

Strategic Assessment of The Capital Investment Plan

Investment Opportunities and Reforms in Lebanon



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Abstract

The quality of Lebanon's infrastructure is amongst the poorest regionally and globally. In fact, out of 137 countries, Lebanon ranks 130 in quality of overall infrastructure.¹ This has been induced by low public spending on infrastructure, a consequence of the country's debt burden as well as the long-term absence of a budget. The Capital Investment Plan (CIP) can be an effective tool to help reinforce Lebanon's delapidated infrastructure, abetting a boost in economic growth. The Government of Lebanon has requested from the World Bank an assessment of the CIP.

This paper presents an assessment for the projects in the CIP by the World Bank Group, which has had a long-term engagement with Lebanon, both sectorally and cross-sectorally. The assessment was undertaken on the basis of the listing presented in Annex A, information provided in the Government's own Capital Investment Plan document, as well as other adhoc information. Each project in the CIP requires an independent appraisal as per highest standards. In addition, a sustainable macro-fiscal framework and debt strategy are essential for a successful implementation of the CIP. The IMF is taking the lead on a macro-fiscal assessment for the CIP, which will be presented at the Paris conference.

The Assessment generally finds that the choice of sectors is appropriate for a CIP for Lebanon, and that many of the listed projects are relevant, indeed, some are critical, to help alleviate infrastructural bottlenecks. Nonetheless, horizontal and vertical reforms, including the reduction of fiscal impact, are essential to enable the CIP and make the projects sustainable and attractive to investors. This document suggests a list of indicative reforms. It does not, however, address crippling barriers in project implementation in infrastructure, which have resulted in long delays and significant additional costs.

¹ Source: World Economic Forum, Global Competitiveness Index 2017-2018.

I. Introduction and Summary of Assessment

A. The Physical Deficit

1. A central pillar in the social contract between Citizen and State is the delivery of basic public services. In Lebanon, there are significant deficiencies in key basic services, including, electricity, water supply, sanitation, transport, waste management, telecommunications and others. These services are not only essential for growth of productivity and income, but also for ensuring a basic level of living standard for residents. When effectively provided, they can have a positive impact on income equality, allowing low income groups access to better and more productive opportunities. Their provision also enhances health and education outcomes, thus improving human capital—a critical driver of growth in high middle-income economies such as Lebanon. Instead, the Lebanese typically reach out to informal, and sometimes even legally questionable, providers and mechanisms to supplant these deficiencies.

2. The lack of fiscal space combined with missing official budgets from 2005 to 2016 resulted in a sharp fall in public spending on infrastructural projects. Gross public debt is estimated at around 153 percent of GDP by end-2017, with only Japan and Greece higher globally. Debt service for the government reaches about 10 percent of GDP annually, consuming about half of domestic revenues. As a result, the government suffers from a long term and sizable fiscal deficit, which in 2016 (the latest full year actual data) registered 9.6 percent of GDP. The lack of fiscal space has translated into low government capital expenditures, which, at an average of around 1.5 percent of GDP since the beginning of the millennium, is significantly below comparator countries.

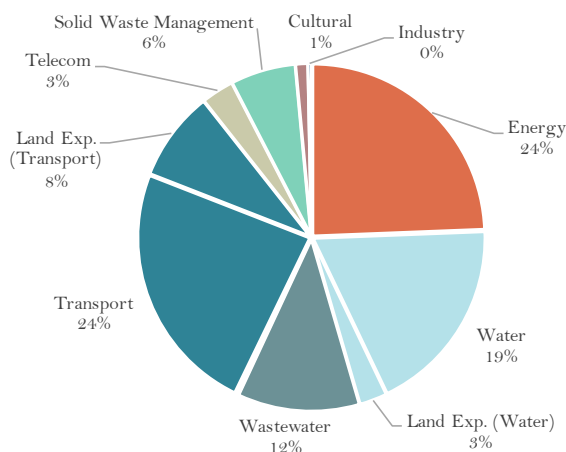
3. As a result, the country's infrastructure network and quality have deteriorated, particularly electricity, water supply, waste management and transport—services important for the population's well-being. In fact, out of 137 countries, Lebanon ranks 130 in quality of overall infrastructure, with quality of electricity supply at 134, quality of roads at 120 and quality of mobile-cellular telephone subscriptions at 104.² Further, low public investment in these sectors has caused capacity to lag behind demand, leading to a reduction in potential economic growth and an overall deterioration in living conditions.

B. Lebanon's Capital Investment Plan and Sector Challenges

4. The Capital Investment Plan (CIP) includes over 280 infrastructural projects, divided between energy, transport, water, wastewater, solid waste treatment, telecommunications, special economic zones and culture and tourism. Geographically, the CIP covers the whole of Lebanon, with some projects designated as national and others as local—North, Beirut and Mount Lebanon, South and the Bekaa areas. Sectorally, the largest investment share is allotted to the transportation, amounting to 32 percent of the total CIP, of which 8 percent are allocated to land expropriation (Figure 1). Almost quarter of the investments are reserved for the energy sector, while water and wastewater are assigned 2 percent and 12 percent, respectively.

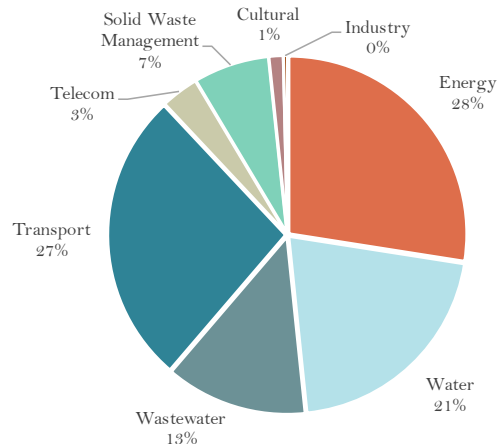
² Source: World Economic Forum, Global Competitiveness Index 2017-2018.

Figure 1: Allocation of costs by sector



Source: WB staff assessment.

Figure 2: Total non-national investment cost by governorate



Source: WB staff assessment.

5. Around half of the total investments are earmarked for “national” projects, with the rest allocated locally. National projects aim at benefiting the entire population, such as the majority of investments in the energy and transportation sectors as well as the telecommunications or the cultural sectors. These projects, amounting to a total of US\$ 10,306 million, are therefore not assigned to specific governorates. Of the locally designated investments in the CIP, 23 percent are located in Mount Lebanon, followed by the North governorate (17 percent) and Nabatiye (15 percent) (Figure 2).

Electricity

6. Power supply remains inconsistent for 92 percent of households, who need to be linked to private generators. Despite its large and subsidized budget, Electricité du Liban’s (EdL), the national utility company, is both inefficient and insufficient, generating in 2017 an average capacity of 2,066 MW, compared to a peak demand of 3,400 MW.³ This results in systematic and long daily blackouts, causing the extensive use of back-up private generators at a cost that is three times the level of EdL tariffs. Moreover, whereas only about half of total electricity production costs are recoverable, electricity tariffs have remained unchanged since 1996 (when the price of oil was US\$ 23 per barrel).

7. Recent World Bank surveys also indicated that availability of reliable electricity in Lebanon is the second biggest obstacle to private sector growth, after political instability. This is particularly significant because substantial investments, primarily from the private sector, are needed along the entire energy value chain, from upstream fuel supply and mid-stream generation and transmission to downstream distribution networks and retail operations, to address the sector’s historic challenges.

8. The CIP contains 23 separately identified investment projects in the power sector for a total of US\$ 5,592 million, to be implemented over three cycles covering the period 2018-2030. To accommodate increased capacity, there will also be a need for transmission investments to absorb the capacity and to ensure stability of the network.

³ Source: Government of Lebanon.

9. The objective of the power investments in to power supply to 24/7 over the medium term. Toward that objective, electricity sector reforms should be adopted as a top priority. This includes private sector participation in both generation and distribution, necessitated by a lack of fiscal space, as well as the introduction of renewable energy. With transmission losses estimated at 40-50 percent, additional capacity would be wasted without a resolution to this inefficiency. Still, additional generation alone is insufficient; absent other adjustments, an expansion of power supply will lead to a rise in government transfers to EdL, resulting in a widening of the fiscal deficit. As such, it is necessary to introduce a multi-year electricity tariff cost-recovery plan for EdL over a medium-term transition period.

10. Importantly, reforms should also address the high cost of power generation in Lebanon, much of which is related to the use of fuel oil as an input. Instead, power stations in Lebanon can run on natural gas, which is much less expensive, more efficient and less environmentally polluting. This however requires the development of new Liquefied Natural Gas (LNG) importing and supply infrastructure facilities, which should be consistent with plans to explore and exploit off-shore domestic gas resources.

Water Supply and Sanitation

11. Notwithstanding Lebanon's relatively high per capita water endowment, inadequate management of and investment in the sector are leading to chronic supply shortages. There is a seasonal mismatch between water supply (at its peak in the rainy winter) and demand (peaking in the hot, dry summer months). One of the principal factors that is exacerbating this seasonal water imbalance is the very low water storage capacity (6 percent of total resources, compared to the MENA average of 85 percent). As a result, water supply services are below the levels expected in a middle-income country. If no action is taken, including in water governance to improve efficiency and manage demand, the country will continue to depend in the long-run on mined groundwater. Water storage capacity should expand in order to boost resilience to natural (i.e. drought) and man-made (i.e. refugees) shocks.

12. The Capital Investment Plan (CIP) includes 124 water supply projects and 82 wastewater projects, covering the whole of Lebanon: North, Beirut and Mount Lebanon, South and the Bekaa areas. The objective on water supply is to reach 24/7, which contributes to restoring or maintaining the social contract on water service. Over the years, citizens need for additional water sources and sanitation has increased due to population growth, economic development, urban expansion, supply shortages and the inability of public water entities to deliver required volumes and quality of service in water supply and sanitation.

Transport

13. Lebanon's endemic traffic congestion problem is estimated to cost the economy no less than 8 percent of GDP annually. Road transport is by far the most dominant form of transport in Lebanon for passengers, freight and commerce, with about 1.2 million vehicles in a country of only 4.5 million people. Traffic congestion and high transport costs are having huge detrimental effects on the development of lagging regions and are forcing the population to move closer to employment and services in Beirut. This dynamic has the dual effect of exacerbating congestion in Beirut and increasing poverty in the regions.

14. The CIP contains 24 separately identified investment projects in the transport sector for a total of US\$ 7,381 million, implemented over three cycles covering the period 2018-2030. The bulk of the transport investments are to complete Lebanon's Highways, while the remaining investments are focused on the development of strategic assets. The latter include

the expansion of Tripoli Port to become an important gateway to Syria and Iraq, the construction of the first modern railway linking Tripoli port to Syria, the introduction of a reliable public transport network and bus rapid transit (BRT) lines, and the expansion of Beirut airport. Regional and smaller investments represent a much smaller share and is primarily focused on the rehabilitation of the road network.

Solid Waste Management

15. Solid waste disposal is a persistent and critical issue in Lebanon. Before the Syrian crisis, only 53 percent of municipal solid waste was disposed of in the country's only two sanitary landfills: Nahmeh and Zahlé. The remaining was disposed of in unsanitary landfills and hundreds of open dumps, which is a main source of pollution to air, watersheds and coastal zones. In the summer of 2015, a visually powerful garbage crisis that left piles of it uncollected on the streets of Lebanon galvanized sizable popular demonstrations.

16. The CIP contains one entry for a single cycle investment program in the solid waste sector: "Solid Waste Management to cover all Lebanon including collection, sorting, treatment and landfill sites" for a total of US\$ 1,400 million. Further discussions identified the following centralized waste treatment investments: (i) three Waste to Energy (WtE) facilities in the urbanized coastal regions (Beirut, the north around Tripoli and South Lebanon around Saida/Zahrani), and (ii) more traditional schemes based on composting and sanitary landfilling for the more rural parts of Lebanon in the north Akka area and for the Bekaa valley. The WtE schemes would require three times US\$ 375 million and the two rural schemes together around \$US 175 million. In addition, roughly US\$ 100 million would be required to cleanup the 962 illegal dumpsites of Lebanon and for some the rehabilitation into sanitary landfills.

Telecommunications

17. Lebanon has a unique opportunity to develop a new comprehensive policy to address the various bottlenecks affecting the growth and development of broadband infrastructure and services. The main opportunity is to leverage on Lebanon's education and skill level, by providing modern broadband infrastructure and ICT applications. This would boost the competitiveness of the service sector, and create jobs and income opportunities for the skilled workers.

18. The CIP contains 8 separately identified investment projects in the telecoms sector for a total of US\$ 700 million, implemented over the two cycle periods covering the period 2018-2025. The objective is to modernize Lebanon's broadband and digital platform infrastructure, providing faster internet and cloud based services to government, businesses and consumers in Lebanon.

19. In embracing this much-needed reform, Lebanon will need to pay attention to the important factors, including:

- accounting for the fiscal implications;
- managing risks and opportunities to make sure that the benefits of broadband reach to different regions and income and social groups; and
- avoiding the emergence of oligopolies in the sector

Industry

20. Lebanon's industrial sector in Lebanon has lagged, both on a regional and global comparative basis (WB, 2016).⁴ Consequences include, inadequate high-skill job creation and the exacerbation of macro-fiscal imbalances. One possibility to strengthen the industrial sector is via spatial industrial policies, most notably, industrial parks and special economic zones (SEZs), which support increased investment and competitiveness in the industrial sector. The CIP presents two such projects. The first, led by Ministry of Industry (MoI), includes the second phase for 3 industrial parks in Alkaa, Balbaak and Turbol, while the second is the Tripoli Special Economic Zone (TSEZ).

21. The proposed industrial parks aim to improve the competitiveness of Lebanon's industries via (i) the provision of critical infrastructure; and (ii) in recognition that land prices are a principal impediment to competitiveness of industry in Lebanon, long-term leasing of municipal lands at very low prices to industries in the zone. However, the authorities can help assure success by reinforcing the role of the private sector in order to ensure that these locations will attract new businesses and investment.

22. The TSEZ is located adjacent to the Tripoli port, imparting a critical advantage. In fact, it is expected to go beyond the trading and logistics role and develop an industrial park to attract foreign and domestic investments on manufacturing and related activities. A central caveat is in regard to the excessive fiscal incentives from which TSEZ businesses will benefit, and which are enshrined by law. The potential exists that TSEZ businesses will gain a significant competitive edge over non-TSEZ businesses, to the extent that the former enters an existing market. As a result, the incentive for businesses would be in favour of relocation to the zone at the expense of expansion. It is thus imperative that access to the zone is awarded to expanding businesses. Specifically, due to the location, the export market should be a key target, and sufficient measures/conditions can be undertaken by the authorities to ensure that access is offered to exporting businesses.

Cultural Heritage

23. Tourism based on heritage assets is a traditionally strong pillar of the Lebanese economy. Lebanese cities are among the oldest continuously inhabited areas in the world. The richness of the melting pot of communities in Lebanon is one the most representative tracts of the country and has historically been a driver of innovation. Lebanon, not accidentally, is the country where the first alphabet of the humankind was invented. Consequently, tourism in Lebanon has always been a major contributor to the economy. From Stone Age settlements to Phoenician city-states, from Roman temples to rock-cut hermitages, from Crusader Castles to Mamluk mosques and Ottoman hammams, heritage sites of global significance are displayed all across the country reflecting ancient and modern world history. This has been widely recognized by the international community; with 5 UNESCO World Heritage Sites, the country has the highest density of these sites globally compared to its population.

24. Contribution of tourism to the country GDP is estimated at 25 percent, which is by far above the world average of 14 percent, above any other country in the Middle East and twice as much a prime tourism destination like Italy (10 percent). Despite elements of fragility due to the regional context, and fluctuations in the sector, tourism remained a strong employment generating sector, especially for low-skilled workers; the sector accounts for 24 percent of total employment in Lebanon. Before the impact of the Syrian crisis, the number of

⁴ World Bank (2016), *Lebanon Economic Monitor: A GeoEconomy of Risks and Rewards*, Spring 2016.

visitors reached 2.5 million per year (2010). Soon afterwards, numbers declined, and lately, due to enhanced efforts for the stability of the country, the trend reversed back into the positive.

25. The CIP contains 11 separately identified investment projects in the sector for a total of US\$ 264 million, to be implemented over the cycles 1 and 2, covering the period 2018-2025. They are related to a larger economic sector that can be defined as High-Value Added Services, which includes Tourism & Heritage and Creativity & Knowledge. Experience to date in Lebanon has shown that supporting knowledge and leveraging heritage assets in cities improves local economic development and job creation, especially in secondary and tertiary cities in lagging regions. It also enhances the livability for local communities in an inclusive manner, and attracts significant private sector investment

C. Assessment Methodology

26. The Government of Lebanon (GoL) has requested from the World Bank Group (WBG) an assessment of the Capital Investment Plan (CIP), which comprises a list of over 280 projects, large and small, with geographic and other limited designations. In light of the afore-mentioned physical deficit, the CIP can be an effective tool to help reinforce Lebanon's delapidated infrastructure, abetting a boost in economic growth. World Bank's long-term engagement with Lebanon affords its staff country context and sector insight, in addition to the technical know-how, to provide an assessment of the CIP project list.

27. A framework for the assessment was designed based on four main categories: (i) Strategic Assessment; (ii) Assessment for Growth, Employment and Inclusion; (iii) Feasibility Assessment; and (iv) Reform Needs Assessment. Annex B presents the Guidance Note for the Capital Investment Plan Assessment Framework. The Note lays out the specific criteria that are used and offers guidance on how to make the assessment.

28. The assessment affords a chance to review opportunities for private investment in Lebanon. Capital investment projects are no longer the exclusive purview of government investment departments. Many countries have found that the private sector provides quality investments and value for money in critical infrastructure areas—energy, telecommunications, transportation etc. At the same time, investors see capital projects as opportunities to participate in critical investments of national priority with substantial international attention and possibly co-financing. However, for such opportunities to be translated to better (and profitable) public services, updated and stable legal and regulatory frameworks are required.

29. A macro-fiscal analysis of the CIP, which is a necessary input in determining the fiscal space, will be led by the International Monetary Fund, and presented in CEDRE in Paris. Lebanon can ill afford to ignore fiscal constraints and the GoL should aim to have them incorporated and accounted for in the final plan. This does not only apply to government expenditures, but also to revenues. For the former, public-private partnerships (PPP) are an important strategy, and the recently passed PPP law can be an effective vehicle. On the revenues side, telecom revenues are not only one of the top revenue sources for the much-indebted government, it is also a rare source of hard currency, noting that the foreign currency-denominated portion of public debt is equivalent to about 56 percent of GDP (end-October 2017).

D. Results in Aggregation

30. The strategic assessment of CIP projects reveals that the vast majority of projects are regarded as being of strategic priority for the relevant sector and are part of an official sector strategy (Table 1). All projects in the water, wastewater, solid waste,

telecommunications, cultural and industry sectors are strategic priorities in their relevant sectors, while most of the projects in transportation (92 percent) and electricity (83 percent) are considered a strategic priority. In terms of strategic integration, all projects in the water, wastewater, solid waste, cultural and industry sectors are part of an official sector strategy. Eighty seven percent of the projects in the electricity sector are embedded in a broader national sector strategy while 54 percent of the projects in the transportation sector follow a sector strategy. Telecommunication stands out as the only sector lacking an official sector strategy.

31. The vast majority of projects in the CIP are expected to reduce the cost structure in the sector, and a good sum can attract FDIs. CIP projects are expected to significantly reduce the cost structure in their relevant sector. This is particularly the case for all projects in electricity, water, wastewater and industry, as well as, the great majority of projects in transportation and cultural sectors. Furthermore, the great majority of projects in electricity (83 percent), solid waste (83 percent) and the cultural sector (73 percent) are capable of attracting FDI.

Table 1. Percentage of projects in the sector which meet the strategic criteria.

	Strategic Assessment			
	The project is a strategic priority for the sector	The project will help significantly reducing the cost structure in the sector	The project will help attracting FDIs in the sector	The project belongs to an official sector strategy
Electricity	83*	100	83	87**
Water	100	100	0	100
Wastewater	100	100	0	100
Transport	92	67	38	54
Telecommunications	100	25**	38**	0
Solid Waste	100	L	83	100
Cultural	100	82**	73***	100
Industry	100	100	50****	100

* Less than 10 percent of projects require more information to assess the statement

** 13 percent of projects require more information to assess the statement

*** 18 percent of projects require more information to assess the statement

**** One of the two projects requires more information to assess the statement

L Not relevant

Source: WB staff assessment.

32. The assessment for growth, employment and inclusion of CIP projects shows that most of the projects in electricity, transportation, culture and industry have a highly sustainable growth impact (Table 2). In addition, most completed projects in the industry, cultural, transportation, solid waste and electricity sectors are projected to create a large or moderate number of jobs.

Table 2. Percentage of projects in the sector which meet the growth, employment and inclusion criteria.

Assessment for Growth, Employment and Inclusion			
	The completed project has high sustainability of growth impact	The completed project contributes significantly to high productivity jobs	The project creates a large or moderate number of jobs
Electricity	78*	<i>I</i>	74
Water	<i>I</i>	<i>I</i>	<i>I</i>
Wastewater	<i>I</i>	<i>I</i>	<i>I</i>
Transport	58	0	96
Telecommunications	13**	25***	38**
Solid Waste	0	0	83
Cultural	82	55	100
Industry	100	100	100

I denotes 'inconclusive', as more information is required to assess the statement

* 22 percent of projects require more information to assess the statement

** 13 percent of projects require more information to assess the statement

*** 25 percent of projects require more information to assess the statement

Source: WB staff assessment.

33. The feasibility assessment for CIP projects shows that most of the projects in the cultural sector and around half of the projects in the industry, telecommunications, solid waste and electricity sectors are ready to be implemented with a period of 18 months (Table 3). Further, the implementing agency has the necessary capacity for all projects in the solid waste, cultural and industry sectors and most of the projects in the transportation (96 percent) and telecommunications sectors (63 percent).

Table 3. Percentage of projects in the sector which meet the feasibility criteria.

Feasibility Assessment		
	Readiness to implement (0-18 months for shovel readiness)	The implementing agency has the necessary capacity
Electricity	48*	9
Water	<i>I</i>	<i>I</i>
Wastewater	<i>I</i>	<i>I</i>
Transport	25	96
Telecommunications	50**	63***
Solid Waste	50	100
Cultural	91	100
Industry	50	100

I denotes 'inconclusive', as more information is required to assess the statement

* 26 percent of projects require more information to assess the statement

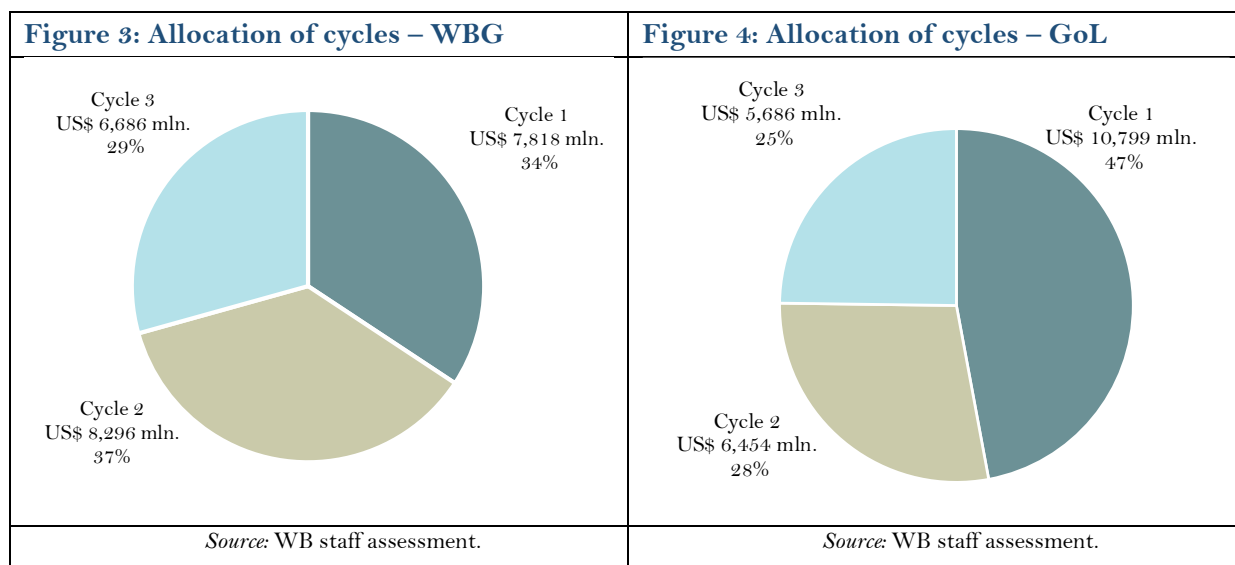
** 13 percent of projects require more information to assess the statement

*** 38 percent of projects require more information to assess the statement

Source: WB staff assessment.

34. According to the WBG, almost a third of total CIP cost is assessed for Cycle 1 (US\$ 7,818), and about 37 percent in cycle 2 (8,296)⁵ (Figure 3). This compares to GoL's estimation of 47 percent (US\$ 10,799 million) and 28 percent (US\$ 6,454 million) of the CIP in Cycles 1 and 2, respectively⁶ (Figure 4). Annex C presents a WBG-GoL project by project comparison on implementation cycles. The main divergences in Cycle 1⁷ emanate from (i) water dams, with the WBG assessing US\$ 930 million less in value of projects in Cycle 1 than GoL does; (ii) two waste to energy facilities (US\$ 750 million) in the solid waste sector, which are assessed by WBG in cycle 2, compared to cycle 1 by GoL; and (iii) the Salaata power plant (US\$ 600 million), which is assessed by the WBG for Cycle 2, compared to Cycle 1 by GoL.⁸ Given the urgent need for the additional generation capacity and likely time needed to develop the Salaata site, other more readily available sites should be developed with Zahrani to ensure that at least 1000 MW of new capacity comes online as soon as possible. It is important to note that this is a static assessment of when the projects are likely to commence implementation, under present conditions and based on previous experiences.

35. Sector allocation of the CIP per Cycle is broadly similar when comparing WBG assessment with GoL's estimations (Figure 5, Figure 6). WBG assessment of Cycle 1 projects are valued at US\$ 7,818 amount, of which 26 percent is assigned for the transportation sector, followed by the electricity sector (20 percent), wastewater (18 percent) and water (17 percent) sectors, telecommunications (9 percent) and solid waste (8 percent). Cycle 2 of the CIP is valued at US\$ 8,296 million, 46 percent of which are transport infrastructure projects.⁹



⁵ These figures include land expropriation costs in the amount of US\$ 311 million and US\$ 1,267 million in Cycles 1 and 2, respectively.

⁶ These figures include land expropriation costs in the amount of US\$ 693 million and US\$ 1,025 million in Cycles 1 and 2, respectively.

⁷ This also accounts for the divergences in Cycle 2.

⁸ A few GoL Cycle 2 projects were assessed as Cycle 1 by WBG.

⁹ \$140 million worth of CIP projects presented by GoL were not assessed for any cycle due to lack of information.

Figure 5: Allocation of costs by sector across Cycles – WBG

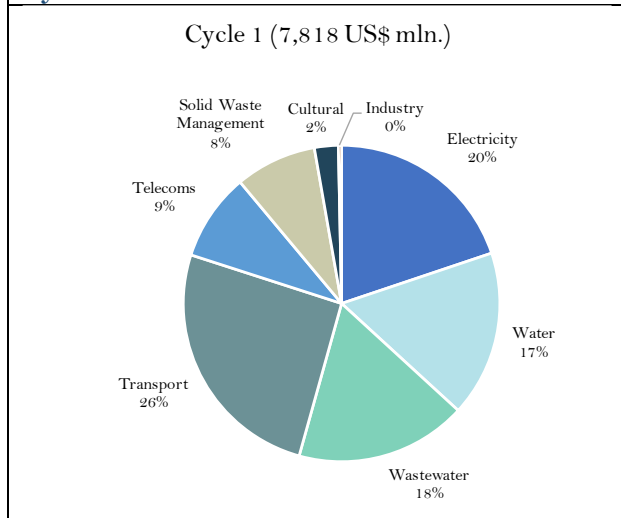
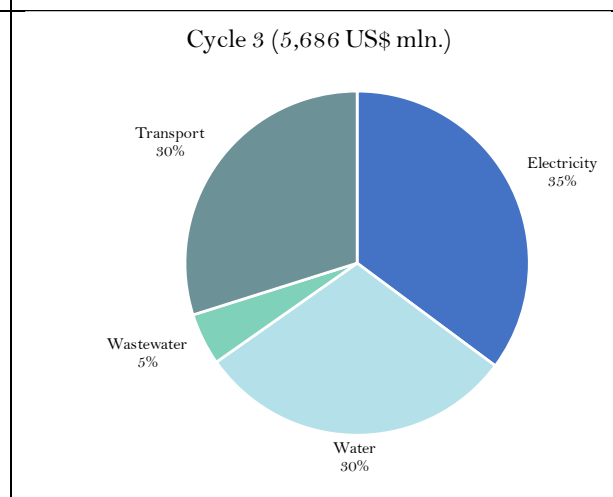
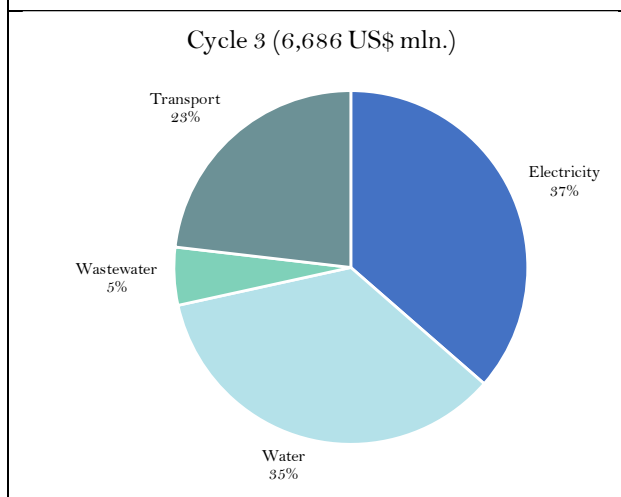
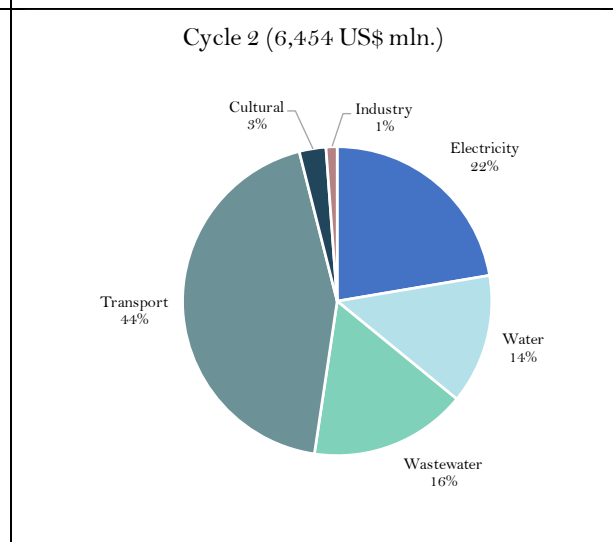
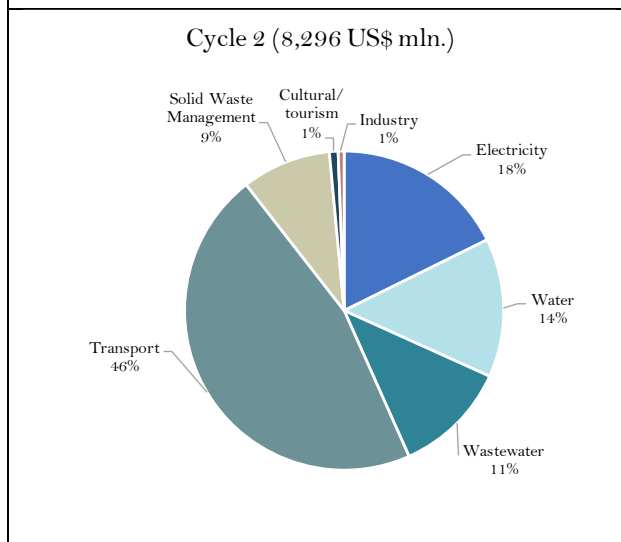
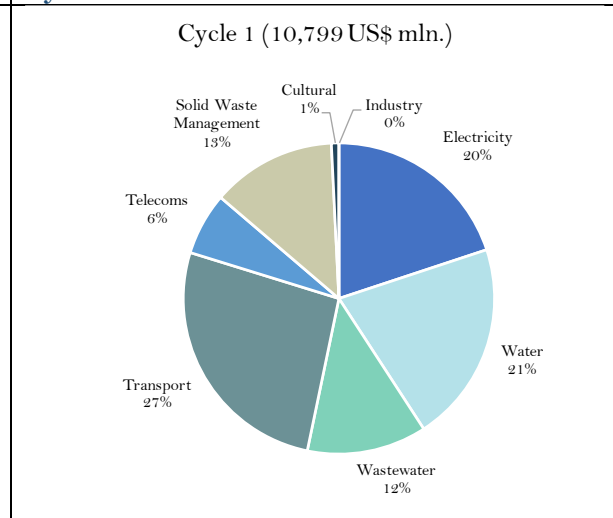


Figure 6: Allocation of costs by sector across Cycles – GoL



Source: WB staff assessment.

Source: WB staff assessment.

E. CIP Enablers

36. Following the election of a president in 2016 and the subsequent formation of a unity government ending the prolonged political stalemate, political leaders made significant progress in 2017 by agreeing on long-standing reform measures. Crucially, on October 19, the Lebanese parliament approved the 2017 budget, making it Lebanon’s first formal budget in 12 years. Other accomplishments include, a parliamentary election law—paving the way for the parliamentary elections in May 2018, the first since 2009—the civil service salary scale adjustment and the public-private partnership law. These achievements illustrate the potential for Lebanese authorities to undertake significant reform initiatives via national political consensus.

37. It remains a fact, however, that a principal component for an effective CIP is the adoption and implementation of a structural reform program. This section suggests a menu of such reforms that would help enable the State to deliver essential services and reinforce its infrastructure in a sustainable manner. Specifically, we present a list of cross-sectoral reforms, which can (i) help establish solid foundations for sound investments; (ii) generate significant positive signals and good will to investors and donors; and (iii) provided there is a political will, be completed in a relatively short period of time. We also suggest sector-specific reforms that are needed in order to advance the sectors, making them more efficient and sustainable. The latter set of reforms are explained in more detail in following sections under the corresponding sector. Table 4 below presents a summary list of suggested reforms.

Table 4: A summary list of suggested structural reforms for the CIP.

Horizontal Reforms	Vertical Reforms
A fiscal framework which commits to a positive primary fiscal balance over the medium term, as part of a debt management strategy that aims to lower the public debt-to-GDP ratio so that it is on a more sustainable trajectory	<u>Electricity</u> <ol style="list-style-type: none"> 1. A multi-year electricity tariff cost-recovery plan for EdL over a transition period in tandem with increases in generation 2. Implementation of approved development plan for natural gas supply
Electricity tariff adjustment for new generation	<u>Water & Wastewater</u> <ol style="list-style-type: none"> 1. Parliament ratifies water code 2. By-Laws of Law 221 for autonomy status of the Water Establishments 3. Staff recruited for O&M of water facilities
Anti-corruption Law	<u>Transport</u> <ol style="list-style-type: none"> 1. National Transport Strategy adopted 2. The review of the governance structure of the Civil Aviation sector 3. Identification of revenues and expenditures for sector
Expedite transition to Single Treasury Account	<u>Solid Waste Management</u> <ol style="list-style-type: none"> 1. Development of a tariff system for waste generators (households) 2. Policies to support capacity development with local governments for sector planning and operations 3. Defining feed-in tariffs for electricity from waste processing facilities based on long-term economic benefits
Reform of public investment management system	<u>Telecommunication</u> <ol style="list-style-type: none"> 1. Adopting a unified vision 2. Harmonized licensing regime for DSPs 3. Restructuring of the telecoms sectors
Ratification of Public Procurement Law	<u>Industrial Zones</u> <ol style="list-style-type: none"> 1. TSEZ Regulatory and Licensing Regime
Endorsement of the new customs strategy	
Passage of credit infrastructure legislative package	
Regulations pertaining to the organizational and staffing structure, financing arrangements and functionality of HCP	

Containing Stresses from the Public Debt

38. Lebanon's large macroeconomic imbalances have kept borrowing costs high for businesses, raising cost of capital, reducing competitiveness and inhibiting investment. Since 2004, the lending

rate averaged 8.8 percent for borrowing in Lebanese pounds (LBP) and 7.5 percent in US\$. High interest rates are imperative for an economy that is dependent on capital inflows to finance its large and persistent twin (fiscal and current account) deficits. In fact, the 2017-2018 Global Competitiveness Index (GCI) produced by the World Economic Forum ranks Lebanon's macroeconomic environment 133rd out of 137 countries, with government debt ranking 135th. This has enfeebled investment causing it to lag in Lebanon's growth model. Instead, consumption has been the primary driver, contributing an average of 4 percentage points (pp) to real GDP growth, 3.3 of which due to private consumption, over the 2005-2015 period.¹⁰ Meanwhile, the contribution of investment to real GDP growth was only 1.3 pp over the same period, falling sharply to 0.1 since 2011.¹¹

39. Lebanon has the third highest debt-to-GDP ratio in the world, imposing substantial financing needs on the Lebanese economy. Gross public debt is estimated to have reached around 153 percent of GDP by end-2017, with only Japan and Greece higher globally. Debt service for the government reaches about 10 percent of GDP annually, consuming about half of domestic revenues. As a result, the government suffers from a long term and sizable fiscal deficit, which in 2016 registered 9.6 percent of GDP. Externally, a large trade deficit drives a sizable structural current account deficit, which has averaged close to 20 percent of GDP since 2011. In 2016, gross financing needs for the public sector amounted to 30 percent of GDP, while that for the external sector (gross external financing needs) were 171 percent of GDP (IMF, 2017).¹² This is all under the context of a fixed exchange rate regime that has been in effect for a couple of decades and which has become a central pillar of the Lebanese economy. The system is sustained in good part by foreign currency inflows, largely in the form of deposits at commercial banks. High interest rates are a reflection of the risk premium that needs to be paid in such a context to maintain the attractiveness of Lebanese assets. Nonetheless, such deposit inflows have decelerated sharply since 2011, increasing uncertainty on the economy's ability to meet its financing needs.

40. It is important for Lebanon to adopt significant and structural fiscal reforms that would send a positive shock to markets and citizens that the Government of Lebanon (GoL) is on track to place the debt-to-GDP ratio on a sustainable path. This can be timed with the increased capital expenditures associated with the CIP so as to offset the contractionary effects of a fiscal adjustment program. As it currently stands, there is widespread apprehension on the government's ability to meet its financing needs in light of slowing deposit inflows to the banking sector. To counter this apprehension, the following initiative is suggested:

Reform 1: GoL to adopt a fiscal framework which commits to a positive primary fiscal balance over the medium term, as part of a debt management strategy that aims to lower the public debt-to-GDP ratio so that it is on a more sustainable trajectory.

41. Under current policies, Lebanon's debt trajectory worsens directly with the generation of more electricity. Electricité du Liban (EdL), the national utility company, imparts a staggering burden on Lebanon's public finances. Prior to the Syrian conflict, government transfers to EdL amounted to an average of 55 percent of Lebanon's fiscal deficit. At their peak in 2012 and 2013, the government transferred around US\$ 2 billion per year to EdL. As the overall fiscal balance has been in deficit since 1992, EdL transfers have been effectively paid through borrowing. Based on annual budget documents, World Bank staff estimate that cumulative government transfers to EdL from 1992 to 2013 accounted for a staggering 55.4 percent of 2013 GDP, and almost 40 percent of Lebanon's total public debt. That is to say: Lebanon's debt-to-GDP ratio would have been 83 percent instead of 138 percent (in 2013) if EdL had not been loss making. In response, we recommend that the government place a limit on its transfers to EdL.

¹⁰ Average real GDP growth was 4.6 percent over the 2005-2015 period.

¹¹ Average real GDP growth was 1.8 percent over the 2011-2015 period

¹² IMF Article IV, January 2017.

Reform 2: Council of Ministers (CoM) to pass a decree stating that any increase in power supply from new power generation output would be matched by a commensurate rise in the average tariff sufficient to leave government transfers to EdL unaffected by the rise in generation. Importantly, this will also establish the principle of linking tariff increases with service improvements. More than half of respondents to a World Bank's Social and Impact Assessment Survey said that they would be willing to pay double their current budget on EdL electricity in return for 24-hour service. The cost of EdL-supplied electricity would remain far lower than that of privately supplied generators.

Governance and Institutions

42. Like others, investors are highly weary of poor governance and weak institutions in Lebanon, which distort their risk-return calculus, raising the expected return and shortening the maturity thresholds that are needed for investments to proceed. Institutions are extremely weak, characterized by both inefficiency and corruption. The country suffers from a governance trap, whereby political stability is maintained through subordination of national prerogatives to consensus among communal leaders, at the cost of strong institutions focused on the common good. As a result, Lebanon scores poorly on many aggregate governance indicators. For instance, out of 137 countries, Lebanon ranks 121 in irregular payments and bribes, 128 in public trust in politicians and 130 in efficiency of government spending.¹³ In addition, Transparency International's (TI) Corruption Perception Index (CPI) ranked Lebanon 136 out of 176 countries worldwide in 2016, making Lebanon among the 50 most corrupt countries in the world. The citizens of Lebanon are looking to their government to make tangible measures in the fight against corruption. We suggest two important measures:

Reform 3: Council of Ministers (CoM) to endorse the National anticorruption strategy currently being developed by the Office of the Minister of State for Administrative Reforms (OMSAR).

Reform 4: Government to expedite reforms to enable the transition to the treasury single account (TSA) which facilitates efficient management and control of government's cash resources. Establishing a unified structure of banking arrangements through a TSA is good practice. Under such a structure all government funds are collected in one account, which reduces borrowing costs, extends credit and improves government's fiscal policy and helps reduce opportunities for corruption. For a TSA to be effective, a sound legal basis needs to be established to ensure its robustness and stability. A TSA policy will reduce the proliferation of bank accounts operated by ministries, departments and agencies. This in turn will promote greater financial accountability throughout the public sector.

43. Lebanon needs Public Investment Management (PIM) systems which perform well despite systemic capacity constraints, and which seek good-fit (rather than "best practice") projects that are informed by the country's development priorities. Efficiency in capital expenditure has become increasingly important in the face of public funding constraints in Lebanon. Many arguments for creating fiscal space are explicitly about the need to better manage scarce resources and boost public investment in physical assets, such as public infrastructure, and/or in the social sector facilities (i.e. health, education, etc.) that contribute to improvements in human capital. However, if the Capital Investment Plan is to be effectively implemented, challenges in core functions need to be addressed to help mitigate the risk of bad or inappropriate projects being undertaken, repeated cost overruns, implementation delays and poor investment outcomes. Thus, in anticipation of expanded capital expenditures,

¹³ Source: World Economic Forum, Global Competitiveness Index 2017-2018.

Reform 5: Government to initiate reforms of Public Investment Management systems in Lebanon, with a view to improving the efficiency of capital expenditure.

44. Strengthening the procurement process is key for Lebanon as it manages the large projects in the Capital Investment Plan. Public procurement in Lebanon has recently received considerable attention, generating controversies related to transparency. Moreover, weak or lack of public procurement oversight continues to contribute to distorting fairness and competition, resulting in favoring the elite in capturing the major market opportunities.

Reform 6: Parliament to ratify the latest revised Public Procurement Law. The law of 1963, which constitutes the legal foundation of Lebanon's current institutional framework for procurement, is outdated, excessively centralized and inadequate, resulting in procurement and execution delays. A revised procurement law originally drafted in 1990, with the latest revision submitted to Parliament on December 12th, 2012, was only put on the agenda of the "Combined Committees" for discussion on February 24, 2015. However, due to lack of time, the review has only covered a small part of the Law, and as such it remains unratified.

Trade

45. Lebanon is a small open economy with a large trading sector, and enabling the trade environment will have a direct and positive impact on firm competitiveness and job creation. Lebanon's exports and imports of goods and services averaged a significant 124 percent of GDP over the past decade. Meanwhile, customs procedures are notoriously inefficient levying additional costs to businesses. In fact, the 2016 World Bank's Logistics Performance Index (LPI) indicates a lagging performance for Lebanon's customs.¹⁴ A key policy initiative in support of the trade sector is the modernization of customs procedures through the development and implementation of the new customs strategy. The following is suggested:

Reform 7: CoM to endorse the new customs strategy, which is currently being finalized and which will entail the following key features:

- Simplified procedures;
- Enhancing electronic data entry;
- Updating the existing ASYCUDA-based system to support e-payments;
- Developing an electronic registration module to include the development of an E-Single Window with focus on the coordination among all border agencies (such as Ministry of Agriculture, Ministry of Health, Ministry of Defense, Ministry of Economy and Trade, and Ministry of Industry, and any other relevant body);
- Strengthening of the Risk Management System;
- Introducing a full-fledged Authorized Economic Operator (AEO) Program, which will fasten the process of low-risk traders;

Doing Business

46. While there have been no substantial reforms across any of the key component measures that make up the Doing Business (DB) score since 2007, reform initiatives have been in the pipeline in key areas such as business regulation streamlining, extending credit to SMEs and insolvency resolution. These are reforms that can be implemented promptly given their current readiness which could, in turn, have a significant impact on SME start-up and growth and job creation. Limitations in these areas constrain

¹⁴ The 2016 LPI score for customs performance was 2.73 for Lebanon, compared to 3.84 for the United Arab Emirates.

the potential in areas where Lebanon does much better such as in business sophistication and innovation. This becomes all the more significant with the expected stronger private sector led growth suggested by the CIP. Toward that end, the following reforms are suggested:

Reform 8: Parliament to pass the Credit Infrastructure Legislative package (insolvency, insolvency practitioners, secured lending, judiciary mediation). This legislative package will increase access to finance for the private sector in Lebanon, especially SMEs, start-ups and women by

- Modernizing the overall insolvency regime to facilitate sound loan recovery and restructuring of viable yet distressed firms, and allowing efficient and effective exiting of unviable firms;
- Strengthening lenders' rights in movable assets; and
- Institutionalizing commercial mediation for fast and cost-effective commercial dispute resolution to free up much needed assets and working capital, and reduce heavy case backlogs in Courts.

The role of the central bank, Banque du Liban (BdL), in the banking sector is vital, both as a regulator and credit enabler, and to prevent unintended negative implications on macroeconomic risks, the central bank has to be a full partner when it comes to credit policy. It is thus imperative to keep the collateral registry (that is associated with the secured lending law) with BdL, since BdL's information set on credit conditions and on macro and micro prudential risks cannot be matched by any other institution.

Public Private Partnerships

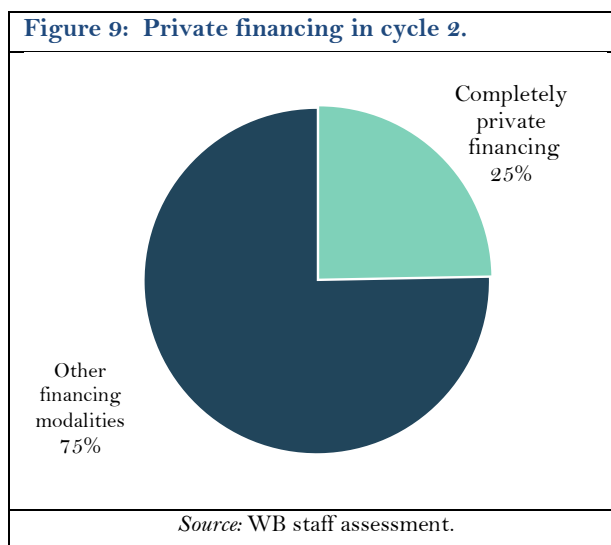
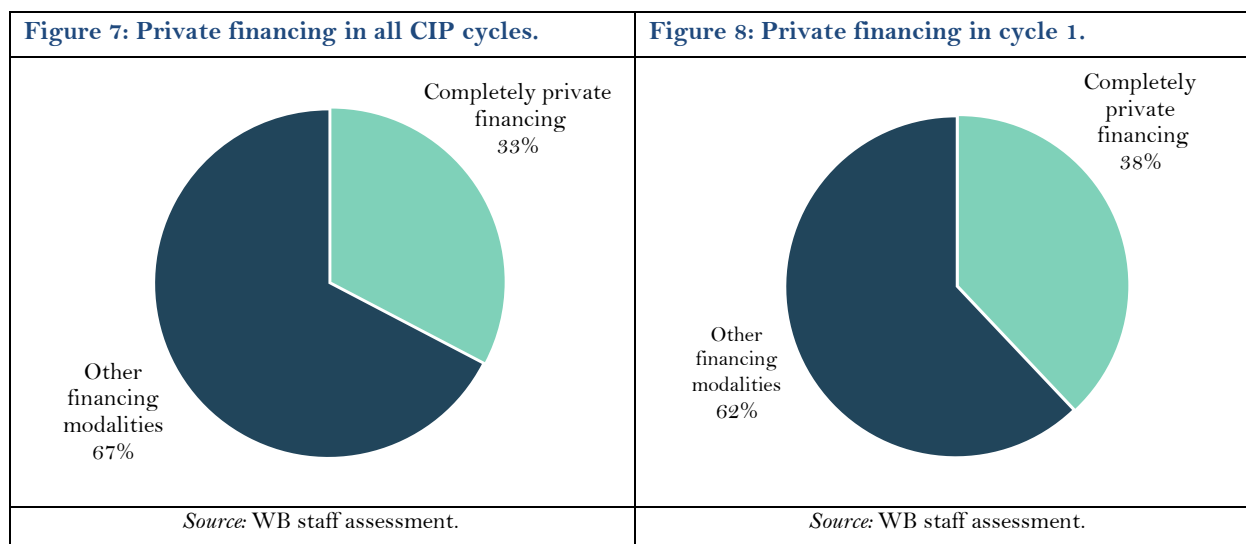
47. There should be a transparent, predictable and accountable enabling environment to attract private financing of priority public investments. CIP needs far exceed government fiscal capacity and to be realized will require a crowding in of different funding sources, including, most critically, private financing. To create the enabling environment to attract significant flows of private investment, reform actions will be required across a number of the key infrastructure sectors. It will also require that the government organize itself differently to manage a more strategic investment engagement with the private sector. The first step in this direction has been taken with the passage of the PPP law in September 2017. This establishes the broad governance and institutional arrangements that can signal to the private sector that effective and transparent processes for the identification, development, negotiation, procurement, implementation and monitoring of Public Private Partnership (PPP) projects is in place.

Reform 9: CoM to effect the newly enacted PPP law by enhancing the operational capacity and by approving regulations pertaining to the organizational and staffing structure, financing arrangements and functionality of the High Council of Privatization and PPPs (HCP). These regulations will ensure that the HCP is fully enabled to fulfill the mandate set out for it in the 2017 PPP law.

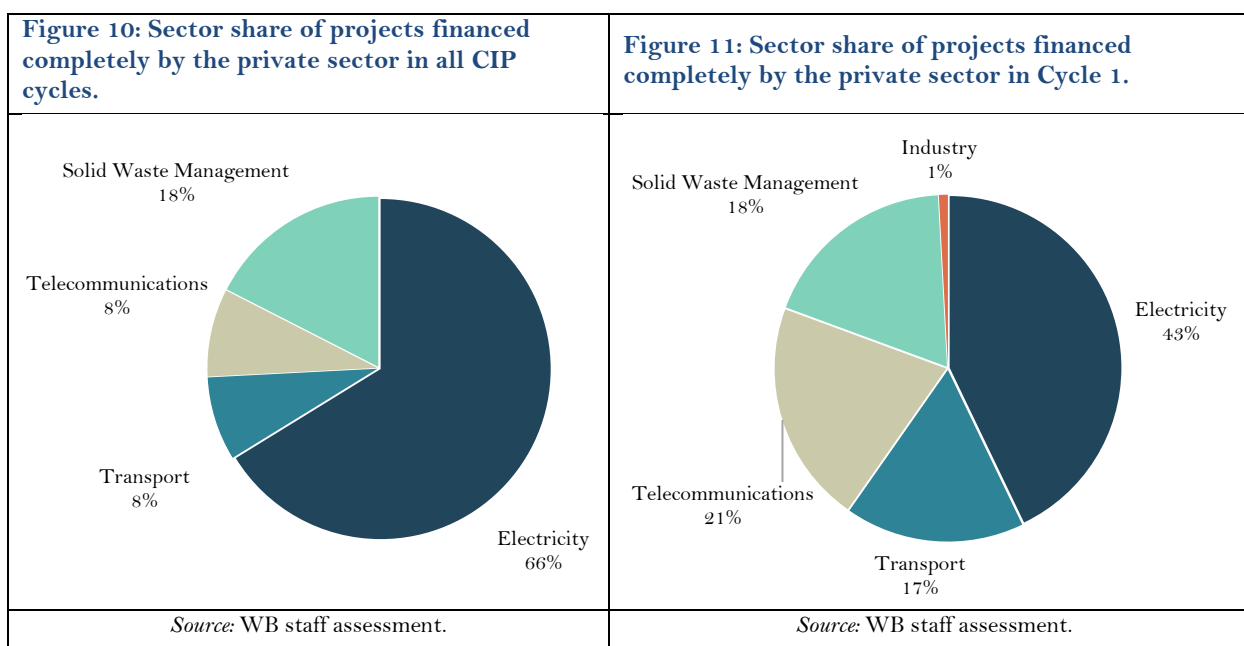
Reform 10: Government of Lebanon—through the Ministry of Finance—to put in place a strategic plan for the management of the fiscal commitments and contingent liabilities (FCCL). FCCL obligations are a common feature of long term PPP contracts entailing different project risk allocations between public and private sectors. Not only can these FCCL obligations have significant fiscal consequences, but the Government credibility as a reliable PPP partner can be seriously impaired where FCCL obligations are not effectively managed. This strategy should detail the institutional arrangements, resource requirements and processes that will be required to ensure the government's fiscal capacity to meet any such obligations that fall due during the life of a PPP contract.

F. Maximizing Finance for Lebanon's CIP

48. In value, around 33 percent (US\$ 7,462 million) of the CIP project costs (cycle 1, 2 and 3) are assessed as could be completely financed by the private sector; in cycle 1 this percentage would be 38 (US\$ 2,967) (Figure 7, Figure 8). It would be advantageous for Lebanon, with a non-existent fiscal space to frontload bankable projects. In cycle 2, public concessional financing is likely to dominate (Figure 9).



49. Electricity projects are assessed as the most appealing to the private sector. In value, electricity sector's share of projects financed completely by the private sector is 66 percent (43 percent) for the whole CIP (cycle 1), followed by solid waste at 18 percent (18 percent), then telecommunications at 8 percent (21 percent) and transport also at 8 percent (17 percent) (Figure 10).



50. It is important to keep in mind that the assessment on financing was done on a project by project basis and "in principle". As such, it should be considered as a target to approach. A cross-comparator country analysis on infrastructure private debt finance indicates volumes of between 0.5 to 1.5 percent of GDP (Figure 12, Figure 13). This translates to between US\$ 250 million to US\$ 750 million annually for Lebanon. For total private financing of projects we would add an average of 25 percent equity, to arrive at US\$ 333 million to US\$ 1,000 million per year of private infrastructure financing.

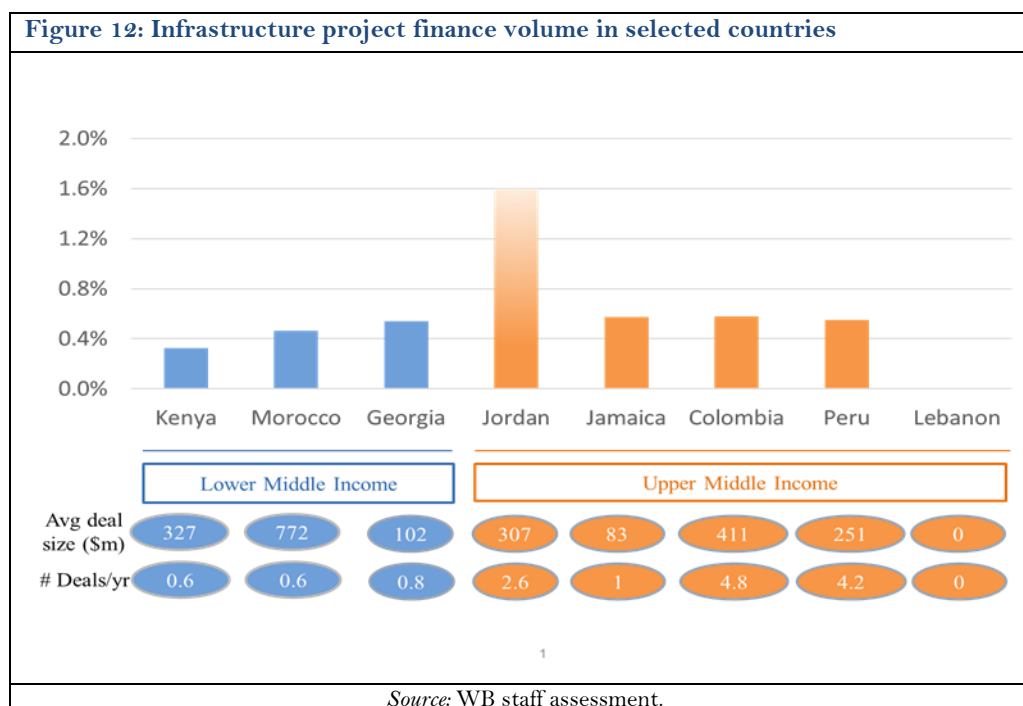
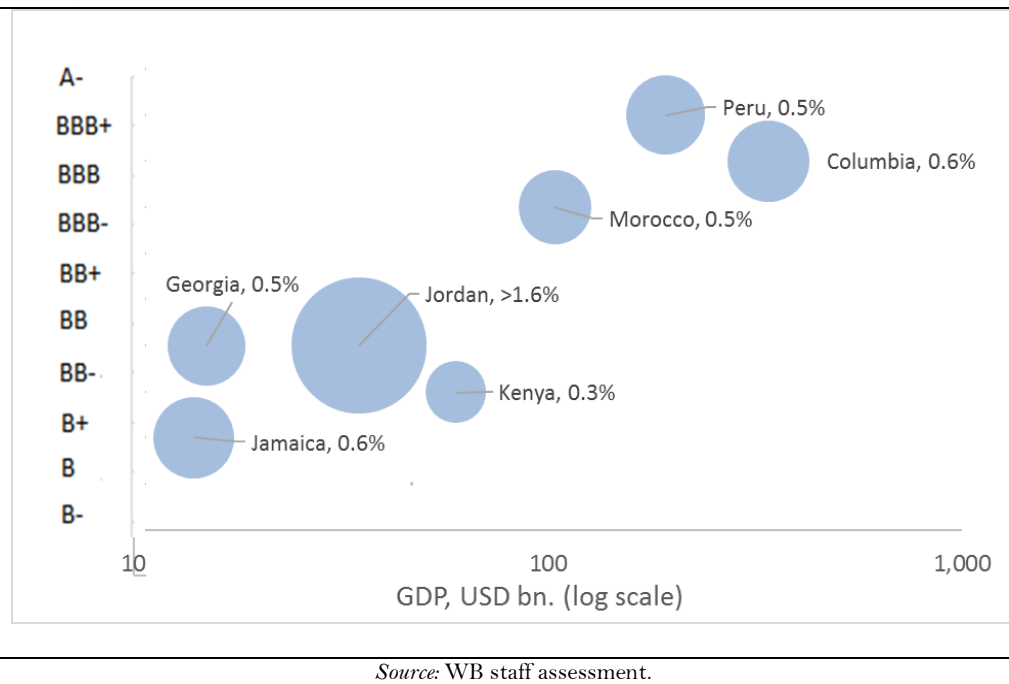


Figure 13 Infrastructure Project Finance Debt Volume, average 2013–2017, (% of GDP)



51. In regard to public financing, the Global Concessional Financing Facility, the GCFF, can be a source of financing for the CIP. Among all financing sources, official development assistance (“ODA”) from concessional multilateral and bilateral development institutions offer the most favorable terms (longest maturities, lowest interest rates, simpler documentation). The GCFF is an established concessional financing facility, which can effectively implement programs that address Lebanon’s long-standing development needs, while at the same time, help mitigate the impact on the refugees.

52. Given Lebanon’s limited sovereign borrowing headroom due to high indebtedness and large debt service obligations relative to GDP (and relative to government revenues), the Lebanese authorities may wish to maximize the volume of commercial investment and finance in infrastructure. In such projects, equity return and debt service are underpinned by commercial revenues (stemming from ratepayers) rather than the national budget (ultimately funded by taxpayers). These projects can also provide “value for money” through their efficient allocation of incentives and risks between the public and private parties. This helps reduce the life-cycle cost of projects, and improve the quality of service. CIP needs far exceed current fiscal capacity and to be realized will require a crowding in of private financing. The banking system has limited capacity mainly due to prudential regulation: their capital adequacy ratios are high and NPLs are on the rise. Despite Lebanese banks’ willingness to finance the CIP, these constraints will certainly be binding moving forward. While capital markets are too nascent to play a role in the short to medium term in the financing of the CIP, the potential on longer horizons is strong and progress on that front would send a good signal to international investors. Ultimately, the goal is to improve infrastructure service, adding value to private sector participation.

53. Priority projects with high rates of social and economic return but low financial rates of return may need financial support from the state to make them commercially viable and attractive to private sector investors. Although commercial infrastructure includes

projects fully in the private sector, in practice most private sector investments in infrastructure involve some form of public-private partnership (PPP) arrangement. At one end of the PPP spectrum, investments in telecom, airports and power generation can be fully financed by the private sector, although some, (independent power producers and internet services), may give rise to significant contingent liabilities for the state. In other infrastructure sectors, (particularly in water supply and urban transport), user fees often fall far short of capital cost. For the latter group with high rates of social and economic return, this often involves large amounts, long investment horizons, relatively low financial returns and complex structuring involved. As a result, there is a need for state involvement to attract commercial investment and finance in infrastructure, such that countries often find it necessary to implement specific facilitation schemes in parallel with broader sector-level and cross-sector enabling policies.

54. For this reason, national authorities could consider establishing a Lebanon Infrastructure Financing Facility (LIFF), with the support of international donors.

Detailed assessments would need to be conducted by the government's transaction advisors to define more precisely amounts required to support the financing of commercial CIP projects, and the multiplier impact of these facilities. As an order of magnitude, the average multiplier effect of donor funding on commercial investment and finance might be in the range of 4 to 5 times; meaning that each dollar of donor or public funds invested in such a scheme could facilitate 4 or 5 dollars of commercial investments in infrastructure.

Box 1: Gender and youth in the CIP

The CIP can positively affect gender and youth conditions in Lebanon. Since construction labor is heavily dominated by low-skill males, the impact would be effected through the value-added generated by completed CIP projects, if well implemented. This can occur via two channels: employment opportunities and socio-economic spillovers.

Women labor force participation in Lebanon is very low, especially for those aged 35-45. Only 22 percent of working-age women are active, compared to 70 percent for men and 49.5 percent¹⁵ for women globally. Labor participation rates are bell-curved for both women and men, with low rates for youth. Young female participation rate is 20 percent, compared to 40 percent for men, increasing to 40 percent for women and nearly 90 percent for men amongst individuals aged 25-34. However, while labor force participation rate of women aged 35-45 decreases drastically back to 20 percent, that of their male peers remains very high at around 90 percent before declining to 47 percent for men above 45 years of age.

Globally, women are primarily responsible for managing water and hygiene at the household and community levels. Moreover, poor water quality poses adverse health consequences especially for pregnant and lactating women and young children. For Lebanon, the Syrian conflict resulted in a 30 percent increase in population over very few years. Overcrowding because of the continuing inflow of the displaced is putting unforeseen pressure on water infrastructure and supply, while also increasing the risk waterborne diseases and infections. The problem of poor water quality is more severe in urban settings compared to rural areas, where bacteriological contamination can be as high as 90 per cent. To the extent that the CIP helps improve these conditions, and a proper implementation of water projects can do so, benefits can disproportionately benefit women and children.

Transport is an important enabler for women's access to economic resources, education, health and other important elements for women's empowerment. Enhancing women's mobility leads to improving their access to economic opportunities and contributes to their economic empowerment. In Lebanon, women are constrained by the poor conditions of the road network, and do not have a reliable and safe alternative to private vehicles, given the safety and harassment concerns in existing public transport. Lower-income women currently depend on their husbands to meet their transportation needs (usually

¹⁵ Global labor statistics are sourced from International Labor Organization modeled estimates, 2017.

one car per household) or are forced to use existing unsafe public transportation. Safety is one of the major constraints highlighted by women through consultations. Women will benefit from the implementation of transport infrastructure projects through improved connectivity, lower transport costs and improved road safety. In addition, the implementation of a reliable, affordable and secure public transport system will allow women to move to access higher education levels, jobs and markets. Women occupy a significant position in the tourism industry; the United Nations World Tourism Organization estimates that tourism has almost twice as many women-led businesses as any other sector. Moreover, 70 percent of tourism labor is women, with concentration in accommodation, catering and handicrafts. Knowledge and creative industries also nurture young talents, providing a necessary alternative to migration: studies done by the European Union show that 40 percent of these industries are under 35 years old, compared to 35 percent of the wider economy.

ELECTRICITY

II. Electricity

The CIP contains 23 separately identified investment projects in the power sector for a total of US\$ 5,592 million, to be implemented over three cycles covering the period 2018-2030. Of these projects, the WBG assesses that 2 (at a cost of around US\$ 1,550 million) are important for the first cycle of 2018-2021. These comprise projects: E1, E4, E5, E6, E8, E9 and FE5. The costing for these projects seems reasonable. These projects can be done in large part by the private sector, but important legal, regulatory and policy changes need to be made. To accommodate this increased capacity, there will also be a need for transmission investments to absorb the capacity and to ensure stability of the network. In it unclear to the WBG what associated plans are in place to also address requisite investments on the transmission and distribution level.

A. General Comments

55. Given the severe shortage of generation capacity in the country, there is an urgent, and ultimately strategic, need to increase this capacity quickly. How much generation capacity fit in this urgent category would depend on (i) the analysis and determination of the amount of unserved demand, which was estimated in 2016 to be approximately 1,200 MW; and (ii) the generation reserve margin needed to maintain grid stability, which typically require 15 to 20 percent more generation capacity than annual peak demand—assuming peak demand is 3,300 MW, this reserve margin should be 500-660 MW. In this respect, the proposed investments in E1 seem appropriate to meet this urgent need.

56. To accommodate this increased capacity, there will also be a need for transmission investments to absorb it and to ensure stability of the network. There will also be a need for investments on the distribution network, which suffers from significant technical and non-technical losses, as well to ensure the added capacity reaches end-users. In this respect, along with any proposal for a generation expansion, one would expect to see proposals for associated transmission and distribution investments that would have to be approved at the same time (if they have not already been approved).

57. At this stage, there is no clear reason why investments in generation capacity should be publicly funded. Models based on privately-financed, owned and operated power plants that can supply the requisite additional capacity have been tested and used in many countries for decades. Investments in transmission and distribution networks, on the other hand, will almost certainly need to be publicly funded. Allocation of these public funds will be key to addressing the generation gap.

58. The CIP does not provide for any non-hydro renewable energy projects. Given that Lebanon is a net importer of primary energy, renewable energy will be key to diversify the country's generation mix to avoid exposure to external shocks generated by global energy markets. In addition, renewable energy is likely to help reduce the overall cost of generation.

59. While Électricité du Liban (EdL) has developed with Électricité de France (EdF) a robust masterplan for expansion of the transmission network, this plan seems to be based on assumptions with respect to the amounts and locations of generation capacity increases. It is unclear what analysis (both technical and economic) was done to ensure that generation expansion follows least-cost principles, and it is unclear what associated plans are put in place to also address requisite investments on the distribution level. This may have been done, but the Bank team is still not privy to this work.

60. Tariff and subsidy reforms are a key aspect of electric system expansion. Given the fact that current tariff policies do not compensate for the cost-of-service, there is a perverse

condition where adding generation capacity on the system means increased fiscal pressure on Government finances. In other words, the more kilowatt hours are sold, the more the Ministry of Finance must pay to cover the gap between EdL's cost-of-service and the revenue it receives. There needs to be a clear plan for tariff reforms that dovetails with the pace of generation expansion. However, tariff increases should be set over time against the efficient costs of operating the sector to protect the interests of consumers in not having to pay for chronic inefficiencies in EdL's operations. In this respect, tariff reforms will also have to be adopted in conjunction with a clear, time-bound plan for reforming and corporatizing EdL.

61. Aside from investments in the transmission and distribution networks to accommodate planned generation expansion, there is an even more urgent need to address losses on both networks, which are estimated to be between 40-50 percent. To put this more into perspective, assuming current available generation capacity in Lebanon is 2,000 MW, ultimately, only 1,000 MW to 1,200 MW actually result in revenue to EdL. If EdL increases its generation capacity by 500 MW, only 250 MW to 300 MW of this capacity will be revenue generating. Decreasing these losses is a high priority for the system, and related investments may, in certain instances, be far more productive financially than investments in increasing generation capacity.

62. The proposed cost estimates for some of the generation plants in the CIP seem to be on the high side. It is important to note, however, that costs of doing business in Lebanon seem to be higher than in other countries, which could explain the difference between these estimates and international benchmarks. There can also be site-specific costs that increase the total investments. The projects' feasibility studies will be key to determining the reasonableness of capital and other cost estimates.

63. In terms of job creation, most proposed investments are likely to generate jobs during the construction periods of the related facilities. However, once construction is completed, the number of staff needed to maintain the facilities during their economic life is typically not high. In this respect, the direct impact from the proposed investments on job creation is likely to be low. However, the indirect impact on job creation economy-wide from increasing generation capacity and improving electricity service is likely to be high.

B. Projects

64. E1 – Zahrani and Salaata

- The estimate projects' costs of US\$1.2 billion for 1000 MW of gas-fired, combined cycle generation seem to be reasonable;
- We understand that the proposed Salaata site is an environmentally-sensitive area. Implementing the project in this area may have added environmental mitigation costs that would not be incurred in other sites. This could delay project implementation while an appropriate mitigation plan is developed, assuming of course that the identified impacts are of a nature that can be mitigated in a cost-effective manner;
- We also understand that the site still needs to be acquired and new transmission infrastructure will be needed to connect the plant to the grid, both of which will take some time to complete;
- Given the urgent need for the additional generation capacity and likely time needed to develop the Salaata site, other more readily available sites should be developed with Zahrani to ensure that at least 1000 MW of new capacity comes online as soon as possible.

There will still be a need for additional capacity to meet future demand, which the Salaata site can be used to satisfy as and when related environmental and land acquisition issues are resolved; and

- Generation investment will be associated with likely needed transmission and distribution investments to allow for delivery of the added capacity. In this respect, the proposed investment should also outline the likely public expenditures needed to accommodate related investments in the energy value chain.

65. E2 – Jieh Power Plant

- The estimate projects' costs of US\$ 500 million for 500 MW of (presumably) gas-fired, combined cycle generation seem to be reasonable, assuming the project will be implemented on a brownfield site; and
- See bullet No. 3 in paragraph 64.

66. E3 – Salaata 2 Power Plant

- The estimate projects' costs of US\$ 600 million for 500 MW of (presumably) gas-fired, combined cycle generation seem to be reasonable;
- It is important to note that development of this plant will, by necessity, follow development of Salaata 1 in E1; and
- See bullet No. 3 in paragraph 64.

67. E4 & FE3 Hydro Power Plants

- The proposed hydro investments in E4 and FE3 are identical, but the proposal is to implement them in cycles over time. The highest priority should be rehabilitation and upgrades of existing hydro plants.
- There are two significant issues that need to be addressed with respect to these existing plants, part of which are public and the rest are under concessions with the private sector. Many of the private concessions, which deal with relatively old facilities, will expire within the next 10 years, but it is unclear what plans the ministry has for taking them over. However, without a clear vision as to what will happen to these concessions after their expiry, the private sector has no incentive or guidance to invest in maintenance and rehabilitation. Further, the tariff paid by EdL for hydropower appears inadequate to cover the maintenance costs, which affects availability of the facilities and long-term asset value.
- Further, the institutional setup dealing with hydropower is ad hoc and involves many stakeholders with little or no coordination among them. It is unclear how or why investments in new facilities should be made without resolving this critical issue first.
- Only pre-feasibility studies were done on the proposed sites for new hydropower facilities. Detailed feasibility studies on each of the 25 proposed sites are still needed. Further, given the potential environmental and social impacts of hydro facilities, in general, it will be critical to undertake such an assessment before the full costs of each site can be fully determined.

68. E5 & FE5 Geothermal Plants of 1 MW and 15 MW

- The proposed 1 MW plant in E5 is a pilot plant in Akkar to drill test geothermal wells to firm the analytical models of Lebanon's geothermal resources. The total investment cost of this pilot is estimated to be approximately US\$ 25 million. The anticipated cost of electricity from this pilot plant is expected to be in the range of US¢46, though this cost depends on factors that will become more apparent as the wells are completed. While it remains unclear what the proposed US\$ 5 million cost in the CIP is for, it is assumed to be either for studies or transaction support to implement the pilot plant;
- The proposed plant in FE5 is an enhanced geothermal system (EGS) expected to be implemented in Akkar as well. The estimated cost per kWh of the electrical output of this plant is expected to be in the range of US¢28 based on the current analytical models of the geothermal resources. These models will need to be updated based on the findings of the pilot plant in E5, once completed. In other words, the investment in FE5 depends on (a) completion of the pilot plant in E5 and (b) realizing positive results on the available geothermal resource;
- While geothermal generation is an excellent source of clean energy, the resources in Lebanon are estimated to provide approximately 7 MW of electrical capacity. There is a bigger potential of thermal generation for heating equivalent to 71 MW; and
- The strategic question is the priority of investments in geothermal generation in comparison to investments in other forms of clean energy (e.g., solar and wind) that have far lower costs. Concentrated Solar Power technologies, for example, would likely provide far more electrical and thermal output at much lower prices than currently anticipated for the geothermal resources. As such, the proposed investments in at least FE5 should probably not be a high priority.

69. E6, E7 and FE6 Transmission Masterplan Projects

- At the outset, it is important to note that the estimated costs for the proposed investments do not appear to include the cost of land expropriation or compensation for the requisite rights-of-way for the anticipated projects. Estimating these land costs requires at least preliminary surveys of the routes for the different transmission lines and substations to identify the specific parcels of lands affected. As such, the costs in the CIP are likely to be an underestimate from what is actually needed to complete the work.
- EdL expects to upgrade its aging 150 kV transmission network to 220 kV to accommodate the planned generation investments. In other words, the proposed transmission investments are tied to progress on the proposed generation projects. Put another way, when a generation investment is approved, the approval for the transmission and distribution investments needed to deliver power from the new power plant needs to also be considered and approved at the same time.
- Before contemplating new investments in the 220 kV network, a solution to the long-outstanding problem of connecting the existing 220 kV loop at Mansourieh needs to be found.
- The proposed investment in E7 relates to ALL of the generation projects to accommodate the additional load from the proposed generation projects and better balance the load

across substations. Most of proposed investments in E7 appear to relate to evacuation from new power plants at Zouk (the old ones are connected to 150 kV but the new one will be at 220 kV), Akkar wind farm, Jieh and Selaata, but also include relocation of Jeita substation to create a 220 kV loop from Zouk, equipped with underground cables to feed the coastal towns of Adma and Jounieh.

- The number of staff in EdL's department and their technical capacity to prepare projects seem inadequate to prepare and implement the proposed projects. There needs to be a clear and credible plan as to how EdL will bridge this gap to avoid problems during execution. There also seems to be a chronic problem in securing required permits for transmission projects from municipalities that don't seem to have the capacity to undertake the work necessary to grant the permits. This becomes a significant source of delay and potential for interference in the implementation process, which needs to be addressed at the broader policy level.

70. E8 LV Network Upgrades

- The 66 kV network was built in the 1970s and long past its useful life. In this respect, it needs to be replaced urgently. Some of the proposed investments targets this issue, but more is needed on a more systematic basis to ensure proper operation of the distribution network.

71. E9 – Distribution Service Providers (DSP)

- DSPs are private-sector companies hired to develop and implement investment plans to reduce distribution level losses. The country was divided into 3 regions that were awarded to 3 separate companies. The Government is responsible for funding the investment plans agreed with the DSPs in order for the DSPs to meet the contractually-mandated targets to improve performance of the distribution networks in their awarded region. Currently, only 1 of the 3 companies seem to have achieved positive results, and the contracts of all 3 were recently renewed for 4 years after the initial contract term of 5 years had expired;
- One of the key contractual conditions was for DSPs to install smart meters to begin addressing the significant bill collection and non-technical losses on the distribution level, which in turn would decrease the amount of subsidy EdL needs. Although other investments in at least 1 of the regions (north) moved forward, with very positive results in terms of reduced EdL losses and increased revenue, installation of smart meters has not happened in the DSPs' initial 5-year term. The main impediment, based on the information provided, is political; and
- Investments in smart meters should be a high priority as they will increase EdL revenues and likely more than pay for themselves. The amount of the investments needed are determined by the DSPs, subject to review and approval by EdL.

72. E10 – Gas Pipeline

- Based on preliminary analysis undertaken by the Bank several years ago, building a north-to-south gas pipeline would be very costly, primarily because (a) a land-based pipeline must go through Beirut where land costs are very expensive and (b) the sea floor

off the Lebanese coast is very deep, which would increase the cost of a marine pipeline. Additional studies are needed to further refine these conclusions and analyse alternatives, but it is unclear whether any of these studies have been completed;

- A north-to-south gas pipeline would make the current plan to install 3 FSRUs in Zahrani, Salaata and Bedawei unnecessary. It is far more economical to install one large FSRU at one of these sites and connect to this proposed gas pipeline to transport the gas where it is needed. In this respect, the proposed timeframe in the CIP for this gas pipeline seems inconsistent with the ongoing plans for the FSRUs;
- The proposed FSRUs include an obligation on the awarded private-sector company(ies) to construct a gas pipeline from the FSRUs to the power plants that they are expected to serve. In the south, this is likely to be Zahrani and Jieh (after its rehabilitation), and, in the north, it is likely to be Bedawei. The Bedawei gas pipeline could ostensibly be extended to reach Salaata (thus eliminating the need for a separate FSRU at that location) and Zouk (after its rehabilitation), which would likely increase the economies-of-scale at the Bedawei FSRU site (thus reduce the overall cost of gas supply) by using a larger gas importing facility. These pipelines would be built, operated and maintained by the private sector, and paid for in the tariff paid for gas purchased over the life of a gas supply agreement between EdL (or MoEW) and the private company(ies); and
- These pipelines would not go through Beirut, but it would seem reasonable that they would form the basis for a north-to-south gas pipeline backbone for the country. In this respect, it is unclear what the rationale is for a separate, publicly-financed project towards that end.

73. FE1 and FE2 – New Power Plants at Zouk and undisclosed Locations

- These seem to be placeholders at this point. However, it is important to point out that the planned expansion of gas-fired capacity at Zouk and elsewhere need to be coordinated with the plans for overall gas supply (and gas pipelines) in the country. For example, if the intention is to install these 1,500 MW of new capacity gas-fired, this could impact the design of any contemplated gas pipelines in E11 (or alternatives) and transmission/distribution network expansions. It could also have an impact on the design of the FSRUs, if the intention is to bring this capacity online in the next 10 years.

C. Reform Needs

74. CoM to approve and implement a multi-year electricity tariff cost-recovery plan for EdL over a 3-year transition period. EdL's tariff has not been revised since 1996 and is thus far below cost-recovery levels, exacerbating the fiscal burden on government which covers the utility's revenue gap. Any tariff increases, however, need to be phased in to coincide with increases in hours of electricity supplied by EdL to show its customers tangible results commensurate with the larger bill. Importantly, tariff increases should also include an effective lifeline block helping to protect low income consumers and/or cash transfers. Taken together, this would improve sector financial conditions without increasing the fiscal burden on public finances, while also generating public support or at least minimizing public resentment.

75. The Ministry of Energy to complete implementation of approved development plan for natural gas supply by developing new LNG supply and infrastructure facilities,

liquefied natural gas importing infrastructure and plan to explore and exploit off-shore domestic gas resources.

76. The Government to aim towards meeting and expanding the target in the 2010 energy plan for renewable energies and green growth. Evidence suggests that Lebanon is especially exposed to large vulnerabilities from climate change with the poor disproportionately affected. The estimated impact of climate change on Lebanon is encompassing and costly (estimated at US\$ 1.9 billion by 2020 in a first of its kind analysis for Lebanon released this year by Ministry of Environment/UNDP). A green growth and low carbon emissions development strategy for Lebanon could also be an opportunity for job creation.

Table 5. Electricity Projects.

Ref	Project	Estimated Cost (MUS\$)	Land Expropr. (MUS\$)
E1.1	GENER (1) New power plants on Medium (2) Term - IPP - 1000MW – Zahrani	600.0	N/A
E1.2	GENER (1) New power plants on Medium (2) Term - IPP - 1000MW – Salaata	600.0	N/A
E2	GENER Jiye Power plant-500MW	500.0	0.0
E3	GENER Salaata 2 Plant on Longer Term- 500MW	600.0	0.0
E4	GENER Hydro power plants (331.5 MW)	264.1	N/A
E5	GENER Geothermal Plant of 1.3 MW	5.0	N/A
E6	Transmission Master Plan Project (High Importance)	223.6	0.0
E7	Transmission Master Plan Project including Infrastructure at KSARA Substation (Mid Importance)	253.7	0.0
E8	Transmission LV Network Upgrade		
E8.1	<i>Transmission LV Network Upgrade</i>	20.0	0.0
E8.2	<i>Transmission LV Network Upgrade</i>	6.0	0.0
E8.3	<i>Transmission LV Network Upgrade</i>	6.0	0.0
E8.4	<i>Transmission LV Network Upgrade</i>	6.0	0.0
E8.5	<i>Transmission LV Network Upgrade</i>	6.0	0.0
E8.6	<i>Transmission LV Network Upgrade</i>	6.0	0.0
E8.7	<i>Transmission LV Network Upgrade</i>	6.0	0.0
E9.1	Distribution DSP	262.5	N/A
E9.2	Distribution DSP	87.5	N/A
E10	Fuel Sourcing Gas Pipeline	140.0	N/A
FE1	GENER Zouk Power plant - 500MW	500.0	Existing Land Dedicated for the power plant
FE2	GENER New Power plants on Longer Term - 1000 MW	1,200.0	New Location
FE3	GENER Hydro power plants (141.5 MW)	112.7	N/A
FE5	GENER Geothermal Plant of 15MW	52.7	N/A
FE6	Transmission Master Plant Project (Low Importance)	134.6	N/A

Table 2: Assessment of Project E1.1

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		D	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		E	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	1
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	D
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	3
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	D
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	3
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	2
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	N
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	1
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Installing smart meters to reduce commercial losses
2- Tariff/subsidy reform
3- Corporatization of EdL

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 6: Assessment of Project E1.2

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		D	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		E	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	1
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	D
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	3
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	D
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	3
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	2
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	1
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	N
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	1
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Installing smart meters to reduce commercial losses
2- Tariff/subsidy reform
3- Corporatization of EdL

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 7: Assessment of Project E2

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		D	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		E	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	1
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	D
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	3
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	D
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	3
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	2
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	1
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	N
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	1
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Installing smart meters to reduce commercial losses
2- Tariff/subsidy reform
3- Corporatization of EdL

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 8: Assessment of Project E3

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		D	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		E	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	1
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	D
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	3
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	D
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	3
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	3
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	1
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	N
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	1
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Installing smart meters to reduce commercial losses
2- Tariff/subsidy reform
3- Corporatization of EdL

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 9: Assessment of Project E4

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		E	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	2
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	D
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	2
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	D
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	3
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	1
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	N
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	1
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Tariff/subsidy reform
2- Creating the necessary institutional structure to coordinate hydropower developments in the sector
3- Developing a unified strategy for use of hydropower resources in Lebanon

	Score
16- Reform Timeline	3
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 10: Assessment of Project E5

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
			N
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
			D
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
			N
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
			Y
Yes	Y		
No	N		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
			Y
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
			N
Yes	Y		
No	N		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
			N
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
			E
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	1
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	D
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	1
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	D
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	1
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	N
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	1
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Installing smart meters to reduce commercial losses
2- Tariff/subsidy reform
3- Corporatization of EdL

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 11: Assessment of Project E6

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	3
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	D
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	3
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	D
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	2
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	N
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	1
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Installing smart meters to reduce commercial losses
2- Tariff/subsidy reform
3- Corporatization of EdL

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 12: Assessment of Project E7

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	3
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	D
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	3
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	D
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	2
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	2
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	N
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	1
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Installing smart meters to reduce commercial losses
2- Tariff/subsidy reform
3- Corporatization of EdL

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 13: Assessment of Project E8

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		Y	
Very likely		Y	
Not likely		N	
I don't know/don't have enough information		D	
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes		Y	
No		N	
I don't know/don't have enough information		D	
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes		Y	
No		N	
I don't know/don't have enough information		D	
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive		Y	
Yes, "in principle" but the institutional/policy environment needs changes first		E	
No, for any reason		N	
I don't know/don't have enough information		D	

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	3
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	D
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	3
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	D
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	2
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	N
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	1
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Installing smart meters to reduce commercial losses
2- Tariff/subsidy reform
3- Corporatization of EdL

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 14: Assessment of Project E9

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		L	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		N	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		D	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		E	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

		Score
5- Timing of Potential Growth Impact of Completed Project		D
Less than 12 months from initiation	3	
In 13 to 36 months from initiation	2	
In more than 36 months from initiation	1	
I don't know/don't have enough information	D	

		Score
8- "Good Job" Potential of Completed Project		1
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3	
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2	
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1	
I don't know/don't have enough information	D	

		Score
6- Sustainability of Growth Impact of Completed Project		D
Highly sustainable	3	
Moderately sustainable	2	
Not likely to be sustainable or will require significant public resources	1	
I don't know/don't have enough information	D	

		Score
9- Employment Creation of Completed Project		1
Generates a large number of jobs	3	
Generates a moderate number of jobs	2	
Generates a low number of jobs	1	
I don't know/don't have enough information	D	

		Score
7- Inclusivity of Growth of Completed Project		D
Project targets poor women	3	
Project targets the poor in general	2	
None of the above	1	
I don't know/don't have enough information	D	

		Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:		D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3	
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2	
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1	
I don't know/don't have enough information	D	

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	D
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	1
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Installing smart meters to reduce commercial losses
2- Tariff/subsidy reform
3- Corporatization of EdL

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 15: Assessment of Project E10

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
			E
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
			L
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
			Y
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
			Y
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
			D
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
			D
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
			D
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
			E
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

		Score
5- Timing of Potential Growth Impact of Completed Project		D
Less than 12 months from initiation	3	
In 13 to 36 months from initiation	2	
In more than 36 months from initiation	1	
I don't know/don't have enough information	D	

		Score
8- "Good Job" Potential of Completed Project		D
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3	
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2	
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1	
I don't know/don't have enough information	D	

		Score
6- Sustainability of Growth Impact of Completed Project		D
Highly sustainable	3	
Moderately sustainable	2	
Not likely to be sustainable or will require significant public resources	1	
I don't know/don't have enough information	D	

		Score
9- Employment Creation of Completed Project		2
Generates a large number of jobs	3	
Generates a moderate number of jobs	2	
Generates a low number of jobs	1	
I don't know/don't have enough information	D	

		Score
7- Inclusivity of Growth of Completed Project		D
Project targets poor women	3	
Project targets the poor in general	2	
None of the above	1	
I don't know/don't have enough information	D	

		Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:		D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3	
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2	
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1	
I don't know/don't have enough information	D	

Feasibility Assessment

	Score
11- Affordability of Project	1
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	D
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	D
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	N
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	1
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Installing smart meters to reduce commercial losses
2- Tariff/subsidy reform
3- Corporatization of EdL

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 16: Assessment of Project FE1

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
			D
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
			Y
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
			Y
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
			Y
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
			D
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
			D
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
			D
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
			E
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

		Score
5- Timing of Potential Growth Impact of Completed Project		D
Less than 12 months from initiation	3	
In 13 to 36 months from initiation	2	
In more than 36 months from initiation	1	
I don't know/don't have enough information	D	

		Score
8- "Good Job" Potential of Completed Project		D
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3	
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2	
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1	
I don't know/don't have enough information	D	

		Score
6- Sustainability of Growth Impact of Completed Project		D
Highly sustainable	3	
Moderately sustainable	2	
Not likely to be sustainable or will require significant public resources	1	
I don't know/don't have enough information	D	

		Score
9- Employment Creation of Completed Project		1
Generates a large number of jobs	3	
Generates a moderate number of jobs	2	
Generates a low number of jobs	1	
I don't know/don't have enough information	D	

		Score
7- Inclusivity of Growth of Completed Project		D
Project targets poor women	3	
Project targets the poor in general	2	
None of the above	1	
I don't know/don't have enough information	D	

		Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:		D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3	
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2	
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1	
I don't know/don't have enough information	D	

Feasibility Assessment

	Score
11- Affordability of Project	3
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	3
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	D
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	N
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	1
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Installing smart meters to reduce commercial losses
2- Tariff/subsidy reform
3- Corporatization of EdL

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 17: Assessment of Project FE2

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
			D
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
			Y
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
			Y
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
			Y
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
			D
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
			D
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
			D
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
			E
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

		Score
5- Timing of Potential Growth Impact of Completed Project		D
Less than 12 months from initiation	3	
In 13 to 36 months from initiation	2	
In more than 36 months from initiation	1	
I don't know/don't have enough information	D	

		Score
8- "Good Job" Potential of Completed Project		D
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3	
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2	
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1	
I don't know/don't have enough information	D	

		Score
6- Sustainability of Growth Impact of Completed Project		D
Highly sustainable	3	
Moderately sustainable	2	
Not likely to be sustainable or will require significant public resources	1	
I don't know/don't have enough information	D	

		Score
9- Employment Creation of Completed Project		1
Generates a large number of jobs	3	
Generates a moderate number of jobs	2	
Generates a low number of jobs	1	
I don't know/don't have enough information	D	

		Score
7- Inclusivity of Growth of Completed Project		D
Project targets poor women	3	
Project targets the poor in general	2	
None of the above	1	
I don't know/don't have enough information	D	

		Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:		D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3	
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2	
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1	
I don't know/don't have enough information	D	

Feasibility Assessment

	Score
11- Affordability of Project	3
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	3
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	D
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	N
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	1
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Installing smart meters to reduce commercial losses
2- Tariff/subsidy reform
3- Corporatization of EdL

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 18: Assessment of Project FE3

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		E	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	2
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	D
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	2
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	D
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	3
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	2
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	1
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	N
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	1
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Tariff/subsidy reform
2- Creating the necessary institutional structure to coordinate hydropower developments in the sector
3- Developing a unified strategy for use of hydropower resources in Lebanon

	Score
16- Reform Timeline	3
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 19: Assessment of Project FE5

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
			N
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
			D
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
			N
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
			Y
Yes	Y		
No	N		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
			Y
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
			N
Yes	Y		
No	N		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
			N
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
			E
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	1
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	D
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	1
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	D
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	D
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	N
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	1
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Installing smart meters to reduce commercial losses
2- Tariff/subsidy reform
3- Corporatization of EdL

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 20: Assessment of Project FE6

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	3
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	D
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	3
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	D
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	3
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	2
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	N
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	1
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Installing smart meters to reduce commercial losses
2- Tariff/subsidy reform
3- Corporatization of EdL

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

WATER AND WASTEWATER

III. Water and Wastewater

The CIP (Capital Investment Plan) contains 206 separately identified investment projects in the water and wastewater sectors for a total of US\$ 7,527 million, to be implemented over three cycles covering the period 2018-2030. For the purpose of the assessment, the water sector projects in the CIP were grouped into two groups—networks and dams—while the wastewater projects were grouped into three groups—networks, wastewater treatment plants and new system (WWTP+ networks). In regard to the water sector, the WBG assesses that networks and dams at a cost of around US\$ 1,224 million plus US\$ 103 million for land expropriation, are important for the first cycle (2018-202). While water networks can potentially be completed and managed by the private sector, provided that important legal, regulatory and policy measures are introduced, dams need a stronger public sector role. As for wastewater projects, WBG assesses US\$ 1,334 million plus US\$ 35 million for land expropriation, are important for the first cycle (2018-202). When considering project cost, it is essential to confirm that the amounts provided in the CIP include the cost of expropriation and environmental mitigation.

A. General Comments

77. In Lebanon, citizens need for additional water sources and sanitation has increased due to population growth, economic development, urban expansion, supply shortages and the inability of public water entities to deliver required volumes and quality of service in water supply and sanitation.

78. The objective on water supply is to reach 24/7, which contributes to restoring or maintaining the social contract on water service. During water shortages, people resort to expensive alternative options such as tankers and bottled water. The continuous service would allow for the reduction of the cost to the most vulnerable, along with health benefits from improved water quality.

79. On sanitation, expanding services with improved technology throughout Lebanon, will contribute to reinforcing the social contract, generating environmental and health benefits to the citizens. Now that the country is progressing well on water supply, sanitation becomes necessary. In addition, with growing water needs, options of new water, such as reuse and storm-water management, can be explored to fill the gap on water availability and adapt to the climate change impact. Usually the most vulnerable are the ones who don't have access to reliable services and are forced to seek expensive alternatives or are usually dependent on "unhygienic alternatives", which also generate environmental concerns, such as pollution of groundwater. Hence the sanitation components would tackle public health, water supply safety, and environmental issues. In addition, better planning is required to connect wastewater networks to wastewater treatment plants.

80. For each of water supply and sanitation sectors, due to the limited human resources at the water establishments, performance-based contracts to operate and manage infrastructure is an option to pursue. It would offer two advantages: (i) to improve the accountability and the performance by way of a larger private sector role; and (ii) create jobs for national operators (develop small and medium enterprises in the water supply and sanitation sectors).

81. The water supply and the wastewater plans under the Capital Investment Plan (CIP) are critical as they cover the investments needed in the sector for Lebanon. Based on the World Bank current engagement in Greater Beirut Water Supply Project (GBWSP-known

as Awali project) and the Water Augmentation Water Supply (WSAP-known as Bisri dam), we would like to share the following thoughts.

Water Supply

82. On the network rehabilitation, the World Bank has provided technical support to the Beirut and Mount Lebanon Water Establishment (BMLWE) on reducing water leakages. To ensure a continuous water-supply, leakages need to be reduced, and for that, training of staff in pressure control and leak detection is essential. Improving the water service is an opportunity to update tariff structure and put in place volumetric tariff. The reduction of leakages, if well designed, can be an opportunity to improve private sector participation initially through performance-based contracts. More detailed discussions are needed to see how to scale up the current technical assistance to the other water establishments. The North Lebanon Water Establishment has experience in providing continuous water supply, and it can also provide useful lessons.

83. On water supply storage, the Bisri dam has been an opportunity to learn multiple lessons that could be used in future programs. First, in the budget provided for dams' projects in the CIP, it is critical to assess if the cost of expropriation and environmental mitigation is accounted for to ensure that the project is cost-effective. Second, the alternative analysis study conducted for the Bisri dam was essential to ensure that the dam is a best option in an overall national program of infrastructure, and non-structural measure to achieve water security. Third, the high quality of Environmental and Social Impact Assessment done for Bisri dam confirmed that the dam is the best alternative. The mitigation plan/financing for the identified environment and social impacts as well as the communication with stakeholder emphasized the need to establish benefit-sharing programs for the local people in the surrounding communities.

Sanitation

84. We applaud the inclusion of wastewater as an area of engagement in the CIP. Augmenting the water supply will induce increasing wastewater volume in the different areas in Lebanon. However, sanitation goes beyond wastewater infrastructure and looks at the management level to ensure sustainability of sanitation service delivery. This would require an adequate tariff for wastewater services based on volume of water consumed. Also significant, is the closing of the loop through options of reuse of treated wastewater such as such as agriculture irrigation, industry, aquifer-recharge, etc., when feasible. Hence, it is important to emphasize that sanitation is a critical topic in Lebanon. It is recommended to (i) start engaging on inclusive sanitation, including looking at appropriate technologies (wastewater/network is not the only option in some cases septage treatment plants are an option too); (ii) understand the financing needs of the sector (including if the numbers include the expropriation costs) and; (iii) evaluate the CAPEX and OPEX associated with various technological options. A discussion on the Operation and Maintenance including management of the sludge is also needed. The Bank water team stands ready to provide technical support in the sanitation.

B. Assessment of Water Establishments

85. In 2000, Water Sector Law 221 was enacted with the objective of: (i) clarifying the respective obligations and rights of public agencies for the delivery of water services; (ii) empowering the newly created Regional Water Establishments (RWEs) to increase service and improve sustainability; and (iii) creating reciprocal accountability between customers and the RWEs. The full implementation of Law 221 was however impeded by

fragmentation of investment, planning and execution responsibilities, inadequate tariffs and tariff structure, poor inter-Government coordination and significant delays in infrastructure investment.

86. The four water establishments are the following: North Lebanon Water Establishment (NLWE), Beirut and Mount Lebanon Water Establishment (BMLWE); Beqaa Water Establishment (BWE); and South Lebanon Water Establishment (SLWE). A summary of the CIP projects according to water establishment is as per the table below:

Table 21: Summary of CIP projects per water authority.

Water Establishment	Water Supply		Sanitation	
	# projects	estimated costs (US\$ M)	# projects	estimated costs (US\$ M)
NLWE	41	1,251	19	468.8
BMLWE	12	891	38	1,234.3
SLWE	27	1,751.5	14	365.7
BWE	44	951	9	333.6
Grand Total	124	4,844.5	80	2,402.5

- For sanitation projects, the CIP shows that there is a need of:
 - small scale municipal projects to be handled by water establishments and/or municipality depending on the location for a cost US\$ 250 million which are excluded from the table above.
 - Ghadir flood protection against the flood of major highways is considered as national needs for a cost of US\$ 30 million.
- **NLWE:** priority in the CIP is given to projects in water supply. It makes sense as the establishment wants to expand the water supply network while keeping the 24/7 for the existing areas with continuous water supply. This is the only water establishment that is delivering continuous water supply and it is important to maintain this social contract with the customers. The projects under sanitation are pragmatic, helping to protect water sources. Priority should have the maximal use of the current wastewater treatment plant capacity by connecting the wastewater network.
- **BMLWE:** priority in the CIP is given to projects in sanitation which is in line with WB team assessment. Indeed, a lot of work has been done for water supply, while the focus on sanitation is pragmatic and recommended as future next steps. With World Bank technical assistance and its own funding, the BMLWE launched a contract to establish DMA's in Beirut South by end of November 2017. The establishment is now finalizing the preparation of the first performance based water loss reduction and management contract in Achrafieh, funded by the WB, for further enabling the environment of the performance contracts in the future.
- **SLWE:** priority in the CIP is given to projects in water supply and the reduction of the losses. Similar to the NLWE, the projects on sanitation are pragmatic, helping to protect water sources.

- **BWE:** there is a need for water supply for the areas that are not connected. The water quality is of a major concern where there is a need to reduce pollution in lake Qaraoun. The WB is contributing US\$ 55 million to reduce the quantity of untreated municipal sewage discharged into the Litani River and to improve pollution management around Qaraoun Lake. Sanitation projects are a top priority for BWE.

C. Reform Needs

Overview of the CIP

87. The Capital Investment Plan (CIP) includes 124 water supply projects and 82 wastewater projects, covering the whole of Lebanon: North, Beirut and Mount Lebanon, South and the Bekaa areas. It is essential to confirm that the amounts provided in the CIP include the cost of expropriation and environmental mitigation. Since project specific information is not sufficiently available, the team assessed groups of projects for the water supply and sanitation sectors. There are no irrigation sector activities except for the following dams to be used for irrigation located in the Bekaa area, namely (i) Massa Dam; (ii) Younine Dam and (iii) Litani - Conveyor 800 Phase 2.

88. To help improve level of service in water supply and sanitation, the three top priority reforms are the following:

- a) ***Ratification of the water code (at parliament level)*** to increase the options of private sector involvement to operate and maintain water infrastructure for the medium to long terms.
- b) ***Improvements of by-laws for the Law 221 for autonomy status of the Water Establishments*** to transfer function to the Water Establishments;
- c) ***Recruitment of staff*** to support operation and maintenance of water facilities;
- d) ***New tariff structure*** for water supply and wastewater services to cover at least operation and maintenance cost; and
- e) ***Improve coordination between planning and construction and operation and maintenance functions in the water sector.***

89. For the purpose of the assessment, the water sector projects in the CIP were grouped into two groups—networks and dams—while the wastewater projects were grouped into three groups—networks, wastewater treatment plants and new system (WWTP+ networks). All the projects were distributed as per the geographical location per water establishment.

90. Enabling conditions to make the water sector more attractive for private sector involvement (including private funding):

- a) Secure real autonomy for the water establishments (financially and authority).
- b) Introduce adequate tariff structure to gradually cover operation and maintenance cost for drinking water and waste water services plus capital cost (depreciation and debt service). The Ministry of Energy and Water could develop national guidelines for water tariffs based on a progressive block system that allows to consider social and economic conditions.

- c) Improved coordination mechanism between the planning/construction function and the operation and maintenance function by enhancing the role of the operation and maintenance functions in project preparation.
- d) Raising awareness of the customers of the cost of water services. While water is free, it is a scarce commodity and cost of the services need to be covered. Covering full cost by tariffs will raise awareness

D. Projects Ratings and Recommendations

91. The ranking of the projects as proposed are acceptable. First, there is need to define overall project objective, second, to derive specific project objectives, and third, thereupon develop the prioritization criteria being applied to define 3 project stages/cycles. Hence, additional criteria for prioritizing any project should consider, but is not limited to:

- a) Prioritization of projects with lowest ratio of CAPEX per population benefitting.
- b) Prioritization of areas with high prevalence of water-borne diseases.
- c) Prioritization of areas with highest water pollution incidents/risks.
- d) Prioritization of areas with highest industrial/economic relevance.
- e) Prioritization of areas where quantity and quality of water supply is worst.

92. “Soft” Components: The CIP only mentions projects with works/installations. A comprehensive program may also include institutional, financial and technical assistance to the 4 Water Establishments (WEs) and relevant Ministries. Such a soft component could include, but is not limited to, the following:

- a) Optimization of actual institutional set-up and staffing structure of WEs.
- b) Optimization of financial management and sustainability, by looking into the whole cycle of financial aspects, such as: Who defines water/wastewater tariffs? Who is in charge of collecting fees? Who is receiving the tariff fees? Who has responsibility to use the collected money? Who has responsibility for infrastructure planning and implementation? Ownership of assets? Need for public subsidies (if yes, what are prevailing conditions?) etc.
- c) Procurement training – particularly for Design-Build (DB) and Design-Build-Operate (DBO) contracts, to better utilize market know-how.
- d) WWTP operator training.
- e) Workshops on supposedly not so well-known technical & environmental issues such as pipe rehabilitation, sewage/septage treatment technologies, biogas production and utilization, treated water and sludge reuse, GHG emissions, olive oil residue mgmt., optimized fertilizer and pesticide application in agriculture.
- f) Analysis of appropriateness of applied treatment standards for municipal WWTPs, including creation of awareness for cost implications of different standards.
- g) Effluents from industries: promotion of cleaner technologies, pre-treatment of effluents to sewer systems and to water bodies.
- h) Development of a strategic plan for treated water reuse in agriculture, groundwater recharge, industries, or other.
- i) Strategic planning of minimum monitoring needs by utilities.
- j) Define key operation indicators, and develop Lebanese water & sanitation benchmarking based on those indicators.

k) Public outreach campaigns on water/sanitation issues.

Table 22: Water Supply Networks Projects

Ref	Project	Estimated Cost (MUS\$)	Land Exprop. (MUS\$)
W8A	Expropriations for Beirut Storage Tanks	0	35
W7	Water Supply system rehabilitation in Beirut area	100	0
W3A	Transmission line from Janneh Dam to Greater Beirut	60.0	0.0
W4	Water treatment plant and water supply system for Beqaata Dam	35.0	2.0
W6A	Water supply system for Chabrouh Dam	40.0	2.0
W8	Water Supply Project for Mount Lebanon	100.0	0.0
W9	Qobayat Water Supply Systems, Phase 1	51.0	0.5
W10	Halba Water Supply Systems, Phase 1	92.0	0.5
W1	Water supply system for Mseilha Dam	14.5	5.0
W2	Water supply system for Balaa Lake	10.5	3.0
W11	Danniyeh Water Supply Systems, Phase 1	27.0	0.5
W12	Minieh Water Supply Systems, Phase 1	12.0	0.5
W13	Tripoli Water Supply Systems, Phase 1	25.0	0.5
W14	Zgharta Water Supply Systems, Phase 1	24.0	1.0
W15	Bcharre Water Supply Systems, Phase 1	10.0	0.0
W16	Koura Water Supply Systems, Phase 1	55.0	0.5
W17	Batroun Water Supply Systems, Phase 1	25.0	0.5
W24	Yahfoufa Water Supply System	12.0	0.5
W25	Qaa El Rim System	28.0	0.5
W26	Qab Eilas, Jdita and Zebdol Water Supply systems	9.0	0.5
W27	Aanjar Water Supply System	24.0	0.5
W28	Chamsine Water Supply System	6.0	0.5
W29	Ain El Zarqa Part 1 Water Supply System	16.0	0.5
W30	Ain El Zarqa Part 2 Water Supply System	6.0	0.5
W18	Ain El Hawr -Ras El Meil Systems	18.0	1.0
W19	Ein El Zarqa	8.0	1.0
W20	Laboue Water Supply System	17.0	0.5
W21	Ouyoun Orghosh Water Supply System	9.0	0.5
W22	Younine, Maqne and Nahle water supply systems	5.0	0.5
W23	Yamoune Water Supply Systems	50.0	0.5
W35	Nabatiye Water Supply System	26.0	0.5
W36	Bint-Jbeil Water Supply System	63.0	0.5
W37	Marjaayoun & Hasbaya Water Supply Systems	24.0	0.5
W31	Saida Water Supply Systems	25.0	1.0
W32	Zahrani Water Supply System	39.0	0.5
W33	Jezzine Water Supply System	6.0	0.5
W34	Sour Water Supply System	42.0	0.5

Table 23: Assessment of Water Supply Networks

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
			Y
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
			Y
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
			Y
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
			N
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
			D
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
			Y
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
			Y
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
			N
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	D
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	D
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	D
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	D
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	D
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

11- Affordability of Project		Score
		2
Private financing with guarantees/ contingent liabilities	3	
Public concessional financing	2	
Public, market based financing	1	
I don't know/don't have enough information	D	

13- In Your Judgment, The Project Belongs to Which Implementing Period?		Score
		*
2018 - 2021	1	
2022 – 2025	2	
2026 - 2030	3	
I don't know/don't have enough information	D	

12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)		Score
		D
0-6 months for shovel readiness	3	
6-18 months for shovel readiness	2	
18+ months for shovel readiness	1	
I don't know/don't have enough information	D	

14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?		Score
		D
Yes	Y	
No	N	
I don't know/don't have enough information	D	

Reform Needs Assessment

15- Reform Complement		Score
		1
No reforms needed	3	
Only cabinet decrees needed	2	
Parliamentary legislation needed	1	
I don't know/don't have enough information	D	

16- Reform Timeline		Score
		2
Reforms to be front ended	3	
Reforms to proceed with implementation	2	
Reforms to be post- implementation	1	
I don't know/don't have enough information	D	

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful	
<p>1- PPP: Ratification of the water code (at parliament level). Act 228/2000 is not applicable for water projects until the water code is approved. This lack of ratification limits the options of management contract to operate and maintain, for a medium-long term, water infrastructure, such as water treatment plants</p> <p>2- Improving by-laws of the Law 221 to provide full autonomy status of the Water Establishments. These by-laws would allow transfer of function to the Water Establishments, improvement of sanitation, and needed staffing for improved performance of the Water Establishments.</p> <p>3- Recruitment of staff: staffing is frozen at all the public institutions. This freeze is a concern for all water establishments in Lebanon as they will be operating and maintaining water facilities.</p>	

* Although Water Supply Networks projects are assessed as a group, the assessed implementation cycle is project-specific. See Table 88.

Table 24: Water Supply Dams Projects

Ref	Project	Estimated Cost (MUS\$)	Land Exprop. (MUS\$)
W41A	Remaining Expropriations for Besri Dam	0.0	15.0
W41B	Remaining Expropriations for Chabrouh Dam	0.0	20.0
W50	Damour Dam	150.0	30.0
W39	Ain Dara -Azounieh Dam	110.0	5.0
W40	Maaser Chouf Dam	85.0	2.0
W38	El Bared Dam	300.0	0.0
W45	Noura el Tahta Dam	80.0	10.0
W46	Atolbe Dam	18.0	2.0
W55	Qarqaf Dam	81.0	#N/A
W38A	Additional funds for Mseilha Dam	15.0	0.0
W38B	Additional funds for Balaa Dam	7.0	0.0
W38C	Repairing works for Brissa Dam	15.0	#N/A
W47	Dar Baachtar Dam	75.0	10.0
W48	IaaL Dam	70.0	10.0
W49	Rahwe Dam	25.0	10.0
W53	Wadi Chich Dam	20.0	0.0
W43	Barhashah Dam	40.0	1.0
W41	Assi Phase 1 Dam	65.0	0.0
W42	Assi Phase 2 Dam	300.0	40.0
W44	Ibl es Saqi Dam	200.0	100.0
W51	Khardali Dam	435.0	200.0
W52	Kfarsir Dam	45.0	15.0
W56	Choumariye Dam	60.0	20.0
W3	Hydropower plant for Janneh Dam	100.0	0.0
W53	Irrigation - Massa Dam	60.0	4.0
W54	Irrigation - Younine Dam	65.0	10.0
W5	Irrigation - Litani - Conveyor 800 Phase 2 -Irrigation and Water Networks	300.0	0.0

Table 25: Assessment of Water Supply Dams Projects

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
		N	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		D	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	D
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	D
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	D
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	D
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	D
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

11- Affordability of Project		Score
		2
Private financing with guarantees/ contingent liabilities	3	
Public concessional financing	2	
Public, market based financing	1	
I don't know/don't have enough information	D	

12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)		Score
		D
0-6 months for shovel readiness	3	
6-18 months for shovel readiness	2	
18+ months for shovel readiness	1	
I don't know/don't have enough information	D	

13- In Your Judgment, The Project Belongs to Which Implementing Period?		Score
		*
2018 - 2021	1	
2022 – 2025	2	
2026 - 2030	3	
I don't know/don't have enough information	D	

14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?		Score
		D
Yes		Y
No		N
I don't know/don't have enough information		D

Reform Needs Assessment

15- Reform Complement		Score
		1
No reforms needed	3	
Only cabinet decrees needed	2	
Parliamentary legislation needed	1	
I don't know/don't have enough information	D	

16- Reform Timeline		Score
		2
Reforms to be front ended	3	
Reforms to proceed with implementation	2	
Reforms to be post- implementation	1	
I don't know/don't have enough information	D	

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful

1- PPP: Ratification of the water code (at parliament level). Act 228/2000 is not applicable for water projects until the water code is approved. This lack of ratification limits the options of management contract to operate and maintain, for a medium-long term, water infrastructure, such as water treatment plants

2- Improving by-laws of the Law 221 to provide full autonomy status of the Water Establishments. These by-laws would allow transfer of function to the Water Establishments, improvement of sanitation, and needed staffing for improved performance of the Water Establishments.

3- Recruitment of staff: staffing is frozen at all the public institutions. This freeze is a concern for all water establishments in Lebanon as they will be operating and maintaining water facilities.

* Although Water Supply Dams projects are assessed as a group, the assessed implementation cycle is project-specific. See Table 88.

Table 26: Sanitation Networks Projects

Ref	Project	Estimated Cost (MUS\$)	Land Exprop. (MUS\$)
WW1	Completion of missing networks and collectors within Tripoli WWTP Service Area	#N/A	#N/A
WW10	Beirut wastewater systems	50.0	0.0
WW13	Extension and upgrading of collection networks within Ghadir wastewater treatment plant drainage basin	108.0	0.0
WW01a	1-km Link of the main collector Bohsas - Maarad	5.0	0.0
WW01b	Qalamoun villages WW networks	5.0	0.0
WW01c	Wastewater networks in the coastal and central villages and towns of Koura - Phase 2	20.0	3.0
WW01d	Zgharta Wastewater networks	30.0	0.0
WW01e	Wastewater networks for coastal part of Minie - Danniye District	19.0	0.0
WW76	Expansion of Wastewater collection networks of West Bekaa, Phase 2	27.0	0.0
WW61	Jbaa Wastewater System	7.5	0.0
WW16	Completion of wastewater networks in Saida	25.0	0.0
WW17	Sour Phase 3	50.0	0.0
WW07	Completion of wastewater networks within Jbeil WWTP Service Area	40.0	0.0
WW08	Networks for Halat and Nahr Ibrahim	9.1	0.0
WW14	Expansion of sewer networks for coastal Chouf	40.0	0.0
WW04	Completion of wastewater networks within El Aabde WWTP Service Area	60.0	1.0
WW01f	Wastewater networks for villages in the center of Danniye	20.0	0.0
WW79	Madfoun System	20.0	0.0
WW73	Timnine Part 2 Wastewater System	66.0	5.0
WW63	Nabatiye Part 2 (East Nabatiye) Wastewater System	50.0	0.0
WW58	Halloussieh Wastewater System	6.0	1.5
WW59	Srifa Wastewater System	8.0	0.0

Table 27: Assessment of Sanitation Networks Projects

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
		N	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		D	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	D
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	D
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	D
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	D
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	D
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

11- Affordability of Project		Score	2
Private financing with guarantees/ contingent liabilities	3		
Public concessional financing	2		
Public, market based financing	1		
I don't know/don't have enough information	D		

13- In Your Judgment, The Project Belongs to Which Implementing Period?		Score	*
2018 - 2021	1		
2022 – 2025	2		
2026 - 2030	3		
I don't know/don't have enough information	D		

12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)		Score	D
0-6 months for shovel readiness	3		
6-18 months for shovel readiness	2		
18+ months for shovel readiness	1		
I don't know/don't have enough information	D		

14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?		Score	D
Yes	Y		
No	N		
I don't know/don't have enough information	D		

Reform Needs Assessment

15- Reform Complement		Score	1
No reforms needed	3		
Only cabinet decrees needed	2		
Parliamentary legislation needed	1		
I don't know/don't have enough information	D		

16- Reform Timeline		Score	2
Reforms to be front ended	3		
Reforms to proceed with implementation	2		
Reforms to be post- implementation	1		
I don't know/don't have enough information	D		

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful			
1- PPP: Ratification of the water code (at parliament level). Act 228/2000 is not applicable for water projects until the water code is approved. This lack of ratification limits the options of management contract to operate and maintain, for a medium-long term, water infrastructure, such as water treatment plants			
2- Improving by-laws of the Law 221 to provide full autonomy status of the Water Establishments. These by-laws would allow transfer of function to the Water Establishments, improvement of sanitation, and needed staffing for improved performance of the Water Establishments.			
3- Recruitment of staff: staffing is frozen at all the public institutions. This freeze is a concern for all water establishments in Lebanon as they will be operating and maintaining water facilities.			

* Although Sanitation Networks projects are assessed as a group, the assessed implementation cycle is project-specific. See Table 88.

Table 28: Waste Water Treatment Plants Projects

Ref	Project	Estimated Cost (MUS\$)	Land Exprop. (MUS\$)
WW78	Small Scale Municipal Projects	250.0	0.0
WW11	Ghadir Flood Protection	30.0	0.0
WW12	Upgrade of Ghadir wastewater treatment plant	200.0	0.0
WW18c	Jbeil WWTP Extension	20.0	0.0
WW18d	Nabi Younes - WWTP Expansion	20.0	0.0
WW18a	Chekka WWTP Expansion	20.0	0.0
WW18b	Batroun WWTP Expansion	20.0	0.0
WW09	Upgrade of Daoura wastewater treatment plant	300.0	0.0
WW64	Expansion of Nabatiye Wastewater Treatment Plant	20.0	0.0
WW15	Upgrade of Saida wastewater treatment plant	55.0	0.0

Table 29: Assessment of Wastewater Treatment Plants Projects

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
		N	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports?		Score	
		D	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	D
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	D
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	D
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	D
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	D
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

11- Affordability of Project		Score
		2
Private financing with guarantees/ contingent liabilities	3	
Public concessional financing	2	
Public, market based financing	1	
I don't know/don't have enough information	D	

12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)		Score
		D
0-6 months for shovel readiness	3	
6-18 months for shovel readiness	2	
18+ months for shovel readiness	1	
I don't know/don't have enough information	D	

13- In Your Judgment, The Project Belongs to Which Implementing Period?		Score
		*
2018 - 2021	1	
2022 – 2025	2	
2026 - 2030	3	
I don't know/don't have enough information	D	

14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?		Score
		D
Yes		Y
No		N
I don't know/don't have enough information		D

Reform Needs Assessment

15- Reform Complement		Score
		1
No reforms needed	3	
Only cabinet decrees needed	2	
Parliamentary legislation needed	1	
I don't know/don't have enough information	D	

16- Reform Timeline		Score
		2
Reforms to be front ended	3	
Reforms to proceed with implementation	2	
Reforms to be post- implementation	1	
I don't know/don't have enough information	D	

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful	
<p>1- PPP: Ratification of the water code (at parliament level). Act 228/2000 is not applicable for water projects until the water code is approved. This lack of ratification limits the options of management contract to operate and maintain, for a medium-long term, water infrastructure, such as water treatment plants</p> <p>2- Improving by-laws of the Law 221 to provide full autonomy status of the Water Establishments. These by-laws would allow transfer of function to the Water Establishments, improvement of sanitation, and needed staffing for improved performance of the Water Establishments.</p> <p>3- Recruitment of staff: staffing is frozen at all the public institutions. This freeze is a concern for all water establishments in Lebanon as they will be operating and maintaining water facilities.</p>	

* Although Waste Water Treatment Plants projects are assessed as a group, the assessed implementation cycle is project-specific. See Table 88.

Table 30: Sanitation System Projects

Ref	Project	Estimated Cost (MUS\$)	Land Exprop. (MUS\$)
WW22	Qartaba, Aqoura and Afqa wastewater systems	20.0	5.0
WW31	Additional Funds for Hrajel Wastewater System	20.0	2.0
WW34	Additional funds for Jeita system	15.0	0.0
WW40	Sfailah and Qortada (Zandouqa) Wastewater system	67.6	6.6
WW41	Bmaryam - Btibyat Wastewater system	28.1	4.9
WW35	Kfartai Wastewater system	6.5	0.0
WW32	Aachqout WWTP	20.5	0.0
WW23	Bchille system	5.0	0.0
WW24	Aabaydat system	11.0	0.0
WW25	Tartij Small Local Station	1.5	0.0
WW26	Aalmaat system	12.0	0.0
WW27	Jaj WWTP	6.6	0.0
WW28	Lehfed Haqel Small Stations	2.2	0.0
WW29	Behdaydat WWTP	3.5	0.0
WW30	Yahchouch WWTP	8.3	0.0
WW33	Bqaatouta WWTP	0.8	0.0
WW36	Abou Mizane WWTP	3.3	0.0
WW37	Zabbougha WWTP	0.8	0.0
WW38	Es Souane WWTP	20.7	0.0
WW39	Mtein WWTP	6.3	0.0
WW42	Hlaliye Wastewater System	44.9	3.2
WW43	Shwite Wastewater System	12.8	2.0
WW44	Qtale Wastewater System	12.6	2.5
WW45	Arsoun Wastewater System	8.6	1.3
WW47	Rouayssat En Naamane Small Local Station Wastewater System	66.0	3.2
WW48	El Knaisse Wastewater System	83.0	3.5
WW53	WWTP1 Wastewater System	0.2	0.0
WW54	WWTP2 Wastewater System	8.0	0.0
WW57	Kfar Matta Small Local Station Wastewater System	0.5	0.0
WW19	Additional Funds for Meshmesh (Fnaydeq) Wastewater System	8.0	1.0
WW03	Qabaait system and remaining small systems in Minie - Danniye	62.0	0.0
WW06	Construction of small scale Wastewater Systems in Akkar Wetlands	25.0	5.0
WW05	Construction of wastewater systems for Akkar El Atika, Qobaiyat and surrounding villages	25.0	0.0
WW20b	Kfar Hay system	25.0	0.0
WW20c	Chebtine system	15.0	0.0
WW02	Bakhoun WWTP and networks	25.0	0.0
WW20a	Ajed Ebrine system	4.5	0.0
WW21	Small systems to protect Qadisha Valley	50.3	0.0

WW74	Eastern Zahle Wastewater System	45.0	5.0
WW75	Wastewater Systems for Sohmar, Yohmor, Zilaya and surrounding villages	17.6	0.1
WW77	Wastewater System for Rachaiya villages	64.0	0.6
WW69	Additional funds for Hermel WWTP and Networks	27.0	0.0
WW72	Upgrade of Iaat (Baalbek) WWTP and additional networks for Baalbek city and surrounding villages	11.0	0.0
WW71	Qaa and Jdaide Wastewater System	25.7	0.0
WW70	Bajjaje Wastewater System	39.5	0.0
WW65	Additional funds for Hasbaiya System	27.7	0.5
WW68	Bint Jbeil Wastewater System	32.0	0.0
WW62	Braiqaa Wastewater System	26.0	0.0
WW66	Ouadi Slouqi Wastewater System	33.0	0.0
WW60	Nabaa el Tasseh Wastewater System	18.0	0.0
WW67	Deir Mimas Wastewater System	5.5	0.0

Table 31: Assessment of Sanitation System Projects

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
			Y
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
			Y
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
			Y
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
			N
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports?		Score	
			D
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
			Y
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
			Y
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
			N
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	D
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	D
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	D
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	D
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	D
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	*
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	D
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?	D
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	1
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- PPP: Ratification of the water code (at parliament level). Act 228/2000 is not applicable for water projects until the water code is approved. This lack of ratification limits the options of management contract to operate and maintain, for a medium-long term, water infrastructure, such as water treatment plants
2- Improving by-laws of the Law 221 to provide full autonomy status of the Water Establishments. These by-laws would allow transfer of function to the Water Establishments, improvement of sanitation, and needed staffing for improved performance of the Water Establishments.
3- Recruitment of staff: staffing is frozen at all the public institutions. This freeze is a concern for all water establishments in Lebanon as they will be operating and maintaining water facilities.

* Although Sanitation System projects are assessed as a group, the assessed implementation cycle is project-specific. See Table 88.

TRANSPORT

IV. Transport

The CIP contains 24 separately identified investment projects in the transport sector for a total of US\$ 7,381 million, implemented over three cycles covering the period 2018-2030. Of these projects, the WBG assesses that 7 (at a cost of around US\$ 1,832 million, plus US\$ 173 million for land expropriation) are important for the first cycle of 2018-2021. These comprise projects: TP5, TP6, TP8/a, TP10, TP16, TP18, and TP19. The estimated costs are generally reasonable, although they appear on the low side—in most cases, the actual cost of projects is higher than initially predicted, and this is particularly the case in Lebanon given long implementation period. While most CIP transport projects can have a PPP dimension, especially during the operations and maintenance phase, they require substantial concessional public financing especially upfront. WBG also notes institutional constraints and low capacity for implementing agencies to absorb and execute the large investments under the CIP.

While the CIP includes strategic investments, some important parts remain missing. Improvement of traffic conditions in secondary cities, such as Tripoli and Saida, is not included, and neither is future developments/expansions of ports capacity and/or future railway lines.

A. General Comments

93. The transport projects included in the CIP generally represent important parts to complete Lebanon’s strategic transport network. Most projects are strategic and on the list of government programs/priorities for years. While there is no official strategy for the Ministry of Public Works and Transport (MPWT), there is a strategic document by the Council of Development and Reconstruction (CDR) which was prepared in 2005 and which identified most of these large transport infrastructure projects (SDATEL), in addition to priorities in several other sectors. Some of the projects have been on the government priorities for many decades and have not been implemented due to complexity and high cost.

94. The bulk of the transport investments are to complete Lebanon’s Highways. About US\$ 5 billion are earmarked to complete Lebanon’s highway network. Despite Lebanon having a small highway network consisting mainly of two axes—a North-South Coastal Corridor (roughly about 250 km) where about 80 percent of Lebanon’s population is concentrated, and an East-West (roughly about 50 km) Corridor linking Beirut to Damascus. The construction of the highway system started in the 1960s, yet important links such as the Beirut Peripherique, the extension of the Highway from Tripoli to the Syrian border in the North, and the extension of the Highway to Tyre and the southern border are still not completed after over 50 years of planning.

95. Beyond Highways, the remaining investments are also focused on the development of strategic assets. This includes the expansion of Tripoli Port to become an important gateway to Syria and Iraq, the construction of the first modern railway linking Tripoli port to Syria, the introduction of a reliable public transport network and BRT lines, and the expansion of Beirut airport. Regional and smaller investments represent a much smaller share and is primarily focused on the rehabilitation of the road network, with about US\$ 500 million earmarked for that purpose.

96. While the CIP includes the most strategic investments, some important parts remain missing. Specifically, the improvement of traffic conditions in secondary cities, such as Tripoli and Saida is not included, neither is future developments/expansions of ports capacity and/or future railway lines.

97. The overall phasing of the projects is logical, however it is presented primarily from a “readiness” lens and capacity to implement. The CIP calls on starting all major transport infrastructure in parts, such as executing the Beirut Peripherique in 3 phases, the Jounieh Bypass in 3 phases, the public transport plan in 3 phases and so on. While this is appropriate and shows realism in term of implementation sequences, the phases usually make economic sense as “stand-alone” projects, yet there are important economic multipliers when the full infrastructure is executed such as completing the full Peripherique. The CIP however does not provide a sense of prioritization between these various large infrastructures. For instance, the CIP does not answer whether the Beirut Peripherique is a priority over the Jounieh Bypass, or whether, in a resource constrained environment, we should opt to complete the Peripherique, or do 2 phases of the Peripherique and 2 phases of the Jounieh bypass, and so on. An economic and financial prioritization might be helpful. Moreover, the phasing of the two main highways in the CIP (A2 and Peripherique) need more in-depth analysis and is further discussed in Paragraph 112.

B. The Impact on the Socio-Economy

98. Given the strategic nature of transport in the CIP projects, the expected economic and social benefits are generally very high. CIP transport projects will have large positive impacts on growth by increasing trade, investments, and employment and removing economic externalities and bottlenecks.

Impact on Trade and Competitiveness

99. Investments in economic corridors in Lebanon as planned in the CIP—such as in ports, highways, railways and airports—will allow Lebanon to play a major role as a trade and transport hub in the region, a role it had successfully played in the past. Lebanon represents an important gateway to the Mediterranean, Europe and beyond, especially given the constrained maritime access to many countries in the region particularly Syria (only 2 ports with limited capacity) and Iraq, and possibly beyond to include Iran and the GCC. However, the current poor infrastructure makes the cost of exporting goods from/through Lebanon expensive, particularly due to bad land transport infrastructure and inefficient logistics and customs procedures (Table 32).

Table 32. Export/Import Costs (US\$/ per container)

	Lebanon	Middle East & North Africa	Upper middle income
Export cost - port or airport supply chain	500	837	1285
Export cost - land supply chain	3000	1886	1607
Import cost - port or airport supply chain	3000	1688	1384
Import cost - land supply chain	N/A	1131	1488

Source: World Bank Logistics Performance.

100. Investments in transport infrastructure and services will also create an important economic stimulus—and is often a typical economic stimulus instrument globally—which is much needed for the Lebanese economy. This is primarily due to the large local economic

multiplier effects of transport infrastructure and services (local engineering and contractors, local suppliers of materials, local truckers and shippers, local public transport operator etc.). In addition, such public investments in strategic assets are likely to include additional private investments in operations and maintenance, equipment purchase and in management. Improving transport connectivity and reducing transport costs will also largely contribute to reviving Lebanon's important tourism sector, be it in reducing connectivity between Lebanon and neighboring country, or as internal connectivity allowing tourists to visit multiple sites outside Beirut.

101. Initiating large infrastructure investments in Lebanon, will increase the competitiveness of Lebanese firms and their readiness for similar works in Syria and Iraq. This will further encourage international firms to use Lebanon as a hub for Syria's reconstruction. The investment in Transport Economic Corridors as emphasized in the CIP (highways, ports, railways...) will therefore clearly enhance Lebanon's trade and competitiveness. However, to increase such benefits, Lebanon needs to also look at parallel soft measures (such as procedures, customs, border crossings) as well as better linkages between these transport corridors and other economic ancillary economic activities to create actual economic corridors, as is being planned for the Northern Lebanon Economic Corridor Project.

Impact on Reducing Economic Externalities

102. Poor transport connectivity and high transport costs represent a large drag on the Lebanese economy. Various studies put the economic cost of traffic congestion in Lebanon around 5 to 10 percent of GDP annually. In addition, Lebanon has one of the worst road safety records with the economic cost of road crashes estimated in the 3 to 5 percent range. There are also additional transport costs such as vehicle operating costs due to poor road condition (Lebanon's roads rank 120 in term of quality globally, one of the worst). While the CIP projects can't not totally eradicate such costs, they nevertheless will substantially contribute to reducing such externalities, or at least curb their further growth (especially public transport, road rehabilitation, highways...).

Impact on spatial development, lagging regions and local economic markets

103. Given Lebanon's small geography, Lebanon's economy could operate as one inter-connected market from a spatial development point of view. Travel distances are generally small in Lebanon with most of the country's population being within a 100 km radius from Beirut, a typical 1 hour trip in normal conditions, which would have allowed goods and people to flow seemingly across the country and for firms and businesses to flourish in all its parts. Yet, and due to poor transport connectivity, economic distances have been growing substantially as it sometimes takes more than 1 hr to travel only 20 km to Beirut. This has put the entire regions of the North, Bekaa, and the South at large disadvantages as generally poorer and lagging regions. The planned highways, roads and public transport under the CIP will all contribute to reducing such economic distances.

Impact on Employment

104. The Transport sector is one of the main employment generators in Lebanon. Currently, about 7 percent of Lebanon's labor force is employed in transport services (truckers, taxis, port and airport). In addition, a significant part of workers in the construction sector are actually working in the construction of transport infrastructure. This puts the total employment in transport infrastructure and services at least 10 percent of total employment making the transport sector one of the largest employers in Lebanon especially for the poor, low skilled

(construction workers, truck drivers, taxi drivers...) and Syrian refugees (mainly in construction, less in services). Various studies show that transport infrastructure generates most employment among all infrastructure investments as a significant share of such investments (between 15 to 30 percent depending on type of works/projects) is spent on labor. In addition, significant local supply chain activities are also generated creating further employment opportunities. It is very important to note that the narrative of the CIP about infrastructure and job creation, in addition to the general/rough methodology applied to produce such employment estimates, has been very much influenced by the Bank work/narrative on the Roads and Employment Project.

Impact on Social Inclusion

105. The CIP transport investments will benefit a large number of vulnerable groups. As highlighted above, CIP transport investments will have significant impact on the lagging regions, improving transport connectivity between such regions and the center through highways as well as within these regions through road rehabilitation. Transport externalities such as traffic accidents or health ailments from air pollution disproportionately affect the poor due to high hospitalization costs and the loss of important income providers. In addition, public transport programs will reduce the economic and financial transport costs, particularly for the urban poor, as it is important to note that transport represent about 10 to 15 percent of households' expenditures. Improved transport connectivity and reliable public transportation will also benefit several other vulnerable groups such as women (independence of travel using public transport with less harassment), the youth and persons with disabilities.

106. The economic and social benefits of the CIP investments will be large yet they will materialize only gradually over a few years. Generally, the development and execution of large infrastructure requires some years. This is particularly the case for Lebanon where delays are common. Some projects however, such as roads rehabilitation, can be executed within relatively shorter timeframe.

C. Feasibility Assessment and Readiness

107. The CIP transport projects have high technical and economic feasibility. As discussed above, the social and economic benefits of the CIP transport projects are very high. Meanwhile, all these projects are technically feasible, yet they require thorough study and preparation given their large scope and technical complexity, including some being implemented for the first time in Lebanon (BRT, railways, large tunnels for Jounieh Bypass etc.). Unfortunately, technical studies on most of these projects are not very far advanced given the practice in Lebanon to wait for the confirmation of the financing of such projects before undertaking detailed and costly technical studies. This is understandable given that some projects have been on the shelves for 50 years, yet this represent a major hindrance in that project execution is largely delayed as many important planning and execution studies are generally deferred until financing is secured. Nevertheless, the CIP transport projects are presented in a logical manner where complex projects have been broken down into smaller projects, which make sense economically, and which can be executed sequentially therefore improving technical feasibility.

108. The estimated costs are generally reasonable, although they appear on the low side. Cost estimates derive from very preliminary studies including pre-feasibility and feasibility studies. In such studies, only high level cost item can be roughly estimated. The real project costs are more certain with detailed designs, especially for large infrastructure requiring soil investigation and other detailed assessment. In most cases, the actual cost of these projects are

higher than initially predicted, and this is particularly the case in Lebanon given generally poor governance and long implementation period of projects. Meanwhile, and on the benefits/revenue side, many studies overestimate benefits to justify project. While this is fine to encourage the government to go ahead with such projects given that they all seem of high strategic value, the feasibility figures should be treated with caution when used for planning the sources of financing, especially private sector/PPPs.

109. Most CIP transport projects require substantial concessional public financing. A major constraint to the development of Lebanon's transport infrastructure is the high cost of land and the inability of the government to finance large land expropriations. The cost of land expropriation for transport related projects in the CIP is in the US\$ 2 to 3 billion range, a major expenditure. While part of this can be financed by donors, it is usually up for governments to finance land while donors (and private sector) finance infrastructure. Another limitation to having donor financing of land acquisition for highways and roads, is the different interpretation between Lebanese laws and donors' requirements for compensation of land acquired for highway projects. In addition, most transport projects require public sector financing for the infrastructure while the private sector intervene during the operations and management (O&M) phase as further discussed below.

110. Most CIP transport projects can have a PPP dimension, especially for covering operations and maintenance. The airport terminal and Jounieh touristic port can be financed fully, or close to 100 percent, by the private sector. The other transport projects are unlikely to be 100 percent feasible by the private sector yet most of the projects can have some private financing, especially at later stages (equipment purchase, operations and maintenance). Port, railways and public transport development generally require that the public sector pays for the infrastructure while the private sector contributes to equipment finance (buses, trains, port equipment) and O&M. Highways generally require that the land is financed by the public sector, with some highway sections implemented as BOT by the private sector (through tolls, if traffic allows it), while for others the private sector can only finance the maintenance of infrastructure. Poverty and equity issues need to be also considered when introducing PPPs especially for highway links in Akkar (poorest region of Lebanon) or in the South.

111. Across all sectors, Lebanon has currently major institutional constraints and low implementing agencies' capacity to absorb and execute the large investments under the CIP. Major CIP investments are in 3 sectors, namely Transport, Water and Energy. The relevant institutions in these sectors are primarily 3: the Ministry of Public Works and Transport and some dependent agencies (weak capacity), the Ministry of Energy and Water and smaller water utilities (weak to moderate capacity) and CDR (moderate to strong capacity, however already overstretched). The Lebanese government, with support from donors, need to have a strategy on how to address implementation challenges especially with select key implementing agencies, particularly CDR, on how to ramp up quickly and efficiently their implementation capacity. Some "outside the box" thinking is required to accelerate the implementation of the CIP given that even simple projects in Lebanon take many years to execute.

112. The phasing and implementation of large projects with significant land expropriation requires particular attention. This is particularly relevant for the A2 and Peripherique projects where land expropriation requirements are over US\$ 1 billion. Given GoL's difficulty in funding much smaller expropriations over the past decade, it remains uncertain if GoL will be able to acquire the required land for these highways in the short term to allow the start of infrastructure construction. Moreover, GoL is still studying the modalities to execute such projects (public procurement, BOT, in sections or together...) which will also take some time to produce reliable studies to inform such decisions. We would like to re-iterate here

that these projects are of very strategic importance to the sector and the economy, the discussion below is primarily on the timing/phasing of these investments and potential modalities for their execution. We therefore provide below three different scenarios for the execution of these highways:

1) **Scenario 1:** Government immediately start acquiring land and proceeds with construction in phases/sections. For instance, the government immediately, issues required laws/decrees and financing mechanisms (compensations, coupons or zoning...) while acquiring the land gradually over a period of time (such as over 10 years). Under this scenario the proposed phasing by GoL seems reasonable (conditional on the laws/decrees issued within a year time or so and financing made available for land expropriation). This scenario assumes the government will proceed with the construction of this highway in segments under a public procurement scheme (this scenario assumes private investors are less interested in individual segment) Under this scenario, the private sector can be brought-in later under a different PPP scheme (not BOT), such as a concession for O&M of the highway after its construction. This scenario would imply, however, less mobilization of private capital investment and heavier costs for the government;

2) **Scenario 2:** Government immediately start acquiring land and decide to execute project/construction as a BOT. Under this scenario, it is less likely that the private sector would invest in smaller sections before the full land is acquired (as financial returns and traffic volumes will become much more interesting when the full project is completed), which means construction is not likely to start before a few years and hence the project can be executed in cycles 2 and 3 under this scenario. Alternatively, the private sector could be offered some individual sections that might be profitable as BOTs, which would advance some of the construction works to cycle 1, however such alternative seems unlikely and should be subject to further study. While this scenario (BOT) is likely to result in delays in the project execution, its advantage is that it would reduce the government contribution to the infrastructure CAPEX as the private sector could bring in some capital.

3) **Scenario 3:** Government gets delayed in acquiring the required land (unavailability of funds, political and administrative challenges, objections from land/house owners...). Given Lebanon's track record in facing difficulties with land expropriations for even smaller projects, the large financial resources required, and the difficulty to remove some encroachers along the right of way, this scenario appears more likely. Under this scenario, it is not expected that any construction can start before 4 to 5 years or so which means the initiation of these projects are likely to be in cycles 2 and 3 at best.

113. Given the above discussion, and in the absence of a clear GoL vision and decision of i) ways and mechanisms to finance the required land expropriation and ii) the modality of execution (eg. BOT for full highway, sections in phases as public sector financed or BOT for separate sections) we feel that it is less likely that parts of these highways will be executed under cycle 1 of this program, but rather under cycles 2 and 3.

D. Reform Needs

114. The execution of the CIP transport priorities should go hand-in-hand with some important reforms in the sector. The CIP can be executed within the existing institutional and policy framework given that it addresses major, long lasting and strategic capacity constraints in the sector. Yet, reforms can be advanced in parallel in order to accelerate such programs and

ensure the sustainability and efficiency of the sector. Important reform areas for the sector, in relation to the CIP, are highlighted below:

- a) ***Strategic Planning:*** The development of a national Transport Strategy and Action Plan that:
 - covers all modes of transport (Ports, Airports, Roads, Railways, Public Transport);
 - priorities investments within the sector as well as key policy actions; and
 - becomes the roadmap for consecutive ministers to implement in contrast to current interests by ministers in only short term projects such as road rehabilitation.
- b) ***Sector Governance:*** The reform and strengthening of sector institutions. This could include:
 - The creation of a national public transport authority with a clear mandate to plan and execute all public transport activities. This will allow the consolidation of various important public transport activities from various existing entities (Ministry of Transport, ministry of Interior, municipalities etc.) under one entity;
 - The reform of the governance structure of the major ports namely Beirut and Tripoli. The governance structure of Beirut Port is a bit unique and follows a very old model, while the Tripoli Port does not have an active Board of Directors;
 - The strengthening of the planning for road rehabilitation and maintenance and the creation of a proper and transparent road asset management system. The creation of a Road Fund could also be considered;
 - The review of the governance structure of the Civil Aviation sector to promote further investments in airports, including setting up of a regulatory body, and to further liberalize the civil aviation market in Lebanon; and
 - The strengthening of the implementation capacity of sector institutions, namely the MPWT, CDR, Higher Council of Privatization, the Railways and Public Transport Authority and other sector agencies.
- c) ***Implementation Capacity:***
 - The build-up of CDR and Ministries' capacity and staffing;
 - The review of CDR internal processes, as well as relevant ministries, to accelerate and streamline execution;
 - The follow up by senior decision makers on the progress in project execution to drive forward the projects and remove possible political and administrative bottlenecks;
 - The review and discussion regarding CDR priority projects to achieve more balance between the roles of CDR and Ministries, giving CDR fewer yet more strategic, large, and complex projects and less small projects (such as small municipal projects, small and scattered infrastructure etc.).
 - The allocation of funding to undertake detailed studies, from day one, for all the strategic projects approved in the CIP without waiting for actually securing the

financing of such projects. This will allow execution to proceed fast as soon as financing is available. We welcome the inclusion in the CIP of TP16, Feasibility Studies of Major Projects.

d) CIP, Sector Financing and Sustainability

- Fiscal/budget: There should be more transparency between transport sector fiscal revenues and its allocated expenditures: the sector contributes to about 15 percent of fiscal/budget revenues, yet it is not visible given multiple sources (fuel excise, port dues, airport dues, vehicle registration, licenses...). There should be better established linkages between taxes and the way expenditures are planned, especially in transport where there are no/little operational revenues (unlike telecom, water and electricity where users pay direct charges). In most countries, a share of the fuel excise is used for the financing of Roads and Highways. This could be either in the form of a dedicated tax, or through proper budgeting processes.
- Pricing and user charges. This includes the possibility of introducing and increasing direct transport user charges, such as increasing parking revenues in Beirut, increasing public transport fares or charges, introducing tolls on select highways.
- PPPs. Most of the planned investment could have a PPP dimension and such potential should be assessed, be it in the CAPEX of the projects where possible or for operations and maintenance to ensure financial sustainability
- Real estate valuation and the use of real estate revenues/taxes to finance the sector, particularly land acquisition. The government needs a clear strategy how to finance land acquisition in the transport sector. An important instrument being discussed is the use of real estate taxes and/or rights to finance such infrastructure (such as giving higher zoning options for people close to highways or impacted by expropriations). Real estate financing mechanisms could include taxes, zoning “coupons”, shares in Special Purpose Vehicle (if a PPP), provision of alternatives in kind (such as housing in other areas if available), change of zoning allowances along corridors, and/or cash payments. Without a structured approach for land acquisition for highways, it will be difficult to advance this highly important economic sector.

Table 33: Transportation Projects

Ref	Project	Estimated Cost (MUS\$)	Land Exprop. (MUS\$)
TP1	Dbaye-Nahr Ibrahim Motorway (A2) - Phase 1	247.0	125.0
TP1	Dbaye-Nahr Ibrahim Motorway (A2) - Phase 2	330.0	166.0
TP1	Dbaye-Nahr Ibrahim Motorway (A2) - Phase 3	247.0	125.0
TP2	Beirut Peripheric - Phase 1	232.0	254.0
TP2	Beirut Peripheric - Phase 2	310.0	338.0
TP2	Beirut Peripheric - Phase 3	232.0	254.0
TP10	Bus Rapid Transit System - Greater Beirut Public Transport Project	500.0	N/A
TP16	Rehabilitation and development of Beirut Rafic Hariri Airport - Phase 1	500.0	N/A
TP5	Pan Arab Highway - Akkar	150.0	50.0
TP7	Beirut-Damascus Highway Completion	400.0	100.0
TP11	Tripoli-Syrian Boarder Railway	90.0	0.0
TP4	Northern Coastal Highway - Beirut Entrance	180.0	N/A
TP18	Service road for Coastal Highway, Phase 2	112.0	202.0
TP18	Service road for Coastal Highway, Phase 1	38.0	68.0
TP6	Touliqiyeh - Ras Baalbak - Syrian Boarder Highway	110.0	55.0
TP9	Upgrading of Road Network in Greater Beirut	380.0	50.0
TP8/a	Rehabilitation of Roads in Mount Lebanon - Classified and Unclassified (Municipal) Roads	509.0	N/A
TP12	Touristic Port in Jounieh	62.0	N/A
TP16/a	Rehabilitation and Development of Rene Mouawad Airport in Akkar	100.0	N/A
TP3	Southern Coastal Highway (Saida Bypass and Sour Link)	450.0	150.0
TP14	Expansion of Saida Port	60.0	N/A
TP15	Touristic Port in Sour	30.0	N/A
TP19	Feasibility Studies for Major Projects	25.0	0.0
TP20	Tripoli Port, Phase 2	150.0	0.0

Table 34: Assessment of Project TP1 - Phases 1 & 2

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
		N	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		N	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	2
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	3
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	1
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

11- Affordability of Project		Score
		2
Private financing with guarantees/ contingent liabilities	3	
Public concessional financing	2	
Public, market based financing	1	
I don't know/don't have enough information	D	
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)		Score
		1
0-6 months for shovel readiness	3	
6-18 months for shovel readiness	2	
18+ months for shovel readiness	1	
I don't know/don't have enough information	D	
13- In Your Judgment, The Project Belongs to Which Implementing Period?		Score
		2
2018 - 2021	1	
2022 – 2025	2	
2026 - 2030	3	
I don't know/don't have enough information	D	
14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?		Score
		Y
Yes	Y	
No	N	
I don't know/don't have enough information	D	

Reform Needs Assessment

15- Reform Complement		Score
		1
No reforms needed	3	
Only cabinet decrees needed	2	
Parliamentary legislation needed	1	
I don't know/don't have enough information	D	
16- Reform Timeline		Score
		2
Reforms to be front ended	3	
Reforms to proceed with implementation	2	
Reforms to be post- implementation	1	
I don't know/don't have enough information	D	
17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful		
1- Introduce tolling on Lebanon Highways (political decision, legal allows it)		
2- Introduce mechanisms for financing of Highways land expropriation (such as increased zoning, dedicated funds over some years...)		
3- Introduce a sustainable mechanism for highway development and maintenance in Lebanon, including financing		

Table 35: Assessment of Project TP1 - Phase 3

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
		N	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		N	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	2
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	3
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	1
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

11- Affordability of Project		Score
		2
Private financing with guarantees/ contingent liabilities	3	
Public concessional financing	2	
Public, market based financing	1	
I don't know/don't have enough information	D	
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)		Score
		1
0-6 months for shovel readiness	3	
6-18 months for shovel readiness	2	
18+ months for shovel readiness	1	
I don't know/don't have enough information	D	
13- In Your Judgment, The Project Belongs to Which Implementing Period?		Score
		3
2018 - 2021	1	
2022 – 2025	2	
2026 - 2030	3	
I don't know/don't have enough information	D	
14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?		Score
		Y
Yes	Y	
No	N	
I don't know/don't have enough information	D	

Reform Needs Assessment

15- Reform Complement		Score
		1
No reforms needed	3	
Only cabinet decrees needed	2	
Parliamentary legislation needed	1	
I don't know/don't have enough information	D	
16- Reform Timeline		Score
		2
Reforms to be front ended	3	
Reforms to proceed with implementation	2	
Reforms to be post- implementation	1	
I don't know/don't have enough information	D	
17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful		
1- Introduce tolling on Lebanon Highways (political decision, legal allows it)		
2- Introduce mechanisms for financing of Highways land expropriation (such as increased zoning, dedicated funds over some years...)		
3- Introduce a sustainable mechanism for highway development and maintenance in Lebanon, including financing		

Table 36: Assessment of Project TP2 - Phases 1 & 2

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
		N	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	2
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	3
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	1
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

11- Affordability of Project		Score	13- In Your Judgment, The Project Belongs to Which Implementing Period?		Score
		2			2
Private financing with guarantees/contingent liabilities	3		2018 - 2021	1	
Public concessional financing	2		2022 – 2025	2	
Public, market based financing	1		2026 - 2030	3	
I don't know/don't have enough information	D		I don't know/don't have enough information	D	
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)		Score	14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?		Score
		1			Y
0-6 months for shovel readiness	3		Yes	Y	
6-18 months for shovel readiness	2		No	N	
18+ months for shovel readiness	1		I don't know/don't have enough information	D	
I don't know/don't have enough information	D				

Reform Needs Assessment

15- Reform Complement		Score	17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful	
		1		
No reforms needed	3		1- Introduce tolling on Lebanon Highways (political decision, legal allows it)	
Only cabinet decrees needed	2		2- Introduce mechanisms for financing of Highways land expropriation (such as increased zoning, dedicated funds over some years...)	
Parliamentary legislation needed	1		3- Introduce a sustainable mechanism for highway development and maintenance in Lebanon, including financing	
I don't know/don't have enough information	D			
16- Reform Timeline		Score		
		2		
Reforms to be front ended	3			
Reforms to proceed with implementation	2			
Reforms to be post- implementation	1			
I don't know/don't have enough information	D			

Table 37: Assessment of Project TP2 - Phase 3

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
			Y
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
			Y
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
			Y
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
			N
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
			Y
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
			Y
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
			Y
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
			N
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	2
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	3
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	1
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

11- Affordability of Project		Score
		2
Private financing with guarantees/ contingent liabilities	3	
Public concessional financing	2	
Public, market based financing	1	
I don't know/don't have enough information	D	
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)		Score
		1
0-6 months for shovel readiness	3	
6-18 months for shovel readiness	2	
18+ months for shovel readiness	1	
I don't know/don't have enough information	D	
13- In Your Judgment, The Project Belongs to Which Implementing Period?		Score
		3
2018 - 2021	1	
2022 – 2025	2	
2026 - 2030	3	
I don't know/don't have enough information	D	
14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?		Score
		Y
Yes	Y	
No	N	
I don't know/don't have enough information	D	

Reform Needs Assessment

15- Reform Complement		Score
		1
No reforms needed	3	
Only cabinet decrees needed	2	
Parliamentary legislation needed	1	
I don't know/don't have enough information	D	
16- Reform Timeline		Score
		2
Reforms to be front ended	3	
Reforms to proceed with implementation	2	
Reforms to be post- implementation	1	
I don't know/don't have enough information	D	
17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful		
1- Introduce tolling on Lebanon Highways (political decision, legal allows it)		
2- Introduce mechanisms for financing of Highways land expropriation (such as increased zoning, dedicated funds over some years...)		
3- Introduce a sustainable mechanism for highway development and maintenance in Lebanon, including financing		

Table 38: Assessment of Project TP3

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
		N	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		N	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	2
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	3
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	2
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

11- Affordability of Project		Score	13- In Your Judgment, The Project Belongs to Which Implementing Period?		Score
		* 2			3
Private financing with guarantees/ contingent liabilities	3		2018 - 2021		1
Public concessional financing	2		2022 – 2025		2
Public, market based financing	1		2026 - 2030		3
I don't know/don't have enough information	D		I don't know/don't have enough information		D
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)		Score	14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?		Score
		1			Y
0-6 months for shovel readiness	3		Yes		Y
6-18 months for shovel readiness	2		No		N
18+ months for shovel readiness	1		I don't know/don't have enough information		D
I don't know/don't have enough information	D				

Reform Needs Assessment

15- Reform Complement		Score	17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful	
		1		
No reforms needed	3		1- Introduce tolling on Lebanon Highways (political decision, legal allows it)	
Only cabinet decrees needed	2		2- Introduce mechanisms for financing of Highways land expropriation (such as increased zoning, dedicated funds over some years...)	
Parliamentary legislation needed	1		3- Introduce a sustainable mechanism for highway development and maintenance in Lebanon, including financing	
I don't know/don't have enough information	D			
16- Reform Timeline		Score		
		2		
Reforms to be front ended	3			
Reforms to proceed with implementation	2			
Reforms to be post- implementation	1			
I don't know/don't have enough information	D			

Table 39: Assessment of Project TP4

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
			E
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
			Y
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
			Y
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
			N
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports?		Score	
			N
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
			Y
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
			D
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
			N
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

5- Timing of Potential Growth Impact of Completed Project		Score 2
Less than 12 months from initiation	3	
In 13 to 36 months from initiation	2	
In more than 36 months from initiation	1	
I don't know/don't have enough information	D	
6- Sustainability of Growth Impact of Completed Project		Score 2
Highly sustainable	3	
Moderately sustainable	2	
Not likely to be sustainable or will require significant public resources	1	
I don't know/don't have enough information	D	
7- Inclusivity of Growth of Completed Project		Score 1
Project targets poor women	3	
Project targets the poor in general	2	
None of the above	1	
I don't know/don't have enough information	D	
8- "Good Job" Potential of Completed Project		Score 2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3	
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2	
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1	
I don't know/don't have enough information	D	
9- Employment Creation of Completed Project		Score 3
Generates a large number of jobs	3	
Generates a moderate number of jobs	2	
Generates a low number of jobs	1	
I don't know/don't have enough information	D	
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:		Score 2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3	
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2	
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1	
I don't know/don't have enough information	D	

Feasibility Assessment

11- Affordability of Project		Score	13- In Your Judgment, The Project Belongs to Which Implementing Period?		Score
		2			2
Private financing with guarantees/contingent liabilities	3		2018 - 2021	1	
Public concessional financing	2		2022 – 2025	2	
Public, market based financing	1		2026 - 2030	3	
I don't know/don't have enough information	D		I don't know/don't have enough information	D	
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)		Score	14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?		Score
		1			Y
0-6 months for shovel readiness	3		Yes	Y	
6-18 months for shovel readiness	2		No	N	
18+ months for shovel readiness	1		I don't know/don't have enough information	D	
I don't know/don't have enough information	D				

Reform Needs Assessment

15- Reform Complement		Score	17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful	
No reforms needed	3		1-	
Only cabinet decrees needed	2		2-	
Parliamentary legislation needed	1		3-	
I don't know/don't have enough information	D			
16- Reform Timeline		Score		
		2		
Reforms to be front ended	3			
Reforms to proceed with implementation	2			
Reforms to be post- implementation	1			
I don't know/don't have enough information	D			

Table 40: Assessment of Project TP5

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
			Y
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
			Y
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
			Y
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
			N
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports?		Score	
			Y
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
			Y
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
			Y
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
			N
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

		Score
5- Timing of Potential Growth Impact of Completed Project		1
Less than 12 months from initiation	3	
In 13 to 36 months from initiation	2	
In more than 36 months from initiation	1	
I don't know/don't have enough information	D	

		Score
8- "Good Job" Potential of Completed Project		2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3	
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2	
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1	
I don't know/don't have enough information	D	

		Score
6- Sustainability of Growth Impact of Completed Project		3
Highly sustainable	3	
Moderately sustainable	2	
Not likely to be sustainable or will require significant public resources	1	
I don't know/don't have enough information	D	

		Score
9- Employment Creation of Completed Project		3
Generates a large number of jobs	3	
Generates a moderate number of jobs	2	
Generates a low number of jobs	1	
I don't know/don't have enough information	D	

		Score
7- Inclusivity of Growth of Completed Project		2
Project targets poor women	3	
Project targets the poor in general	2	
None of the above	1	
I don't know/don't have enough information	D	

		Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:		2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3	
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2	
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1	
I don't know/don't have enough information	D	

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	2
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	1
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Same discussion on Highways (See Peripherique)
2-
3-

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 41: Assessment of Project TP6

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
			E
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
			N
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
			Y
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
			N
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports?		Score	
			N
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
			N
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
			D
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
			N
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

		Score
5- Timing of Potential Growth Impact of Completed Project		2
Less than 12 months from initiation	3	
In 13 to 36 months from initiation	2	
In more than 36 months from initiation	1	
I don't know/don't have enough information	D	

		Score
8- "Good Job" Potential of Completed Project		2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3	
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2	
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1	
I don't know/don't have enough information	D	

		Score
6- Sustainability of Growth Impact of Completed Project		2
Highly sustainable	3	
Moderately sustainable	2	
Not likely to be sustainable or will require significant public resources	1	
I don't know/don't have enough information	D	

		Score
9- Employment Creation of Completed Project		3
Generates a large number of jobs	3	
Generates a moderate number of jobs	2	
Generates a low number of jobs	1	
I don't know/don't have enough information	D	

		Score
7- Inclusivity of Growth of Completed Project		2
Project targets poor women	3	
Project targets the poor in general	2	
None of the above	1	
I don't know/don't have enough information	D	

		Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:		2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3	
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2	
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1	
I don't know/don't have enough information	D	

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	1
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1-
2-
3-

	Score
16- Reform Timeline	
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 42: Assessment of Project TP7

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

		Score
5- Timing of Potential Growth Impact of Completed Project		2
Less than 12 months from initiation	3	
In 13 to 36 months from initiation	2	
In more than 36 months from initiation	1	
I don't know/don't have enough information	D	

		Score
8- "Good Job" Potential of Completed Project		2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3	
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2	
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1	
I don't know/don't have enough information	D	

		Score
6- Sustainability of Growth Impact of Completed Project		3
Highly sustainable	3	
Moderately sustainable	2	
Not likely to be sustainable or will require significant public resources	1	
I don't know/don't have enough information	D	

		Score
9- Employment Creation of Completed Project		3
Generates a large number of jobs	3	
Generates a moderate number of jobs	2	
Generates a low number of jobs	1	
I don't know/don't have enough information	D	

		Score
7- Inclusivity of Growth of Completed Project		1
Project targets poor women	3	
Project targets the poor in general	2	
None of the above	1	
I don't know/don't have enough information	D	

		Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:		2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3	
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2	
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1	
I don't know/don't have enough information	D	

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	2
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	1
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	D
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Same discussion regarding land expropriation for all highway projects
2-
3-

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 43: Assessment of Project TP8/a

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		N	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		N	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	3
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	2
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	3
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	2
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	2
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	3
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1-
2-
3-

	Score
16- Reform Timeline	
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 44: Assessment of Project TP9

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
		N	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		N	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		N	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	3
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	2
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	2
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	2
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	2
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	1
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	3
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1-
2-
3-

	Score
16- Reform Timeline	
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 45: Assessment of Project TP10

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports?		Score	
		N	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	2
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	3
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	2
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	1
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

11- Affordability of Project		Score	13- In Your Judgetment, The Project Belongs to Which Implementing Period?		Score
		2			1
Private financing with guarantees/contingent liabilities	3		2018 - 2021		1
Public concessional financing	2		2022 – 2025		2
Public, market based financing	1		2026 - 2030		3
I don't know/don't have enough information	D		I don't know/don't have enough information		D
12- In Your Judgetment, Readiness to Implement (is Project Shovel Ready?)		Score	14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?		Score
		2			Y
0-6 months for shovel readiness	3		Yes		Y
6-18 months for shovel readiness	2		No		N
18+ months for shovel readiness	1		I don't know/don't have enough information		D
I don't know/don't have enough information	D				

Reform Needs Assessment

15- Reform Complement		Score	17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful	
		1		
No reforms needed	3		1- Approval of the WB loan by Parliament	
Only cabinet decrees needed	2		2- Long term creaiton of National Transport Authority	
Parliamentary legislation needed	1		3- Mechanisms for long term financing of O&M and future PT investements	
I don't know/don't have enough information	D			
16- Reform Timeline		Score		
		1		
Reforms to be front ended	3			
Reforms to proceed with implementation	2			
Reforms to be post- implementation	1			
I don't know/don't have enough information	D			

Table 46: Assessment of Project TP11

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
		N	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports?		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

		Score
5- Timing of Potential Growth Impact of Completed Project		2
Less than 12 months from initiation	3	
In 13 to 36 months from initiation	2	
In more than 36 months from initiation	1	
I don't know/don't have enough information	D	

		Score
8- "Good Job" Potential of Completed Project		2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3	
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2	
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1	
I don't know/don't have enough information	D	

		Score
6- Sustainability of Growth Impact of Completed Project		3
Highly sustainable	3	
Moderately sustainable	2	
Not likely to be sustainable or will require significant public resources	1	
I don't know/don't have enough information	D	

		Score
9- Employment Creation of Completed Project		3
Generates a large number of jobs	3	
Generates a moderate number of jobs	2	
Generates a low number of jobs	1	
I don't know/don't have enough information	D	

		Score
7- Inclusivity of Growth of Completed Project		2
Project targets poor women	3	
Project targets the poor in general	2	
None of the above	1	
I don't know/don't have enough information	D	

		Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:		2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3	
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2	
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1	
I don't know/don't have enough information	D	

Feasibility Assessment

11- Affordability of Project		Score	13- In Your Judgetment, The Project Belongs to Which Implementing Period?		Score
		2			2
Private financing with guarantees/contingent liabilities	3		2018 - 2021		1
Public concessional financing	2		2022 – 2025		2
Public, market based financing	1		2026 - 2030		3
I don't know/don't have enough information	D		I don't know/don't have enough information		D
12- In Your Judgetment, Readiness to Implement (is Project Shovel Ready?)		Score	14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?		Score
		2			Y
0-6 months for shovel readiness	3		Yes		Y
6-18 months for shovel readiness	2		No		N
18+ months for shovel readiness	1		I don't know/don't have enough information		D
I don't know/don't have enough information	D				

Reform Needs Assessment

15- Reform Complement		Score	17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful	
		D		
No reforms needed	3		1- First railway in Lebanon in yrs, regulatory and institutional contxt needs further assesement	
Only cabinet decrees needed	2		2-	
Parliamentary legislation needed	1		3-	
I don't know/don't have enough information	D			
16- Reform Timeline		Score		
		2		
Reforms to be front ended	3			
Reforms to proceed with implementation	2			
Reforms to be post- implementation	1			
I don't know/don't have enough information	D			

Table 47: Assessment of Project TP12

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
			E
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
			N
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
			N
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
			Y
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports?		Score	
			N
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
			N
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
			N
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
			Y
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	2
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	1
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	2
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	2
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	1
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	3
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	2
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	3
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	3
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1-
2-
3-

	Score
16- Reform Timeline	
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 48: Assessment of Project TP14

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
			E
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
			N
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
			N
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
			N
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
			Y
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
			N
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
			Y
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
			N
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	2
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	2
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	2
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">11- Affordability of Project</td> <td style="width: 20%; text-align: center;">Score 2</td> </tr> <tr> <td>Private financing with guarantees/ contingent liabilities</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Public concessional financing</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Public, market based financing</td> <td style="text-align: center;">1</td> </tr> <tr> <td>I don't know/don't have enough information</td> <td style="text-align: center;">D</td> </tr> </table>	11- Affordability of Project	Score 2	Private financing with guarantees/ contingent liabilities	3	Public concessional financing	2	Public, market based financing	1	I don't know/don't have enough information	D	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">13- In Your Judgment, The Project Belongs to Which Implementing Period?</td> <td style="width: 20%; text-align: center;">Score 3</td> </tr> <tr> <td>2018 - 2021</td> <td style="text-align: center;">1</td> </tr> <tr> <td>2022 – 2025</td> <td style="text-align: center;">2</td> </tr> <tr> <td>2026 - 2030</td> <td style="text-align: center;">3</td> </tr> <tr> <td>I don't know/don't have enough information</td> <td style="text-align: center;">D</td> </tr> </table>	13- In Your Judgment, The Project Belongs to Which Implementing Period?	Score 3	2018 - 2021	1	2022 – 2025	2	2026 - 2030	3	I don't know/don't have enough information	D
11- Affordability of Project	Score 2																				
Private financing with guarantees/ contingent liabilities	3																				
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12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	Score 1																				
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Yes	Y																				
No	N																				
I don't know/don't have enough information	D																				

Reform Needs Assessment

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15- Reform Complement	Score <div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div>																		
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Only cabinet decrees needed	2																		
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16- Reform Timeline	Score <div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div>																		
Reforms to be front ended	3																		
Reforms to proceed with implementation	2																		
Reforms to be post- implementation	1																		
I don't know/don't have enough information	D																		

Table 49: Assessment of Project TP15

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
			N
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
			N
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
			N
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or		Score	
			Y
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports?		Score	
			N
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
			N
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
			N
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
			Y
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	2
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	1
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	2
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	2
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	2
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	3
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	3
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	1
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1-
2-
3-

	Score
16- Reform Timeline	
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 50: Assessment of Project TP16

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
			E
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
			Y
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
			N
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
			Y
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports?		Score	
			Y
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
			N
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
			Y
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
			Y
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	2
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	3
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	1
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	3
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	1
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	D
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Further competition in the airline industry might be appropriate, this needs to be further assessed
2-
3-

	Score
16- Reform Timeline	
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 51: Assessment of Project TP16a

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
			E
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
			N
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
			N
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
			Y
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports?		Score	
			Y
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
			N
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
			N
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
			D
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	2
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	2
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	2
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	1
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	D
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	2
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	1
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	D
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Opening the market to more competition from airlines, TBC
2-
3-

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 52: Assessment of Project TP18 - Phase 1

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
			E
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
			N
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
			N
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
			N
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
			N
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
			N
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
			D
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
			N
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

		Score
5- Timing of Potential Growth Impact of Completed Project		2
Less than 12 months from initiation	3	
In 13 to 36 months from initiation	2	
In more than 36 months from initiation	1	
I don't know/don't have enough information	D	

		Score
8- "Good Job" Potential of Completed Project		2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3	
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2	
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1	
I don't know/don't have enough information	D	

		Score
6- Sustainability of Growth Impact of Completed Project		2
Highly sustainable	3	
Moderately sustainable	2	
Not likely to be sustainable or will require significant public resources	1	
I don't know/don't have enough information	D	

		Score
9- Employment Creation of Completed Project		3
Generates a large number of jobs	3	
Generates a moderate number of jobs	2	
Generates a low number of jobs	1	
I don't know/don't have enough information	D	

		Score
7- Inclusivity of Growth of Completed Project		1
Project targets poor women	3	
Project targets the poor in general	2	
None of the above	1	
I don't know/don't have enough information	D	

		Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:		2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3	
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2	
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1	
I don't know/don't have enough information	D	

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	1
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1-
2-
3-

	Score
16- Reform Timeline	
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 53: Assessment of Project TP18 - Phase 2

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
			E
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
			N
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
			N
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
			N
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
			N
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
			N
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
			D
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
			N
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

		Score
5- Timing of Potential Growth Impact of Completed Project		2
Less than 12 months from initiation	3	
In 13 to 36 months from initiation	2	
In more than 36 months from initiation	1	
I don't know/don't have enough information	D	

		Score
8- "Good Job" Potential of Completed Project		2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3	
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2	
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1	
I don't know/don't have enough information	D	

		Score
6- Sustainability of Growth Impact of Completed Project		2
Highly sustainable	3	
Moderately sustainable	2	
Not likely to be sustainable or will require significant public resources	1	
I don't know/don't have enough information	D	

		Score
9- Employment Creation of Completed Project		3
Generates a large number of jobs	3	
Generates a moderate number of jobs	2	
Generates a low number of jobs	1	
I don't know/don't have enough information	D	

		Score
7- Inclusivity of Growth of Completed Project		1
Project targets poor women	3	
Project targets the poor in general	2	
None of the above	1	
I don't know/don't have enough information	D	

		Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:		2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3	
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2	
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1	
I don't know/don't have enough information	D	

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	2
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	1
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1-
2-
3-

	Score
16- Reform Timeline	
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 54: Assessment of Project TP19

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	<input type="text"/>
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	<input type="text"/>
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	<input type="text"/>
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	<input type="text"/>
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	<input type="text"/>
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	<input type="text"/>
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	<input type="text"/>
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	<input type="text"/>
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

5- Timing of Potential Growth Impact of Completed Project		Score
Less than 12 months from initiation	3	<input type="text"/>
In 13 to 36 months from initiation	2	
In more than 36 months from initiation	1	
I don't know/don't have enough information	D	

8- "Good Job" Potential of Completed Project		Score
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3	<input type="text"/>
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2	
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1	
I don't know/don't have enough information	D	

6- Sustainability of Growth Impact of Completed Project		Score
Highly sustainable	3	<input type="text"/>
Moderately sustainable	2	
Not likely to be sustainable or will require significant public resources	1	
I don't know/don't have enough information	D	

9- Employment Creation of Completed Project		Score
Generates a large number of jobs	3	<input type="text"/>
Generates a moderate number of jobs	2	
Generates a low number of jobs	1	
I don't know/don't have enough information	D	

7- Inclusivity of Growth of Completed Project		Score
Project targets poor women	3	<input type="text"/>
Project targets the poor in general	2	
None of the above	1	
I don't know/don't have enough information	D	

10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:		Score
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3	<input type="text"/>
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2	
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1	
I don't know/don't have enough information	D	

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?	
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1-
2-
3-

	Score
16- Reform Timeline	
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 55: Assessment of Project TP20

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

		Score
5- Timing of Potential Growth Impact of Completed Project		2
Less than 12 months from initiation	3	
In 13 to 36 months from initiation	2	
In more than 36 months from initiation	1	
I don't know/don't have enough information	D	

		Score
8- "Good Job" Potential of Completed Project		2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3	
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2	
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1	
I don't know/don't have enough information	D	

		Score
6- Sustainability of Growth Impact of Completed Project		3
Highly sustainable	3	
Moderately sustainable	2	
Not likely to be sustainable or will require significant public resources	1	
I don't know/don't have enough information	D	

		Score
9- Employment Creation of Completed Project		3
Generates a large number of jobs	3	
Generates a moderate number of jobs	2	
Generates a low number of jobs	1	
I don't know/don't have enough information	D	

		Score
7- Inclusivity of Growth of Completed Project		2
Project targets poor women	3	
Project targets the poor in general	2	
None of the above	1	
I don't know/don't have enough information	D	

		Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:		2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3	
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2	
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1	
I don't know/don't have enough information	D	

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	2
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	2
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	2
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Appointment of an official Board of Directors for Tripoli Port
2-
3-

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

V. Solid Waste Management

The CIP contains one entry for a single cycle 1 (2018–2021) investment program in the solid waste sector: “Solid Waste Management to cover all Lebanon including collection, sorting, treatment and landfill sites” for a total of US\$ 1,400 million. Further discussions gave more insight into the investment program, which foresees investments in centralized waste treatment for five regional waste ‘sheds’: (i) three Waste to Energy (WtE) facilities in the urbanized coastal regions (Beirut, the north around Tripoli and South Lebanon around Saida/Zahrani), and (ii) more traditional schemes based on composting and sanitary landfilling for the more rural parts of Lebanon in the north Akka area and for the Bekaa valley. The WtE schemes would require three times US\$ 375 million and the two rural schemes together around US\$ 175 million. In addition, roughly US\$ 100 million would be required to cleanup the 962 illegal dumpsites of Lebanon and for some the rehabilitation into sanitary landfills. This amounts to a total of US\$ 1,400 million. Of these projects, the WBG assesses that 4 (at a cost of around US\$ 650 million) are important for the first cycle of 2018–2021. These comprise projects: SW1.1, SW2, SW3.1 and SW3.2. The costing for these projects seems reasonable. These projects can be done in large part by the private sector.

A. General Comments

115. Solid waste disposal is a persistent and critical issue in Lebanon. Before the Syrian crisis, only 53 percent of municipal solid waste was disposed of in the country’s only two sanitary landfills: Nahmeh and Zahlé. The remaining was disposed of in unsanitary landfills and hundreds of open dumps, which is a main source of pollution to air, watersheds and coastal zones. The closure of the over-extended Nahmeh landfill in July 2015 resulted in the worse environmental crisis in Lebanon’s recent history.

116. In the summer of 2015, a visually powerful garbage crisis that left piles of it uncollected on the streets of Lebanon galvanized sizable popular demonstrations. Garbage began piling up since July 17, 2015 when the Naameh landfill, which served as the primary landfill for the country, was closed without an alternate site being designated due to opposition from local communities. A nontransparent tendering process was organized by the government for new waste management contracts across the country. On August 24, 2015, the Ministry of Environment announced the winners of the bids, most of whom were seen as having close ties to the political elite. The perceived incessant corruption at the expense of quality of services triggered a series of protests and civil disobedience measures targeting the ruling political class with emphasis on corruption and incompetence.

Lebanon’s Integrated Solid Waste Management

117. In April 2012, the Council of Ministers approved Decree 8003 on Integrated Municipal Solid Waste Management, which has been awaiting parliamentary approval since. The Draft Law promotes an integrated and proper management of municipal waste by encouraging waste minimization, source separation, recycling, energy recovery, effective treatment facilities, etc.

118. On January 11, 2018, the Lebanese cabinet endorsed the Policy Summary on Integrated Solid Waste Management. The policy summary calls for the Ministry of Environment (MoE) to survey the financial and administrative capacities of every municipality in Lebanon and assess their ability to manage their waste without government intervention. If municipalities are incapable or unwilling to treat their waste, they would be linked to the centralized solution, from which the CIP solid waste projects are derived. In addition, the Decision also includes a number of short-term measures to improve conditions and expend the

capacity of some existing disposal facilities; and increase composting and waste sorting capacity to reduce waste to disposal. The Decision puts implementation of these measures in the hands of CDR.

119. The CIP contains one entry for a single cycle 1 (2018-2021) investment program in the solid waste sector: “Solid Waste Management to cover all Lebanon including collection, sorting, treatment and landfill sites” for a total of US\$ 1,400 million. Further discussions gave more insight into the investment program, which has the nature of a national sector roadmap, based on feasibility studies and a basic investment program that will need further work for the development of the regional investment schemes. Roughly, the program foresees investments in centralized waste treatment for five regional waste ‘sheds’: (i) three waste sheds in the urbanized coastal regions (Beirut, the north around Tripoli and South Lebanon around Saida/Zahrani area) each managing around 1,200 t/d of municipal waste, with a WtE facility at the heart of the system, with the Beirut WtE being developed through long-term concessions to the private sector, and the other two under deliberation; and (ii) more traditional schemes based on composting and sanitary landfilling for two waste sheds for the more rural parts of Lebanon in the north and for the Bekaa valley.

120. The proposed cost estimates for investments seem adequate. Details have not been provided, but the rough estimates for investments as indicated are in line with international benchmarks. The WtE schemes would require three times US\$ 375 million and the two rural schemes together around US\$ 175 million. In addition, roughly US\$ 100 million would be required to cleanup the 962 illegal dumpsites of Lebanon and rehabilitation of sanitary landfills. These amounts give a total of US\$ 1,400 million. The development of the five regional schemes is expected to take four years. Given their obligations, (local government) LGs will remain responsible for waste collection (as in the current situation, largely contracted to private operators) and have the option to opt out of these regional schemes that will be developed and operated under the direct control of the central government. It is expected that most LGs will choose to bring their waste to the regional facilities. Subject to participating LGs, the total program would cover around 90 percent of waste generated in Lebanon.

Assessing CIP Waste Treatment Projects

121. There is a strong rationale to organize solid waste management in Lebanon with regional schemes, initiated by the Council of Development and Reconstruction (CDR) and managed by private operators. Lebanon has a history of high cost waste services and engagement with the private sector in waste management operations, mainly waste collection and disposal. These are conditions that support the proposed private sector financing and operations of these facilities. Given the challenges, particularly land issues, to develop local outlets for waste disposal and scale benefits, it makes good sense to develop regional schemes and for the central government through CDR to lead this program.

122. The choice of costly waste-to-energy facilities is driven by challenges in Lebanon to develop sanitary landfills, which in general (internationally) are lower costs options. Waste-to-energy schemes normally are substantially more expensive than sanitary landfilling, with the latter being the preferred option for most countries that have similar GDP/capita levels. It is recognized, however, that landfilling in Lebanon is challenging due to a lack of land. Also related to these challenges, a large part of waste in the country, particularly in the Beirut area, already faces cost levels of US\$ 100/ton and more, which are comparable to costs of waste incineration.

123. Regional waste schemes, and particularly waste-to-energy investments, take time to develop; current initiatives are at the early planning stage. The proposed program envisages a period of four years to develop the regional schemes. This seems achievable, though on the optimistic side, assuming there are no setbacks due to land issues (not in my back yard, NIMBY) and options to mobilize public finance for investments if needed. For the WtE schemes, international experience suggests that even without major setbacks in financing and planning, a period of 5-6 years is more realistic.

124. Contingency planning. The development of WtE is complex and at the current development stage, without a solid market test, it is difficult to foresee what challenges lie ahead in contractual and financing arrangements with investors, in planning (ESIA, public consultation) and in operational and financial arrangements to be made with the participating LGs. It is important to plan for waste management in the period up to the operationalization of the five regional facilities and include provisions for set-backs.

125. Lebanon is locking in into waste incineration and treatment, with limited focus on waste recycling and waste reduction. In high income countries, incineration has been a key element in waste systems to reduce waste for disposal. However, it is regarded as a lower level solution in the waste management hierarchy and recent developments ('circular economy') see a substantial shift from waste incineration to waste recycling and reduction. With the proposed program, Lebanon is locking in into waste incineration for decades. The adopted strategy is that increases in waste generation due to economic development and demographic trends would be managed through waste recycling and reduction in the future.

126. Financial sustainability, tariff system and financial arrangements with LGs. In addition to the US\$ 1.4 billion investments, the schemes will need roughly US\$ 150-200 million per year to operate. At present, there are no development arrangements to have these costs covered by waste generators (households) or the LGs. There is thinking of putting a tariff system in place based on electricity consumption, and possibly linking billing to electricity billing. Tariffs systems take time to develop and have social implications. It is critical for the success of the regional investments that improvement in services go hand in hand with cost recovery. Policies need to take shape in the next two years that address financial and operational arrangements with LGs (put-or-pay, bring the waste at a fee, or otherwise pay engagement charges) and the establishment of consumer waste fees.

127. Feed-in tariffs. For waste incineration, electricity feed-in tariffs (FIT) are critical and may even generate more revenues than gate fees for waste delivery at the facility. The program assumes a FIT of US\$ 0.1075/kWh to be paid by EdL. The tariff looks reasonable but it not clear whether it is underpinned by an assessment of economic benefits (premiums for renewable energy) in comparison to current costs of power generation. It also needs to be confirmed that long-term arrangements can be made for FITs.

128. In terms of job creation, the proposed investments will generate jobs during the construction periods and for operation of the related facilities. On average, it can be expected that several hundreds of jobs are created at each of the five regional facilities.

B. Projects

129. SW1.1 - Beirut Waste to Energy Facility

- The scheme to process 1,200 ton/day municipal solid waste has an estimated cost of US\$ 375 million, which seems reasonable.

- According to government, a site has been identified, a prequalification tender has resulted in a shortlist of potential bidders and it is suggested that arrangement for feed-in tariffs can be made. Some key transactions elements still need to be developed and it appears that the prequalification has not yet performed a substantial market test for the scheme based on a 25 years concession.
- Based on government information, this regional facility is most advanced and should be made ready for tender in the coming 6-12 months.

130. SW1.2, 1.3 – Tripoli Area WtE Facility, South Lebanon Coastal Area WtE Facility

- Each of the two schemes is expected to process 1,200 ton/day municipal solid waste, with an estimated cost of US\$ 375 million per facility, which seems reasonable.
- These schemes appear less developed than the Beirut scheme and to gain experience it is recommended to have at least one to two years delay in tendering these facilities after the Beirut tender has been concluded with financial closure.

131. SW2 – National cleanup program for closure and rehabilitation of waste dump sites

- This project is expected to cleanup more than 950 sites at an estimated cost of US\$ 100 million. The cost estimate is very rough but as such seems reasonable.
- It's unlikely that this work can be financed from private funding, unless, perhaps for a number of sites, it can be linked to the other 5 projects.
- Works can start rapidly for a number of sites, but it is likely that for a large number of sites, they can only be closed when alternative capacity for treatment of disposal has been put in place. Hence, a phased approach is recommended.

132. SW3.1, 3.2 – Akkar Valley Regional Facility and Bekaa Valley Regional Facility

- These two schemes are expected to process 920 and 280 ton/day municipal solid waste, respectively. The total estimated cost is US\$ 175 million for both facilities which seems reasonable.
- Technology for these two regional schemes is mainly sorting and composting to reduce waste to disposal and the development and operation of sanitary landfills. The various investments of these two schemes should be as much as possible combined in two integrated contracts and it seems feasible to find private investors to finance, develop and operate the facilities.
- The schemes still need substantial planning and preparation but are less complicated than the WtE deals. Therefore tendering within the next two years should be possible but a comprehensive market test is recommended and a sound financing basis for operating costs needs to be developed, which could be more challenging in these regions than in the urbanized areas with WtE concessions.

C. Reform Needs

133. Most prominent reform needs are:

- 1- Development of a tariff system for waste generators (households);
- 2- Policies to support capacity development with local governments for sector planning and operations;

- 3- Defining feed-in tariffs for electricity from waste processing facilities based on long-term economic benefits

Table 56: Solid Waste Management Projects

Ref	Project	Estimated Cost (MUS\$)	Land Exprop. (MUS\$)
SW1.1	Waste to energy facility	375.0	None
SW1.2	Waste to energy facility	375.0	None
SW1.3	Waste to energy facility	375.0	None
SW2	Rehabilitation of dumpsites throughout Lebanon	100.0	None
SW3.1	Rural sorting, composting, and sanitary landfills	87.5	None
SW3.2	Rural sorting, composting, and sanitary landfills	87.5	None
SW1.1	Waste to energy facility	375.0	None

Table 57: Assessment of Project SW1.1

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		L	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		L	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		N	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		Y	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	3
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	2
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	1
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	2
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	3
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	2
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	D
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	1
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1-Tariff system for waste generators (households)
2- Capacity development local government for sector planning and operations
3- Electricity feed-in tariffs based on long-term economic benefits

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 58: Assessment of Project SW1.2

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		L	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		L	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		N	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		Y	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	3
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	2
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	1
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	2
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	3
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	2
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	1
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	D
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	1
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1-Tariff system for waste generators (households)
2- Capacity development local government for sector planning and operations
3- Electricity feed-in tariffs based on long-term economic benefits

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 59: Assessment of Project SW1.3

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		L	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		L	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		N	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		Y	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	3
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	2
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	1
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	2
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	3
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	2
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	1
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	D
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	1
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1-Tariff system for waste generators (households)
2- Capacity development local government for sector planning and operations
3- Electricity feed-in tariffs based on long-term economic benefits

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 60: Assessment of Project SW2

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
			Y
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
			L
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
			L
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
			N
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
			N
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
			Y
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
			Y
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
			N
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	3
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	1
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	1
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	1
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	1
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	1
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	1
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	D
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	2
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1-This project is dependent on implementation of Projects SW1a-e; a significant number of sites cannot be closed prior to these.
2-
3-

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 61: Assessment of Project SW3.1

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		L	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		L	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		N	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		Y	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	3
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	2
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	1
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	2
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	3
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	2
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	D
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	1
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1-Tariff system for waste generators (households)
2- Capacity development local government for sector planning and operations
3- Electricity feed-in tariffs based on long-term economic benefits

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 62: Assessment of Project SW3.2

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		L	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		L	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		N	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		Y	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	3
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	2
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	1
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	2
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	3
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	2
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	D
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	1
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1-Tariff system for waste generators (households)
2- Capacity development local government for sector planning and operations
3- Electricity feed-in tariffs based on long-term economic benefits

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

TELECOMMUNICATIONS

VI. Telecommunications

The CIP contains 8 separately identified investment projects in the telecoms sector for a total of US\$ 700 million, that can be implemented over the first cycle covering the period 2018-2021. Of these projects, the WBG assesses that 5 are of strategic importance to the sector. These comprise projects: T1, T2, T3, T5 and T8 (at a cost of around US\$ 410 million). Of these, T1 (Fiber to the Office and Fiber to the Home) can be done in large part by the private sector, but important legal, regulatory and policy changes need to be made. The estimated costs are generally reasonable, although more information is needed on some projects. The telecoms sector in Lebanon is the second biggest income earner for the government, making it a vital source of financing for a country with the third highest debt-to-GDP ratio in the world. Telecom reforms should proceed with caution as the potential contingent liabilities for the public sector is appreciable.

A. General Comments

134. Most investments go in the right direction: modernize Lebanon’s broadband and digital platform infrastructure, providing faster internet and cloud based services to government, businesses and consumers in Lebanon. The following assessment is a “static” analysis and we stress on the importance of considering broader policy reform in the sector.

135. The plan also includes investments to enhance MoT’s core corporate functions, such as service delivery and billing (T2), or to improve the ability of the State to regulate and monitor the market, such as in areas like surveillance and spectrum management (T4 and T5). Complementary interventions in capacity building and institutional and regulatory reform are needed to fully realize the impact of this investment plan.

136. The telecoms sector in Lebanon is the second biggest income earner for the government making it a vital source of financing for a country with the third highest debt-to-GDP ratio in the world that generates substantial financing needs.²¹ Telecom transfers to the government averaged 3.4 percent of GDP annually over the past decade. It is also a rare source of hard currency, noting that the foreign currency-denominated portion of public debt is equivalent to about 56 percent of GDP. Telecom reforms should proceed with caution as the potential contingent liabilities for the public sector is appreciable.

B. Comments on projects 1-8

137. TL1 – Phase 2 - Fiber to the Office and Fiber to the Home (US\$ 100 million):

- In most countries where broadband access is open to competition, fiber to the home or the office services and infrastructure in economically active areas is carried out by the private sector. Public funding or different forms of interventions come at a later stage when the private sector is not willing to invest further in less lucrative segments of the market. On the other hand, in CIP T1 the planned network investment (Fiber to the Home and Fiber to the Office), reaches the final user.
- The investment estimate is reasonable, and consistent with a similar analysis done by the task team that would result in an investment of US\$120 mln to US\$ 150 mln to build infrastructure in economically viable, densely populated areas.

²¹ Gross public debt is estimate at 153 percent of GDP, end-2017, with only Japan and Greece higher globally. Debt service for the government reaches about 10 percent of GDP annually, consuming about half of domestic revenues. As a result, the government suffers from a long term and sizable fiscal deficit, which in 2016 registered 9.6 percent of GDP.

138. TL2 – Phase 2 – Core Network and IMS (IP multimedia subsystem) (US\$ 90 million):

- This investment is planned as part of MoT's upgraded infrastructure and is one of the key investment to alleviate demand for DSL services on the short and medium term and to improve quality of domestic internet network.
- This type of investment should be carried out by the private sector, but in the case of Lebanon and to improve service on the short term, awaiting reforms that allow competition, this investment can be made by the public sector, as it is essential to increase overall internet speed and quality in Lebanon.
- The investment estimate appears reasonable.

139. TL3 – Expansion of international capacity (US\$ 50 million)

- Currently, all international backbone communication is handled by MOT. More information is needed to assess whether this capacity has reached its limits and what are the options to increase the international capacity available for Lebanon.
- Since the government owns and operates the international gateways in Lebanon, it is important to consider partnership with the private sector at the investment and operational level. It is important to induce competition in this segment, to have a greater impact on the market, in terms of available bandwidth and price of capacity. Prices were reduced but are still high compared with fully open markets.
- It is important to notice, however, that even if the potential for competition in this market segment is considerable, the adverse impact in terms of fiscal flows is also the highest in this segment. If competition were to be introduced, the private sector would quickly gain market shares, prices would drop dramatically and demand elasticity would not be such to compensate the price drop. The combined impact of revenues realized by private sector operators and lower margins arising from competition, would mean a sharp reduction of fiscal revenues from this specific segment.
- The investment estimate appears reasonable but more information is needed to determine the cost of the backbone upgrade capacity.

140. TL4 – Phase 2 – Security System (US\$ 60 million):

- Investment in cybersecurity, including DPI, Deep Packet Inspection, allows authorities to intercept and decode communications, intercept illegal activities and ensures the safety of user information.
- The implementation of these systems requires coordination and cooperation between different institutions. More information is needed on this subject to assess the project implementation plan, scope, cost and readiness.
- Further information is needed to assess the investment estimate.

141. TL5 – Phase 2 – Spectrum Monitoring (US\$ 20 million):

- More information is needed to understand what are the existing spectrum monitoring tools available to the Ministry and to the regulator in order to better assess this project.
- Spectrum monitoring is commonly carried out by independent regulatory agencies, and therefore it is recommended that this investment is made to reinforce the capacities of the TRA. This is particularly important in Lebanon where the government and MoT

are also users of spectrum and therefore an independent institution is better placed to monitor and regulate the use of spectrum.

- The estimate seems on the high side.

142. TL6 – National Cloud Platform (US\$ 200 million):

- This is an important investment that is usually undertaken as a Public-Private Partnership (PPP) to provide a common cloud based infrastructure to the government, with data centre and disaster recovery capabilities. It is important to: i) help government explore PPP options, as not all of the investment needed should come from the budget and ii) prepare an adequate institutional environment to implement the reform. Change in management is more important than hardware in the implementation of cloud based solutions.
- A high-level comparison with other countries shows that the investment needed for this project is over-estimated, however more information on the scope of the project is required to corroborate this finding.
- The cost for this component is very high; it is unclear what scope of investment would justify this cost estimate and whether least cost options were considered.

143. TL7 – Phase 2 – IOT, Lora and WiFi Network (US\$ 30 million):

- Additional information is needed on the objectives, design and implementation of this project. This is particularly the case for the IoT and Lora part of the components. The investment, the sources of funding and the reforms needed will therefore depend on the scope and objectives of this project.
- Investment in public wifi networks is an important one to extend connectivity in areas with poor access to internet. Similarly, public wifi networks can provide access to segments of the society that cannot afford personal or residential internet subscriptions. In these cases, public intervention is warranted since private investment may not be profitable. The deployment of public wifi spot should therefore be strategic and targeted to the areas where residents have limited access and to important institutions such as schools, universities, parks, etc...
- Additional information is needed to determine whether this investment estimate is reasonable.

144. TL8 – GSM network (US\$ 150 million):

- This is an investment to upgrade the capabilities of MoT mobile infrastructure for both networks.
- Ideally this type of investment should be carried out by the private sector, but in the case of Lebanon and to improve service on the short term, awaiting reforms that allow competition, this investment can be made by the public sector.
- More information on the scope of this project is needed to assess the relevance of this investment and how reasonable it is. It is unclear why an expansion of the GSM network is needed at a time when the industry is clearly moving to 4G and 5G solutions.

C. Complementary Policy Interventions

145. Lebanon has a unique opportunity to develop a new comprehensive policy to address the various bottlenecks affecting the growth and development of broadband

infrastructure and services. The main opportunity is to leverage on Lebanon's education and skill level of population, by providing modern broadband infrastructure and ICT applications. This would boost the competitiveness of the service sector, and create jobs and income opportunities for the skilled workers.

146. In embracing this much-needed reform, Lebanon will need to pay attention to two important factors:

- account for the fiscal implications;
- manage risks and opportunities to make sure that the benefits of broadband reach to different regions and income and social groups; and
- avoid the emergence of oligopolies in the sector

147. As a matter of priority, Lebanon must adopt a unified sector policy and update the laws and regulatory tools to ensure a progressive opening the sector to competition.

Some Reform Needs:

148. At present, the government has authorized two DSPs to build fiber using MoT's passive infrastructure. In addition, other DSPs have also expressed their interest to invest. For this reason, the government is preparing a standardized license, to bring all operators on the same level playing field. This is a good step, and needs to be established quickly, before one DSP gets an important first mover advantage on a specific CO. The terms of the license are particularly straightforward and the text can be quickly introduced. The harmonized license framework can be used as a chance to strengthen the conditions of the DSP licenses while creating a level playing field. In particular, the following conditions are desirable:

- No limits on the number of DSPs authorized to lay down fiber (all DSPs meeting certain conditions are authorized, as in the class license regime);
- No minimum investment obligation: the successful examples of Eastern Europe show that small and micro operators can be a formidable force behind the development of broadband; it should be the market, and not the government, to determine the number of players, through competition and consolidation;
- A uniform revenue sharing agreement: different DSPs have different revenue sharing agreements with the government (ranging from 20 to 40 percent of the revenues); a revenue sharing agreement impacts the business plan of an operator, that will either limit investment or increase the final price for the customer, or a combination of both; this is not desirable.
- If more than one DSP intends to address a CO, there are two scenarios: either there is enough space in the passive infrastructure of MoT to accommodate two or more DSPs, or there isn't; if there is not enough passive infrastructure capacity, then a bidding process (for example, based on revenue sharing percentages), would need to be introduced to determine which DSPs will have the right to deploy fiber in a constrained environment;

Table 63: Telecommunications Projects

Ref	Project	Estimated Cost (MUS\$)	Land Exprop. (MUS\$)
TL1	Phase 2 FTT(X) - FTTO: Fiber -To-The-Office - FTTH: Fiber-To-The-Home Phase 7 FTT (X) infrastructure	100	None
TL2	Phase 2 - Core Network and IMS (IP Multimedia Subsystem)	90	None
TL3	Expansion of international connectivity	50	None
TL4	Phase 2 Security System	60	None
TL5	Phase 2 Spectrum Monitoring	20	None
TL6	National Cloud Platform	200	None
TL7	Phase 2 IOT, Lora and WiFi Network	30	None
TL8	GSM network	150	None

Table 64: Assessment of Project TL1

Strategic Assessment				
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score		
		Y		
Resounding yes	Y	Y		
"Good to have" but not a priority	E			
No	N			
I don't know/don't have enough information	D			
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score		
		Y		
Very likely	Y	Y		
Not likely	N			
Not relevant	L			
I don't know/don't have enough information	D			
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score		
		N		
Very likely	Y	Y		
Not likely	N			
Not relevant	L			
I don't know/don't have enough information	D			
1d- How Likely is it that The Project Will Help Attract a Significant		Score		
		Y		
Very likely	Y	Y		
Not likely	N			
I don't know/don't have enough information	D			
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score		
		Y		
Very likely	Y	Y		
Not likely	N			
I don't know/don't have enough information	D			
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score		
		N		
Yes	Y	Y		
No	N			
I don't know/don't have enough information	D			
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score		
		Y		
Yes	Y	Y		
No	N			
I don't know/don't have enough information	D			
4- The Project Can and Should be 100% Financed by the Private Sector		Score		
		E		
Yes, the institutional and policy environment are supportive	Y			
Yes, "in principle" but the institutional/policy environment needs changes first	E	E		
No, for any reason	N			
I don't know/don't have enough information	D			

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	2
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	3
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	2
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	2
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	D
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	1
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	2
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	2
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful

- 1- Authorization to the private sector to deploy infrastructure: such as decree providing standard facilities-based licensed to all private DSPs
- 2- Issue of dominance of OGERO addressed: through independent regulation of OGERO access to wholesale services such as ducts
- 3 - Complementary rights provided to facilities-based private DSPs

	Score
16- Reform Timeline	3
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 65: Assessment of Project TL2

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y	Y	
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
		Y	
Very likely	Y	Y	
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
		Y	
Very likely	Y	Y	
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or		Score	
		Y	
Very likely	Y	Y	
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports?		Score	
		N	
Very likely	Y	Y	
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		N	
Yes	Y	Y	
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		D	
Yes	Y	Y	
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		E	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E	E	
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	2
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	2
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	2
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	1
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	1
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	3
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	2
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Authorization to the private sector to deploy infrastructure: such as decree providing standard facilities-based licensed to all private DSPs
2- Issue of dominance of OGERO addressed: through independent regulation of OGERO access to wholesale services such as ducts
3 - Complementary rights provided to facilities-based private DSPs

	Score
16- Reform Timeline	3
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 66: Assessment of Project TL3

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y	Y	
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
		Y	
Very likely	Y	Y	
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
		Y	
Very likely	Y	Y	
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or		Score	
		Y	
Very likely	Y	Y	
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports?		Score	
		Y	
Very likely	Y	Y	
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		N	
Yes	Y	Y	
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		D	
Yes	Y	Y	
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		E	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E	E	
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	1
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	3
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	2
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	2
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	1
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	2
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	1
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	1
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Authorization to the private sector to invest in international gateways
2- Issue of dominance of MoT addressed: through independent regulation of MoT access to wholesale services such as international capacity
3 - Complementary rights provided to facilities-based private DSPs

	Score
16- Reform Timeline	3
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 67: Assessment of Project TL4

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		E	
Resounding yes	Y	Y	
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
		L	
Very likely	Y	Y	
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
		L	
Very likely	Y	Y	
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
		N	
Very likely	Y	Y	
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports?		Score	
		N	
Very likely	Y	Y	
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		N	
Yes	Y	Y	
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		D	
Yes	Y	Y	
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E	E	
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	3
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	1
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	1
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	1
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

13- In Your Judgement, The Project Belongs to Which Implementing Period?	Score
	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?	D
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

**17- Please Specify Top 3 Reform Priorities
Needed in Order for the Project to be Successful**

Table 68: Assessment of Project TL5

Strategic Assessment				
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score		
		Y		
Resounding yes	Y	Y		
"Good to have" but not a priority	E			
No	N			
I don't know/don't have enough information	D			
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score		
		L		
Very likely	Y	Y		
Not likely	N			
Not relevant	L			
I don't know/don't have enough information	D			
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score		
		L		
Very likely	Y	Y		
Not likely	N			
Not relevant	L			
I don't know/don't have enough information	D			
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score		
		N		
Very likely	Y	Y		
Not likely	N			
I don't know/don't have enough information	D			
1e- How Likely is it that The Project Will Contribute to Increasing Exports?		Score		
		N		
Very likely	Y	Y		
Not likely	N			
I don't know/don't have enough information	D			
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score		
		N		
Yes	Y	Y		
No	N			
I don't know/don't have enough information	D			
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score		
		D		
Yes	Y	Y		
No	N			
I don't know/don't have enough information	D			
4- The Project Can and Should be 100% Financed by the Private Sector		Score		
		N		
Yes, the institutional and policy environment are supportive	Y			
Yes, "in principle" but the institutional/policy environment needs changes first	E	E		
No, for any reason	N			
I don't know/don't have enough information	D			

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	1
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	1
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	1
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	1
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	1
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	1
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	2
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?	D
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	3
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Empowerment of the sector regulator

	Score
16- Reform Timeline	D
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 69: Assessment of Project TL6

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		E	
Resounding yes	Y	Y	
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score	
		L	
Very likely	Y	Y	
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score	
		L	
Very likely	Y	Y	
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score	
		N	
Very likely	Y	Y	
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports?		Score	
		N	
Very likely	Y	Y	
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		N	
Yes	Y	Y	
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		D	
Yes	Y	Y	
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		E	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E	E	
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	D
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	D
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	D
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	1
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	1
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	1
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

13- In Your Judgement, The Project Belongs to Which Implementing Period?	Score
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?	D
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

**17- Please Specify Top 3 Reform Priorities
Needed in Order for the Project to be Successful**

Table 70: Assessment of Project TL7

Strategic Assessment				
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score		
		E		
Resounding yes	Y	Y		
"Good to have" but not a priority	E			
No	N			
I don't know/don't have enough information	D			
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score		
		N		
Very likely	Y	Y		
Not likely	N			
Not relevant	L			
I don't know/don't have enough information	D			
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry		Score		
		N		
Very likely	Y	Y		
Not likely	N			
Not relevant	L			
I don't know/don't have enough information	D			
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score		
		N		
Very likely	Y	Y		
Not likely	N			
I don't know/don't have enough information	D			
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score		
		N		
Very likely	Y	Y		
Not likely	N			
I don't know/don't have enough information	D			
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score		
		N		
Yes	Y	Y		
No	N			
I don't know/don't have enough information	D			
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score		
		D		
Yes	Y	Y		
No	N			
I don't know/don't have enough information	D			
4- The Project Can and Should be 100% Financed by the Private Sector		Score		
		E		
Yes, the institutional and policy environment are supportive	Y			
Yes, "in principle" but the institutional/policy environment needs changes first	E	E		
No, for any reason	N			
I don't know/don't have enough information	D			

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	3
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	1
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	2
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	1
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	D
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

13- In Your Judgement, The Project Belongs to Which Implementing Period?	Score
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

**17- Please Specify Top 3 Reform Priorities
Needed in Order for the Project to be Successful**

Table 71: Assessment of Project TL8

Strategic Assessment				
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score		
		Y		
Resounding yes	Y	Y		
"Good to have" but not a priority	E			
No	N			
I don't know/don't have enough information	D			
1e- How Likely is it that The Project Will Contribute to Increasing Exports?		Score		
		D		
Very likely	Y	Y		
Not likely	N			
I don't know/don't have enough information	D			
1b- How Likely is it that the Project Will Alleviate Significant Supply Bottlenecks In the Sector or Industry?		Score		
		D		
Very likely	Y	Y		
Not likely	N			
Not relevant	L			
I don't know/don't have enough information	D			
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score		
		N		
Yes	Y	Y		
No	N			
I don't know/don't have enough information	D			
1c- How Likely is it that The Project Will Help Reduce The Cost Structure Significantly In the Sector or Industry?		Score		
		D		
Very likely	Y	Y		
Not likely	N			
Not relevant	L			
I don't know/don't have enough information	D			
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score		
		D		
Yes	Y	Y		
No	N			
I don't know/don't have enough information	D			
1d- How Likely is it that The Project Will Help Attract a Significant Amount of FDI in The Sector Concerned or In Upstream or Downstream Sectors?		Score		
		D		
Very likely	Y	Y		
Not likely	N			
I don't know/don't have enough information	D			
4- The Project Can and Should be 100% Financed by the Private Sector		Score		
		E		
Yes, the institutional and policy environment are supportive	Y			
Yes, "in principle" but the institutional/policy environment needs changes first	E	E		
No, for any reason	N			
I don't know/don't have enough information	D			

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	2
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	D
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	2
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	D
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	D
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	1
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgetment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgetment, Readiness to Implement (is Project Shovel Ready?)	D
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	3
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful

	Score
16- Reform Timeline	D
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

VII. Tourism & Heritage, Creativity & Knowledge

The CIP contains 11 separately identified investment projects in the sector for a total of US\$ 264 million, to be implemented over the cycles 1 and 2, covering the period 2018–2026. Of these projects, the WBG assesses that 7 projects are of high priority, with implementation starting in cycle 1, 2018–2021 (at a total cost of around US\$ 191 million). These high priority projects comprise: CH2 (Cinema Industry), CH3 (Theater), CH5 (Scientific and Educational Centers), CH7 (Arts General), CH9 (Historic Cities), CH10 (Heritage, Archeological Sites, and Surroundings) and CH11 (Museums). These projects can be implemented with the involvement of the private sector and some can be set up as PPPs, with adjustments to the current legal, regulatory and policy framework. The cost estimates are reasonable, country capacity in these areas is sound, and the projects build on previous results the country has achieved.

A. Introduction

149. The 11 projects proposed in the CIP could play a pivotal role in spurring local economic development, in particular in lagging regions. The World Bank Group team that reviewed the CIP found that the 11 projects prioritized by the Government of Lebanon are beneficial to high-value added services that constitute the backbone of the Lebanese economy. They are related to a larger economic sector that can be defined as High-Value Added Services, which includes Tourism & Heritage and Creativity & Knowledge. Experience to date in Lebanon has shown that supporting knowledge and leveraging heritage assets in cities improves local economic development and job creation, especially in secondary and tertiary cities in lagging regions, enhances the livability for local communities in an inclusive manner, and attracts significant private sector investment. Supplementing conventional models of knowledge and heritage-based activities with new forms of activities based on intangible culture and contemporary creativity can have a significant contribution to economic growth and job generation.

150. The 11 projects identified by the Government are aligned with existing sector strategies, for which the Government has shown commitment and capacity to achieve results. The 11 projects require a total investment of US\$ 264 million and are planned to be implemented over cycles 1 and 2. They are components of larger strategies that could unlock employment in fast growing sectors of the Lebanese economy. These projects are the result of a screening exercise carried out by the Government of Lebanon in close consultations with public and private stakeholders. The 11 projects have been identified based on their potential to have a high catalytic potential to unlock further private sector investment. While certain projects in high-value added services can be implemented by the private sector alone, the 11 projects included in the CIP would require upfront concessional public financing. These projects can contribute to the removal of bottlenecks and strengthen the enabling environment for the private sector to thrive, in economic sectors where the country demonstrated capacity to achieve results. Some of the 11 projects may benefit from the application of the new PPP law passed by the Parliament of Lebanon in August 2017, provided that some legal, regulatory and policy measures are introduced to adjust the regulatory framework to the specific nature of these projects. In general, the proposed 11 projects seem to be reasonably costed and they have a generally high level of readiness.

B. Economic Relevance

151. Tourism based on heritage assets is a traditionally strong pillar of the Lebanese economy. Lebanon turned its diversity into an asset: Lebanese cities are among the oldest

continuously inhabited areas in the world. The richness of the melting pot of communities in Lebanon is one the most representative tracts of the country and has historically been a driver of innovation. Lebanon, not accidentally, is the country where the first alphabet of the humankind was invented. Before the Lebanese Civil War, Beirut was widely regarded as “The Paris of the Middle East” or also “The Pearl of the Middle East,” cited as the Capital of Levantine Mediterranean culture. Consequently, tourism in Lebanon has always been a major contributor to the economy. From Stone Age settlements to Phoenician city-states, from Roman temples to rock-cut hermitages, from Crusader Castles to Mamluk mosques and Ottoman hammams, heritage sites of global significance are displayed all across the country reflecting ancient and modern world history. This has been widely recognized by the international community: with 5 UNESCO World Heritage Sites, the country has the highest density of these sites globally compared to its population.

152. Contribution of tourism to the country GDP is estimated at 25 percent, which is by far above the world average of 14 percent, above any other country in the Middle East and twice as much a prime tourism destination like Italy (10 percent). Despite elements of fragility due to the regional context, and fluctuations in the sector, tourism remained a strong employment generating sector, especially for low-skilled workers, a factor that turns the sector into a robust poverty reduction mechanism. The sector accounts for 24 percent of total employment in Lebanon. Before the impact of the Syrian crisis, the number of visitors reached 2.5 million per year (2010). Soon afterwards, numbers declined, and lately, due to enhanced efforts for the stability of the country, the trend reversed back into the positive.

153. Further growth in heritage and tourism can distribute benefits to lagging regions. With the right interventions of the public sector, private investment in tourism has been traditionally high. As an example, in 2012 Foreign Direct Investments in tourism reached a total of US\$ 1.3 billion. However, the majority of tourism related initiatives targeted coastal areas in and close to Greater Beirut, due to better accessibility and infrastructure. The Government of Lebanon recently completed a major project (Cultural Heritage and Urban Development Projects, US\$ 120 million), started after the conclusion of the Civil War, which focused on 5 cities: Baalbeck, Tripoli, Byblos, Saida, and Tyre. The project supported targeted interventions that removed bottlenecks for private sector growth with a very pragmatic approach. Project results have been remarkable, with some of these cities attracting US\$ 7 dollars of private sector investment for every US\$ 1 dollar invested in public infrastructure.

154. The challenge for the next future is about enhancing tourism-related benefits for the overall country, contributing to developing new destinations, starting from secondary and tertiary cities inland, which all possess unique attractions (e.g. Anjar, Baalbeck, Zahle, Rashaya, to name a few). This would have the positive effects of bringing tourism spending outside the capital, in regions that have been so far lagging behind, and serve as a driver to enhance service delivery, in communities that so far have been relatively more isolated and excluded. As a service industry, tourism is labor intensive and does not require high skills: with 1 job created for every new 12 tourists. Investment in the livability of secondary and tertiary cities would also serve an effective measure to enhance service delivery for local communities as well as open them up to visitors, with the dual benefit of making these places as better to live for local communities and more attractive destinations for visitors, supporting local economic development in the whole value chain.

155. Creativity and knowledge have a growing relevance for the Lebanese economy. Owing to its liberal political system, drive for freedom, diverse community and cultural background, and its entrepreneurial young population, Lebanon has been home to successful experiences in Creativity & Knowledge, with the highest growth potential among Middle

Eastern countries. These experiences include television broadcasting, advertising services, cinema production and post-production, publishing, music production and new emerging and fast-growing markets such as digital media. From an economic stand point, the sector in Lebanon has a turnover of US\$ 1 billion, with about 400 active businesses, employing 4.5 percent of the Lebanese labor force, particularly skilled youth. With a contribution of 4.8 percent to the country's GDP and an added value generated of around 55 percent, the sector places Lebanon at the top of Middle Eastern countries, with a clear potential to grow. Workers have average wages usually 50-60 percent lower than in GCC countries, making the Lebanese workforce very cost efficient in this sector.

156. Further growth in creativity and knowledge is constrained by gaps in specialized infrastructure. Businesses in creativity and knowledge have so far shown a high potential to strengthen shared prosperity and renew the social contract in Lebanon. They developed to the current level despite infrastructure shortcomings, thanks to a general environment that is favorable to private-sector led growth. Further growth is hampered by the absence of some specific foundational and specialized infrastructure that would allow businesses to benefit from adequate platforms to anchor their innovative approaches to further leverage creativity and knowledge. To address shortcomings, dedicated investments have been identified by the Government with sector strategies. These strategies highlighted the need of specialized libraries, a national theater, new branches for the music academy, scientific and educational centers, and dedicated infrastructure for the movie industry.

C. Government Response in the CIP

157. The list of 11 projects in the CIP has been built on wide consensus. The CIP elaborated by the Government and has been developed with broad consultations with the public and private sector and it represents an adequate selection of a priority projects. Some of these projects could be realized in partnership with the private sector, with support from the public sector with concessional financing for strategic investments (the amount of public financing is what the Government highlighted in the costing of the 11 projects), unlocking a virtuous circle of investments. Their implementability does not pose significant economic risks, given solid demand, and does not have notable challenges, given local technical and managerial capacity, limited land acquisition issues, and coherence with social and environmental policies.

158. The World Bank team that assessed the CIP agrees that all 11 projects have relevance. The 11 projects selected by the Government can support one of the most dynamic sectors of the Lebanese economy to grow, yielding significant results in terms of employment, especially for educated youth in Creativity and Knowledge. This in turn will help reduce further migration of skilled Lebanese abroad and pave the way for a more shared prosperity of the country's. In addition, Heritage and Tourism, being labor intensive, generates job opportunities for low-skilled workers in lagging regions. The list includes a total of 11 projects for US\$ 264 million. There are particularly interesting initiatives that offer strategic support for Creativity and Knowledge infrastructure; these are CH1 National and Public Libraries, CH2 Cinema Industry, CH3 Theater, CH4 Music Industry, and CH5 Scientific and Educational Centers (the total investment for projects CH1 to CH5 is US\$ 62 million). The CIP list also includes very specific and high potential infrastructure for Heritage and Tourism, particularly projects CH6 Arts Museum; CH7 Arts General; and CH8 Warehouse (the total investment for projects CH6 to CH11 is US\$ 203 million).

159. The list of 11 projects builds on tested good practices and adequate experience. High priority that may be given to CH2, CH3, and CH5 for Creativity & Knowledge; CH9, CH10, and CH11 for Tourism & Heritage, with their implementation starting in cycle 1.

160. With reference to Creativity & Knowledge, priority in cycle 1 may be given to projects CH2 (Cinema Industry), CH3 (Theater), and CH5 (Scientific and Educational Centers). The high priority of the project CH2 Cinema industry is due to the growth potential of the sector in the country and its relevance for job generation, particularly for the youth, and for fostering freedom and social cohesion, in a sector that has brought Lebanon to global visibility (e.g. recent Oscar nomination for the movie *The Insult*). The project CH3 Theater is of high priority as well and it can be implemented with an innovative value-capture scheme that would represent a potential application of the new PPP law to urban development at a scale of significance. The project CH5 Scientific and Educational Centers is of high priority as well, due to the relevance of establishing a network of secondary and specialized research centers throughout the country to support innovation, particularly in agriculture and niche products (e.g. ICT, wine industry, food processing), which have been growing fast and represent areas with high employment generation potential. These priority projects in Creativity & Knowledge can be implemented in partnership with the private sector, experimenting new areas for PPPs in the country. The table developed by the Government, for these projects includes the amount of concessional financing needed to address infrastructural gap and unlock private initiatives.

161. Concerning Tourism & Heritage, priority in cycle 1 can be given to CH9 (Historic Cities), CH10 (Heritage, Archeological Sites, and Surroundings), and CH11 (Museums). These second set of projects would scale up and build on the recent and sound success of large operations already implemented by the Government of Lebanon to support Heritage and Tourism. These projects are CH9 Historical cities and buildings, CH10 Archeological sites and surroundings, and CH11 Museums. These high priority projects would help replicate success stories in secondary and tertiary cities inland, in lagging regions, opening up new destinations. They would expand the benefits of tourism, bringing spending to less developed areas within the country and enhancing the level of service delivery to local communities in secondary cities in the internal part of the country, addressing regional disparities compared to the more developed coastal areas. These projects would finance strategic infrastructure that can attract relevant private sector investment, based on tested approaches. The table developed by the Government, for these projects includes the amount of concessional financing needed. It is relevant to highlight that projects identified in this sector have close linkages and synergies with projects identified in other sectors of the CIP, particularly those on ports expansion, as these initiatives could enhance tourism access to cities and their inland, namely TP12 (Tourism port in Jounieh, US\$ 62 million); TP14 (Expansion of the Saida port, US\$ 60 million); TP15 (Tourism port in Sour, Tyre, US\$ 30 million); and TP20 (Expansion of the Tripoli port, US\$ 150 million).

162. The cost of the 6 high priority projects which implementation could start in cycle 1 is US\$ 182 million, with a share of them corresponding to US\$ 84 to be invested in cycle 1. Given their nature, these high priority projects would continue implementation in cycle 2 as well. The cost of the remaining projects that could start implementation in cycle 2 is US\$ 184 million.

D. Sector Reforms

163. The Government of Lebanon has pursued sustained efforts to ensure dynamism and further growth in Heritage & Tourism and Creativity & Knowledge, given their relevance to the country's economy. These efforts have included ensuring freedom of media with a solid

and dedicated legislation, playing an active role in enforcing intellectual property rights and regulations. Sector regulations have also ensured an adequate framework for conservation and management of heritage assets and then involvement of the private sector, especially at the local level, to which Lebanon has systematically honored its commitments by ratifying relevant international conventions and reflecting them in its country system.

164. Additionally, the Government set up a dedicated system of incentives to support the sector, which can bridge public and private investments. In 2001, the Lebanese Parliament passed the Investment Law 360, establishing a framework that provides financial and non-financial incentives for investment, with the sector considered a priority, given its high potential for employment. Under the current regulatory framework, incentives are designed based on a geographical distinction of the country into 3 macro-areas, with higher incentives targeting lagging regions of the country. Incentives include exemptions from corporate income tax, and taxes on project dividends, reduction of work permit fees for various categories, reduction on construction permit fees, exemption from land registration fees and other measures to ease investment.

165. The projects can be made more effective by having their implementation coupled with a fine tuning of the system of incentives in place, to enhance overall sector governance, based on an update of the nexus demand-supply. Such fine-tuning could be coupled with targeted measures to enhance urban governance as well and ease of doing business at the local level, with the objective of effectively capturing the benefits and sustainability that these projects can bring, linking existing incentives with more efficient measures to unlock growth at the local level.

Table 72: Cultural Heritage/ Tourism Projects

Ref.	Project	Estimated Cost (MUS\$)
CH1	National and Public Libraries	15
CH2	Cinema Industry	7
CH3	Theater	7
CH4	Music Industry	15
CH5	Scientific and Educational Centers	18
CH6	Arts Museum	7
CH7	Arts in General	10
CH8	Museums Deposits (Warehouses)	36
CH9	Historic Cities	50
CH10	Heritage, Archeological Sites, and Surroundings	70
CH11	Museums	30

Table 73: Assessment of Project CH1

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		L	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		D	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		D	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	1
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	2
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	2
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	2
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	2
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	3
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1-
2-
3-

	Score
16- Reform Timeline	D
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 74: Assessment of Project CH2

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	3
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	2
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	3
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	3
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	3
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	1
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	3
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1-
2-
3-

	Score
16- Reform Timeline	D
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 75: Assessment of Project CH3

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		N	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	3
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	2
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	2
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	3
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	3
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	3
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- NOTE: Potential project to apply the new PPP law in value-capture financing at a relevant scale in urban development
2-
3-

	Score
16- Reform Timeline	D
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 76: Assessment of Project CH4

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	2
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	2
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	2
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	3
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	2
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	2
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	3
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1-
2-
3-

	Score
16- Reform Timeline	D
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 77: Assessment of Project CH5

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

		Score
5- Timing of Potential Growth Impact of Completed Project		3
Less than 12 months from initiation	3	
In 13 to 36 months from initiation	2	
In more than 36 months from initiation	1	
I don't know/don't have enough information	D	

		Score
8- "Good Job" Potential of Completed Project		3
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3	
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2	
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1	
I don't know/don't have enough information	D	

		Score
6- Sustainability of Growth Impact of Completed Project		3
Highly sustainable	3	
Moderately sustainable	2	
Not likely to be sustainable or will require significant public resources	1	
I don't know/don't have enough information	D	

		Score
9- Employment Creation of Completed Project		3
Generates a large number of jobs	3	
Generates a moderate number of jobs	2	
Generates a low number of jobs	1	
I don't know/don't have enough information	D	

		Score
7- Inclusivity of Growth of Completed Project		3
Project targets poor women	3	
Project targets the poor in general	2	
None of the above	1	
I don't know/don't have enough information	D	

		Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:		3
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3	
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2	
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1	
I don't know/don't have enough information	D	

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	3
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	3
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Fine tune the existing system of incentives in place
2-
3-

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 78: Assessment of Project CH6

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		D	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		D	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

		Score
5- Timing of Potential Growth Impact of Completed Project		2
Less than 12 months from initiation	3	
In 13 to 36 months from initiation	2	
In more than 36 months from initiation	1	
I don't know/don't have enough information	D	

		Score
8- "Good Job" Potential of Completed Project		2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3	
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2	
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1	
I don't know/don't have enough information	D	

		Score
6- Sustainability of Growth Impact of Completed Project		2
Highly sustainable	3	
Moderately sustainable	2	
Not likely to be sustainable or will require significant public resources	1	
I don't know/don't have enough information	D	

		Score
9- Employment Creation of Completed Project		2
Generates a large number of jobs	3	
Generates a moderate number of jobs	2	
Generates a low number of jobs	1	
I don't know/don't have enough information	D	

		Score
7- Inclusivity of Growth of Completed Project		2
Project targets poor women	3	
Project targets the poor in general	2	
None of the above	1	
I don't know/don't have enough information	D	

		Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:		D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3	
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2	
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1	
I don't know/don't have enough information	D	

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	2
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	2
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	3
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1-
2-
3-

	Score
16- Reform Timeline	D
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 79: Assessment of Project CH7

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

		Score
5- Timing of Potential Growth Impact of Completed Project		3
Less than 12 months from initiation	3	
In 13 to 36 months from initiation	2	
In more than 36 months from initiation	1	
I don't know/don't have enough information	D	

		Score
8- "Good Job" Potential of Completed Project		3
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3	
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2	
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1	
I don't know/don't have enough information	D	

		Score
6- Sustainability of Growth Impact of Completed Project		3
Highly sustainable	3	
Moderately sustainable	2	
Not likely to be sustainable or will require significant public resources	1	
I don't know/don't have enough information	D	

		Score
9- Employment Creation of Completed Project		3
Generates a large number of jobs	3	
Generates a moderate number of jobs	2	
Generates a low number of jobs	1	
I don't know/don't have enough information	D	

		Score
7- Inclusivity of Growth of Completed Project		3
Project targets poor women	3	
Project targets the poor in general	2	
None of the above	1	
I don't know/don't have enough information	D	

		Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:		D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3	
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2	
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1	
I don't know/don't have enough information	D	

Feasibility Assessment

	Score
11- Affordability of Project	3
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	2
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	2
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1- Fine tune the existing system of incentives
2-
3-

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 80: Assessment of Project CH8

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		N	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

		Score
5- Timing of Potential Growth Impact of Completed Project		2
Less than 12 months from initiation	3	
In 13 to 36 months from initiation	2	
In more than 36 months from initiation	1	
I don't know/don't have enough information	D	

		Score
8- "Good Job" Potential of Completed Project		2
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3	
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2	
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1	
I don't know/don't have enough information	D	

		Score
6- Sustainability of Growth Impact of Completed Project		2
Highly sustainable	3	
Moderately sustainable	2	
Not likely to be sustainable or will require significant public resources	1	
I don't know/don't have enough information	D	

		Score
9- Employment Creation of Completed Project		2
Generates a large number of jobs	3	
Generates a moderate number of jobs	2	
Generates a low number of jobs	1	
I don't know/don't have enough information	D	

		Score
7- Inclusivity of Growth of Completed Project		D
Project targets poor women	3	
Project targets the poor in general	2	
None of the above	1	
I don't know/don't have enough information	D	

		Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:		D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3	
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2	
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1	
I don't know/don't have enough information	D	

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	2
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	2
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	3
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1-
2-
3-

	Score
16- Reform Timeline	D
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 81: Assessment of Project CH9

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	3
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	3
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	3
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	3
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	3
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	3
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	3
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1-
2-
3-

	Score
16- Reform Timeline	D
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 82: Assessment of Project CH10

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

		Score
5- Timing of Potential Growth Impact of Completed Project		3
Less than 12 months from initiation	3	
In 13 to 36 months from initiation	2	
In more than 36 months from initiation	1	
I don't know/don't have enough information	D	

		Score
8- "Good Job" Potential of Completed Project		3
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3	
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2	
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1	
I don't know/don't have enough information	D	

		Score
6- Sustainability of Growth Impact of Completed Project		3
Highly sustainable	3	
Moderately sustainable	2	
Not likely to be sustainable or will require significant public resources	1	
I don't know/don't have enough information	D	

		Score
9- Employment Creation of Completed Project		3
Generates a large number of jobs	3	
Generates a moderate number of jobs	2	
Generates a low number of jobs	1	
I don't know/don't have enough information	D	

		Score
7- Inclusivity of Growth of Completed Project		3
Project targets poor women	3	
Project targets the poor in general	2	
None of the above	1	
I don't know/don't have enough information	D	

		Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:		3
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3	
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2	
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1	
I don't know/don't have enough information	D	

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	3
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	3
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1-
2-
3-

	Score
16- Reform Timeline	D
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 83: Assessment of Project CH11

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

		Score
5- Timing of Potential Growth Impact of Completed Project		3
Less than 12 months from initiation	3	
In 13 to 36 months from initiation	2	
In more than 36 months from initiation	1	
I don't know/don't have enough information	D	

		Score
8- "Good Job" Potential of Completed Project		3
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3	
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2	
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1	
I don't know/don't have enough information	D	

		Score
6- Sustainability of Growth Impact of Completed Project		3
Highly sustainable	3	
Moderately sustainable	2	
Not likely to be sustainable or will require significant public resources	1	
I don't know/don't have enough information	D	

		Score
9- Employment Creation of Completed Project		3
Generates a large number of jobs	3	
Generates a moderate number of jobs	2	
Generates a low number of jobs	1	
I don't know/don't have enough information	D	

		Score
7- Inclusivity of Growth of Completed Project		3
Project targets poor women	3	
Project targets the poor in general	2	
None of the above	1	
I don't know/don't have enough information	D	

		Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:		3
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3	
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2	
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1	
I don't know/don't have enough information	D	

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	3
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	3
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1-
2-
3-

	Score
16- Reform Timeline	D
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

VIII. Industry

The CIP contains 2 separately identified investment projects in the industry sector, the 3 industrial parks in Alkaa, Balbaak and Turbol and the Tripoli Special Economic Zone (TSEZ), for a total of US\$ 75 million. The WBG assesses that the TSEZ project in cycle 1 (2018-2021), with the costing on the low side. Meanwhile, the industrial parks project in the CIP constitute phase 2 of an ongoing project and as such is intended to be implemented over the second cycle covering the period 2022-2026. The estimated cost is seemingly high for the industrial parks phase 2.

A. General Comments

166. Lebanon's industrial sector in Lebanon has lagged, both on a regional and global comparative basis (WB, 2016).²² The country's macroeconomic structure, being heavily dependent on tourism and real estate at the expense of industry and agriculture, renders the economy vulnerable to political and economic shocks. In this context, Lebanon needs to focus on its industrial potential and provide solutions to the numerous constraints hindering its industrial establishments from functioning at their full capacity.

167. As it stands, the structural composition of the Lebanese economy is not conducive for job creation, even during robust growth periods. While real estate and construction exert a sizable influence on the aggregate economy, combining to account for an average of 17.1 percent of real GDP between 2004 and 2011, they employed an average of only 7.8 percent of the Lebanese workforce between 2004 and 2009 (WB, 2016). The real estate sector, in particular, has accounted for anywhere between 50 and 70 percent of total gross fixed capital formation since 1997. The disconnect between robust activity in real estate and job creation also holds true for the region at large; a World Bank study²³ showed that while the real estate sector accounted for around 33 percent of Foreign Direct Investment (FDI) inflows to the Middle East and North Africa (MENA) region, it contributed to only 5 percent of job creation between 2003 and 2011. In comparison and over the same period, manufacturing accounted for a much lesser 20 percent of FDI inflows to MENA but generated 55 percent of the employment.

168. One possibility to strengthen the industrial sector is via spatial industrial policies, most notably, industrial parks and special economic zones (SEZs), which support increased investment and competitiveness in the industrial sector. In theory these would offer the potential to address both growth and macroeconomic vulnerability issues linked to weak industrial sector performance. To the degree that they attract new investments—particularly from foreign enterprises—that introduce new technologies to the domestic economy, industrial parks and SEZs support growth both through an accumulation of physical capital as well as an increase in total factor productivity (TFP) (Wang, 2013).²⁴ An indicator of productivity is the share of medium- to high-technology in manufacturing; currently, for Lebanon this share is about half of the OECD average, and ranks about half-way in the region (WB, 2016). Moreover, the shift in economic activity toward the more resilient industrial sector, will help establish a more diversified economy, enabling Lebanon to better absorb the shocks to which the country is frequently exposed. This can be maximized by focusing on Lebanon's comparative advantages in high value-added sectors (a knowledge economy).

²² World Bank (2016), *Lebanon Economic Monitor: A GeoEconomy of Risks and Rewards*, Spring 2016.

²³ World Bank (2011), *Investing for Growth and Jobs*, Middle East and North Africa region, pages 30-34.

²⁴ Jin Wang, (2013), *The economic impact of Special Economic Zones: Evidence from Chinese municipalities*, Journal of development economics, v. 101, March 2013, p. 133-147.

169. Industrial parks and SEZs may also offer a strategy to mitigate macroeconomic vulnerabilities via a number of channels. As with the potential productivity gains noted above, exploiting these gains depends on the degree to which these instruments facilitate competitiveness and (especially) attract Foreign Direct Investment (FDI).

- a) In raising net exports, the current account deficit can be lowered.
- b) An increase in FDI will strengthen the balance of payments, providing exchange rate support.
- c) In decreasing dependence on short-term inflows, FDI helps lower the risk of a sudden stop.

170. Special care should be allotted when fiscal incentives are offered, which evidence suggest are ineffective as a source of differentiation, with the end result merely an increasing ‘race to the bottom’ and transfer of rents from governments to private investors. In general, fiscal incentives should not be excessive and should be well targeted and consistent with the national economic/industrial strategy that the government is pursuing. This is so as to not cause distortions whereby the incentives lead to relocation of existing businesses to the zones rather than the establishment of new business. Moreover, these fiscal incentives are bound to cause additional transfer of resources from the more taxed, less privileged majority to the less-taxed elite.

B. Ensuring Success

171. Industrial parks and SEZs should be seen within the context of spatial industrial policy—i.e. as instruments that aim to improve the environment for investment and productivity in specific locations. What all these zone types feature in common is the spatial concentration of firms and infrastructure. As further features are added to this core infrastructure, usually to overcome constraints to the operating environment for businesses, the nature of the offering widens (Table 84). The features include the following:

- ***Concentration of infrastructure:*** The foundation of all zones is the provision of industrial infrastructure that is targeted to a defined spatial area. The rationale is three-fold. First, the spatial targeting allows governments to concentrate scarce resources where they can have the biggest impact. Second, it allows for more effective planning of industrial development, reducing negative externalities of congestion and environmental damage that may result from less planning development. Finally, they offer the potential for exploiting positive spillovers that results from co-location of firms, particularly within related and supporting industries (i.e. clusters), including the development of deep, specialized markets for labor and suppliers, as well as information spillovers and coordination potential.
- ***Specialized infrastructure and services:*** Industrial parks often offer specialized services to firms operating in the facilities, particularly where zones are designed to support specific clusters. Such services typically involve access to public or ‘club goods’ which benefit all firms but which no individual firm (particularly Small and Medium Enterprises) would invest in alone. These may include common effluent treatment facilities, common processing facilities, design and testing facilities, etc. More generalized services like engineering, human resources (labor recruiting and training) and financial services, may also be offered particularly in zones catering to foreign investors and/or where such services are unavailable from local markets surrounding the zones.

- **Regulatory facilitation:** While many basic industrial parks stop at the provision of infrastructure, many zones aim to facilitate the process of legal and regulatory compliance of tenants, including business registration and licensing, obtaining construction and operating permits, and any required permits related to labor (e.g. visas and work permits). Such facilitation is most common in SEZ arrangements, where the target tenant is most often a foreign investor with less experience in managing the domestic regulatory environment.
- **Regulatory regime simplification:** Beyond facilitation, many zones seek to simplify and liberalize regulatory requirements for investors to reduce the regulatory burden of business establishment and operation. Simplification usually involves establishing a separate set of rules—a separate regulatory regime—for the zone and thus is almost never part of a standard industrial park arrangement.
- **Specialized customs, trade and financial regimes:** In order to facilitate trade, particularly in zones targeting export-oriented industry, it is common for zone programs to establish a specialized customs regime. Such a regime typically involves an environment allowing for duty-free imports of inputs to the production process and no restrictions (quotas, duties, etc) on exports. It may also allow firms to operate outside normal rules with regard to operating with foreign currency, currency convertibility and repatriation of funds if these are unduly restrictive. Note that some aspects of the customs regime can be implemented in a basic industrial park environment if the country has a customs law that allows, for example, for the operation of bonded warehouses and duty-drawback mechanisms.
- **Specialized fiscal and labor regimes:** Common to almost all SEZs but not typically part of a basic industrial park program is a fiscal regime that provides a number of incentives designed to attract investment. This may include reduction or elimination of corporate taxes, VAT, and other taxes (e.g. local taxes); it may also reduce or eliminate labor contributions like pensions and social security and provide subsidies for training and capital investment. Such a specialized fiscal regime is not typically part of a basic industrial park program, although investors in an industrial park may qualify for many of the incentives if they are available more broadly through the national investment regime. Finally, SEZs are sometimes established with a specialized regime for labor, allowing investors to benefit from access from reduced regulatory protections²⁵ and/or greater flexibility in bringing in foreign workers.

Table 84: Summary of feature for Industrial Parks and SEZs' infrastructure.

	Industrial Parks	SEZs
Basic infrastructure	✓	✓
Specialized infrastr. and services	✓	✓
Regulatory facilitation	✓	✓
Regulatory simplification		✓
Specialized trade regime		✓
Multi-user (indust./commer./resid.)		✓
Independent governance		✓

Note: dark blue shading indicates standard feature; light blue indicates a feature that exists in some cases

²⁵ While specialized labor regimes were common in traditional EPZs of the 1970s-1990s they are increasingly less common today, where zones are expected to adopt not just ILO-compliant labor regimes but to ensure that the regimes in the EPZs and SEZs do not differ substantively from those in the domestic economy.

172. The popularity of such regimes over recent decades stems from the catalytic role they have in supporting the growth of manufacturing exports in a number of places. Most notably, the success of China, and before that East Asia neighbors Taiwan, Korea, and Japan, was based in part on using industrial parks to support the development of export-oriented manufacturing. In Latin America, the Dominican Republic, El Salvador, and Honduras, among others, used *zonas francas* (“free zones”, generally using the Economic Processing Zone model) to take advantage of preferential access to the U.S. market. Their zones generated large-scale manufacturing sectors in economies previously reliant on agricultural commodities. In the Middle East and North Africa, Economic Processing Zone (EPZ) and SEZ regimes played an important role in catalyzing export-oriented diversification in countries like the Arab Republic of Egypt, Morocco, and the United Arab Emirates.

173. Despite these successes, however, it is important to keep in mind that these spatial arrangements, at least those involving specialized regimes like EPZs and SEZs, have had a mixed record overall. Many programs have suffered from controversial land acquisition and allocation practices, delayed investment and failure to attract sufficient investments, resulting in many zones being considered ‘white elephants’ (WB, 2016). Moreover, given the large investments in taxpayer money going into these programs, the payoff in terms of investment, job creation and exports has too often failed to materialize.

174. The following are lessons learned from international experiences with industrial parks and SEZs:

- a) ***Comparative advantage:*** Successful industrial parks often cater to specific industrial clusters. Where zone initiatives have been successful is where the emphasis has been on:
 - i) industrial clusters that are in line with national or regional comparative advantage; and
 - ii) where they are clearly linked to a wider national industrial strategy. Examples include Bangladesh and many of the EPZs in Central America, which built infrastructure to support a specific global positioning in the apparel sector. By contrast, less successful zone initiatives in many parts of Africa have ended up catering to a diverse set of capital intensive sectors that mainly served to facilitate imports.
- b) ***Strategic locations:*** Industrial parks and SEZs are most successful when they take advantage of strategic locations. This typically includes metropolitan regions and key trade-related infrastructure, but can also include locations with good access to immobile, strategic (typically, natural) resources. By contrast, many countries that have launched programs have attempted to use part of the program as a regional development tool, to attract investment into ‘lagging’ or peripheral regions. Many countries, including Turkey, Thailand, Russia, South Africa and Bangladesh among others, have found that while industrial parks flourished in favorable locations, they languished in less favorable ones, even when additional fiscal incentives were on offer.
- c) ***Critical infrastructure:*** While most zones offer infrastructure that is of higher quality than is typically available in the country, in some cases (for example in some zones in Nigeria, Ghana, and Senegal) infrastructure inside the zones is a mirror of the worst experiences in the country more widely, including water shortages, electricity failures, and health, safety and environmental shortfalls. Thus, zone development must prioritize critical supporting infrastructure—both inside and outside the industrial park—along with or even ahead of the development of land and factory shells. This is what is referred to in China’s industrial parks as “*five connections and a levelling*”—power, water, telecommunications, roads, and ports, along with basic land preparation—as the fundamental infrastructural responsibility of governments in industrial zone development.

- d) ***Regulatory simplification:*** Successful industrial parks not only offer facilitation through ‘one-stop’ investor services but actually simplify the requirements and procedures involved in business start-up, construction and operations. This can be done through legal mechanisms that actually change the regulatory requirements of firms operating within zones, as is the case in many SEZ programs. But it can also be achieved through concerted efforts to improve procedures within each relevant agency. In this regard, one can look to reforms in Chinese industrial parks to see an example of successfully married process reengineering and automation of business compliance burdens, resulting in significant reductions in administrative processing times—see, for example, the ‘Digital Beijing Initiative’ of the Zhongguancun e-Park in Beijing.
- e) ***Role of the private sector:*** While many successful industrial zone programs have been led by government, commercial orientation and private sector participation in development and operation of successful zones is often critical to ensure speed of implementation, financial risk-sharing, technical expertise and appropriate market signals. Fiscal, customs, and other incentives must be designed to attract the right kind of productivity-enhancing investments rather than short-term or rent-seeking investments.
- f) ***Regulatory autonomy and coordination:*** While a number of regulatory models exist for overseeing industrial parks, the most effective approach tends to be establishing a single national regulatory authority (rather than individual zone authorities) that is independent from an individual ministry. This provides autonomy and minimizes political interference. Examples here include the industrial zone and free zone regimes in Thailand, Costa Rica, Dominican Republic, Jordan, Philippines and Korea. It is also critical, in cases where more than one zone program exists, to ensure a formal mechanism exists to facilitate coordination.
- g) ***Local economy linkages:*** Particularly in SEZs and industrial zone initiatives targeting foreign investors, active efforts should be made to promote linkages between zone-based firms and the domestic economy, including suppliers and labor markets. Initiatives may include local supplier development, job training, and technology transfer programs. Regulatory improvements in the local economy outside the zones can also be critical to enable local firms to respond to the new opportunities offered by zone investments.

C. Industrial Parks and SEZs in Lebanon

175. Lebanon has had a program of industrial zones for several decades. An industrial zone strategy was developed by Investment Development Authority of Lebanon (IDAL) in 1995, which aimed to support industrial development and a more balanced geographical distribution of industrial investment through the provision of specific infrastructure and financial incentives. The Ministry of Industry was granted the right to establish industrial zones in 2005 through Decree #14283. Specifically, this decree grants the right for Ministry of Industry (MoI) to establish and operate public “industrial centers” throughout Lebanon.

176. According to data from the Ministry of Industry, 131 industrial zones have been established either by decree or a decision from a Higher Council. Nearly half are in Beirut and Mount Lebanon, close to one-quarter are in North Lebanon, and the remainder are split between Bekaa and South Lebanon & Nabatiyeh. The existing zones are largely linked to location requirements defined around environment impacts of industries. Industries in Lebanon are split into five categories, in decreasing order of environment impact. Factories in the first 3 categories can only operate in industrial zones while those in the fourth and fifth categories can operate in industrial zones only if the zones pertain to their relative industry.

177. Apart from suitable industrial classifications, MoI and Central Government do not provide industrial zones with infrastructure, connections to grid or any further benefits beyond those mentioned in the decrees. However, local municipalities might contribute to this regard based on availability of financial resources and healthy relationships with operating industrialists. As a result, while some industrial zones are endowed with quality facilities, many of the existing zones lack basic infrastructure, including environmental infrastructure (e.g. water and wastewater) to support industrial development. Moreover, most industrial development continues to take place outside of the zones.

178. Beyond these industrial zones, four private industrial zones have been established²⁶:

- Shakadif Industrial City – located in the South near Jezzine
- Tebna Industrial City – located in the South near Sidon, Tyre and Nabatieh.
- Dmoul Industrial Park – located in the South in Ansar
- Terbol Industrial City – located in Bekaa in Terbol

179. In addition to industrial parks, Lebanon also has established special economic zones, or ‘free economic zones’, which operate under the office of the Prime Minister. The first of these, the Logistics Free Zone, is based in Beirut and operated by the Port of Beirut. This zone, established by law in 1995 but launched only in 2007, is designed under a ‘freezone’ model, which aims to attract foreign and domestic investment in trade-related activities, including transport, transit, and logistics. It offers 100 percent foreign ownership and customs exemptions.

D. CIP Industrial Parks and TSEZ

180. The Ministry of Industry, in partnership with the United Nations Industrial Development Organization (UNIDO), has launched an initiative to establish industrial parks in three locations, all in the Bekaa Valley: Alkaa, Baalbek and Terbol. IN1 of the CIP constitutes the second phase of the project. The ministry’s objective is to help improve the competitiveness of Lebanon’s industries via a number of mechanisms. To begin with, MoI will provide the necessary infrastructure (waste treatment, road linkages, power generation etc.) that has so far been lacking in its classifications of industrial zones. The environmental setting is particularly disposed to benefit, considering current operating conditions for industry. Additionally, in recognition that land prices are a principal impediment to competitiveness of industry in Lebanon, this initiative aims to offer long-term leasing of municipal lands at very low prices to industries that relocate to the zones. Afore-mentioned space and scale externalities will also be in effect.

181. Only a cabinet decree adopting the masterplan is needed as the project was designed to be implementable within the present legal and instructional framework. The Council of Development and Reconstruction is the implementing agency. It is yet unclear whether there will be a single entity overseeing all industrial parks, or each park will have its own entity. In any case, the governing entity(ies) is (are) expected to include a private operator, the Ministry of Industry and the local municipality(ies). At US\$ 50 million, the second phase of the project, the complete cost of which is estimated to be US\$ 120 million, seems overpriced.

182. For exports to be a real opportunity for the industrial parks, vital conditions include Syria peace and reconstruction, or at the very least, a secured access through Syria to other countries in the region (i.e. Jordan, Iraq). Relative to Lebanon’s geography, Alkaa,

²⁶ IDAL 2014, *Lebanon’s Private Industrial Zones*.

Baalbek and Terbol are remote, distant from the coast and close to the Syrian border. They are, however, connected via a main highway that links to Beirut, allowing them access to the focal domestic market.

183. Turbol has a well-established private agribusiness that is interested in expanding into the proposed industrial zone. It is not clear if the same is true of Balbaak and Alkaa. While some relocation of businesses is reasonable, a main objective should be new businesses and investment. For that, private sector interest and participation are key.

184. In 2008, the government passed a law for the establishment of the Tripoli Special Economic Zone (TSEZ), to be established on a 50-hectare site adjacent to the Port of Tripoli in the North of the country. The TSEZ Law also includes the establishment of Tripoli Special Economic Zone Authority as a distinct, autonomous legal entity (reporting to the Prime Minister's office) for oversight of the TSEZ program. The TSEZ is expected to go beyond the trading and logistics role of the Logistics Free Zone in Beirut and develop an industrial park to attract foreign and domestic investments on manufacturing and related activities. A thorough market demand and financial/economic feasibility study has been completed indicating potential job creation potential, tenant demand and PPP investor interest. Overall cost of fully developed TSEZ is US\$ 250-270 million. It is estimated that circa US\$ 210-240 million of this can be mobilized from the private sector with the government providing an initial investment of circa US\$ 30-40 million in the construction of onsite infrastructure.

185. The TSEZ includes an extremely generous set of fiscal incentives²⁷ in addition to labor regulatory incentives. Indeed, the provision of a 100 percent corporate tax exemption without time limits and a 100 percent exemption of withheld taxes and social security contributions for employees are almost unheard of these days, even within the SEZ environment. As such, the potential exists that TSEZ businesses will gain a significant competitive edge over non-TSEZ businesses, to the extent that the former enters an existing market. As a result, the incentive for businesses would be in favor of relocation to the zone at the expense of expansion. It is thus imperative for access to the zone to be awarded to expanding businesses. Specifically, due to the location, the export market should be a key target, and sufficient measures/conditions can be undertaken by the authorities to ensure that access is offered to exporting businesses.

186. Other reform measures include:

- Passage of Regulatory and Licensing Regime;
- Approval of TSEZ Masterplan and PPP Business Plan; and
- Recruitment of Private Sector Developer/Operator

²⁷ This includes (i) 100 percent customs exemption on imported raw material; (ii) duty free export of finished goods; (iii) duty free import of construction material, equipment, office machinery and spare parts; (iv) 100 percent exemption on VAT and excise tax for goods and services destined for exports; (v) 100 percent exemption on corporate profit tax (provided that not less than 50 percent of the workforce is Lebanese and the value of fixed assets or capital is greater than USD 300,000); (vi) 100 percent exemption on withheld tax on salaries for employees of tenants and on social security contributions; (vii) 10 percent exemption on building permit fees and built property tax; and (viii) 100 percent exemptions on shares and bonds issued by companies within TSEZ.

Table 85: Special Economic Zones Projects

Ref	Project	Estimated Cost (MUS\$)	Land Expropr. (MUS\$)
IN1	Infrastructure for industrial cities, Alkaa, Baalbek, and Terbol – Phase 2	50	None
IN2	Infrastructure for the Tripoli Special Economic Zone	25	None

Table 86: Assessment of Project IN1

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		D	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		N	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	3
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	3
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	3
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	1
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	2
Private financing with guarantees/ contingent liabilities	3
Public concessional financing	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	2
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	1
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	3
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
1-
2-
3-

	Score
16- Reform Timeline	
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Table 87: Assessment of Project IN2

Strategic Assessment			
1- In Your View, Is the Project a Strategic Priority for the Sector?		Score	
		Y	
Resounding yes	Y		
"Good to have" but not a priority	E		
No	N		
I don't know/don't have enough information	D		
1b- How Likely is it that the Project Will Alleviate Significant Supply		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1c- How Likely is it that The Project Will Help Reduce The Cost Structure		Score	
		Y	
Very likely	Y		
Not likely	N		
Not relevant	L		
I don't know/don't have enough information	D		
1d- How Likely is it that The Project Will Help Attract a Significant		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
1e- How Likely is it that The Project Will Contribute to Increasing Exports		Score	
		Y	
Very likely	Y		
Not likely	N		
I don't know/don't have enough information	D		
2- Does the Project Belong to an Official Sector Strategy/Plan?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
3- Is the Project an Appropriate Technical Solution to the Challenge Identified?		Score	
		Y	
Yes	Y		
No	N		
I don't know/don't have enough information	D		
4- The Project Can and Should be 100% Financed by the Private Sector		Score	
		E	
Yes, the institutional and policy environment are supportive	Y		
Yes, "in principle" but the institutional/policy environment needs changes first	E		
No, for any reason	N		
I don't know/don't have enough information	D		

Assessment for Growth, Employment and Inclusion

	Score
5- Timing of Potential Growth Impact of Completed Project	3
Less than 12 months from initiation	3
In 13 to 36 months from initiation	2
In more than 36 months from initiation	1
I don't know/don't have enough information	D

	Score
6- Sustainability of Growth Impact of Completed Project	3
Highly sustainable	3
Moderately sustainable	2
Not likely to be sustainable or will require significant public resources	1
I don't know/don't have enough information	D

	Score
7- Inclusivity of Growth of Completed Project	1
Project targets poor women	3
Project targets the poor in general	2
None of the above	1
I don't know/don't have enough information	D

	Score
8- "Good Job" Potential of Completed Project	3
Contributes <u>significantly</u> to creating high productivity (or high skill) jobs	3
Contributes <u>moderately</u> to creating high productivity (or high skill) jobs	2
Contributes <u>marginally</u> to creating high productivity (or high skill) jobs	1
I don't know/don't have enough information	D

	Score
9- Employment Creation of Completed Project	3
Generates a large number of jobs	3
Generates a moderate number of jobs	2
Generates a low number of jobs	1
I don't know/don't have enough information	D

	Score
10- In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:	D
CIP under-estimates labor hours generated, i.e. CIP number is too low?	3
CIP reasonably estimates labor hours generated, i.e. CIP number is about right?	2
CIP over-estimates labor hours generated, i.e. CIP number is too high?	1
I don't know/don't have enough information	D

Feasibility Assessment

	Score
11- Affordability of Project	3
Private financing with guarantees/ contingent liabilities	3
Public concessional financing - some concessional financing required	2
Public, market based financing	1
I don't know/don't have enough information	D

	Score
13- In Your Judgment, The Project Belongs to Which Implementing Period?	1
2018 - 2021	1
2022 – 2025	2
2026 - 2030	3
I don't know/don't have enough information	D

	Score
12- In Your Judgment, Readiness to Implement (is Project Shovel Ready?)	2
0-6 months for shovel readiness	3
6-18 months for shovel readiness	2
18+ months for shovel readiness	1
I don't know/don't have enough information	D

	Score
14- Does the Potential Implementing Agency have the Necessary Capacity	Y
Yes	Y
No	N
I don't know/don't have enough information	D

Reform Needs Assessment

	Score
15- Reform Complement	2
No reforms needed	3
Only cabinet decrees needed	2
Parliamentary legislation needed	1
I don't know/don't have enough information	D

17- Please Specify Top 3 Reform Priorities Needed in Order for the Project to be Successful
Passage of Regulatory and Licensing Regime
Approval of TSEZ Masterplan and PPP Business Plan
Recruitment of Private Sector Developer/Operator

	Score
16- Reform Timeline	2
Reforms to be front ended	3
Reforms to proceed with implementation	2
Reforms to be post- implementation	1
I don't know/don't have enough information	D

Annex A

GoL Investment Plan Projects

Sector code	National Investment Plan	Region	Population	Description	Inv cost \$mill	Land Exp. in \$mill	Status	Status code	Impact code	Generated Employment (Mill of Labor days)	Priority =Status+Impact	Implementation Cycle	
Electricity	E1	GENER (1) New power plants on Medium (2) Term - IPP - 1000MW	(1) Zahrani	National	Capacity of 1000 MW financed by the Private sector	600	0.0	Feasibility Study done. First two locations are Zahrani & Salaata. Launch the project.	2	3	10.00	4	1
	E1.2	GENER (1) New power plants on Medium (2) Term - IPP - 1000MW	(2) Salaata			600							1
	E2	GENER Jiye Power plant-500MW	Jieh	National	New Power Plant in Jieh	500	0.0	Feasibility atudy is being prepared. Launch the project.	1	3	5.00	4	2
	E3	GENER Salaata 2 Plant on Longer Term- 500MW	Salaata	National	Capacity of 500 MW	600	0.0		N/A	N/A	N/A	N/A	2
	E4	GENER Hydro power plants (331.5 MW)	National	National	(1) Rehabilitation & Upgrade of Existing Hydro Plants -92MW ; (2) Installation of New Hydro Plants - 25 sites (233MW-315MW) ; (3) Micro-Hydro on non-river streams - 13 Pilot sites identified - 5MW	264	0.0	Feasibility Study Done.	1	2	6.60	3	1
	E5	GENER Geothermal Plant of 1.3 MW	National	National		5	0.0		N/A	N/A	N/A	N/A	1
	E6	Transmission Master Plan Project (High Importance)	National	National	Upgrade/Installation of 220KV Substations, and installation of underground Cables	224	0.0		N/A	N/A	N/A	N/A	1
	E7	Transmission Master Plan Project including Infrastructure at KSARA Substation (Mid Importance)	National	National	Upgrade/Installation of 220KV Substations, and installation of underground Cables	254	0.0		N/A	N/A	N/A	N/A	2
	E8	Transmission LV Network Upgrade	National (total)	National	Installation of transformers, and Low Voltage transmission lines		0.0		N/A	N/A	N/A	N/A	1
	E8.1	Transmission LV Network Upgrade	Mount Lebanon		Mount Lebanon	20	0.0		N/A	N/A	N/A	N/A	1
	E8.2	Transmission LV Network Upgrade	Akkar		Akkar	6	0.0		N/A	N/A	N/A	N/A	1
	E8.3	Transmission LV Network Upgrade	Nabatiye		Nabatiye	6	0.0		N/A	N/A	N/A	N/A	1
	E8.4	Transmission LV Network Upgrade	North		North	6	0.0		N/A	N/A	N/A	N/A	1
	E8.5	Transmission LV Network Upgrade	Bekaa		Bekaa	6	0.0		N/A	N/A	N/A	N/A	1
	E8.6	Transmission LV Network Upgrade	Baalbek-Hermel		Baalbek-Hermel	6	0.0		N/A	N/A	N/A	N/A	1
	E8.7	Transmission LV Network Upgrade	South		South	6	0.0		N/A	N/A	N/A	N/A	1
	E9.1	Distribution DSP	National	National	Finish the Smart Grid	263	0.0	Implement Smart Meters	1	3	N/A	4	1
	E9.2	Distribution DSP	National	National	Finish the Smart Grid	88	0.0	Implement Smart Meters	1	3	N/A	4	2
	E10	Fuel Sourcing Gas Pipeline	North/South	National	Build a gas pipeline along the coast to feed all power plants	140	0.0	Pre-feasibility study done. Budget law in discussion at the parliament.	3	1	0.10	6	1
	FE1	GENER Zouk Power plant - 500MW	Zouk	National	New Power plant in Zouk (new construction or rehabilitation to be decided by COM)	500	Existing Land Dedicated for the power plant	Technical report will soon be sent to the CoM. Launch the project.	1	3	5.00	4	3
	FE2	GENER New Power plants on Longer Term - 1000 MW	National	National	Capacity of 1000 MW	1,200	New Location		N/A	N/A	N/A	N/A	3
	FE3.1	GENER Hydro power plants (141.5 MW)	National	National	(1) Rehabilitation & Upgrade of Existing Hydro Plants - 92MW	0	0.0	Feasibility Study Done	1	2	2.20	3	N/A
	FE3.2	GENER Hydro power plants (141.5 MW)	National	National	(2) Installation of new Hydro Plants - 25 sites- (233MW-315MW)	113	0.0	Feasibility Study Done	1	2	2.20	3	3
	FE3.3	GENER Hydro power plants (141.5 MW)	National	National	(3) Micro-Hydro on non-river streams - 13 Pilot sites identified- 5 MW	0	0.0	Feasibility Study Done	1	2	2.20	3	N/A
	FE5	GENER Geothermal Plant of 15MW	National	National		53	0.0		N/A	N/A	N/A	N/A	3
	FE6	Transmission Master Plant Project (Low Importance)	National	National	Upgrade/Installation of 220KV Substations, and Installation of underground Cables	135	0.0		N/A	N/A	N/A	N/A	3

<u>Sector code</u>	<u>National Investment Plan</u>	<u>Region</u>	<u>Population</u>	<u>Description</u>	<u>Inv cost \$mill</u>	<u>Land Exp. in \$mill</u>	<u>Status</u>	<u>Status code</u>	<u>Impact code</u>	<u>Generated Employment (Mill of Labor days)</u>	<u>Priority =Status+Impact</u>	<u>Implementation Cycle</u>
W3A	Transmission line from Janneh Dam to Greater Beirut	Greater Beirut and Mount Lebanon		Construction of a transmission line from Janneh Dam to Beirut region to Provide additional water supply	60	0	Dam is under construction. Design required for the transmission pipe	1	2	1.60	3	1
W7	Water Supply system rehabilitation in Beirut area	Greater Beirut	2,500,000	Increasing supply sources and extension of transmission lines and distribution networks	100	0		2	3	1.00	5	1
W8A	Expropriations for Beirut Storage Tanks	Greater Beirut		Expropriations for Hazmieh and Ashrafieh storage Tanks	0	35		#N/A	#N/A	0.00	#N/A	1
W4	Water treatment plant and water supply system for Beqaata Dam	Mount Lebanon/ Metn	258,000	Construction of Water Treatment plant, transmission lines and reservoirs for Beqaata DAM (water supply 6 MCM).	35	2	Dam is under construction. Design required for the plant and transmission	3	2	0.35	5	1
W6A	Water supply system for Chabrouh Dam	Mount Lebanon		Chabrouh Dam System - Networks required: 60km for Kfardebian, 28 km for Faraya, and new networks for other villages.	40	2		1	3	0.20	4	1
W8	Water Supply Project for Mount Lebanon	Mount Lebanon/ Metn, Chouf, Aley and Kesrouane	280,000	Increasing supply sources, and extension of transmission lines and distribution networks.	100	0		3	2	1.00	5	1
W9	Qobayat Water Supply Systems - Phase 1	North/Akkar	101,400	Completion, expansion and upgrade of Qobayat water supply networks including construction of 60 wells (number may change depending on available safe yield), 2 intake structures on springs, 13 pump stations and upgrade of 7 existing pump stations, 10 reservoirs, and 100km of pipelines.	51	1	Detailed Design is required.	2	3	0.20	5	1
W10	Halba Water Supply Systems - Phase 1	North/ Akkar	54,600	Expansion and upgrade of Halba water supply networks including construction of 47 wells (number may change depending on available safe yield), 2 intake structures on springs, 1 pump station and upgrade of 8 existing pump stations, 14 reservoirs, 35km of transmission lines and 116km of distribution lines.	92	1	Detailed Design is required.	2	3	0.30	5	1
W6	Water supply system for El Bared Dam DAM	North/Akkar	590,000	Construction of Water transmission lines and reservoirs from El Bared Dams to the localities served.	20	1	Design is required.	1	3	0.20	4	2
W9-1	Qobayat Water Supply Systems - Phase 2	North/Akkar		Expansion and upgrade of Qobayat water supply networks including upgrade of 12 existing pump stations, 11 reservoirs, and 7km of pipelines.	5	1	Master plan level; subject to change during phase 1.	1	2	0.05	3	2
W10-1	Halba Water Supply Systems - Phase 2	North/ Akkar		Expansion and upgrade of Halba water supply networks including construction of 14 wells, 2 intake structures on springs, upgrade of 14 existing pump stations, 17 reservoirs, 0.6km of transmission lines.	7	1	Master plan level; subject to change during phase 1.	1	2	0.05	3	2
W9-2	Qobayat Water Supply Systems - Phase 3	North/Akkar		Expansion and upgrade of Qobayat water supply networks.	9	#N/A	Detailed Design is required.	1	1	0.10	2	3
W10-2	Halba Water Supply Systems - Phase 3	North/Akkar		Expansion and upgrade of Halba water supply networks.	13	#N/A	Detailed Design is required.	1	1	0.15	2	3
W1	Water supply system for Mseilha Dam	North/Batroun	19,346	Construction of Water Treatment plant, transmission lines and reservoirs for Mseilha DAM (water supply 6 MCM)	15	5	Tender documents available	3	3	0.30	6	1
W2	Water supply system for Balaa Lake	North/Batroun	19,500	Construction of Water Treatment plant, transmission lines, and reservoirs for Balaa DAM (water supply 1.5 MCM)	11	3	Dam is under construction. Tender documents for the plant and transmission pipe available.	3	3	0.25	6	1
W11	Danniyeh Water Supply Systems - Phase 1	North/ Meniyeh-Danniyeh	82,980	Expansion and upgrades of Danniyeh water supply networks including construction of 22 wells, 2 intake structures on springs, 8 pumps stations and upgrade of 7 existing pump stations, 12 reservoirs and 132km of distribution lines.	27	1	Detailed Design is required.	2	3	0.25	5	1
W12	Minieh Water Supply Systems - Phase 1	North/ Meniyeh-Danniyeh	35,560	Expansion and upgrade of Minieh water supply networks including construction of 54 wells, 1 intake structure on spring, 2 pump stations, 2 reservoirs and 19km of distribution lines.	12	1	Detailed Design is required.	2	3	0.10	5	1
W13	Tripoli Water Supply Systems - Phase 1	North/Tripoli	264,580	Expansion and upgrade of Tripoli water supply networks including construction of 8 wells, 1 intake structure on springs, 1 pump station, 2 reservoirs and 4km of transmission lines.	25	1	Detailed Design is required.	2	3	0.15	5	1
W14	Zgharta Water Supply Systems - Phase 1	North/Zgharta	55,066	Expansion and upgrade of Zgharta water supply networks including construction of 26 wells, 22 reservoirs and 108km of pipelines.	24	1	Detailed Design is required.	2	3	0.10	5	1
W15	Bcharre Water Supply Systems - Phase 1	North/Bcharre	21,218	Expansion and upgrade of Bcharre water supply networks including construction of 3 intake structures on springs, 50km of distribution lines and 3km of transmission lines.	10	0	Detailed Design is required.	2	3	0.10	5	1

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W16	Koura Water Supply Systems - Phase 1	North/Koura	48,159	Expansion and upgrade of Koura water supply networks including construction of 26 wells, 6 pump stations, 13 reservoirs, 42km of transmission lines and 120km of distribution lines.	55	1	Detailed Design is required.	2	3	0.15	5	1
W17	Batroun Water Supply Systems - Phase 1	North/Batroun	46,074	Expansion and upgrade of Batroun water supply networks including construction of 1 well, 1 pump station, 13 reservoirs, 148km of distribution lines and 4km of transmission lines.	25	1	Detailed Design is required.	2	3	0.25	5	1
W11-1	Danniyeh Water Supply Systems - Phase 2	North/ Meniyeh-Danniyeh		Expansion and upgrade of Danniyeh water supply networks including construction of 3 wells, 11 reservoirs and 30km of pipelines.	7	1	Master plan level; subject to change during phase 1.	1	2	0.05	3	2
W12-1	Minieh Water Supply Systems - Phase 2	North/ Meniyeh-Danniyeh		Expansion and upgrade of Minieh water supply networks including construction of 7 wells, 2 reservoirs and upgrade of 1 pump station.	1	0	Master plan level; subject to change during phase 1.	1	2	0.05	3	2
W13-1	Tripoli Water Supply Systems - Phase 2	North/Tripoli		Expansion and upgrade of Tripoli water supply networks including construction of 3 wells, 1 reservoir and 1km of transmission lines.	6	1	Master plan level; subject to change during phase 1.	1	2	0.05	3	2
W14-1	Zgharta Water Supply Systems - Phase 2	North/Zgharta		Expansion and upgrade of Zgharta water supply networks including construction of 30 wells and 13 reservoirs.	9	1	Master plan level; subject to change during phase 1.	1	2	0.10	3	2
W15-1	Bcharre Water Supply Systems - Phase 2	North/Bcharre		Expansion and upgrade of Bcharre water supply networks including construction of 6 pumps stations, 6 reservoirs and upgrade of 1 existing pump station.	4	1	Master plan level; subject to change during phase 1.	1	2	0.05	3	2
W16-1	Koura Water Supply Systems - Phase 2	North/Koura		Expansion and upgrade of Koura water supply networks including construction of 10 wells, 1 pump station, 13 reservoirs and upgrade of 1 pump station.	10	1	Master plan level; subject to change during phase 1.	1	2	0.10	3	2
W17-1	Batroun Water Supply Systems - Phase 2	North/Batroun		Expansion and upgrade of Batroun water supply networks including construction of 1 well, 1 pump station and 11 reservoirs.	3	1	Master plan level; subject to change during phase 1.	1	2	0.05	3	2
W11-2	Danniyeh Water Supply Systems - Phase 3	North/ Meniyeh-Danniyeh		Expansion and upgrade of Danniyeh water supply networks.	3	1	Detailed Design is required.	1	1	0.05	2	3
W12-2	Minieh Water Supply Systems - Phase 3	North/ Meniyeh-Danniyeh		Expansion and upgrade of Minieh water supply networks.	2	1	Detailed Design is required.	1	1	0.05	2	3
W13-2	Tripoli Water Supply Systems - Phase 3	North/Tripoli		Expansion and upgrade of Tripoli water supply networks.	12	1	Detailed Design is required.	1	1	0.10	2	3
W14-2	Zgharta Water Supply Systems - Phase 3	North/Zgharta		Expansion and upgrade of Zgharta water supply networks.	7	1	Detailed Design is required.	1	1	0.05	2	3
W15-2	Bcharre Water Supply Systems - Phase 3	North/Bcharre		Expansion and upgrade of Bcharre water supply networks.	3	0	Detailed Design is required.	1	1	0.05	2	3
W16-2	Koura Water Supply Systems - Phase 3	North/Koura		Expansion and upgrade of Koura water supply networks.	12	1	Detailed Design is required.	1	1	0	2	3
W17-2	Batroun Water Supply Systems - Phase 3	North/Batroun		Expansion and upgrade of Batroun water supply networks.	3	1	Detailed Design is required.	1	1	0	2	3
W24	Yahfoufa Water Supply System	Baalbek-Hermel-Bekaa / Baalbek and Zahle	35,203	Expansion and upgrade of Yahfoufa water supply networks including construction of 10 ground reservoirs, 1 elevated tank, 1 pump station, 42km of gravity pipes and 1km of pressure pipes.	12	1	Detailed Design is required.	2	3	0	5	1
W25	Qaa El Rim System	Bekaa/Zahle	32,850	Expansion and upgrade of Qaa el Rim water supply system including construction of 11 ground reservoirs, 1 elevated tank, 2 pump stations, 20km of gravity pipes and 7km of pressure pipes.	28	1	Detailed Design is required.	2	3	0	5	1
W26	Qab Elias, Jdita and Zebdol Water Supply systems	Bekaa/Zahle	24,141	Expansion and upgrade of Qab Elias, Jdita and Zebdol water supply networks including construction of 8 ground reservoirs, 2 pump stations, 16km of gravity pipes and 3km of pressure pipes.	9	1	Detailed Design is required.	2	3	0	5	1
W27	Aanjar Water Supply System	Bekaa/Zahle	14,852	Expansion and upgrade of Aanjar water supply system including construction of 8 ground reservoirs, 1 elevated tank, 2 pump stations, 20km of gravity pipes and 11 km of pressure pipes.	24	1	Detailed Design is required.	2	3	0	5	1

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W28	Chamsine Water Supply System	Bekaa/Zahle and West Bekaa	58,376	Expansion and upgrade of Chamsine water supply networks including construction of 7 ground reservoirs, 1 pump station, 5km of gravity pipes and 1km of pressure pipes.	6	1	Detailed Design is required.	2	3	0	5	1
W29	Ain El Zarqa Part 1 Water Supply System	Bekaa/West Bekaa	34,307	Expansion and upgrade of Ain El Zarqa water supply system Part 1, including construction of 4 ground reservoirs, 1 elevated tank, 1 pump station, 7km of gravity pipes and 2km of pressure pipes.	16	1	Detailed Design is required.	2	3	0	5	1
W30	Ain El Zarqa Part 2 Water Supply System	Bekaa/Rachaya	17,041	Expansion and upgrade of Ain El Zarqa water supply system Part 2, including construction of 4 ground reservoirs, 2 elevated tanks and 3km of gravity pipes.	6	1	Detailed Design is required.	2	3	0	5	1
W24-1	Yahfoufa Water Supply System	Baalbek-Hermel-Bekaa / Baalbek and Zahle		Expansion and upgrade of Yahfoufa water supply networks.	10	1	Master plan level; subject to	1	2	0	3	2
W25-1	Qaa El Rim System	Bekaa/Zahle		Expansion and upgrade of Qaa el Rim water supply system .	4	1	Master plan level; subject to	1	2	0	3	2
W26-1	Qab Elias, Jdita and Zebdol Water Supply systems	Bekaa/Zahle		Expansion and upgrade of Qab Elias, Jdita and Zebdol water supply networks.	6	1	Master plan level; subject to	1	2	0	3	2
W27-1	Aanjar Water Supply System	Bekaa/Zahle		Expansion and upgrade of Aanjar water supply system.	5	1	Master plan level; subject to	1	2	0	3	2
W28-1	Chamsine Water Supply System	Bekaa/Zahle and West Bekaa		Expansion and upgrade of Chamsine water supply networks	3	1	Master plan level; subject to	1	2	0	3	2
W29-1	Ain El Zarqa Part 1 Water Supply System	Bekaa/West Bekaa		Expansion and upgrade of Ain El Zarqa water supply system Part 1	7	1	Master plan level; subject to	1	2	0	3	2
W30-1	Ain El Zarqa Part 2 Water Supply System	Bekaa/Rachaya		Expansion and upgrade of Ain El Zarqa water supply system Part 2	2	0	Master plan level; subject to	1	2	0	3	2
W24-2	Yahfoufa Water Supply System	Baalbek-Harmel - Bekaa / Baalbek and Zahle		Expansion and upgrade of Yahfoufa water supply networks	2	1	Detailed Design is required.	1	1	0.05	2	3
W25-2	Qaa El Rim System	Bekaa/Zahle		Expansion and upgrade of Qaa el Rim water supply system	4	0	Detailed Design is required.	1	1	0.05	2	3
W26-2	Qab Elias, Jdita and Zebdol Water Supply Systems	Bekaa/Zahle		Expansion and upgrade of Qab Elias, Jdita and Zebdol water supply networks	1	0	Detailed Design is required.	1	1	0.05	2	3
W27-2	Aanjar Water Supply System	Bekaa/Zahle		Expansion and upgrade of Aanjar water supply system	2	0	Detailed Design is required.	1	1	0.05	2	3
W28-2	Chamsine Water Supply System	Bekaa/Zahle and West Bekaa		Expansion and upgrade of Chamsine water supply networks	2	0	Detailed Design is required.	1	1	0.05	2	3
W29-2	Ain El Zarqa Part 1 Water Supply System	Bekaa/West Bekaa		Expansion and upgrade of Ain El Zarqa water supply system	2	0	Detailed Design is required.	1	1	0.05	2	3
W30-2	Ain El Zarqa Part 2 Water Supply System	Bekaa/Rachaya		Expansion and upgrade of Ain El Zarqa water supply system	2	0	Detailed Design is required.	1	1	0.05	2	3
W18	Ain El Hawr -Ras El Meil Systems	Baalbek-Harmel / Hermel	32,654	Expansion and upgrade of Ain El Hawr (Merjhine), Ras El Meil water supply networks including construction of 21 ground reservoirs, 7 elevated tanks, 2 pump stations, 66km of gravity pipes and 19km of pressure pipes.	18	1	Detailed Design is required	2	3	0.10	5	1
W19	Ein El Zarqa	Baalbek-Hermel/ Hermel	34,077	Expansion and upgrade of Ein El Zarqa water supply networks including construction of 1 pump station and 7km of pipes.	8	1	Detailed Design is required	2	3	0.10	5	1
W20	Laboue Water Supply System	Baalbek-Hermel/ Baalbek	49,553	Expansion and upgrade of Laboue water supply system including construction of 5 ground reservoirs, 2 elevated tanks, 8 pump stations, 47km of gravity pipes and 30km of pressure pipes.	17	1	Detailed Design is required	2	3	0.10	5	1

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W21	Ouyoun Orghosh Water Supply System	Baalbek-Hermel/Baalbek	18,238	Expansion and upgrade of Ouyoun Orghosh water supply system including construction of 6 ground reservoirs and 80km of gravity pipes.	9	1	Detailed Design is required	2	3	0.05	5	1
W22	Younine, Maqne and Nahle water supply systems	Baalbek-Hermel/Baalbek	8,119	Expansion and upgrade of Younine, Maqne and Nahle water supply networks including construction of 2 ground reservoirs, 1 well and 20km of pipes.	5	1	Detailed Design is required	2	3	0.05	5	1
W23	Yamoune Water Supply Systems	Baalbek-Hermel/Baalbek	131,946	Expansion and upgrade of Yamoune water supply system including construction of 16 ground reservoirs, 5 elevated tanks, 90km of gravity pipes, 7km of pressure pipes and 4 pump stations.	50	1	Detailed Design is required	2	3	0.10	5	1
W18-1	Ain El Hawr - Ras El Meil Systems	Baalbek-Hermel/Hermel		Expansion and upgrade of Ain El Hawr (Merjhine), Ras El Meil water supply networks.	16	1	Master plan level; subject to	1	2	0.15	3	2
W19-1	Ein El Zarqa	Baalbek-Hermel/Hermel		Expansion and upgrade of Ein El Zarqa water supply networks.	6	1	Master plan level; subject to	1	2	0	3	2
W20-1	Laboue Water Supply System	Baalbek-Hermel/Baalbek		Expansion and upgrade of Laboue water supply system.	15	1	Master plan level; subject to	1	2	0	3	2
W21-1	Ouyoun Orghosh Water Supply System	Baalbek-Hermel/Baalbek		Expansion and upgrade of Ouyoun Orghosh water and supply system.	9	1	Master plan level; subject to	1	2	0	3	2
W22-1	Younine, Maqne and Nahle water supply systems	Baalbek-Hermel/Baalbek		Expansion and upgrade of Younine, Maqne and Nahle water supply networks.	4	1	Master plan level; subject to	1	2	0	3	2
W23-1	Yamoune Water Supply System	Baalbek-Hermel/Baalbek		Expansion and upgrade of Yamoune water supply system.	25	1	Master plan level; subject to	1	2	0	3	2
W18-2	Ain El Hawr -Ras El Meil Systems	Baalbek-Hermel/Hermel		Expansion and upgrade of Ain El Hawr (Merjhine), Ras El Meil water supply networks.	2	1	Detailed Design is required.	1	1	0	2	3
W19-2	Ein El Zarqa	Baalbek-Hermel/Hermel		Expansion and upgrade of Ein El Zarqa water supply networks.	1	1	Detailed Design is required.	1	1	0	2	3
W20-2	Laboue Water Supply System	Baalbek-Hermel/Baalbek		Expansion and upgrade of Laboue water supply system.	1	1	Detailed Design is required.	1	1	0	2	3
W21-2	Ouyoun Orghosh Water Supply System	Baalbek-Hermel/Baalbek		Expansion and upgrade of Ouyoun Orghosh water supply system.	3	1	Detailed Design is required.	1	1	0	2	3
W22-2	Younine, Maqne and Nahle water supply systems	Baalbek-Hermel/Baalbek		Expansion and upgrade of Younine, Maqne and Nahle water supply networks.	1	1	Detailed Design is required.	1	1	0	2	3
W23-2	Yamoune Water Supply System	Baalbek-Hermel / Baalbek		Expansion and upgrade of Yamoune water supply system.	7	1	Detailed Design is required.	1	1	0	2	3
W35	Nabatiye Water Supply System	Nabatiye	125,172	Expansion and upgrade of water supply networks in the Caza of Nabatiye, including construction of 1 water treatment plant, 20 reservoirs, 3 pump stations and 78km of pipelines.	26	1	Detailed Design is required.	2	3	0	5	1
W36	Bint-Jbeil Water Supply System	Nabatiye/Bint-Jbeil	66,043	Expansion and upgrade of water supply networks in the Caza of Bint-Jbeil, including construction of 3 water treatment plants, 26 reservoirs, 1 pump station and 122km of pipelines.	63	1	Detailed Design is required.	2	3	0	5	1
W37	Marjaayoun & Hasbaya Water Supply Systems	Nabatiye/ Marjaayoun & Hasbaya	83,827	Expansion and upgrade of water supply networks in the Cazas of Marjaayoun and Hasbaya, including construction of 1 water treatment plant, 15 reservoirs, 4 pumps stations and 90km of pipelines.	24	1	Detailed Design is required.	2	3	0	5	1
W35-1	Nabatiye Water Supply System	Nabatiye		Expansion and upgrade of water supply networks in the Caza of Nabatiye, including construction of 1 water treatment plant, 6 local reservoirs, 2 regional reservoirs, 2 pump stations and 32 km of transmission lines.	20	1	Master plan level; subject to	2	2	0	4	2
W36-1	Bint-Jbeil Water Supply System	Nabatiye		Expansion and upgrade of water supply networks in the Caza of Bint-Jbeil, including construction of 6 local reservoirs, 1 regional reservoir and 1km of distribution lines.	1	0	Master plan level; subject to	2	2	0	4	2

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W37-1	Marjaayoun and Hasbaya Water Supply Systems	Nabatiye		Expansion and upgrade of water supply networks in the Cazas of Marjaayoun and Hasbaya, including construction of 1 local reservoir and 16km of distribution lines.	1	0	Master plan level; subject to	2	2	0	4	2
W68	Water Supply System for Choumariye Dam	South		Downstream works for proposed Choumariye Dam	70	0		#N/A	#N/A	#N/A	#N/A	3
W35-2	Nabatiye Water Supply System	Nabatiye		Expansion and upgrade of water supply networks.	15	1	Detailed Design is required.	1	2	0	3	3
W36-2	Bint-Jbeil Water Supply System	Nabatiye		Expansion and upgrade of water supply networks.	1	1	Detailed Design is required.	1	2	0	3	3
W37-2	Marjaayoun&Hasbaya Water Supply Systems	Nabatiye		Expansion and upgrade of water supply networks.	1	1	Detailed Design is required.	1	2	0	3	3
W31	Saida Water Supply Systems	South/Saida	146,905	Expansion and upgrade of water supply networks in the Caza of Saida, including construction of 1 new well, 34 reservoirs, 5 pump stations and 84km of pipelines.	25	1	Detailed Design is required.	2	3	0	5	1
W32	Zahrani Water Supply System	South/Zahrani	103,697	Expansion and upgrade of water supply networks in the Caza of Zahrani, including construction of 1 water treatment plant, 21 reservoirs, 5 pump stations and 70km of pipelines.	39	1	Detailed Design is required.	2	3	0	5	1
W33	Jezzine Water Supply System	South/ Jezzine	20,232	Expansion and upgrade of water supply networks in the Caza of Jezzine, including construction of 1 new well, 8 reservoirs, 6 pump stations and 30km of pipelines.	6	1	Detailed Design is required.	2	3	0	5	1
W34	Sour Water Supply System	South/Sour	140,296	Expansion and upgrade of water supply networks in the Caza of Sour, including construction of 2 water treatment plants, 30 reservoirs, 3 pump stations and 147km of pipelines.	42	1	Detailed Design is required.	2	3	0	5	1
W31-1	Saida Water Supply Systems	South		Expansion and upgrade of water supply networks in the Caza of Saida, including construction of 1 water treatment plant (Besri Dam), 5 local reservoirs, pump stations and 57km of pipelines.	8	1	Master plan level; subject to	2	2	0	4	2
W32-1	Zahrani Water Supply System	South		Expansion and upgrade of water supply networks in the Caza of Zahrani, including construction of 3 local reservoirs and 7.5km of distribution lines.	1	1	Master plan level; subject to	2	2	0	4	2
W33-1	Jezzine Water Supply System	South		Expansion and upgrade of water supply networks in the Caza of Jezzine, including construction of 1 water treatment plant (Besri Dam), 2 regional reservoirs, 4 pump stations and 18km of pipelines.	5	1	Master plan level; subject to	2	2	0	4	2
W34-1	Sour Water Supply System	South		Expansion and upgrade of water supply networks in the Caza of Sour, including construction of 8 local reservoirs, 3 regional reservoirs and 13.5km of distribution lines.	2	0	Master plan level; subject to	2	2	0	4	2
W31-2	Saida Water Supply Systems	South		Expansion and upgrade of water supply networks in the Caza of Saida.	8	1	Detailed Design is required.	1	2	0	3	3
W32-2	Zahrani Water Supply System	South		Expansion and upgrade of water supply networks.	1	1	Detailed Design is required.	1	2	0	3	3
W33-2	Jezzine Water Supply System	South		Expansion and upgrade of water supply networks.	4	1	Detailed Design is required.	1	2	0	3	3
W34-2	Sour Water Supply System	South		Expansion and upgrade of water supply networks.	2	1	Detailed Design is required.	1	2	0	3	3
W41A	Remaining Expropriations for Besri Dam	Beirut and Mount Lebanon		Additional funds of US\$15 mln are required to complete the expropriations	0	15		#N/A	#N/A	0	#N/A	1
W41B	Remaining Expropriations for Chabrouh Dam	Beirut and Mount Lebanon		Expropriations of 4,000,000m2 for Chabrouh Dam (remaining expropriations)	0	20		2	#N/A	0	#N/A	1
W50	Damour Dam	Mount Lebanon/ Damour	reater Beirut	Construction of Water and Irrigation DAM (42-106 MCM) for Beirut and Damour region.	150	30	Feasibility study done	1	2	2	3	3

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W39	Ain Dara - Azounieh Dam	Mount Lebanon/ Aley	225,112	Construction of Water Supply dam (4-5 MCM) and associated water treatment plant, transmission lines and reservoirs including expropriations and supervision costs.	110	5	Tender Documents available	3	2	1	5	1
W40	Maaser Chouf Dam	Mount Lebanon/ Chouf	70,500	Construction of Water Supply hill lake (2.2 MCM) and associated water treatment plant, transmission lines and reservoirs including expropriations and supervision costs.	85	2	Tender Documents available	3	2	1	5	1
W38	El Bared Dam	North/Akkar	590,000	Construction of Water Supply dam (37-90 MCM) and associated water treatment plant and transmission network, including expropriation and supervision works.	300	0	Tender documents available	2	3	3	5	1
W45	Noura el Tahta Dam	North/Akkar	6,510	Construction of dam (35-50 MCM) for Nour el Tahta and surrounding villages.	80	10	Design is required.	1	2	1	3	3
W46	Atolbe Dam	North/Akkar - Obayat village	6,405	Construction of Water Supply hill lake (0.70 MCM) to supply Qbayat.	18	2	At preliminary design stage.	1	1	0	2	3
W55	Qarqaf Dam	North/Akkar		Construction of Irrigation DAM (20-25 MCM) for Akkar coastal region.	81	#N/A		#N/A	#N/A	#N/A	#VALUE!	3
W38A	Additional funds for Mseilha Dam	North/Batroun		Additional funds to complete Mseilha Water Supply and irrigation dam (6-12 MCM)	15	0		#N/A	#N/A	#N/A	#VALUE!	1
W38B	Additional funds for Balaa Dam	North/Batroun		Additional funds to complete Balaa Water Supply dam (1.2-2.2 MCM)	7	0		#N/A	#N/A	#N/A	#VALUE!	1
W38C	Repairing works for Brissa Dam	North/ Dennyieh		Consultancy services for a solution and implementation of the required works to solve the problems of the constructed Brissa dam (irrigation 0.8 MCM)	15	#N/A		#N/A	#N/A	#N/A	#VALUE!	1
W47	Dar Baachtar Dam	North/Koura	38,510	Construction of Water and Irrigation Dam (7 MCM) for Koura and Batroun	75	10	At preliminary design stage	1	2	1	3	3
W48	Iaal Dam	North/Zgharta	25,240	Construction of Water and Irrigation Dam (12-18 MCM) for Caza of Zgharta villages.	70	10	Under design	1	2	1	3	3
W49	Rahwe Dam	North/Batroun	40,000	20m dam height, providing additional static storage capacity of 2 MCM for the irrigation of 200ha	25	10	Design completed. New E	1	2	0	3	3
W53	Wadi Chich Dam	North/Bcharre	24,567	Construction of Water and Irrigation dam (200,000 CM) with treatment plant, storage tanks and distribution lines to the villages of Bcharre, Mar Isha3, Hadshit, Bka3 Kafra, Bazaoun, and Hasroun.	20	0	Feasibility study	1	2	0	3	3
W43	Barhashah Dam	Bekaa/Zahle	53,000	Construction of Water Supply Hill lake (0.55 MCM)	40	1	Tender Documents available	2	2	0	4	1
W41	Assi Phase 1 Dam	Bekaa/Hermel	76,170	Completion of execution works for Assi Phase 1 Water and Irrigation Dam (63 MCM), and supervision works.	65	0	Dam Construction stopped	2	3	1	5	1
W42	Assi Phase 2 Dam	Bekaa/Hermel	41,660	Construction of Assi Phase 2 Water and Irrigation Dam (15 MCM)	300	40	Tender documents available	2	2	3	4	2
W44	Ibl es Saqi Dam	South/ Marjaayoun	22,884	Construction of Irrigation and Water supply dam (50 MCM) on the Hasbani river next to Ibl es Saqi; the main use will be for irrigation with 30% of water supply.	200	100	Tender documents available	2	2	2	4	2
W51	Khardali Dam	South/Nabatiye	59,327	Construction of Irrigation and water supply dam (120 MCM) on Litani river (Khardali segment) including downstream works; the main use will be for irrigation with 15-20% for water supply.	435	200		1	2	3	3	3
W52	Kfarsir Dam	South/Nabatiye	24,567	Construction of Irrigation and water supply dam (12 MCM) on the Litani river next to Kfar Sir village; the main use will be for irrigation with 25% for water supply.	45	15	At preliminary design stage.	1	2	0	3	3
W56	Choumariye Dam	South		Construction of Water supply and Irrigation DAM on Litani river.	60	20		#N/A	#N/A	#N/A	#N/A	3
W3	Hydropower plant for Janneh Dam	Mount Lebanon/ Jbeil	230,000	Expansion of the Hydropower plant associated to Janneh DAM (current plan 50MW) to produce additional 100MW (totaling 150MW).	100	0	Dam is under construction.	3	2	2	5	1
W53	Massa Dam-IRRIGATION	Bekaa/Zahle	9,000	Providing additional storage capacity of 8 MCM for the irrigation of 1600ha	60	4		1	2	1	3	3
W54	IRRIGATION - Younine Dam	Baalbek		Providing additional storage capacity of 5.8 MCM for irrigation of 1200ha	65	10		1	2	1	3	3
W5	IRRIGATION - Litani - Conveyor 800 Phase 2 -Irrigation and W	South/Nabatiye		Construction of distribution networks from the Conveyor 800 system for irrigation and water supply	300	0	The main conveyor is under	2	3	3	5	1

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WW10	Beirut wastewater systems	Beirut	642,000	Collection networks	50	0	Feasibility is completed. Survey and detailed design is required.	2	3	1.00	5	1
WW13	Extension and upgrading of collection networks within Ghadir wastewater treatment plant drainage basin	Mount Lebanon	700,000	Collection networks	25	0	Feasibility is available. Detailed Design and Tender Documents are required	1	3	0.50	4	2
WW07	Completion of wastewater networks within Jbeil WWTP Service Area	Mount Lebanon	57,500	Wastewater networks	40	0	Feasibility completed. Detailed design and tender documents are required	1	3	0.80	4	2
WW08	Networks for Halat and Nahr Ibrahim	Mount Lebanon	3,000	Wastewater networks	9	0	Feasibility is completed. Detailed design is required	2	2	0.20	4	2
WW14	Expansion of sewer networks for coastal Chouf	Mount Lebanon	68,000	Collection networks	40	0	Master plan done. Partial studies	1	4	0.80	5	2
WW04	Completion of wastewater networks within El Aabde WWTP Service Area	Akkar (Akko)	38,000	Wastewater networks	60	1	Construction of the WWTP & Phase 1 networks will be launched soon. Detailed design and tender documents are required for phases 2 and 3	1	3	1.00	4	2
WW1	Completion of missing networks and collectors within Tripoli WWTP Service Area	North Lebanon			N/A	N/A		N/A	N/A	N/A	N/A	1
WW01a	1-km Link of the main collector Bohsas - Maarad	North Lebanon	9,700	Wastewater networks	5	0	Detailed Design of the Tripoli networks completed and ready for tendering	2	4	0.10	6	1
WW01b	Qalamoun villages WW networks	North Lebanon	9,700	Wastewater networks	5	0	Detailed Design of the Tripoli networks completed and ready for tendering	2	4	0.10	6	1
WW01c	Wastewater networks in the coastal and central villages and towns of Koura - Phase II	North Lebanon	30,000	Wastewater networks	20	3	Master Plan done. Main collector constructed. Detailed design is required	2	4	0.50	6	1
WW01d	Zgharta Wastewater networks	North Lebanon	58,000	Wastewater networks	30	0	Master Plan done. Detailed design is required	1	4	1.00	5	1
WW01e	Wastewater networks for coastal part of Minie - Danniye District	North Lebanon	53,000	Wastewater networks	19	0	Master Plan done. Detailed design is required	1	3	0.40	5	1
WW01f	Wastewater networks for villages in the center of Danniye	North Lebanon	13,000	Wastewater networks	20	0	Master Plan done. Detailed design is required. Feasibility depends on the Zgharta system construction	1	3	0.40	4	2
WW79	Madfoun System	North Lebanon	11,600	Main collector and networks	20	0	Master Plan	1	2	0.50	3	3
WW76	Expansion of Wastewater collection networks of West Bekaa - Phase 2	Bekaa (West)	7,000	Networks	27	0	Master Plan. Studies are done	2	2	0.60	4	1
WW73	Timnine Part II Wastewater System	Baalbek & Hama	48,500	Networks	66	5	Phase 1 (including WWTP) under tender stage	1	3	1.20	4	2
WW61	Jbaa Wastewater System	Nabatiye (North)	13,000	Collection networks	8	0	Ready for tendering	2	2	0.15	4	1
WW63	Nabatiye Part II (East Nabatiye) Wastewater System	Nabatiye (North)	40,500	Networks	50	0	Master Plan. Design under preparation	2	3	1.00	5	2
WW16	Completion of wastewater networks in Saïda	South Lebanon	81,000	Collection networks	25	0	Ready for tendering	2	4	0.50	6	1
WW17	Sour Phase III	South Lebanon	46,000	Collection networks	50	0	Master Plan done. Studies under preparation	2	3	1.00	5	1

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										Employment (Mill of Labor days)		
WW58	Halloussieh Wastewater System	South Lebanon	6,000	Networks	6	2	Master Plan. Studies are required	1	3	0.10	4	2
WW59	Srifa Wastewater System	South Lebanon	7,000	Networks	8	0	Master Plan. Studies are required	1	3	0.15	4	2
WW78	Small Scale Municipal Projects	Lebanon		All	250	0	Mechanism of studies, documents and implementation to be defined	N/A	N/A	N/A	N/A	1
WW11	Ghadir Flood Protection	Mount Lebanon	68,500	Small dams and river banks protection	30	0	Ready for tendering	3	3	0.60	6	1
WW09	Upgrade of Daoura wastewater treatment plant	Mount Lebanon	771,500	Upgrade of the treatment plant	300	0	Study required to update the current design from preliminary to secondary as per Barcelona convention.	1	4	7.00	5	1
WW12	Upgrade of Ghadir wastewater treatment plant	Mount Lebanon	700,000	Upgrade of the treatment plant	200	0	Treatment plant upgrade to preliminary ongoing. Study required to update the current design from preliminary to secondary as per Barcelona convention	0	4	5.00	4	2
WW18c	Jbeil WWTP Extension	North Lebanon	63,000	Expansion of existing wastewater treatment plant	20	0	No studies	0	4	0.40	4	2
WW18d	Nabi Younes - WWTP Expansion	North Lebanon	72,000	Expansion of existing wastewater treatment plant	20	0	No studies	0	4	0.40	4	2
WW18a	Chekka WWTP Expansion	North Lebanon	18,500	Expansion of existing wastewater treatment plant	20	0	No studies	0	3	0.40	3	2
WW18b	Batroun WWTP Expansion	North Lebanon	8,000	Expansion of existing wastewater treatment plant	20	0	No studies	0	3	0.40	3	2
WW64	Expansion of Nabatiye Wastewater Treatment Plant	Nabatiye (North)	61,000	Expansion of treatment plant	20	0	No studies	0	4	0.40	4	2
WW15	Upgrade of Saida wastewater treatment plant	South Lebanon	211,500	Upgrade of the treatment plant	55	0	Master Plan done	1	4	1.00	5	2
WW22	Qartaba, Aqoura and Afqa wastewater systems	Mount Lebanon	5,000	Wastewater treatment plants	20	5	Qartaba network phase 1 under construction. Additional funds required for part 2. Design of Aqoura and Afqa systems will be completed in the coming months.	1	3	0.40	4	1
WW31	Additional Funds for Hrajel Wastewater System	Mount Lebanon	11,500	Wastewater treatment plant and network	20	2	Tender documents available. Contract agreement is pending additional funds required	3	2	0.40	5	1
WW34	Additional funds for Jeita system	Mount Lebanon	70,000	Wastewater treatment plant and network	15	0	Additional funds are required. Design under preparation	2	4	0.30	6	1
WW40	Sfailah and Qortada (Zandouqa) Wastewater system	Mount Lebanon	28,000	2 Wastewater treatment plants and network	68	7	Ready for tendering	2	2	1.50	4	1
WW41	Bmaryam - Btibyat Wastewater system	Mount Lebanon	10,200	Wastewater treatment plant and network	28	5	Design done	2	3	0.70	5	1
WW35	Kfartai Wastewater system	Mount Lebanon	2,500	Wastewater treatment plant and network	7	0	Master Plan	1	2	0.15	3	2
WW32	Aachqout WWTP	Mount Lebanon	7,000	Wastewater treatment plant and network	21	0	Master Plan	1	3	0.40	4	2
WW23	Bchille system	Mount Lebanon	1,100	Wastewater treatment plant and network	5	0	Master Plan	1	1	0.10	2	3

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										Employment (Mill of Labor days)		
WW24	Aabaydat system	Mount Lebanon (Jbeil)	4,200	Wastewater treatment plant and networks	11	0	Master Plan	1	1	0.20	2	3
WW25	Tartij Small Local Station	Mount Lebanon (Jbeil)	1,100	Wastewater treatment plant and networks	2	0	Master Plan	1	1	0.03	2	3
WW26	Aalmat system	Mount Lebanon (Jbeil)	4,000	Wastewater treatment plant and networks	12	0	Master Plan	1	1	0.25	2	3
WW27	Jaj WWTP	Mount Lebanon (Jbeil)	3,000	Wastewater treatment plant and networks	7	0	Master Plan	1	1	0.15	2	3
WW28	Lehfed Haqel Small Stations	Mount Lebanon (Jbeil)	2,000	Wastewater treatment plant and networks	2	0	Master Plan	1	1	0.05	2	3
WW29	Behdaydat WWTP	Mount Lebanon (Jbeil)	1,700	Wastewater treatment plant and networks	4	0	Master Plan	1	1	0.07	2	3
WW30	Yahchouch WWTP	Mount Lebanon (Kesrouan/ Jbeil)	6,000	Wastewater treatment plant and networks	8	0	Master Plan	1	1	0.15	2	3
WW33	Bqaatouta WWTP	Mount Lebanon (Kesrouan)	700	Wastewater treatment plant and networks	1	0	Master Plan	1	1	0.02	2	3
WW36	Abou Mizane WWTP	Mount Lebanon (Metn)	2,000	Wastewater treatment plant and networks	3	0	Master Plan	1	1	0.06	2	3
WW37	Zabbougha WWTP	Mount Lebanon (Metn)	300	Wastewater treatment plant and networks	1	0	Master Plan	1	1	0.02	2	3
WW38	Es Souane WWTP	Mount Lebanon (Metn)	13,000	Wastewater treatment plant and networks	21	0	Master Plan	1	1	0.40	2	3
WW39	Mtein WWTP	Mount Lebanon (Metn)	3,000	Wastewater treatment plant and networks	6	0	Master Plan	1	1	0.15	2	3
WW42	Hlaliye Wastewater System	Mount Lebanon (Baabda Aley)	5,000	Wastewater treatment plant and networks	45	3	Master Plan	1	1	0.90	2	3
WW43	Shwite Wastewater System	Mount Lebanon (Baabda Aley)	7,500	Wastewater treatment plant and networks	13	2	Master Plan	1	1	0.20	2	3
WW44	Qtale Wastewater System	Mount Lebanon (Baabda Aley)	6,000	Wastewater treatment plant and networks	13	3	Master Plan	1	1	0.20	2	3
WW45	Arsoun Wastewater System	Mount Lebanon (Baabda Aley)	3,500	Wastewater treatment plant and networks	9	1	Master Plan	1	1	0.10	2	3
WW47	Aley Zone 7	Mount Lebanon (Aley)	150	Wastewater treatment plant and networks	66	3	Master Plan	1	3	0.00	4	1
WW48	Aley Zone 8 (Rechmaïya) and Zone 9 (Fouara/ Ouadi Es Sitt) Systems	Mount Lebanon (Aley)	27,500	Wastewater treatment plant and networks	83	4	Master Plan	1	2	1.50	3	1
WW53	WWTP1 Wastewater System	Mount Lebanon (Chouf)	100	Wastewater treatment plant and networks	0	0	Master Plan	1	1	0.01	2	3
WW54	WWTP2 Wastewater System	Mount Lebanon (Chouf)	4,000	Wastewater treatment plant and networks	8	0	Master Plan	1	1	0.15	2	3

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WW57	Kfar Matta Small Local Station Wastewater System	Mount Lebanon (Chouf)	2,000	Wastewater treatment plant and networks	1	0	Master Plan	1	1	0.01	2	3
WW19	Additional Funds for Meshmesh (Fnaydeq) Wastewater System	Akkar (Akkar)	23,000	Wastewater treatment plant and networks	8	1	Tender documents available. Contract agreement is pending additional funds required	3	3	0.25	6	1
WW03	Qabait system and remaining small systems in Minie - Danniye	Akkar (Akkar) and North Lebanon	26,500	Wastewater treatment plants and networks	62	0	Master Plan done. Detailed design is required	1	3	1.25	4	2
WW06	Construction of small scale Wastewater Systems in Akkar Wetlands	Akkar (Akkar)	21,500	25 Wastewater treatment plants and networks	25	5	Feasibility completed. Detailed design and tender documents are required	1	3	0.50	4	2
WW05	Construction of wastewater systems for Akkar El Atika, Qobaiyat and surrounding villages	Akkar (Akkar)	14,500	Wastewater treatment plants and networks	25	0	Master Plan done. Detailed design is required	1	2	0.50	3	3
WW20b	Kfar Hay system	North Lebanon (Batroun)	17,000	Wastewater treatment plant and networks	25	0	Tender documents ready for tender	3	2	0.50	5	1
WW20c	Chebtine system	North Lebanon (Batroun)	8,500	Wastewater treatment plant and networks	15	0	Tender documents ready for tender	3	2	0.30	5	1
WW02	Bakhoun WWTP and networks	North Lebanon (Minie - Danniye)	24,500	Wastewater treatment plant and networks	25	0	Master Plan	1	3	0.50	4	2
WW20a	Ajed Ebrine system	North Lebanon (Koura)	4,500	Wastewater treatment plants and networks	5	0	Master Plan done. Detailed design is required	1	2	0.10	3	3
WW21	Small systems to protect Qadisha Valley	North Lebanon (Bcharre)	33,250	Treatment plants and networks	50	0	Master Plan. Feasibility still not ready	1	2	1.00	3	3
WW74	Eastern Zahle Wastewater System	Bekaa (Zahle)	44,000	Wastewater treatment plant and networks	45	5	Feasibility completed	1	3	0.90	4	1
WW75	Wastewater Systems for Sohmor, Yohmor, Zilaya and surrounding villages	Bekaa (West Bekaa)	18,500	3 wastewater treatment plants and networks	18	0	Master Plan. Feasibility	1	2	0.35	3	2
WW77	Wastewater System for Rachaiya villages	Bekaa (Rachaiya)	42,500	Wastewater treatment plant and networks	64	1	Master Plan. Additional funds are required	2	2	1.50	4	2
WW69	Additional funds for Hermel WWTP and Networks	Baalbek-Hermel (Hermel)	33,500	Treatment plant and networks	27	0	Studies done. Partial funding is required to complete the project	3	3	0.60	6	1
WW72	Upgrade of Iaat (Baalbek) WWTP and additional networks for Baalbek city and surrounding villages	Baalbek-Hermel (Baalbek)	66,500	Upgrade of a treatment plant and networks	11	0		N/A	4	0.20	4	1
WW71	Qaa and Jdaide Wastewater System	Baalbek-Hermel (Baalbek)	16,500	Treatment plants and networks	26	0	Master Plan	1	2	0.50	3	2
WW70	Bajjaje Wastewater System	Baalbek-Hermel (Baalbek)	20,500	Treatment plant and networks	40	0	Master Plan	1	2	0.80	3	2
WW65	Additional funds for Hasbaiya System	Nabatiye (Hasbaiya)	13,000	Treatment plant and networks	28	0	Project under preparation requiring additional funds	3	2	0.40	5	1
WW68	Bint Jbeil Wastewater System	Nabatiye (Bint Jbeil)	34,000	Treatment plant and networks	32	0	Studies done. Partial funding is required to complete the project	3	1	0.60	4	1
WW62	Braiqa Wastewater System	Nabatiye (Nabatiye)	42,000	Treatment plant and networks	26	0	Master Plan	1	3	0.60	4	2

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WW66	Ouadi Slouqi Wastewater System	Nabatiye (Marjaayoun)	30,500	Treatment plant and networks	33	0	Detailed design partially done	2	1	0.70	3	2
WW60	Nabaa el Tasseh Wastewater System	Nabatiye - South Lebanon (Jezzine) and Nabatiye	11,000	Treatment plant and networks	18	0	Preliminary studies	1	3	0.35	4	2
WW67	Deir Mimas Wastewater System	Nabatiye (Marjaayoun)	6,500	Treatment plant and networks	6	0	Detailed design partially done	2	1	0.10	3	2

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										Employment (Mill of Labor days)	nt (Mill of Labor days)	nt (Mill of Labor days)		
TP1	Dbaye-Nahr Ibrahim Motorway (A2) - Phase 1	National	4,291,534	Design and Construction for Development works	247	125	Design partially ava	2	3	3	5	1		
TP1	Dbaye-Nahr Ibrahim Motorway (A2) - Phase 2	National	4,291,534	Design and Construction for Development works	330	166	Design partially ava	2	2	4	4	2		
TP1	Dbaye-Nahr Ibrahim Motorway (A2) - Phase 3	National	4,291,534		247	125		1	2	3	3	3		
TP2	Beirut Peripheric - Phase 1	National	4,291,534	Design and Construction for Development works	232	254	Design partially ava	2	3	3	5	1		
TP2	Beirut Peripheric - Phase 2	National	4,491,534	Design and Construction for Development works	310	338	Design partially ava	2	2	4	4	2		
TP2	Beirut Peripheric - Phase 3	National	4,291,534		232	254		1	2	3	3	3		
TP10	Bus Rapid Transit System - Greater Beirut Public Transport Project	National	4,291,534	Design and Construction of dedicated routes and Stations between Beirut-Jounieh-Tabarja in addition to dedicated Bus Routes within Beirut	500	0	Feasibility and ESIA	3	3	6	6	1		
TP16	Rehabilitation and development of Beirut Rafic Hariri Airport - Phase 1	National	4,291,534	Design and Construction of Rehabilitation and Development Works-includes various works expected for the development goals of BRHIA	500	0	No Design	2	3	6	5	1		
TP5	Pan Arab Highway - Akkar	National	296,757	Pan Arab Highway - Akkar	150	50	Design available	3	3	2	6	1		
TP7	Beirut-Damascus Highway Completion	National	4,291,534	Jamhour-Baalchmey & Mdeirej Completion. Providing a safer and faster road from Beirut through Mount Lebanon and Bekaa valley to connect to Damascus	400	100	No Design	1	3	5	4	2		
TP11	Tripoli-Syrian Boarder Railway	National	4,291,534	Design and Construction Works for Railway Tracks. Includes both phases 1 and 2 of the Tripoli-Syrian Boarder Railway in addition to a rehabilitation of the seaside Railway track across Lebanon to be used for Public Transport	90	0	Design partially ava	2	2	1	4	2		
TP4	Northern Coastal Highway - Beirut Entrance	National	4,291,534	Antelias-Nahr Beirut Seaside Highway	180	0	No Design	1	3	2	4	2		
TP18	Service road for Coastal Highway, Phase 2	National	4,291,534	Providing safe exit roads for cars and passengers from cities and major town. Service road section 1 from Jounieh to Jbeil and section 2 from Khalde to Damour	112	202	No Design	1	3	1	4	2		
TP18	Service road for Coastal Highway, Phase 1				38	68		2	3	0	5	1		
TP6	Touliqiyeh - Ras Baalbak - Syrian Boarder Highway	National	314,672	Design and construction of 35 km highway from Toufikia connecting to Ras Baalbak and leading to the Syrian border	110	55	No Design	2	3	1	5	1		
TP9	Upgrading of Road Network in Greater Beirut	Beirut	403,381	Various connections, road rehabilitations and upgrades, parkings, and other infrastructure works within Beirut	380	50	Design partially ava	2	2	4	4	2		
TP8/a	Rehabilitation of Roads in Mount Lebanon - Classified and Unclassified (Municipal) Roads	Mount Le	3,888,153	Design and Construction for Road Rehabilitation and Expansion	509	0	Design available	3	3	6	6	1		
TP12	Touristic Port in Jounieh	Mount Le	1,543,781	Design and Construction Works for Touristic Port	62	0	Design available	3	1	1	4	2		
TP16/a	Rehabilitation and Development of Rene Mouawad Airport in Akkar	Akkar	296,757	Design and Construction of Rehabilitation and Development Works to meet development goals of Rene Mouawad Airport	100	0	No Design	1	2	1	3	2		
TP3	Southern Coastal Highway (Saida Bypass and Sour Link)	South	1,000,000	Completion of a missing 7.5 km Link on the Southern Coastal Highway through Saida South Highway Road - Phase 5 Section 2 - 3km from Bourj Rahhal-Abbasiya in Sour	450	150	Design partially ava	1	2	5	3	3		
TP14	Expansion of Saida Port	South	500,000	Design and Construction of Port Extension	60	0	No Design	1	2	1	3	3		
TP15	Touristic Port in Sour	South	300,000	Design and Construction Works for Touristic Port	30	0	No Design	1	2	0	3	3		
TP19	Feasibility Studies for Major Projects				25	0		2	3	0	5	1		
TP20	Tripoli Port, Phase 2				150	0		1	2	2	3	3		

Telecom

<u>Sector code</u>	<u>National Investment Plan</u>	<u>Region</u>	<u>Population</u>	<u>CIP Displaced</u>	<u>Description</u>	<u>Inv cost \$mill</u>	<u>Land Exp. in \$mill</u>	<u>Status</u>	<u>Status code</u>	<u>Impact code</u>	<u>Generated Employment (Mill of Labor days)</u>	<u>Priority =Status+Impact</u>	<u>Implementation Cycle</u>
TL1	(1) Phase 2 - FTT(X) ; (1.a) FTTO: Fiber-To-The Office ; (1.b) FTTH: Fiber-To-The -Home (2) Phase 7 FTT (X) infrastructure	National	(i) FTTH: main areas in major cities and residential compounds ; (ii) FTTO: Corporate and Heavy Users, National wide ; (iii) FTTO: Corporate and Heavy Users, National wide		Fiber deployment and connection to the most economical Points / Users	100	0	Design Completed	#N/A	#N/A	0.02	3	1
TL2	Phase 2 - Core Network and IMS (IP Multimedia Subsystem)	Bekaa / Ke	All population of both areas		Construction of the passive infrastructure (ducting and cabling) for these areas with no connectivity infrastructure, and the implementation of a GIS system	90	0	Design Completed	#N/A	#N/A	0.01	3	1
TL3	Expansion of international connectivity	National	All population		(1) Upgrade and expansion of the network backbone(international gateway, core and edge). Deployment of 2 new submarine cables connecting Lebanon to Europe directly an via ; (2) Upgrade and expansion DWDM, IP/MPLS, and Access with centralized NOC	50	0	(1) Design Completed ;	#N/A	#N/A	0.05	3	1
TL4	Phase 2 Security System	National	All population		Replacing the old hardware based switching and expansion of the number of fixed line availability to 2 million, to provide at least triple-play services (voice, video and data)	60	0	Design Completed	#N/A	#N/A	0.05	3	1
TL5	Phase 2 Spectrum Monitoring	National	All population		Deploying cyber security, DDoS, and DPI systems at various government institutions and data center	20	0	Design in progress	#N/A	#N/A	0.05	3	1
TL6	National Cloud Platform	National	Basically governmental department, all service providers and Operators		Upgrade and expansion of Nation Wide Spectrum Monitoring and Management, Locate and Intercept of illegal use of Spectrum	200	0	Design in progress	#N/A	#N/A	0.05	3	1
TL7	Phase 2 IOT, Lora and WIFI Network	National	All population, but basically governmental, corporate, business and heavy users		Build a national cloud based data center to be used as primary as well as disaster re recovery site as needed by Government and non-gov institutions	30	0	Design in progress	#N/A	#N/A	0.05	3	1
TL8	GSM Network	National	All population		Deployment of nationwide IOT (Internet of things) and public WIFI networks	150	0	Design not yet started	#N/A	#N/A	0.05	3	1

Culture & Tourism

<u>Sector code</u>	<u>National Investment Plan</u>	<u>Region</u>	<u>Population</u>	<u>Description</u>	<u>Inv cost \$mill</u>	<u>Land Exp. in \$mill</u>	<u>Status</u>	<u>Status code</u>	<u>Impact code</u>	<u>Generated Employment (Mill of Labor days)</u>	<u>Priority =Status+Impact</u>	<u>Implementation Cycle</u>
CH1	National and Public Libraries	National			15	0						1&2
CH2	Movies (Cinematic and documentaries)	National			7	0						1&2
CH3	Theater	National			7	0						1&2
CH4	Music (new branches for the Conservatoire)	National			15	0						1&2
CH5	Scientific and Educational Centers	National			18	0						1&2
CH6	Arts Museum	National			7	0						1&2
CH7	Arts General	National			10	0						1&2
CH8	Warehouse	National			36	0						1&2
CH9	Historical cities and buildings	National			50	0						1&2
CH10	Archaeological sites and surroundings	National			70	0						1&2
CH11	Museums	National			30	0						1&2

Industry

<u>Sector code</u>	<u>National Investment Plan</u>	<u>Region</u>	<u>Population</u>	<u>Description</u>	<u>Inv cost \$mill</u>	<u>Land Exp. in \$mill</u>	<u>Status</u>	<u>Status code</u>	<u>Impact code</u>	<u>Generated Employment (Mill of Labor days)</u>	<u>Priority =Status+Impact</u>	<u>Implementation Cycle</u>
IN1	Infrastructure for 3 industrial cities, Alkaa, Baalbek, and Terbol - Phase 2				50	0						2
IN2	Infrastructure for the Tripoli Special Economic Zone				25	0						2

Annex B

Guidance Note for the CIP Assessment Framework

Strategic Assessment

1. In Your View, Is the Project a Strategic Priority for the Sector?

- *Guiding question:* based on your experience of the information provided, does the proposed project address a priority deficiency in infrastructure or public service delivery for the sector?
- **If Resounding Yes**, please *rate Y*.
- **If “good to have, but not a high priority”**, please *rate E*
- **If No**, please *rate N*.
- **If you don’t know**, then please *rate D*.

1b. How Likely is it that the Project Will Alleviate Bottlenecks Significantly in the Sector or Industry?

- *Guiding question:* We are considering supply bottlenecks as the absence of infrastructure (hard or soft) that prevent production from taking place or scaling up. Supply bottlenecks could be absence of electricity, of road connections, of irrigation services, of small or substandard certification services (for exports), etc.
- **If Very likely**, please *rate Y*.
- **If Not likely**, please *rate N*
- **If Not relevant**, please *rate L*.
- **If you don’t know**, then please *rate D*.

1c. How Likely is it that the Project Will Help Reduce the Cost Structure Significantly in the Sector or Industry?

- *Guiding question:* For the reduction in cost structure, please look at the reduction of inefficiencies; perhaps a road will help reduce transportation costs or travel time; or new irrigation system will reduce water losses; private generator charges will be reduced; private tuition feed will be reduced, etc.
- **If Very likely**, please *rate Y*.
- **If Not likely**, please *rate N*
- **If Not relevant**, please *rate L*.
- **If you don’t know**, then please *rate D*.

1d. How Likely is it that The Project Will Help Attract a Significant Amount of FDI in the Sector Concerned or in Upstream or Downstream Sectors?

- **If Very likely**, please *rate Y*.
- **If Not likely**, please *rate N*
- **If you don’t know**, then please *rate D*.

- 1e. How Likely is it that the Project Contribute to Increasing Exports?
- **If Very likely**, please *rate Y*.
 - **If Not likely**, please *rate N*
 - **If you don't know**, then please *rate D*.
2. Does the Project Belong to an Official Sector Strategy/Plan?
- *Guiding question:* Is the project part of a strategy/plan for the sector which has received official national (i.e. governmental, parliamentary, *but not just ministerial*) or subnational (municipal) endorsement?
 - **If Yes**, please *rate Y*.
 - **If No**, then please *rate N*.
 - **If I don't know**, then please *rate D*.
3. Is the Project an Appropriate Technical Solution to the Challenge Identified?
- *Guiding question:* Is the proposed technical solution appropriate to the problem identified given the challenge, capacities of agencies, and indebtedness of Lebanon, i.e., the envisaged technology or approach is neither too advanced, too complicated, nor over-specified, or is the selected option too expensive?
 - For example, while a metro system does address a priority deficiency (traffic congestion), it might not be the most appropriate technical solution, considering Lebanon's resources.
 - **If Yes**, please *rate Y*.
 - **If No**, please *rate N*.
 - **If I don't know**, then please *rate D*.
4. The Project Can and/or Should be 100% Financed by the Private Sector.
- **If Yes given today's policy and institutional environment**, please *rate Y*.
 - **If Yes "in principle", but changes to today's policy and institutional environment are necessary**, please *rate E*.
 - **If No for any reason**, then please *rate N*.
 - **If I don't know**, then please *rate D*.
- I. Assessment for Growth, Employment and Inclusion
5. Timing of Potential Growth Impact, After Completion of the Project
- Please estimate time horizon for potential growth impact.
 - **If In less than 12 months from project initiation** (short-term impact on growth), then please *rate 3*.
 - For example, potential benefits from an SME subsidy scheme may kick in during implementation or shortly thereafter.
 - **If In 13 to 36 months from project initiation** (medium-term impact on growth), then please *rate 2*.

- For example, if you are convinced that this would constitute a financially profitable investment (ie a demand driven expansion in port).
 - **If In more than 36 months from project initiation** (long-term impact on growth), then please *rate 1*.
 - For example, if you think this is an investment that would help increase Lebanon's competitiveness/growth potential in the years to come (such as a tertiary education project)
 - **If you don't know**, then please *rate D*.
6. Sustainability of Growth Impact, After Completion of the Project
- **If highly sustainable**, then please *rate 3*.
 - If you are convinced that this would constitute an investment with long-term economic and social returns.
 - **If moderately sustainable**, then please *rate 2*.
 - If you are convinced that this would constitute an investment with only short- to medium-term economic and social returns.
 - **If not likely to be sustainable or will require significant public resources**, then please *rate 1*.
 - For example, if you think that this investment will **not** generate economic and social returns beyond the short-term and requires significant public resources.
 - **If you don't know**, then please *rate D*.
7. Inclusivity of Growth Impact, of the Completed Project
- **If Project targets poor women**, then please *rate 3*.
 - **If Project targets the poor in general**, then please *rate 2*.
 - **If None of the above**, then please *rate 1*.
 - **If You don't know**, then please *rate D*.
8. "Good Job" Potential, of the Completed Project
- *Guidance:* Kindly focus on the quality of jobs generated (there is a separate question regarding the quantity of jobs created further down).
 - **If Project contributes significantly to creating high productivity (or high skill) jobs**, then please *rate 3*.
 - **If Project contributes moderately to creating high productivity (or high skill) jobs**, then please *rate 2*.
 - **If Project contributes marginally to creating high productivity (or high skill) jobs**, then please *rate 1*.
 - **If You don't know**, then please *rate D*.
9. Employment Creation by Completed Project
- *Guidance:* This question is not about the number of jobs created during implementation. Rather, like the previous question, it asks about the quantity of jobs

that may be created after the project is implemented. Clearly, the question is quite subjective.

- **If Project generates a large number of jobs**, then please *rate 3*.
- **If Project generates a moderate number of jobs**, then please *rate 2*.
- **If Project generates a low number of jobs**, then please *rate 1*.
- **If You don't know**, then please *rate D*.

10. In Your Judgement, Is Government's Estimation of Labor-Hours Generated by Project:

- **If the estimated employment generated during implementation are UNDER ESTIMATED by the project file (column entitled Generated Employment – Millions of labor-Days)** please *rate 3*.
- **If the estimated employment generated during implementation are REASONABLY ESTIMATED by the project file (column entitled Generated Employment – Millions of labor-Days)** please *rate 2*.
- **If the estimated employment generated during implementation are OVER ESTIMATED by the project file (column entitled Generated Employment – Millions of labor-Days)** please *rate 1*.
- **If you don't know**, then please *rate D*.

Feasibility Assessment

11. Affordability of Project

- **If Private financing with guarantees/ contingent liabilities**, then please *rate 3*.
 - If project can realistically be privately financed with implicit or explicit state guarantees. Implicit state guarantees imply contingent liabilities.
- **If Public concessional financing**, then please *rate 2*.
 - If project cannot be privately financed and needs public financing, but it is realistic to expect concessional financing. For example, a project that benefits both host and refugees communities can qualify for the Global Concessional Financing Facility (GCFF).
- **If Public, market based financing**, then please *rate 1*.
 - If project cannot be privately financed and needs public financing, but it is not likely to be concessional financing.
- **If I don't know**, then please *rate D*.

12. In your Judgement, Readiness to Implement (Is Project Shovel Ready?)

- **If 0-6 months for shovel (i.e. short term implementation period)**, then please *rate 3*.
- **If 6-18 months for shovel (i.e. medium term implementation period)**, then please *rate 2*.
- **If 18+ months for shovel (i.e. long term implementation period)**, then please *rate 1*.

- **If I don't know**, then please *rate D*.
13. In your Judgment, the Project Belongs to Which Implementing Period?
- **If 2018 - 2021**, then please *rate 1*.
 - **If 2022 - 2025**, then please *rate 2*.
 - **If 2026 - 2030**, then please *rate 3*.
 - **If I don't know**, then please *rate D*.
14. Does the Potential Implementing Agency have the Necessary Capacity (Staffing, Skills and Institutional Structure)?
- **If Yes**, then please *rate Y*.
 - **If No**, then please *rate N*.
 - **If I don't know**, then please *rate D*.

II. Reform Needs Assessment

15. Reform Complement
- **If No reforms needed**, then please *rate 3*.
 - **If Only cabinet decrees needed**, then please *rate 2*.
 - **If Parliamentary legislation needed**, then please *rate 1*.
 - **If I don't know**, then please *rate D*.
16. Reform Timeline
- **If Reforms to be front ended**, then please *rate 3*.
 - **If Reforms to proceed with implementation**, then please *rate 2*.
 - **If Reforms to be post-implementation**, then please *rate 1*.
 - **If I don't know**, then please *rate D*.
17. Please Specify the Top Three Reforms Needed for the Project to be Successful:
- **1.**
 - **2.**
 - **3.**

Annex C

WBG – GoL Comparator Tables of the Implementation Cycles for Projects

<i>Table 88: WB Assessment of Implementation Cycle in Comparison to GoL - Electricity</i>		Cycle		Cost (MUS\$)	
		GoL	WB	Invest.	Land Exp
Electricity Projects	CIP code				
GENER (1) New power plants on Medium (2) Term - IPP - 1000MW - Zahrani	E1.1	1	1	600	0
GENER (1) New power plants on Medium (2) Term - IPP - 1000MW - Salaata	E1.2	1	2	600	0
GENER Jiye Power plant-500MW	E2	2	2	500	0
GENER Salaata 2 Plant on Longer Term- 500MW	E3	2	3	600	0
GENER Hydro power plants (331.5 MW)	E4	1	1	264	0
GENER Geothermal Plant of 1.3 MW	E5	1	1	5	0
Transmission Master Plan Project (High Importance)	E6	1	1	224	0
Transmission Master Plan Project including Infrastructure at KSARA Substation	E7	2	2	254	0
Transmission LV Network Upgrade	E8	1	1	0	0
Transmission LV Network Upgrade	E8.1	1	1	20	0
Transmission LV Network Upgrade	E8.2	1	1	6	0
Transmission LV Network Upgrade	E8.3	1	1	6	0
Transmission LV Network Upgrade	E8.4	1	1	6	0
Transmission LV Network Upgrade	E8.5	1	1	6	0
Transmission LV Network Upgrade	E8.6	1	1	6	0
Transmission LV Network Upgrade	E8.7	1	1	6	0
Distribution DSP	E9.1	1	1	263	0
Distribution DSP	E9.2	2	1	88	0
Fuel Sourcing Gas Pipeline	E10	1	D	140	0
GENER Zouk Power plant - 500MW	FE1	3	3	500	0
GENER New Power plants on Longer Term - 1000 MW	FE2	3	3	1200	0
GENER Hydro power plants (141.5 MW)	FE3	3	2	113	0
GENER Geothermal Plant of 15MW	FE5	3	1	53	0
Transmission Master Plant Project (Low Importance)	FE6	3	3	135	0

<i>Electricity Sector Cost</i>	Invest. Cost		Land Exp.		Total	
	GoL	WB *	GoL	WB	GoL	WB
Total	5592		0		5592	
Cycle 1	2151	1551	0	0	2151	1551
Cycle 2	1441	1466	0	0	1441	1466
Cycle 3	2000	2435	0	0	2000	2435

* WB cost across the 3 cycles is US\$ 5452 mil, different by US\$ 140 mil, due to the unknown phase assigned to project E10

Table 88: WB Assessment of Implementation Cycle in Comparison to GoL - Water (1/4)

Water Projects	CIP code	Cycle		Cost (MUS\$)	
		GoL	WB	Invest.	Land Exp
Transmission line from Janneh Dam to Greater Beirut	W3A	1	1	60	0
Water Supply system rehabilitation in Beirut area	W7	1	1	100	0
Expropriations for Beirut Storage Tanks	W8A	1	1	0	35
Water treatment plant and water supply system for Beqaata Dam	W4	1	1	35	2
Water supply system for Chabrouh Dam	W6A	1	1	40	2
Water Supply Project for Mount Lebanon	W8	1	1	100	0
Qobayat Water Supply Systems - Phase 1	W9	1	1	51	1
Halba Water Supply Systems - Phase 1	W10	1	1	92	1
Water supply system for El Bared Dam DAM	W6	2	2	20	1
Qobayat Water Supply Systems - Phase 2	W9-1	2	2	5	1
Halba Water Supply Systems - Phase 2	W10-1	2	2	7	1
Qobayat Water Supply Systems - Phase 3	W9-2	3	3	9	0
Halba Water Supply Systems - Phase 3	W10-2	3	3	13	0
Water supply system for Mseilha Dam	W1	1	1	15	5
Water supply system for Balaa Lake	W2	1	1	11	3
Danniyeh Water Supply Systems - Phase 1	W11	1	1	27	1
Minieh Water Supply Systems - Phase 1	W12	1	1	12	1
Tripoli Water Supply Systems - Phase 1	W13	1	1	25	1
Zgharta Water Supply Systems - Phase 1	W14	1	1	24	1
Bcharre Water Supply Systems - Phase 1	W15	1	1	10	0
Koura Water Supply Systems - Phase 1	W16	1	1	55	1
Batroun Water Supply Systems - Phase 1	W17	1	1	25	1
Danniyeh Water Supply Systems - Phase 2	W11-1	2	2	7	1
Minieh Water Supply Systems - Phase 2	W12-1	2	2	1	0
Tripoli Water Supply Systems - Phase 2	W13-1	2	2	6	1
Zgharta Water Supply Systems - Phase 2	W14-1	2	2	9	1
Bcharre Water Supply Systems - Phase 2	W15-1	2	2	4	1
Koura Water Supply Systems - Phase 2	W16-1	2	2	10	1
Batroun Water Supply Systems - Phase 2	W17-1	2	2	3	1
Danniyeh Water Supply Systems - Phase 3	W11-2	3	3	3	1
Minieh Water Supply Systems - Phase 3	W12-2	3	3	2	1
Tripoli Water Supply Systems - Phase 3	W13-2	3	3	12	1
Zgharta Water Supply Systems - Phase 3	W14-2	3	3	7	1
Bcharre Water Supply Systems - Phase 3	W15-2	3	3	3	0
Koura Water Supply Systems - Phase 3	W16-2	3	3	12	1
Batroun Water Supply Systems - Phase 3	W17-2	3	3	3	1
Yahfoufa Water Supply System	W24	1	1	12	1
Qaa El Rim System	W25	1	1	28	1
Qab Eilas, Jdita and Zebdol Water Supply systems	W26	1	1	9	1
Aanjar Water Supply System	W27	1	1	24	1

Table 88: WB Assessment of Implementation Cycle in Comparison to GoL - Water (2/4)

Water Projects	CIP code	Cycle		Cost (MUS\$)	
		GoL	WB	Invest.	Land Exp
Chamsine Water Supply System	W28	1	1	6	1
Ain El Zarqa Part 1 Water Supply System	W29	1	1	16	1
Ain El Zarqa Part 2 Water Supply System	W30	1	1	6	1
Yahfoufa Water Supply System	W24-1	2	2	10	1
Qaa El Rim System	W25-1	2	2	4	1
Qab Eilas, Jdita and Zebdol Water Supply systems	W26-1	2	2	6	1
Aanjar Water Supply System	W27-1	2	2	5	1
Chamsine Water Supply System	W28-1	2	2	3	1
Ain El Zarqa Part 1 Water Supply System	W29-1	2	2	7	1
Ain El Zarqa Part 2 Water Supply System	W30-1	2	2	2	0
Yahfoufa Water Supply System	W24-2	3	3	2	1
Qaa El Rim System	W25-2	3	3	4	0
Qab Elias, Jdita and Zebdol Water Supply Systems	W26-2	3	3	1	0
Aanjar Water Supply System	W27-2	3	3	2	0
Chamsine Water Supply System	W28-2	3	3	2	0
Ain El Zarqa Part 1 Water Supply System	W29-2	3	3	2	0
Ain El Zarqa Part 2 Water Supply System	W30-2	3	3	2	0
Ain El Hawr -Ras El Meil Systems	W18	1	1	18	1
Ein El Zarqa	W19	1	1	8	1
Laboue Water Supply System	W20	1	1	17	1
Ouyoun Orghosh Water Supply System	W21	1	1	9	1
Younine, Maqne and Nahle water supply systems	W22	1	1	5	1
Yamoune Water Supply Systems	W23	1	1	50	1
Ain El Hawr - Ras El Meil Systems	W18-1	2	2	16	1
Ein El Zarqa	W19-1	2	2	6	1
Laboue Water Supply System	W20-1	2	2	15	1
Ouyoun Orghosh Water Supply System	W21-1	2	2	9	1
Younine, Maqne and Nahle water supply systems	W22-1	2	2	4	1
Yamoune Water Supply System	W23-1	2	2	25	1
Ain El Hawr -Ras El Meil Systems	W18-2	3	3	2	1
Ein El Zarqa	W19-2	3	3	1	1
Laboue Water Supply System	W20-2	3	3	1	1
Ouyoun Orghosh Water Supply System	W21-2	3	3	3	1
Younine, Maqne and Nahle water supply systems	W22-2	3	3	1	1
Yamoune Water Supply System	W23-2	3	3	7	1
Nabatiye Water Supply System	W35	1	1	26	1
Bint-Jbeil Water Supply System	W36	1	1	63	1
Marjaayoun & Hasbaya Water Supply Systems	W37	1	1	24	1
Nabatiye Water Supply System	W35-1	2	2	20	1
Bint-Jbeil Water Supply System	W36-1	2	2	1	0

Table 88: WB Assessment of Implementation Cycle in Comparison to GoL - Water (3/4)

Water Projects	CIP code	Cycle		Cost (MUS\$)	
		GoL	WB	Invest.	Land Exp
Marjaayoun and Hasbaya Water Supply Systems	W37-1	2	2	1	0
Water Supply System for Choumariye Dam	W6B	3	3	70	0
Nabatiye Water Supply System	W35-2	3	3	15	1
Bint-Jbeil Water Supply System	W36-2	3	3	1	1
Marjaayoun&Hasbaya Water Supply Systems	W37-2	3	3	1	1
Saida Water Supply Systems	W31	1	1	25	1
Zahrani Water Supply System	W32	1	1	39	1
Jezzine Water Supply System	W33	1	1	6	1
Sour Water Supply System	W34	1	1	42	1
Saida Water Supply Systems	W31-1	2	2	8	1
Zahrani Water Supply System	W32-1	2	2	1	1
Jezzine Water Supply System	W33-1	2	2	5	1
Sour Water Supply System	W34-1	2	2	2	0
Saida Water Supply Systems	W31-2	3	3	8	1
Zahrani Water Supply System	W32-2	3	3	1	1
Jezzine Water Supply System	W33-2	3	3	4	1
Sour Water Supply System	W34-2	3	3	2	1
Remaining Expropriations for Besri Dam	W41A	1	1	0	15
Remaining Expropriations for Chabrouh Dam	W41B	1	1	0	20
Damour Dam	W50	3	3	150	30
Ain Dara -Azounieh Dam	W39	1	1	110	5
Maaser Chouf Dam	W40	1	2	85	2
El Bared Dam	W38	1	2	300	0
Noura el Tahta Dam	W45	3	3	80	10
Atolbe Dam	W46	3	3	18	2
Qarqaf Dam	W55	3	3	81	0
Additional funds for Mseilha Dam	W38A	1	2	15	0
Additional funds for Balaa Dam	W38B	1	2	7	0
Repairing works for Brissa Dam	W38C	1	2	15	0
Dar Baachtar Dam	W47	3	3	75	10
IaaL Dam	W48	3	3	70	10
Rahwe Dam	W49	3	3	25	10
Wadi Chich Dam	W53	3	3	20	0
Barhashah Dam	W43	1	2	40	1
Assi Phase 1 Dam	W41	1	2	65	0
Assi Phase 2 Dam	W42	2	3	300	40
Ibl es Saqi Dam	W44	2	3	200	100
Khardali Dam	W51	3	3	435	200
Kfarsir Dam	W52	3	3	45	15
Choumariye Dam	W56	3	3	60	20

Table 88: WB Assessment of Implementation Cycle in Comparison to GoL - Water (4/4)

		Cycle		Cost (MUS\$)	
Water Projects	CIP code	GoL	WB	Invest.	Land Exp
Hydropower plant for Janneh Dam	W3	1	2	100	0
Massa Dam-IRRIGATION	W53	3	3	60	4
IRRIGATION - Younine Dam	W54	3	3	65	10
IRRIGATION - Litani - Conveyor 800 Phase 2 -Irrigation and Water Networks	W5	1	2	300	0

Water Sector Cost	Invest. Cost		Land Exp.		Total	
	GoL	WB	GoL	WB	GoL	WB
Total	4250		595		4845	
Cycle 1	2151	1224	106	103	2257	1327
Cycle 2	722	1149	156	19	878	1168
Cycle 3	1377	1877	333	473	1710	2350

Table 88: WB Assessment of Implementation Cycle in Comparison to GoL - WasteWater (1/3)

Waste Water Projects	CIP code	Cycle		Cost (MUS\$)	
		GoL	WB	Invest.	Land Exp
Beirut wastewater systems	WW10	1	1	50	0
Extension and upgrading of collection networks within Ghadir wastewater treatment pl	WW13	2	1	25	0
Completion of wastewater networks within Jbeil WWTP Service Area	WW07	2	2	40	0
Networks for Halat and Nahr Ibrahim	WW08	2	2	9	0
Expansion of sewer networks for coastal Chouf	WW14	2	2	40	0
Completion of wastewater networks within El Aabde WWTP Service Area	WW04	2	2	60	1
Completion of missing networks and collectors within Tripoli WWTP Service Area	WW1	1	N/A	0	0
1-km Link of the main collector Bohsas - Maarad	WW01a	1	1	5	0
Qalamoun villages WW networks	WW01b	1	1	5	0
Wastewater networks in the coastal and central villages and towns of Koura - Phase II	WW01c	1	1	20	3
Zgharta Wastewater networks	WW01d	1	1	30	0
Wastewater networks for coastal part of Minie - Danniye District	WW01e	1	1	19	0
Wastewater networks for villages in the center of Danniye	WW01f	2	2	20	0
Madfoun System	WW79	3	3	20	0
Expansion of Wastewater collection networks of West Bekaa - Phase 2	WW76	1	1	27	0
Timnine Part II Wastewater System	WW73	2	2	66	5
Jbaa Wastewater System	WW61	1	1	8	0
Nabatiye Part II (East Nabatiye) Wastewater System	WW63	2	2	50	0
Completion of wastewater networks in Saida	WW16	1	1	25	0
Sour Phase III	WW17	1	1	50	0
Halloussieh Wastewater System	WW58	2	2	6	2
Srifa Wastewater System	WW59	2	2	8	0
Small Scale Municipal Projects	WW78	1	1	250	0
Ghadir Flood Protection	WW11	1	1	30	0
Upgrade of Daoura wastewater treatment plant	WW09	1	1	300	0
Upgrade of Ghadir wastewater treatment plant	WW12	2	2	200	0
Jbeil WWTP Extension	WW18c	2	2	20	0
Nabi Younes - WWTP Expansion	WW18d	2	2	20	0
Chekka WWTP Expansion	WW18a	2	2	20	0
Batroun WWTP Expansion	WW18b	2	2	20	0
Expansion of Nabatiye Wastewater Treatment Plant	WW64	2	3	20	0
Upgrade of Saida wastewater treatment plant	WW15	2	3	55	0
Qartaba, Aqoura and Afqa wastewater systems	WW22	1	1	20	5
Additional Funds for Hrajel Wastewater System	WW31	1	1	20	2
Additional funds for Jeita system	WW34	1	1	15	0
Sfailah and Qortada (Zandouqa) Wastewater system	WW40	1	1	68	7
Bmaryam - Btibat Wastewater system	WW41	1	1	28	5
Kfartai Wastewater system	WW35	2	2	7	0
Aachqout WWTP	WW32	2	2	21	0
Bchille system	WW23	3	3	5	0

Table 88: WB Assessment of Implementation Cycle in Comparison to GoL - WasteWater (2/3)

Waste Water Projects	CIP code	Cycle		Cost (MUS\$)	
		GoL	WB	Invest.	Land Exp
Aabaydat system	WW24	3	3	11	0
Tartij Small Local Station	WW25	3	3	2	0
Aalmat system	WW26	3	3	12	0
Jaj WWTP	WW27	3	3	7	0
Lehfed Haqel Small Stations	WW28	3	3	2	0
Behdaydat WWTP	WW29	3	3	4	0
Yahchouch WWTP	WW30	3	3	8	0
Bqaatouta WWTP	WW33	3	3	1	0
Abou Mizane WWTP	WW36	3	3	3	0
Zabbougha WWTP	WW37	3	3	1	0
Es Souane WWTP	WW38	3	3	21	0
Mtein WWTP	WW39	3	3	6	0
Hlaliye Wastewater System	WW42	3	3	45	3
Shwite Wastewater System	WW43	3	3	13	2
Qtale Wastewater System	WW44	3	3	13	3
Arsoun Wastewater System	WW45	3	3	9	1
Aley Zone 7	WW47	1	1	66	3
Aley Zone 8 (Rechmaiya) and Zone 9 (Fouara/ Ouadi Es Sitt) Systems	WW48	1	1	83	4
WWTP1 Wastewater System	WW53	3	3	0	0
WWTP2 Wastewater System	WW54	3	3	8	0
Kfar Matta Small Local Station Wastewater System	WW57	3	3	1	0
Additional Funds for Meshmesh (Fnaydeq) Wastewater System	WW19	1	1	8	1
Qabaaait system and remaining small systems in Minie - Danniye	WW03	2	2	62	0
Construction of small scale Wastewater Systems in Akkar Wetlands	WW06	2	2	25	5
Construction of wastewater systems for Akkar El Atika, Qobaiyat and surrounding villages	WW05	3	3	25	0
Kfar Hay system	WW20b	1	1	25	0
Chebtine system	WW20c	1	1	15	0
Bakhoun WWTP and networks	WW02	2	2	25	0
Ajed Ebrine system	WW20a	3	3	5	0
Small systems to protect Qadisha Valley	WW21	3	3	50	0
Eastern Zahle Wastewater System	WW74	1	1	45	5
Wastewater Systems for Sohmar, Yohmor, Zilaya and surrounding villages	WW75	2	2	18	0
Wastewater System for Rachaiya villages	WW77	2	2	64	1
Additional funds for Hermel WWTP and Networks	WW69	1	1	27	0
Upgrade of Iaat (Baalbek) WWTP and additional networks for Baalbek city and surrounding areas	WW72	1	1	11	0
Qaa and Jdaide Wastewater System	WW71	2	2	26	0
Bajjaje Wastewater System	WW70	2	2	40	0
Additional funds for Hasbaiya System	WW65	1	1	28	0
Bint Jbeil Wastewater System	WW68	1	1	32	0
Braiqaa Wastewater System	WW62	2	2	26	0

Table 88: WB Assessment of Implementation Cycle in Comparison to GoL - WasteWater (3/3)

Waste Water Projects	CIP code	Cycle		Cost (MUS\$)	
		GoL	WB	Invest.	Land Exp
Ouadi Slouqi Wastewater System	WW66	2	2	33	0
Nabaa el Tasseh Wastewater System	WW60	2	2	18	0
Deir Mimas Wastewater System	WW67	2	2	6	0

Waste water Sector Cost	Invest. Cost		Land Exp.		Total	
	GoL	WB	GoL	WB	GoL	WB
Total	2626		57		2682	
Cycle 1	1309	1334	35	35	1344	1369
Cycle 2	1047	947	13	13	1061	961
Cycle 3	269	344	9	9	278	353

Table 88: WB Assessment of Implementation Cycle in Comparison to GoL - Transportation

Transportation Projects	CIP code	Cycle		Cost (MUS\$)	
		GoL	WB	Invest.	Land Exp
Dbaye-Nahr Ibrahim Motorway (A2) - Phase 1	TP1	1	2	247	125
Dbaye-Nahr Ibrahim Motorway (A2) - Phase 2	TP1	2	2	330	166
Dbaye-Nahr Ibrahim Motorway (A2) - Phase 3	TP1	3	3	247	125
Beirut Peripheric - Phase 1	TP2	1	2	232	254
Beirut Peripheric - Phase 2	TP2	2	2	310	338
Beirut Peripheric - Phase 3	TP2	3	3	232	254
Bus Rapid Transit System - Greater Beirut Public Transport Project	TP10	1	1	500	0
Rehabilitation and development of Beirut Rafic Hariri Airport - Phase 1	TP16	1	1	500	0
Pan Arab Highway - Akkar	TP5	1	1	150	50
Beirut-Damascus Highway Completion	TP7	2	2	400	100
Tripoli-Syrian Boarder Railway	TP11	2	2	90	0
Northern Coastal Highway - Beirut Entrance	TP4	2	2	180	0
Service road for Coastal Highway - Phase 2	TP18	2	2	112	202
Service road for Coastal Highway - Phase 1	TP18	1	1	38	68
Touliqiyeh - Ras Baalbak - Syrian Boarder Highway	TP6	1	1	110	55
Upgrading of Road Network in Greater Beirut	TP9	2	2	380	50
Rehabilitation of Roads in Mount Lebanon - Classified and Unclassified (Municipal) Roads	TP8/a	1	1	509	0
Touristic Port in Jounieh	TP12	2	2	62	0
Rehabilitation and Development of Rene Mouawad Airport in Akkar	TP16/a	2	2	100	0
Southern Coastal Highway (Saida Bypass and Sour Link)	TP3	3	3	450	150
Expansion of Saida Port	TP14	3	3	60	0
Touristic Port in Sour	TP15	3	3	30	0
Feasibility Studies for Major Projects	TP19	1	1	25	0
Tripoli Port, Phase 2	TP20	3	2	150	0

Transportation Sector Cost	Invest. Cost		Land Exp.		Total	
	GoL	WB	GoL	WB	GoL	WB
Total	5444		1937		7381	
Cycle 1	2311	1832	552	173	2863	2005
Cycle 2	1964	2593	856	1235	2820	3828
Cycle 3	1169	1019	529	529	1698	1548

Solid Waste Management Projects		Cycle		Cost (MUS\$)	
		GoL	WB	Invest.	Land Exp
	CIP code				
Waste to energy facility	SW1.1	1	1	375	0
Waste to energy facility	SW1.2	1	2	375	0
Waste to energy facility	SW1.3	1	2	375	0
Rehabilitation of dumpsites throughout Lebanon	SW2	1	1	100	0
Rural sorting, composting, and sanitary landfills	SW3.1	1	1	88	0
Rural sorting, composting, and sanitary landfills	SW3.2	1	1	88	0

Solid Waste Manag. Sector Cost	Invest. Cost		Lan Exp.		Total	
	GoL	WB	GoL	WB	GoL	WB
Total	1400		0		1400	
Cycle 1	1400	650	0	0	1400	650
Cycle 2	0	750	0	0	0	750
Cycle 3	0	0	0	0	0	0

Table 88: WB Assessment of Implementation Cycle in Comparison to GoL - Culture & Tourism

Culture & Tourism Projects	CIP code	Cycle		Cost (MUS\$)	
		GoL	WB	Invest.	Land Exp
National and Public Libraries	CH1	1&2	2	15	0
Movies (Cinematic and documentaries)	Ch2	1&2	1	7	0
Theater	Ch3	1&2	1	7	0
Music (new branches for the Conservatoire)	Ch4	1&2	2	15	0
Scientific and Educational Centers	Ch5	1&2	1	18	0
Arts Museum	Ch6	1&2	2	7	0
Arts General	Ch7	1&2	1	10	0
Warehouse	Ch8	1&2	2	36	0
Historical cities and buildings	Ch9	1&2	1	50	0
Archaeological sites and surroundings	Ch10	1&2	1	70	0
Museums	Ch11	1&2	1	30	0

Culture & Tourism Sector Cost	Invest. Cost		Lan Exp.		Total	
	GoL	WB	GoL	WB	GoL	WB
Total	264		0		264	
Cycle 1	84	191	0	0	84	191
Cycle 2	180	73	0	0	180	73
Cycle 3	0	0	0	0	0	0

<i>Table 88: WB Assessment of Implementation Cycle in Comparison to GoL - Industry</i>		Cycle		Cost (MUS\$)	
Industry Projects		CIP code	GoL	WB	Invest. Land Exp
Infrastructure for 3 industrial cities, Alkaa, Baalbek, and Terbol - Phase 2		IN1	2	2	50 0
Infrastructure for the Tripoli Special Economic Zone		IN2	2	1	25 0

<i>Industry Sector Cost</i>	Invest. Cost		Lan Exp.		Total	
	GoL	WB	GoL	WB	GoL	WB
Total	0		0		0	
Cycle 1	0	25	0	0	0	25
Cycle 2	75	50	0	0	75	50
Cycle 3	0	0	0	0	0	0