UNITED NATIONS DEVELOPMENT PROGRAMME

PROJECT DOCUMENT Lebanon



Project Title: Operation of the Zahle Wastewater Treatment FacilityProject Numbers: Award ID 00106573; Output ID: 00132176Implementing Partner: UNDP (DIM)Start Date:01 July 2022End Date:30 June 2024PAC Meeting date:24 June 2022

Brief Description

The Government of Italy has funded the construction and operation of the Zahle Wastewater treatment plant under a soft loan. Under this funding a state-of-art facility has been constructed and was put in operation in October 2017. Due to the economic crisis that Lebanon is experiencing since October 2019, the Lebanese Government, and relevant authorities are no longer capable of securing funds to operate the facility. Hence a 1.5-year funding has been secured under a World Bank fund as of March 2021 up to August 2022. Furthermore, the Italian Government expressed its interest in supporting the operation of this facility for two additional years (September 2022 to August 2024).

The objective of this funding is to ensure the sustainable operation of the facility and give time for Lebanese authorities to conduct reforms and introduce relevant cost recovery system to ensure the sustainability of the operation. Additionally, under the operation services capacity building shall be provided to BWE staff to train them on operating the facility to enable them to manage and operate the facility after two years. Furthermore, support MoEW in establishing the required financial mechanisms that would ensure sustainable operations thereafter.

Contributing Outcome (UNSF/CPD): UNSF Outcome 3.1 Environmental Governance Improved CPD Outcome4.2 National and Environmental

Management Strengthened, Indicator 4.2.2 No. of solid waste, water and wastewater management initiatives implemented

Total resources required:	Euro 4,000,000 (Equivalent \$4,480,000 at exchange rate 1.12)			
Total resources				
allocated:	UNDP TRAC:			
	Donor (Italy):	€4,000,000		
	Government:			
	In-Kind:			
Unfunded:				

Indicative Output(s) with gender marker: GEN0

Agreed by UNDP

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Resident Representative

Date: 02-Aug-2022



I. DEVELOPMENT CHALLENGE

Origin and Context of the Initiative

In year of 2005, the Italian Government granted Lebanon a soft Ioan (Loan no. AID/05/008/00) for the construction and commissioning of a Wastewater treatment plant (WWTP) in Zahle. The implementation of the project was managed by the Council of Development and Reconstruction (CDR), on behalf of the Lebanese Government. CDR, acting as contracting authority, further to a public procurement procedure, awarded the contract to Degremont S.p.A. that was later bought by Suez Trattamento Acque S.p.A. The Implementation of the project was delayed for several reasons.

The construction of the facility was completed in 2017. On the 2nd October 2017, the facility was put into operation for the first time. The funding of the operation of the facility was covered by the Italian Government through CDR up till the end of February 2021. Between March 2021 and August 2022, the facility is expected to be operated by CDR through a World Bank funding.

Since the last quarter of 2019, an economic crisis started in Lebanon and has been escalating since then. This economic crisis is imposing limitations on allocating local funds to ensure sustainable operation of the facility. Additionally, according to local legislations, the Wastewater treatment plants should be managed and operated by Water authorities. In the case of Zahle wastewater treatment plant, it should be operated and managed by Bekaa Water Establishment (BWE). However, in light of the ongoing economic crisis which is affecting the financial resources of BWE, in addition to local legislations issued in 2018, that prevents recruitment in the public sector for 5 years, the BWE also suffers from lack of human resources. Accordingly, BWE expressed that they lack the human and financial capacity to take over the operation and management of Zahle WWTP from CDR, thus putting the facility at risk of being putting out of service and having the wastewater being disposed in illegal manner in nature/environment (with a main risk of having it disposed at Litani River).

Therefore, the Italian Government through AICS, are aiming to allocate additional funds to ensure the continuation of the operation of the facility for 2 additional years, thus granting BWE and Ministry of Energy and Water (MoEW) in addition to other national authorities' time to enhance their capacities and become ready to take over the operation of Zahle WWTP. In light of the resignation of the Lebanese Government, delays in creating a new government, failing of the caretaking government from convening, and lack of public trust in the public sector, AICS and the Italian Government approached UNDP as a potential management authority of the fund for the facility's operation.

Issues and Problems of the Zahle WWTP

The Zahle wastewater treatment plan is facing the following particular challenges:

- Currently the facility is operating only one line at a capacity of approximately 20,000m³/day while its full capacity is 37,300m³/day and can operate two lines. It is not clear at what pace the wastewater networks are being constructed and how will it affect the increase in quantities of wastewater within the upcoming years. The increase in quantity will influence the operation cost.
- The facility does not have a sustainable sludge management infrastructure. Currently the sludge is being placed in temporary cells within the site plot. Three cells have been constructed at the site and are almost full, a fourth cell will be constructed and financed by WB in order to receive the sludge currently produced over the area of the site. Thereafter the sludge will be delivered to the nearby landfill of the Zahle Municipality.
- The electric power supply, is expected to diminish, resulting in higher dependency on back-up generators (which will affect the operation cost as will need diesel supply). Additionally, word in the streets is mentioning that the rates of the public power are expected to increase over the upcoming years which may influence the operation cost.

While the decision was made to transfer the O&M contracts of the WWTPs from the CDR to WEs as of end of June 2021, the CDR and WB is to co-finance the O&M of Zahle WWTP till the August 2022. In order to avoid the shutdown of the WWTP as well as its environmental consequences, it is necessary to take immediate actions in the short, medium and long-term horizon.

National Status for Wastewater and Sludge Management

While Zahle WWTP is facing the above-mentioned specific challenges toward its sustainable operation, it should be noted that those issues are the reflection of challenges of the water sector at national level. While most of the WWTPs are currently managed by private operators contracted by the CDR, it has been decided that the task should be transferred to the WEs by end of June 2021. In summary, the following problems and constraints hinder a proper handling of the WWTPs by the WEs:

- Structural and Operational:
 - Technical deficiency due to the lack of sufficient expertise;
 - Absence of a performance-based contract modality.

- Financial:
 - Deficiency in cost-recovery as applied water tariffs do not include provisions for wastewater treatment, thus incapability to support cost of consumables, energy and maintenance of wastewater treatment.
- Commercial:
 - Operators currently running the plants will terminate their contracts in June 21 due to unpaid arrears by CDR, amounting in total to around 21 million USD.
- Legal:
 - Inadequacy of the organisational structure as identified in the above mentioned organisational decrees;
 - Ambiguity to date in the role of municipalities in the wastewater sector.

In order to address this urgent issue, the updated National Water Sector Strategy (NWSS) of the MoEW (MoEW, 2020) lays out the action plans to improve sustainable and integrated water resource management in Lebanon.

While Water Establishments (WEs) have the mandate of managing the wastewater systems as per law 221/2000, the organisational charts do not include these services. In fact, Bekaa Water Establishment (BWE) has no specific unit or team for wastewater. Thus, the wastewater management service of BWE, including the operation and maintenance of the Zahle WWTP and the other two plants, is currently provided through service contracts with private operators. Despite the management's effort to increase the number of engineers, they make up only 6% of the total headcount. In addition, there is no engineer who specialises in wastewater management, water management and hydraulic engineering.

The WE's understaffing is making any capacity building less effective. The absence of qualified personnel on the topic often led to direct participation of the Director General instead of an engineer or technician specialised in the topic, especially for wastewater management. To address this issue, the NWSS states that priority should be given to financing staff recruitment and using ad-hoc technical support staff rather than introducing long-term technical assistance into the WEs. This is because these technical assistances (TAs) end of doing the work of the staff being supported, hindering the sustainability of the achievement beyond the project implementation period.

The prerogatives of WEs include the proposition of tariffs for water services (drinking, irrigation and wastewater) according to the social and economic conditions as per Article 3 of Law 221/2000 amended by Article 1 of the Law 241/2000. From a legal point of view, this power of the WEs raise the following two concerns:

- The competency of the WEs to study and propose tariffs for proper management;
- The term "proposal" means that decision of the Board of Directors of each WE is subject to the approval of the regulatory authority, which may obviously refuse to approve the pricing policy of the WEs.

As a result, each WE has developed its own adjustment tariff. The sewage fee is a flat rate and has to be paid regardless of the service being rendered or not based on the idea of pollution tax for damaging the environment. The fee collection rate in BWE depends on the area: 47% and 55% in Zahle and Machghara respectively, while only 16% in Rachaya. Overall, current pricing system does not ensure a financial balance while technical and non-technical losses are also leading to draining of the WE's financial resources. In addition, there is no annual audits of the financial statements and ledger of all WEs by an international independent audit firm. This results in lack of transparency and accountability on the provider side, which will hinder the introduction of polluter-pays, user-pays and beneficiary responsibility principles on the consumer side. To overcome these financial and commercial challenges, the updated NWSS recommends the following set of actions:

- Financial side:
 - Introduce International Financial Reporting for all WEs;
 - Restructure the Water and Wastewater tariffs based on valid accounting books;
 - Set a financial plan to have arrears, subscriptions, and fees settled through periodic instalments;
 - o Introduce an adequate Wastewater tariff.
- Commercial side:
 - Conduct a customer census to identify customers of piped water and users of collective wastewater services for each WE's jurisdiction and include them in the customer database and billing system;
 - Introducing district meters and water meters targeting 100% of households
 - For wastewater, users of the services need to be identified and registered in specific databases and cross-reference the database of subscribers to the Wes with the database of users of wastewater services.

As for the tariff, the Council of Ministers has to decide whether to approve the addition of a flat Wastewater tariff of no less than 100,000 LBP/year to allow WEs' to cover O&M of wastewater plants at least partially, until the tariff restructuring study is done through the AFD's project to support sector reform funded by a delegation of EU funds aims to support capacity building of WES and MoEW for service improvement. However, given that the financial study was undertaken before the current economic and financial crisis, the figure for tariff might need to be reconsidered in light of the development of economic situation in Lebanon during the project.

Finally, operation and maintenance of facilities and service are also challenging mainly due to the fragmentation of management roles between different stakeholders (CDR, WEs, municipalities, and private operators) in addition to high energy bill due to interrupted electricity supply. Specifically, for wastewater management, the NWSS prioritise the adoption of a shared wastewater management framework to address the issue of organisation(s) responsible for mapping the wastewater network and treatment plants and determine the financing method.

For the sludge management, the CDR undertook the feasibility study for the sustainable sludge management in the Bekaa region in 2020 as part of the Lake Qaraoun Pollution Prevention Project. The feasibility study took into consideration the sludge generated by the 13 wastewater treatment plants in the Bekaa valley at the 2040 horizon, including Zahle WWTP where the average flow rate plant inlet is estimated at 56,000 m3 per day (after the expansion of the plant by adding a 3rd processing line to the existing 2 lines). The study assessed the following three scenarios for validations:

- 1. Incineration of 70% and spreading in agriculture 30% of the total sludge output;
- 2. Disposing in a dedicated landfill 70% and spreading in agriculture 30% of the total sludge output;
- 3. Incineration of 70% and disposing in a dedicated landfill 30%.

As for the sludge from Zahle WWTP, the scenario 1 and 3 proposed incineration after anaerobic digestion and dewatering via centrifugation along with the sludge from two existing (laat, Yamouneh) and three planned (Marj, Temnine, and El Labouwe) plants. The scenario 2 proposed solar drying at Zahle after centrifugation along with Marj and Temnine plants, then disposing at the dedicated landfill.

II. STRATEGY

Objectives and Strategy

The primary objective of this project is to assist the Bekaa Water Establishment (BWE) to be able to conduct the operation and maintenance of the Zahle Wastewater Treatment Plant (WWTP) in a sustainable manner with regards to both financial and environmental aspects.

The specific objective of this project is to guarantee the treatment of wastewater in the Zahle WWTP in compliance with international standards.

To realize the sustainable operation of the Zahle WWTP by the BWE, the project will take the phased approach toward a smooth transition taking into account the current status of the plant operation as well as the national status of the wastewater and sludge management.

Direct and indirect beneficiaries

Direct Beneficiaries:

- Population (users) connected to the Zahle WWTP via the sewage network (approximately 50% of 205,000 as estimated);
- o Municipalities of Zahle, Qaa El Rim, Hazzerta, Saadnayel, Taalabaya, and Fourzol;
- Ministry of Energy and Water (MoEW);
- Bekaa Water Establishment (BWE).

Indirect Beneficiaries

- Population living within the watershed of the Litani River and Qaraoun Lake;
- Lebanese Government;
- o Litani River Authority;
- o Municipalities of West Bekaa.

III. RESULTS AND PARTNERSHIPS

Expected Results and Indicators

Result 1: Efficient Operation of the Zahle WWTP and Handover

In the short-term (at least 2 years), it is absolute necessary to ensure the continuity of the WWTP's operation from September 2022. For that purpose, this Output addresses the following issues:

- Legal arrangement for the transfer of the contract management of the operation of WWTP from CDR to BWE/MoEW and then to provide UNDP with the authority to operate the facility until the end of this project before it is handed back to the BWE/MoEW;
- Agreement or MoU between Donor, UNDP, and Lebanese Government to enable UNDP to operate the facility on behalf of the Lebanese Government;
- Contract the private operator for the O&M of Zahle WWTP through the UNDP's procurement processes based on competitive bidding;
- Ensure the proper sludge disposal and upgrade the sludge management for longer-term in line with the national plan. The following phased approach will be taken:
 - Short-term: Temporary storage of Sludge within the provisional on-site cells, then transferring the wet sludge to Zahle sanitary landfill, after contracting solar driers;
 - For long-term: World Bank along with the national partners, CDR and MoEW, have committed to purchasing and funding the installation of a solar drying system to dry sludge faster and then transfer the sludge to the Zahle landfill. UNDP will support in the provision of a design for the solar drying bed and will prepare the needed environmental safeguards and studies prior to its purchase to meet the World Bank and national requirements;
 - The municipality of Zahle has agreed to accepting wet sludge from the WWTP once the purchase of the solar drying system is confirmed (tender is posted online) and after it is installed, will continue to dispose the dry sludge in the Zahle solid waste facility.

During this phase, the project will also ensure the proper treatment of incoming WW to meet local and international standards and generated sludge while testing and analyzing sludge and effluent quality. In addition, the project will upgrade the facility more energy efficiently in order to reduce the operational cost. The following technical indicators will be targeted:

Indicator	Baseline	Target
Quality of Effluent water	As per decision 8/1	As per decision 8/1 for surface water
Average Quantity of WW (year 1)	18,743m3/day	20,000m3/day
Average Quantity of WW (year 2)	18,743m3/day	20,000m3/day
Quantities of Sludge (year 1)	34T/d (1.8Kg/m3)	36T/d (1.8Kg/m3)
Quantities of Sludge (year 2)	34T/d (1.8Kg/m3)	36T/d (1.8Kg/m3)

<u>Important Note:</u> The achievement of this output is conditional to the political decision and reform by the Lebanese authorities. Given that such a decision/reform is outside of the control of the UNDP, the UNDP cannot guarantee the achievement of this Output. If the Lebanese authorities do not commit the required measures, the project will be exposed to a financial risk in terms of ability to sustain the operation and maintenance of the facility and will need an additional finance to continue the operation of the Zahle WWTP once this project is completed.

In the mid-term and long-term, the management of the Zahle WWTP and its financing should be taken over by the BWE. While the transition to sustainable management of the WWTP by BWE largely depends on the national commitments toward water and wastewater sectors reforms, the project will aim at facilitating the transition. Capacity building of the BWE's staff (at least 10 BWE qualified personnel) and institutional strengthening of the BWE¹ on the technical needs in terms of operation and maintenance of the facility.

¹ BWE is in charge of recruiting/contract management of the qualified engineers and staff at the BWE for the management of Zahle WWTP.

Activities to be performed to achieve the Expected Results

The project will consist of several activities that are needed to complete the outputs and will include at least some of the following:

- The preparation of the needed technical specifications and terms of reference for the operation and maintenance of the WWTP in line with best practice after which UNDP will initiate a tendering process according to its procurement rules and regulations. This will involve an international and local posting of tendering documents (invitation to bid) for the solicitation of financial and technical offers. A detailed and thorough evaluation process will follow to select the best offeror/contractor and a due process is completed.
- A contract will then be issued and the O&M works will start with the new Contractor including the treatment and disposal of generated sludge.
- In parallel, UNDP will also hire the technical project team members based on its HR practices and as described below, to oversight and manage the Contractor and to ensure all the deliverables are up to standard. The team will also ensure adequate reporting at site level and will liaise with partners and stakeholders on site and at national level (government), in consultation with the UNDP Country Office team. In addition, the team will backstop and provide trouble shoot any technical issues on the ground and will be also oversight the capacity building activities.
- Capacity building activities:
 - will also be undertaken to train the WE personnel and others to ensure the sustainability of operation of the WWTP and a smooth transition;
 - If and as feasible, the project will support the Ministry of Energy and Water in policy and technical support to move forward into a sustainable financial recovery system. This may include support in the development/update/revision of key legislations for cost-recovery (tariff) and performance-based contract.
- Awareness raising activities will be conducted to the extent possible on the topic of wastewater treatment.
- Advocate the equal work opportunities (gender sensitive manner).

Resources Required to Achieve the Expected Results

UNDP was instrumental under previous programmes and projects executed on behalf of MoE and MoEW in striking the right balance between advisory services, guidance to the Project Management Unit (PMU) and effectiveness in procuring the needed contractual human resources, services, equipment and works in a timely manner. The current project has more ambitious output and outcomes than previous UNDP executed programmes as well as projects and will benefit from the same professional support from UNDP as resources have been secured to help achieve the expected results.

The project needs the following resources to deliver the expected results:

- Project Duration: The initial project duration is expected to be 2 years. However, the commitment of Lebanese authorities is prerequisite to achieve the results.
- Project staff hired as service providers for the delivery of the project.
- ✓ Private contractors for the operation and maintenance of the Zahle WWTP that will be selected competitively based on UNDP's rules and regulations.
- ✓ Capacity building and awareness raising activities.
- Indirect cost (charged as DPC in the budget): UNDP Country Office staff time for procurement, contract management, finance, coordination, IT support and security.

Partnerships

UNDP will collaborate closely with the national partners involved in this project building on earlier experience in the sector, including the MoEW, CDR, BWE, Municipality of Zahle and others while also continuing the close partnership with the World Bank that is also working on constructing the wastewater network in Zahle and the region and will also fund the installation of the solar drying system. At the same time, the UNDP will try to expand this partnership to other international and local actors that are active in the field of water sector reform such as the Agence Française pour Le Développement (AFD), the European Union (EU) and others, in full coordination with the Embassy of Italy and AICS to advocate for the needed sectoral reforms.

Risks and Mitigations Measures

A number of risks have been identified that could affect the implementation of the project and are aggregated as follows: political, financial, operational, health and social. Engaging the government at all levels could reduce these risks. As for the financial risk, maintaining close coordination with relevant institutions by making the case for implementing the project would help transfer funds in a timely manner.

On the health aspects, the ongoing pandemic (COVID-19) and its precautionary measures will be addressed by taking the necessary H&S measures, and coordinate with designated authorities to ensure exemptions are granted to the facility team during lockdowns.

On the operational side, the unwillingness to cooperate in the project would be mitigated by showing the benefits that will accrue after the project implementation.

Risks	Mitigations
Lack of commitments from Lebanese authorities toward	Continuous and coordinated advocacy toward the sector
water and wastewater sectors reforms and the inability to implement tariff restructuring and fee collection system (financial).	reform. However, if the reforms do not take place, the additional fund and the extension of the project will be necessary to continue the operation of the Zahle WWTP beyond the project duration.
	UNDP to coordinate with other international donors (including AFD and others) and central government (MoEW, CDR and BWE) to ensure the financing is secured for the long-term operation of the facility.
Failure to get permits for sustainable sludge treatment system.	period and may be extended beyond that.
	Liaise closely between MoEW/BWE as owners of the facility and MoE and/or relevant ministries to receive required permits.
Industrial area feeding its wastewater into network and/or increase in chemical contamination of the wastewater inflow.	Report to designated ministries, and urge industries to conduct required pre-treatments.
Bekaa Water Establishment still does not have the financial nor human resources to operate the facility upon completion of projects.	Make prior arrangements with MoEW to ensure that a public entity will manage the operation after completion of project.
Not enough qualified staff at BWE available to be trained for the operation of the facility	
Increase in electric blackouts and/or increase in electricity tariffs.	Account for these issues in the budgeting as contingency measures.
	Should blackouts be more than 50% of the time, the project budget would not be sufficient to cover the full O&M of the facility and would need to be reported to the Steering Committee/Project Board to find solutions.
Increase in quantities of wastewater	The facility is currently operating at half its capacity. Accordingly, the facility can work at full capacity with two lines.
Wastewater will receive more than the maximum capacity of the plant.	If seasonal peaks they can be accommodated. However, if they annual daily average are to exceed the capacity, then notify MoEW and CDR to stop the expansion of networks.
Failing to import spare parts in a timely manner.	Ensure that key spare parts are always available on site in excess quantities.
Legal challenges in handing over the WWTP to the BWE.	Initiate discussions from the start of the project on the handover of the facility at the end of the project.
Contextual Risks	Povision of project timeling and activities will be
Political instability and security situation in the country can slow down or stop the project activities.	Revision of project timeline and activities will be undertaken to ensure that project activities continue to the extent possible. Coordination with UN Security Department will be undertaken continuously.
Financial crisis facing Lebanon, including the capital control by the banks.	UNDP is taking measures to adjust contractual payment terms to contractors to try to overcome the financial challenges faced at the national level as a result of capital control measures. Furthermore, given that payments from UNDP are considered "fresh financing" to the country, more flexibility is provided by the banks to the Contractors.
	Risk of very high offer received for O&M to compensate for the crisis is also probably. Bidding documents should be as clear as possible and rebidding will be possible if prices received are over-budget.
COVID-19 pandemic including risk of delays due to lockdowns on site.	Ensure the provision of personal protective equipment (PPE) for the workers and other preventive measures at the sites and abiding by national preventive guidelines.
Social unrest could lead to challenges in accessing sites and completing the works on time	Coordination with UN Department of Safety and Security to determine best ways to access sites and to continue

	delivering without taking (or exposing anyone to) unnecessary risks.
Municipality of Zahle stops/refuses to receive the sludge (either in the interim until during the tendering process for the solar dryer or after the dryer is installed) or requests higher than originally agreed upon tipping fee. Handing over from CDR to BWE/MoEW not occurring.	Liaise closely with Zahle Municipality to ensure it will accept sludge disposal in its landfill. Re-negotiate with all partners to overcome this situation and to find viable solution for sludge. An agreement should be entered into between CDR and BWE/MoEW where each party undertakes its responsibility for the handing over of the plant. Written authorisation from the Government of Lebanon to allow UNDP to temporarily operate and maintain the WWTP for the duration of the project with funding from Italy.

Stakeholder Engagement

The project aims to ensure the sustainability of Zahle WWTP by systematically engaging relevant stakeholders, especially BWE and ensure providing them with the related capacity building to ensure strategic sustainability. In addition, other key stakeholders are to be involved and coordinated with such as MoEW, in order to develop cost recovery schemes that would ensure financial sustainability thereafter of the WWTP.

Beneficiaries: The direct beneficiary will be the BWE, the MoEW, and the Bekaa area and most importantly the population living within the watershed of the Litani River and Qaraoun Lake, corresponding to almost 1 million inhabitants in terms of preventing risks of pollution and restoring the river quality. The intervention will indirectly benefit the country as a whole.

The project will also coordinate with line ministries, CDR or any other authorities as needed in order to ensure access to any available data, or to facilitate the collection of such data.

The list of stakeholders includes but is not limited to:

- Bekaa Water Establishment (BWE)
- Ministry of Energy and Water (MoEW)
- Council of Development and Reconstruction (CDR)
- Ministry of Environment (MoE)
- Municipality of Zahle
- Agence Française pour Le Développement (AFD)

Knowledge

The project will produce the reports in accordance with UNDP's programming policies and procedures. In addition, knowledge, good practices and lessons will be captured and shared with other organizations working on the relevant sectors through the existing LCRP and/or 3RF coordination mechanisms. There will also be events organised around the inauguration of projects which will specifically target high-level participation and ensure the activities are widely reported by the main media outlets. Finally, the project activities and results will continuously be reported and reflected on the UNDP Lebanon website social media platforms such as Facebook, Twitter etc. This will be the responsibility of communication officers based on the projects and working in coordination with the UNDP Country Office Communications team.

Sustainability and Scaling Up

The project shall coordinate with MoEW and BWE and advocate proper legislations and reforms related to cost recovery mechanisms that would enhance the financial capacity the Water Establishments in general and of BWE in specific to enable them to operate and maintain WWTP and provide BWE's personnel with the required capacity building and training to perform the required tasks. Already current legislations especially law 77/2018 assigns the water establishments the responsibility of operating and managing WWTP as well as proposing the tariff, however, water establishment lack the required funding and qualified personnel. These issues are also recognized in the update NWSS, which proposed the set of action plans as described in the Section I.

IV. PROJECT MANAGEMENT

Cost Efficiency and Effectiveness

The project uses a portfolio management approach to improve cost-effectiveness and efficiency by leveraging activities and other interventions with the Waste Management Project team in UNDP. For any balance at the end of the project, the country office will consult with the Embassy of Italy and AICS.

Project Management

The project will be managed in accordance with standard UNDP procedures as Direct Implementation (DIM) modality. UNDP will ensure high-quality technical and financial implementation of the project and will be responsible for monitoring and ensuring proper use of all funds to assigned activities, timely reporting of implementation progress as well as undertaking of mandatory and non-mandatory evaluations for each of their respective components. All services for the procurement of works, goods and services, the recruitment of personnel, financial transactions, auditing and reporting will be carried out in compliance with UNDP procedures, rules and regulations for direct implementation. Thus, UNDP Direct Country Office Support Services will be applied, and the related Direct Project Cost (DPC) are budgeted against the project budget.

The audit of the DIM project is made through the regular external (UN Board of Auditors) or internal audits (audits managed by UNDP's Office of Audit and Investigation).

The project management unit (PMU) will remain based in the offices in Beirut and will be responsible for dayto-day management of project documentation and monitoring and provision of policy and technical advice. The PMU will also seek technical services to be carried out by UN agencies and, international NGOs as well as individual consultants and/or consulting firms. The work will be integrated within and managed by the ongoing Energy and Environment Portfolio, which currently runs over 20 projects in the field of energy and environment.

Visibility and Communication

UNDP will ensure that the Government of Lebanon and the project Donor will receive the maximum visibility possible in line with the visibility guidance documents and in coordination with the Donor.

V. RESULTS FRAMEWORK

Intended Outcome as stated in the UNDAF/Country Programme Results and Resource Framework: Outcome 3.1 Environmental Governance Improved

Outcome indicators as stated in the Country Programme Results and Resources Framework, including baseline and targets: Output 4.2 National and Environmental Management Strengthened, Indicator 4.2.2 No. of solid waste, water and wastewater management initiatives implemented (Baseline 2, Target 10)

Applicable Output(s) from the UNDP Strategic Plan: 1.4.1 Solutions scaled up for sustainable management of natural resources, including sustainable commodities and green and inclusive value chains

EXPECTED OUTPUTS	OUTPUT INDICATORS	DATA SOURCE	BASELIN	BASELINE		TARGETS (by frequency of data collection)			DATA COLLECTION METHODS & RISKS
			Value	Year	Year 2022	Year 2023	Year 2024	Total	
Output 1 Efficient operation of	1.1 Average Quantity of WW treated	BWE, Zahle WWTP	6,850,000 m ³	2021	2,433,333 m ³	7,300,000 m ³	4,866,667m ³	14,600,000 m ³	Site visits, technical reports from the contractors
WWTP and handover	1.2 Average quantity of Sludge treated	UNDP, Zahle SWF, Zahle WWTP	12,500 T	2021	4,350 T	13,000 T	8,650 T	26,000 T	Site visits, technical reports from the contractors
	1.3 Number of the BWE staff trained	UNDP, BWE, Zahle WWTP	0	2021	0	0	10– 13	10 - 13	PMU/consultant
	1.4 Handing over the facility	UNDP, BWE, MoEW, Zahle WWTP	0	2021	0	0	1	1	PMU/consultant

VI. INDICATIVE LOGFRAME MATRIX

Expected results	Description	Verifiable and objective indicators	Means of verification	Assumptions
General objective	Assist the Bekaa Water Establishment (BWE) to be able to conduct the operation and maintenance of the Zahle Wastewater Treatment Plant (WWTP) in a sustainable manner	Zahle Wastewater Treatment Plant Operational	Monthly reports prepared by Contractor and feedback from BWE.	The Government of Lebanon remains committed to its strategic targets, and commitments
				The changes/rotations in the personnel of the BWE do not affect project implementation
Specific objective	Treatment of wastewater in the Zahle WWTP in compliance with international standards.	Average Quantity of WW treated	Monthly reports, Laboratory tests (in-house and	Commitments from Lebanese Authorities
		Average quantity of Sludge treated	third party), Feedback from various	(Municipality of Zahle, BWE, MoEW, MoE, etc)
		Handing over the facility	stakeholders	6)
		Number of BME staff training		
		Quality of Effluent water		
Output 1:	Operation of Zahle wastewater treatment plant for a	Project team in place	Monthly reports,	Political stability and
Efficient operation of WWTP and handover	minimum of 2 years	 Procurement process for operator completed 	Feedback from various stakeholders.	commitments from Various stakeholders
		O&M contract issued		
		Number of trainings/awareness raising activities conducted		
		Tons of sludge properly disposed		
Activities in relation to Output 1	 Setting up and hiring the project team Preparing needed technical specifications and terms of reference for the operation and maintenance of the WWTP Issuance of an operation & maintenance contract for 			
	the WWTPCapacity Building and TrainingAwareness activities			

	Advoo	cating the equal work opportunities	
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VII. MONITORING AND EVALUATION

In accordance with UNDP's programming policies and procedures, the project will be monitored through the following monitoring and evaluation plans:

Monitoring Plan

Monitoring Activity	Purpose	Frequency	Expected Action
Track results progress	Progress data against the results indicators in the RRF will be collected and analysed to assess the progress of the project in achieving the agreed outputs.	Quarterly, or in the frequency required for each indicator	Slower than expected progress will be addressed by project management.
Monitor and Manage Risk	Identify specific risks that may threaten achievement of intended results. Identify and monitor risk management actions using a risk log. This includes monitoring measures and plans that may have been required as per UNDP's Social and Environmental Standards. Audits will be conducted in accordance with UNDP's audit policy to manage financial risk.	Quarterly	Risks are identified by project management and actions are taken to manage risk. The risk log is actively maintained to keep track of identified risks and actions taken.
Learn	Knowledge, good practices and lessons will be captured regularly, as well as actively sourced from other projects and partners and integrated back into the project.	At least annually	Relevant lessons are captured by the project team and used to inform management decisions.
Annual Project Quality Assurance	The quality of the project will be assessed against UNDP's quality standards to identify project strengths and weaknesses and to inform management decision making to improve the project.	Bi-Annually	Areas of strength and weakness will be reviewed by project management and used to inform decisions to improve project performance.
Review and Make Course Corrections	Internal review of data and evidence from all monitoring actions to inform decision making.	At least annually	Performance data, risks, lessons and quality will be discussed by the Steering Committee/Project board and used to make course corrections.
Project Report	A progress report will be presented to the donor consisting of progress data showing the results achieved against pre-defined annual targets at the output level, the annual project quality rating summary, an updated risk long with mitigation measures, and any evaluation or review reports prepared over the period.	Quarterly and Annually and at the end of the project (final report)	
Project Review (Steering Committee/Project Board)	The project board/steering committee will hold regular project reviews to assess the performance of the project and review the Multi-Year Work Plan to ensure realistic budgeting over the life of the project. In the project's final year, the Steering Committee/Project Board shall hold an end-of project review to capture lessons learned and discuss opportunities for scaling up and to socialize project results and lessons learned with relevant audiences.	At least annually	Any concerns or slower than expected progress should be discussed by the project board and management actions agreed to address the issues identified. Additional stakeholders such as the municipality of Zahle or other concerned parties will be invited to the meeting by the Steering Committee/project board as needed.
Technical Committee	A project Technical Committee will be set up which will include the technical focal points from UNDP project, AICS and the BWE or MoEW. The technical committee will follow-up on the project results and challenges.	Once every quarter or as needed	The Technical Committee will raise any challenges that need to be flagged to the Steering Committee/Project Board through the Project Manager.

VIII. MULTI-YEAR WORK PLAN

EXPECTED		Plar	ned Budget by Year (L	JSD)		PLANNED	BUDGET
OUTPUTS	PLANNED ACTIVITIES	Y1 (Q3 2022)	Y2 (Q1 - Q4 2023)	Y3 (Q1 - Q3 2024)	RESPONSIBLE PARTY	Total Amount (Euro)	Total Amount (USD)
Output 1: Efficient operation of	Operations and Management (including tipping fee)	344,084	1,376,336	1,032,252	UNDP	2,752,672	3,082,993
WWTP and handover	Civil Engineer/Site Engineer	15,090	60,358	45,269	UNDP	120,717	135,203
	Project Manager	18,347	73,389	55,042	UNDP	146,778	164,392
	Assistant (part-time)	5,658	22,631	16,973	UNDP	45,262	50,693
Running costs [1]		6,928	27,711	20,783	UNDP	55,421	62,072
	Contingency	58,929	235,714	176,786	UNDP	471,429	528,000
	Subtotal 449,035 1,796,139 1,347,104					3,592,279	4,023,352
Direct Project Cost (DPC)	Direct Project Cost (DPC)						83,726
Subtotal (Programmable Budget)	(Programmable 3,667,034 4,107,078						4,107,078
GMS (8% of Programme Budget)	Programme 293,363 328,566						
Total Budget without levy 3,960,396							4,435,644
1% UN Coordination Levy	Coordination 39,604 44,356						44,356
Total Budget with levy						4,000,000	4,480,000

[1]	Running costs breakdown	2 years	
	Laptops		4,464
	Fuel for car or car rental		8,929
	Third party lab tests or expert for specific technical analysis		13,393
	Awareness raising material		4,464
	Stationery		1,786
	Legal expert (to support policy for MoEW)		22,386
	Total		55,421

1.1200
0.8929

Zahle WWTP Project

Year						20)22											20	23											202	24					
Month	J	F	Μ	Α	Μ		J	Α	S	0	Ν	D	J	F	Μ	Α	Μ	J	J	Α	S	0	Ν	D	J	F	Μ	A		J	J	Α	S	0	Ν	D
UNDP and AICS Coordination with Stakeholders																																				
Agreement AICS/UNDP for 2 additional years of 0&M																																				
UNDP preparation of Tender Documents for O&M																																				
International bidding process - online (UNDP)																																				
UNDP & AICS following up on Handing over procedures with Government																																				
Recruitment of Project Team (UNDP)																																				
Two additional years of O&M including technical assistance (UNDP)																																				
Recruitment of BWE Staff (BWE/MoEW)																																				
Training of BWE Staff Handing over of Facility to BWE/MoEW																																				
Technical Committee Meeting																																				
Steering Committee / Project Board Meeting																																				
Support to MoEW Reporting																																				

IX. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

The Project will be executed under the UNDP Direct Implementation Modality (DIM), whereby UNDP will act as the executing and implementing agency. The UNDP will monitor the progress towards intended results, and will ensure high-quality managerial, technical and financial implementation of the project, and will be responsible for monitoring and ensuring proper use of administrated funds to the assigned activities, timely reporting of implementation progress as well as undertaking of mandatory and non-mandatory evaluations for each of their respective components. Furthermore, the procurement of goods and services and the recruitment of personnel shall be provided in accordance with UNDP guidelines, procedures and regulations.

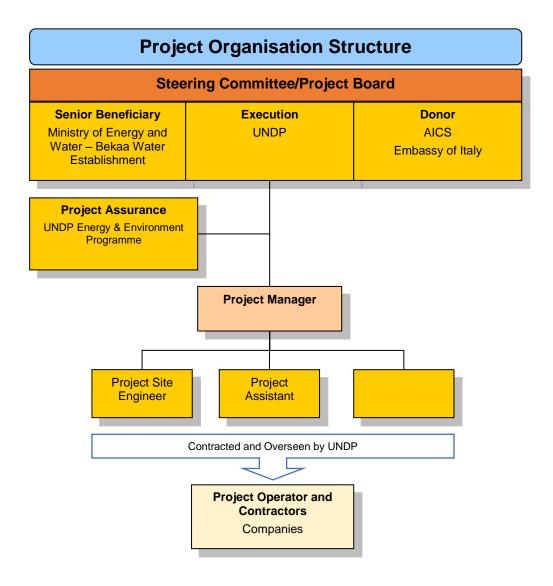
The UNDP country office will provide the following support services, covered by Direct Project Cost (DPC), for the activities of the programme/project:

- i. Payments, disbursements and other financial transactions;
- ii. Recruitment of staff, project personnel, and consultants;
- iii. Procurement of services and equipment, including disposal;
- iv. Organization of training activities, conferences, and workshops, including fellowships;
- v. Travel including visa requests, ticketing, and travel arrangements;
- vi. Shipment, customs clearance, vehicle registration, and accreditation;
- vii. Security management service and Malicious Acts Insurance Policy;
- viii. External access to ATLAS for project managers and other staff, Payroll management services and Medical Clearance Services for all staff.

The UNDP country office will also provide the following general oversight and management services. GMS is recovered with a flat rate of 8% for contributions from donors. GMS cover the following services:

- i. General oversight and monitoring, including participation in project reviews;
- ii. Briefing and de-briefing of project staff and consultants;
- iii. Resource management and reporting;
- iv. Thematic and technical backstopping.

The audit of DIM projects is made through the regular external (UN Board of Auditors) or internal audits (audits managed by UNDP's Office of Audit and Investigations).



The **Project Board/Steering Committee's** role is as follows:

- Provide overall guidance and direction to the project, ensuring it remains within any specified constraints;
- Review project performance based on monitoring, evaluation and reporting, including standard quality assurance checks, etc.;
- Address any high-level project issues as raised by the project manager and project assurance;
- Provide guidance on emerging and/or pressing project risks and agree on possible mitigation and management actions to address specific risks (including ensuring compliance with UNDP's Social and Environmental Standards, Fraud/corruption, Sexual Exploitation and Abuse and Sexual Harassment);
- Agree or decide on project manager's tolerances as required, within the parameters set by UNDP) and the donor, and provide direction and decisions for exceptional situations when the project manager's tolerances are exceeded;
- Advise on major and minor amendments to the project within the parameters set by UNDP and the donor;
- Agree or decide on a project suspension or cancellation or extension, if required;
- Provide high-level direction and recommendations to the project management unit to ensure that the agreed deliverables are produced satisfactorily according to plans;
- Ensure coordination between the various donors and government-funded projects and programmes;
- Report to relevant inter-ministerial bodies or higher-level oversight bodies;
- Ensure coordination with multiple government agencies and their participation in project activities;
- Ensure commitment of human resources to support project implementation, arbitrating any issues within the project;
- Act as an informal consultation mechanism for stakeholders.

The Technical Committee's role will be as follows:

- Review the project progress and challenges at the technical level in terms of following up on the project activities;
- Overcome technical challenges or impediments that might be experienced on the ground during the project implementation;
- Coordinate with stakeholder and technical partners to overcome any challenges and to support the smooth implementation of the projects;
- Provide insight and feedback on any issues in the sector related to the project;
- Liaise at the technical level with all donors and actors working in the sector that are relevant to the project and that can be of support.

Project assurance will be provided by the UNDP Energy and Environment Programme. Its responsibility is to provide objective and independent project oversight and monitoring functions while ensuring that appropriate management milestones are met.

The **project management team** will be established and will coordinate with the various stakeholders. It will consist of Project Manager (referred to as Project Coordinator in the original project proposal with the donor), a Site Engineer (or civil engineer), and a project assistant. Furthermore, the project will include having professional companies to operate and maintain the facility.

X. LEGAL CONTEXT

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of Lebanon and UNDP, signed in 1986. All references in the SBAA to "Executing Agency" shall be deemed to refer to "Implementing Partner".

This project will be implemented by UNDP ("Implementing Partner") in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

XI. RISK MANAGEMENT

- 1. UNDP as the Implementing Partner will comply with the policies, procedures and practices of the United Nations Security Management System (UNSMS).
- 2. UNDP as the Implementing Partner will undertake all reasonable efforts to ensure that none of the [project funds]² [UNDP funds received pursuant to the Project Document]³ are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant accessed to resolution 1267 (1999). The list can be via http://www.un.org/sc/committees/1267/ag_sanctions_list.shtml. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.
- 3. Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (http://www.undp.org/ses) and related Accountability Mechanism (http://www.undp.org/secu-srm).
- 4. UNDP as the Implementing Partner will: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.
- 5. In the implementation of the activities under this Project Document, UNDP as the Implementing Partner will handle any sexual exploitation and abuse ("SEA") and sexual harassment ("SH") allegations in accordance with its regulations, rules, policies and procedures.
- 6. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.
- 7. UNDP as the Implementing Partner will ensure that the following obligations are binding on each responsible party, subcontractor and sub-recipient:
 - a. Consistent with the Article III of the SBAA [or the Supplemental Provisions to the Project Document], the responsibility for the safety and security of each responsible party, subcontractor and sub-recipient and its personnel and property, and of UNDP's property in such responsible party's, subcontractor's and sub-recipient's custody, rests with such responsible party, subcontractor and sub-recipient. To this end, each responsible party, subcontractor and sub-recipient shall:
 - i. put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
 - ii. assume all risks and liabilities related to such responsible party's, subcontractor's and sub-recipient's security, and the full implementation of the security plan.
 - b. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the responsible party's, subcontractor's and sub-recipient's obligations under this Project Document.
 - c. In the performance of the activities under this Project, UNDP as the Implementing Partner shall ensure, with respect to the activities of any of its responsible parties, sub-recipients and other entities engaged under the Project, either as contractors or subcontractors, their personnel and any individuals performing services for them, that those entities have in place adequate and proper procedures, processes and policies to prevent and/or address SEA and SH.
 - d. Each responsible party, subcontractor and sub-recipient will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, subcontractors and sub-recipients in implementing the project or programme or using the UNDP funds. It will ensure that its financial management, anti-corruption and anti-fraud policies are in place and enforced for all funding received from or through UNDP.
 - e. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to each responsible party, subcontractor and sub-recipient: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and Investigations Investigation Guidelines. Each responsible party, subcontractor and sub-recipient agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.

² To be used where UNDP is the Implementing Partner

³ To be used where the UN, a UN fund/programme or a specialized agency is the Implementing Partner

- f. In the event that an investigation is required, UNDP will conduct investigations relating to any aspect of UNDP programmes and projects. Each responsible party, subcontractor and sub-recipient will provide its full cooperation, including making available personnel, relevant documentation, and granting access to its (and its consultants', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with it to find a solution.
- g. Each responsible party, subcontractor and sub-recipient will promptly inform UNDP as the Implementing Partner in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality. Where it becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, each responsible party, subcontractor and sub-recipient will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). It will provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.
- h. UNDP will be entitled to a refund from the responsible party, subcontractor or sub-recipient of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of this Project Document. Such amount may be deducted by UNDP from any payment due to the responsible party, subcontractor or sub-recipient under this or any other agreement. Recovery of such amount by UNDP shall not diminish or curtail any responsible party's, subcontractor's or sub-recipient's obligations under this Project Document.

Where such funds have not been refunded to UNDP, the responsible party, subcontractor or sub-recipient agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to such responsible party, subcontractor or sub-recipient for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

<u>Note</u>: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

- i. Each contract issued by the responsible party, subcontractor or sub-recipient in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from it shall cooperate with any and all investigations and post-payment audits.
- j. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project or programme, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.
- k. Each responsible party, subcontractor and sub-recipient shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to its subcontractors and sub-recipients and that all the clauses under this section entitled "Risk Management Standard Clauses" are adequately reflected, *mutatis mutandis*, in all its sub-contracts or sub-agreements entered into further to this Project Document.
- I. Each contract issued by the responsible party, subcontractor or sub-recipient in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from it shall cooperate with any and all investigations and post-payment audits.
- m. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project or programme, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.
- n. Each responsible party, subcontractor and sub-recipient shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to its subcontractors and sub-recipients and that all the clauses under this section entitled "Risk Management Standard Clauses" are adequately reflected, mutatis mutandis, in all its sub-contracts or sub-agreements entered into further to this Project Document.

XII. ANNEXES

- 1. Social and Environmental Screening
- 2. Risk Analysis
- 3. Project Board Terms of Reference and TORs of key management positions
- 4. Project Quality Assurance Report (Award QA was updated)
- 5. Capacity Assessment: Results of capacity assessments of Implementing Partner (including Partner Capacity Assessment Tool (PCAT) and HACT Micro Assessment) Not applicable as UNDP is the implementing partner
- 6. On-Granting Provisions Applicable to the Implementing Partner Not applicable as the project is executed by UNDP

ANNEX I - Social and Environmental Screening

SOCIAL AND ENVIRONMENTAL SCREENING

Project Information

Pro	oject Information	
1.	Project Title	Operation of the Zahle Wastewater Treatment Facility
2.	Project Number	Award ID 00106573; Output ID: 00132176
3.	Location (Global/Region/Country)	Lebanon
4.	Project stage (Design or Implementation)	Design
5.	Date	2022.07.26

Part A. Integrating Programming Principles to Strengthen Social and Environmental Sustainability

QUESTION 1: How Does the Project Integrate the Programming Principles in Order to Strengthen Social and Environmental Sustainability?

Briefly describe in the space below how the project mainstreams the human rights-based approach

The objective of this funding is to ensure the sustainable operation of the facility and give time for Lebanese authorities to conduct reforms and introduce relevant cost recovery system to ensure the sustainability of the operation. Additionally, under the operation services capacity building shall be provided to BWE staff to train them on operating the facility to enable them to manage and operate the facility after two years. Furthermore, support MoEW in establishing the required financial mechanisms that would ensure sustainable operations thereafter. The adequate and sustainable treatment of wastewater will not only benefit the population connected with the sewage network but also benefit broader population living within the watershed of the Litani River and Qaraoun Lake. Thus, the project mainstreams the human rights-based approach for public health and environment.

Briefly describe in the space below how the project is likely to improve gender equality and women's empowerment

The project promotes the participation of women equally as men in the all activities such as training, capacity building and awareness raising programs. Assessments and data collected will be gender disaggregated to the extent possible.

Briefly describe in the space below how the project mainstreams sustainability and resilience

The project imbibes sustainability within its broader objective of operation of the Zahle Wastewater Treatment Facility. Towards this end, The project shall coordinate with MoEW and BWE and advocate proper legislations and reforms related to cost recovery mechanisms that would enhance the financial capacity the Water Establishments in general and of BWE in specific to enable them to operate and maintain WWTP and provide BWE's personnel with the required capacity building and training to perform the required tasks.

Briefly describe in the space below how the project strengthens accountability to stakeholders

The project aims to ensure the sustainability of Zahle WWTP by systematically engaging relevant stakeholders, especially BWE and ensure providing them with the related capacity building to ensure strategic sustainability. In addition, other key stakeholders are to be involved and coordinated with such as MoEW, in order to develop cost recovery schemes that would ensure financial sustainability thereafter of the WWTP.

Part B. Identifying and Managing Social and Environmental Risks

QUESTION 2: What are the Potential Social and Environmental Risks? Note: Complete SESP Attachment 1 before responding to Question 2.	potential se Note: Resp	ocial and envir	elevel of significance of the ronmental risks? stions 4 and 5below be			essment and ated Moderate,				
Risk Description (broken down by event, cause, impact)	Impact and Likelihoo d (1-5)	Significan ce (Low, Moderate Substantia I, High)	Comments (optional)		mea	Description of assessment and management measures for risks rated as Moderate, Substantial or High				
No major risk identified										
	QUESTION 4: What is the overall project risk categorization?									
			Low Risk							
			Moderate Risk	-						
			Substantial Risk							
			High Risk							
	QUES ⁻	FION 5: Based	on the identified risks ar triggered?			gorization, what requirements of th that apply)	ne SES are			
	Question or	ly required for	Moderate, Substantial and	High I	Risk p	projects				
	<u>ls assessm</u>	ent required?	(check if "yes")				Status? (completed, planned)			
		if yes, indica	ate overall type and status			Targeted assessment(s)				
						ESIA (Environmental and Social Impact Assessment)				
						SESA (Strategic Environmental and Social Assessment)				
	Are manag	-	equired? (check if "yes)							
			f yes, indicate overall type			Targeted management plans (e.g. Gender Action Plan, Emergency				

		ResponsePlan,WasteManagement Plan, others)ESMP (Environmental and Social Management Plan which may include range of targeted plans)
		ESMF (Environmental and Social Management Framework)
Based on identified <u>risks</u> , which Principles/Project-level Standards triggered?		Comments (not required)
Overarching Principle: Leave No One Behind		
Human Rights		
Gender Equality and Women's Empowerment		
Accountability		
1. Biodiversity Conservation and Sustainable Natural Resource Management		
2. Climate Change and Disaster Risks		
3. Community Health, Safety and Security		
4. Cultural Heritage		
5. Displacement and Resettlement		
6. Indigenous Peoples		
7. Labour and Working Conditions		
8. Pollution Prevention and Resource Efficiency		

Final Sign Off

Final Screening at the design-stage is not complete until the following signatures are included

Signature	Date	Description
QA Assessor		
DocuSigned by:		
Than from 01-AL	ıg-2022	UNDP staff member responsible for the project, typically a UNDP Programme Officer. Final signature confirms they have "checked" to ensure that the SESP is adequately conducted.
Jihan Seoud		
Programme Manager		

QA Approver			
DocuSigned by: 4C17B57AEAA5467 Mohammed Salih	01-A	ıg-2022	UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD), Deputy Resident Representative (DRR), or Resident Representative (RR). The QA Approver cannot also be the QA Assessor. Final signature confirms they have "cleared" the SESP prior to submittal to the PAC.
Deputy Resident Representative			
PAC Chair			
PocuSigned by: Kelanie Hurz	02-A	ug-2022	UNDP chair of the PAC. In some cases PAC Chair may also be the QA Approver. Final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC.
Melanie Hauenstein			
Resident Representative			

SESP Attachment 1. Social and Environmental Risk Screening Checklist

	klist Potential Social and Environmental <u>Risks</u>	
Temp risk c	<u>RUCTIONS</u> : The risk screening checklist will assist in answering Questions 2-6 of the Screening late. Answers to the checklist questions help to (1) identify potential risks, (2) determine the overall ategorization of the project, and (3) determine required level of assessment and management ures. Refer to the <u>SES toolkit</u> for further guidance on addressing screening questions.	
	arching Principle: Leave No One Behind an Rights	Answer (Yes/No)
P.1	Have local communities or individuals raised human rights concerns regarding the project (e.g. during the stakeholder engagement process, grievance processes, public statements)?	No
P.2	Is there a risk that duty-bearers (e.g. government agencies) do not have the capacity to meet their obligations in the project?	No
P.3	Is there a risk that rights-holders (e.g. project-affected persons) do not have the capacity to claim their rights?	No
Would	d the project potentially involve or lead to:	
P.4	adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	No
P.5	inequitable or discriminatory impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups, including persons with disabilities? ⁴	No
P.6	restrictions in availability, quality of and/or access to resources or basic services, in particular to marginalized individuals or groups, including persons with disabilities?	No
P.7	exacerbation of conflicts among and/or the risk of violence to project-affected communities and individuals?	No
Gend	er Equality and Women's Empowerment	
P.8	Have women's groups/leaders raised gender equality concerns regarding the project, (e.g. during the stakeholder engagement process, grievance processes, public statements)?	No
Would	d the project potentially involve or lead to:	
P.9	adverse impacts on gender equality and/or the situation of women and girls?	No
P.10	reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	No
P.11	limitations on women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being	No
P.12	exacerbation of risks of gender-based violence?	No
	For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc.	
	inability and Resilience: Screening questions regarding risks associated with sustainability and nce are encompassed by the Standard-specific questions below	

⁴ Prohibited grounds of discrimination include race, ethnicity, sex, age, language, disability, sexual orientation, gender identity, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender and transsexual people.

Ассо	untability	
Would	d the project potentially involve or lead to:	
P.13	exclusion of any potentially affected stakeholders, in particular marginalized groups and excluded individuals (including persons with disabilities), from fully participating in decisions that may affect them?	No
P.14	grievances or objections from potentially affected stakeholders?	No
P.15	risks of retaliation or reprisals against stakeholders who express concerns or grievances, or who seek to participate in or to obtain information on the project?	No
Proje	ct-Level Standards	
Stand	lard 1: Biodiversity Conservation and Sustainable Natural Resource Management	
Woul	d the project potentially involve or lead to:	
1.1	adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services? For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes	No
1.2	activities within or adjacent to critical habitats and/or environmentally sensitive areas, including (but not limited to) legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	No
1.3	changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)	No
1.4	risks to endangered species (e.g. reduction, encroachment on habitat)?	No
1.5	exacerbation of illegal wildlife trade?	No
1.6	introduction of invasive alien species?	No
1.7	adverse impacts on soils?	No
1.8	harvesting of natural forests, plantation development, or reforestation?	No
1.9	significant agricultural production?	No
1.10	animal husbandry or harvesting of fish populations or other aquatic species?	No
1.11	significant extraction, diversion or containment of surface or ground water? For example, construction of dams, reservoirs, river basin developments, groundwater extraction	No
1.12	handling or utilization of genetically modified organisms/living modified organisms?5	No
1.13	utilization of genetic resources? (e.g. collection and/or harvesting, commercial development) ⁶	No
1.14	adverse transboundary or global environmental concerns?	No
Stand	lard 2: Climate Change and Disaster Risks	
Woul	d the project potentially involve or lead to:	
2.1	areas subject to hazards such as earthquakes, floods, landslides, severe winds, storm surges, tsunami or volcanic eruptions?	No

⁵ See the <u>Convention on Biological Diversity</u> and its <u>Cartagena Protocol on Biosafety</u>.

⁶ See the <u>Convention on Biological Diversity</u> and its <u>Nagoya Protocol</u> on access and benefit sharing from use of genetic resources.

2.2	outputs and outcomes sensitive or vulnerable to potential impacts of climate change or disasters? For example, through increased precipitation, drought, temperature, salinity, extreme events, earthquakes	No
2.3	increases in vulnerability to climate change impacts or disaster risks now or in the future (also known as maladaptive or negative coping practices)? For example, changes to land use planning may encourage further development of floodplains,	No
	potentially increasing the population's vulnerability to climate change, specifically flooding	
2.4	increases of greenhouse gas emissions, black carbon emissions or other drivers of climate change?	No
Stand	dard 3: Community Health, Safety and Security	
Would	d the project potentially involve or lead to:	
3.1	construction and/or infrastructure development (e.g. roads, buildings, dams)? (Note: the GEF does not finance projects that would involve the construction or rehabilitation of large or complex dams)	No
3.2	air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation?	No
3.3	harm or losses due to failure of structural elements of the project (e.g. collapse of buildings or infrastructure)?	No
3.4	risks of water-borne or other vector-borne diseases (e.g. temporary breeding habitats), communicable and noncommunicable diseases, nutritional disorders, mental health?	No
3.5	transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	No
3.6	adverse impacts on ecosystems and ecosystem services relevant to communities' health (e.g. food, surface water purification, natural buffers from flooding)?	No
3.7	influx of project workers to project areas?	No
3.8	engagement of security personnel to protect facilities and property or to support project activities?	No
Stand	lard 4: Cultural Heritage	
Would	d the project potentially involve or lead to:	
4.1	activities adjacent to or within a Cultural Heritage site?	No
4.2	significant excavations, demolitions, movement of earth, flooding or other environmental changes?	No
4.3	adverse impacts to sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	No
4.4	alterations to landscapes and natural features with cultural significance?	No
4.5	utilization of tangible and/or intangible forms (e.g. practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?	No
Stand	dard 5: Displacement and Resettlement	
Would	d the project potentially involve or lead to:	
5.1	temporary or permanent and full or partial physical displacement (including people without legally recognizable claims to land)?	No
5.2	economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	No

5.3	risk of forced evictions? ⁷	
5.4	impacts on or changes to land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?	No
Stand	lard 6: Indigenous Peoples	
Would	d the project potentially involve or lead to:	
6.1	areas where indigenous peoples are present (including project area of influence)?	No
6.2	activities located on lands and territories claimed by indigenous peoples?	No
6.3	impacts (positive or negative) to the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)? If the answer to screening question 6.3 is "yes", then the potential risk impacts are considered significant and the project would be categorized as either Substantial Risk or High Risk	No
6.4	the absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	No
6.5	the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No
6.6	forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources? Consider, and where appropriate ensure, consistency with the answers under Standard 5 above	No
6.7	adverse impacts on the development priorities of indigenous peoples as defined by them?	No
6.8	risks to the physical and cultural survival of indigenous peoples?	No
6.9	impacts on the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	No
Stand	Consider, and where appropriate ensure, consistency with the answers under Standard 4 above. lard 7: Labour and Working Conditions	
	d the project potentially involve or lead to: (note: applies to project and contractor workers)	
	working conditions that do not meet national labour laws and international commitments?	No
7.2	working conditions that may deny freedom of association and collective bargaining?	No
7.3	use of child labour?	No
7.4	use of forced labour?	No
7.5	discriminatory working conditions and/or lack of equal opportunity?	No
7.6	occupational health and safety risks due to physical, chemical, biological and psychosocial hazards (including violence and harassment) throughout the project life-cycle?	No
Stand	lard 8: Pollution Prevention and Resource Efficiency	
Would	d the project potentially involve or lead to:	

⁷ Forced eviction is defined here as the permanent or temporary removal against their will of individuals, families or communities from the homes and/or land which they occupy, without the provision of, and access to, appropriate forms of legal or other protection. Forced evictions constitute gross violations of a range of internationally recognized human rights.

8.1	the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	No
8.2	the generation of waste (both hazardous and non-hazardous)?	No
8.3	the manufacture, trade, release, and/or use of hazardous materials and/or chemicals?	No
8.4	the use of chemicals or materials subject to international bans or phase-outs? For example, DDT, PCBs and other chemicals listed in international conventions such as the <u>Montreal Protocol</u> , <u>Minamata Convention</u> , <u>Basel Convention</u> , <u>Rotterdam Convention</u> , <u>Stockholm</u> <u>Convention</u>	No
8.5	the application of pesticides that may have a negative effect on the environment or human health?	No
8.6	significant consumption of raw materials, energy, and/or water?	No

ANNEX II – Risk Analysis

OFFLINE RISK LOG

Project Title: Operation of the Zahle Wastewater Treatment Facility

Award ID: 00106573 Project ID

Project ID: 00132176

#	Description	Date Identified	Туре	Impact & Probability (1: low to 5: high)	Countermeasures / Mngt response	Owner	Submitted, updated by	Last Update	Status
1	Lack of commitments from Lebanese authorities toward water and wastewater sectors reforms and the inability to implement tariff restructuring and fee collection system	28 Feb 2022	Political & Financial	Unable to sustainably operate of the WWTP after the project period. P = 5 I = 4	 Continuous and coordinated advocacy toward the sector reform. However, if the reforms do not take place, the additional fund and the extension of the project will be necessary to continue the operation of the Zahle WWTP beyond the project duration. UNDP to coordinate with other international donors (including AFD and others) and central government (MoEW, CDR and BWE) to ensure the financing is secured for the long-term operation of the facility. 	Project Manager	Programme Manager		
2	Failure to get permits for sustainable sludge treatment system.	28 Feb 2022	Regulatory	Unable to manage sludge from the WWTP P = 4 I = 4	 Ensure that the short-term measure covers the contractual period and may be extended beyond that. Liaise closely between MoEW/BWE as owners of the facility and MoE and/or relevant ministries to receive required permits. 	Project Manager	Programme Manager		
3	Industrial area feeding its wastewater into network and/or increase in chemical contamination of the	28 Feb 2022	Environmental	Unable to manage hazardous and chemical wastes P = 2 I = 2	 Report to designated ministries and urge industries to conduct required pre-treatments. 	Project Manager	Programme Manager		

						1				
	wastewater inflow.									
4	Bekaa Water Establishment still does not have the financial nor human resources to operate the facility upon completion of projects. Not enough qualified staff at BWE available to be trained for the operation of the facility	28 2022	Feb	Political & Financial	Unable to sustainably operate the WWTP after the project period. P = 4 I = 3	•	Make prior arrangements with MoEW to ensure that a public entity will manage the operation after completion of project.			
5	Increase in electric blackouts and/or increase in electricity tariffs.	28 2022	Feb	Operational	Increased cost for the operation of the WWTP P = 3 I = 2	•	Account for these issues in the budgeting as contingency measures. Should blackouts be more than 50% of the time, the project budget would not be sufficient to cover the full O&M of the facility and would need to be reported to the Steering Committee/Project Board to find solutions.	Project Manager	Project Manager	
6	Increase in quantities of wastewater Wastewater will receive more than the maximum capacity of the plant.	28 2022	Feb	Operational	Unable to treat the incoming wastewater P = 2 I = 2	•	The facility is currently operating at half its capacity. Accordingly, the facility can work at full capacity with two lines. If seasonal peaks they can be accommodated. However, if they annual daily average are to exceed the capacity, then notify MoEW and CDR to stop the expansion of networks.	Project Manager	Project Manager	

	1					
7	Failing to import spare parts in a timely manner.	28 2022	Feb	Operational	Unable to sustainably operate of the WWTP after the project period. P = 2 $I = 2$	• Ensure that key spare parts are always available on site in excess quantities.
8	Legal challenges in handing over the WWTP to the BWE. Handing over from CDR to BWE/MoEW not occurring.	28 2022	Feb	Regulatory & Political	Unable to handover the WWTP to the BWE P = 1 I = 3	 Initiate discussions from the start of the project on the handover of the facility at the end of the project. An agreement should be entered into between CDR and BWE/MoEW where each party undertakes its responsibility for the handing over of the plant. Written authorisation from the Government of Lebanon to allow UNDP to temporarily operate and maintain the WWTP for the duration of the project with funding from Italy.
Cor	textual Risks					
9	Political instability and security situation in the country can slow down or stop the project activities.	28 2022	Feb	Political	P = 2 I = 2	 Revision of project timeline and activities will be undertaken to ensure that project activities continue to the extent possible. Coordination with UN Security Department will be undertaken continuously.
10	Financial crisis facing Lebanon, including the capital control by the banks.	28 2022	Feb	Financial	P = 2 I = 1	 UNDP is taking measures to adjust contractual payment terms to contractors to try to overcome the financial challenges faced at the national level as a result of capital control measures. Furthermore, given that payments from UNDP are considered "fresh financing" to the country, more flexibility is provided

					 by the banks to the Contractors. Risk of very high offer received for O&M to compensate for the crisis is also probably. Bidding documents should be as clear as possible and rebidding will be possible if prices received are overbudget.
11	COVID-19 pandemic including risk of delays due to lockdowns on site.	28 Feb 2022	Social	P = 2 I = 1	Ensure the provision of personal protective equipment (PPE) for the workers and other preventive measures at the sites and abiding by national preventive guidelines.
12	Social unrest could lead to challenges in accessing sites and completing the works on time	28 Feb 2022	Social	P = 1 I = 1	Coordination with UN Department of Safety and Security to determine best ways to access sites and to continue delivering without taking (or exposing anyone to) unnecessary risks.
13	Municipality of Zahle stops/refuses to receive the sludge (either in the interim until during the tendering process for the solar dryer or after the dryer is installed) or requests higher than originally agreed upon tipping fee.	28 Feb 2022	Political & Operation	P = 2 I = 3	 Liaise closely with Zahle Municipality to ensure it will accept sludge disposal in its landfill. Re-negotiate with all partners to overcome this situation and to find viable solution for sludge.

ANNEX III - Project Board Terms of Reference and TORs of key management positions.

UNDP Standard Terms of Reference (ToR) for the Operation of the Zahle Wastewater Treatment Facility Project Number: 00106573 – Output Number 00106573

I. Background

All UNDP projects must be governed by a multi-stakeholder board or committee established to review performance based on established monitoring and evaluation metrics and high-level implementation issues to ensure quality delivery of results. For the purpose of this ToR and to ensure standardization, henceforth, as regards project documentation. The Project Board is the most senior, dedicated oversight body for a UNDP 'Development Project', which is defined in the PPM as an instrument where UNDP "Delivers outputs where UNDP has accountability for design, oversight and quality assurance of the entire project." This project also has a Project Coordination Committee that was a requirement of the donor and agreed by UNDP. The functions of the PCC are described in the project document and complement, but do not overlap, with those of the Project Board.

II. Duties and Responsibilities

The two prominent (mandatory) roles of the Project Board or Project Steering Committee are as follows:

1) High-level oversight of the project This is the primary function of the Project Board. The Project Board reviews evidence of project performance based on monitoring, evaluation and reporting, including progress reports, monitoring missions' reports, evaluations, risk logs, quality assessments, and the combined delivery report. The Project Board is the main body responsible for taking corrective actions as needed to ensure the project achieves the desired results. And its function includes oversight of annual (and as-needed) assessments of any major risks to the programme or project, and related decisions/agreements on any management actions or remedial measures to address them effectively.

The Project Board also carries the role of quality assurance of the project taking decisions informed by, among other inputs, the project quality assessment. In this role the Board is supported by the quality assurer, whose function is to assess the quality of the project against the corporate standard criteria. This function is performed by a UNDP programme or monitoring and evaluation officer to maintain independence from the project manager regardless of the project 's implementation modality.

The Project Board reviews updates to the project risk log.

2) Approval of key project execution decisions The Project Board has an equally important, secondary role in approving certain adjustments above provided tolerance levels, including substantive programmatic revisions (major/minor amendments), budget revisions, requests for suspension or extension and other major changes (subject to additional funding partner/donor requirements).

The Project Board is responsible for making management decisions by consensus when required, including the approval of project plans and revisions, and the project manager's tolerances. The Project Board approves annual work plans and reviews updates to the project risk log.

Within the overall governance and management arrangements of the project, the role of the Project Board as regards these two key functions ('High-level oversight of the project' and 'Approval of key project execution decisions') is distinct from the roles of entities involved in the implementation of the project, namely the implementing partner (IP), responsibilities parties (if applicable), service providers and project staff.

Specific responsibilities of the Project Board include the following:

- Provide overall guidance and direction to the project, ensuring it remains within any specified constraints, and promote gender equality and social inclusion (LNOB) in the project implementation;
- Review project performance based on monitoring, evaluation and reporting, including standard quality assurance checks, progress reports, risk logs, spot checks/audit reports and the combined delivery report;
- Address any high-level project issues as raised by the project manager and project assurance;
- Provide guidance on emerging and/or pressing project risks and agree on possible mitigation and management actions to address specific risks (including ensuring compliance with UNDP's Social and Environmental Standards, Fraud/corruption, Sexual Exploitation and Abuse and Sexual Harassment);

- Agree or decide on project manager's tolerances as required, within the parameters set by UNDP (<u>Manage Change</u> in the PPM) and the donor, and provide direction and decisions for exceptional situations when the project manager's tolerances are exceeded;
- Advise on major and minor amendments to the project within the parameters set by UNDP and the donor;
- Agree or decide on a project suspension or cancellation, if required; (note that for GEF and GCF projects it is UNDP that decides to suspend or cancel and project and the [Project Board or Project Steering Committee] is informed/consulted only).
- Provide high-level direction and recommendations to the project management unit to ensure that the agreed deliverables are produced satisfactorily according to plans.
- Receive and address project level grievance, including overseeing whatever specific compliance and stakeholder response (or grievance) mechanisms have been put in place so that individuals and communities potentially affected by the project have access to effective mechanisms and procedures for raising concerns about the social and environmental performance of the project.
- Engage in the low value grant selection process where there is no Grant Selection Committee, as guided by the <u>Low</u> <u>Value Grants UNDP Operational Guide</u>.

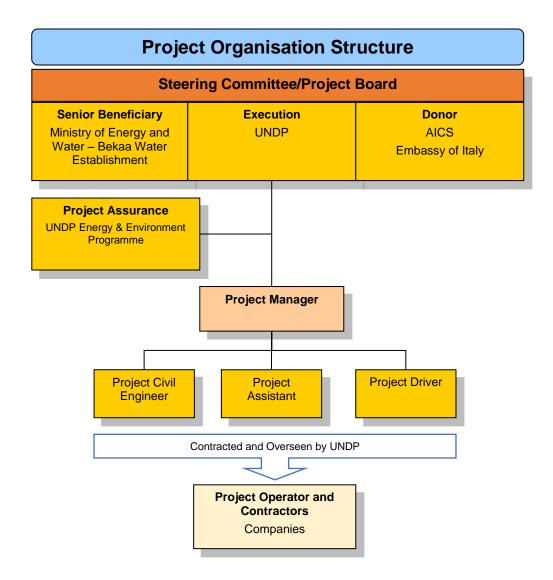
Additional responsibilities of the Project Board can include, but are not limited to, the following:

- Ensure coordination between the various donors and government-funded projects and programmes;
- Report to relevant inter-ministerial bodies or higher-level oversight bodies;
- Ensure coordination with multiple government agencies and their participation in project activities;
- Track and monitor co-financing for this project;
- Appraise the annual project implementation report, including the quality assessment rating report;
- Ensure commitment of human resources to support project implementation, arbitrating any issues within the project;
- Act as an informal consultation mechanism for stakeholders;
- Approve the Project Inception Report, Mid-term Review and Terminal Evaluation reports and corresponding management responses;
- Review the final project report package during an end-of-project review meeting to discuss lessons learned and
 opportunities for scaling up;
- Providing guidance or reporting protocols to technical committees or sub-bodies reporting to the Board (if applicable)

III. Composition of the Project Board

The role of every formal Project Board member must correspond to one of these three roles and be identified accordingly in the project documentation.

Diagram 2 – Project Organization Structure



The Project Board members for this project are the following:

- Project Director/Executive: Given that this project is implemented using Direct Implementation Modality (DIM), UNDP is the Project Executive. The Project Executive is the UNDP Resident Representative or the UNDP Deputy Resident Representative.
- 2) **Development Partner:** as the donor of the project, the Government of Italy is the Development Partner Representative. The Development Partner(s) representative(s) is: AICS.

IV. Standard Project Board Protocols

The Project Board must meet one time annually at a minimum. It is recommended that the timing of board meetings be agreed upon in advance and corresponds to key project reporting or work planning milestones.

Project Board members cannot receive remuneration from project funds for their participation in the Board.

All Project Board must have rules for quorum and documentation/minuting of board decisions. All board decisions and minutes should be kept by the project management unit and UNDP. Guidelines on decisions taken in between board meetings or virtually should be clearly elaborated in the Terms of Reference (ToR) of the Project Board

Unless otherwise specified, Project Board decisions are made by unanimous consensus. If a consensus cannot be reached within the Board, the final decision shall rest with the UNDP representative on the Project Board or a UNDP staff member with delegated authority as the programme manager.⁸

It is required that as per internationally recognized professional standards and principles of sound governance, conflicts of interest affecting board members in performing their duties must be formally disclosed if not avoidable. Where a board member has a specific personal conflict of interest with a given matter before the board, he/she must recuse oneself from their participation in a decision. No board member can vote or deliberate on a question in which he/she has a direct personal or pecuniary interest not common to other members of the board.

All board members should be presented with a ToR for the Project Board which will include the responsibilities already outlined and indicate agreed board practices and logistics.

V. Standard Outputs of Project Board Meetings

In its oversight function, the Project Board will (at a minimum) review and assess the following project-related evidence at each meeting:

- Assessment of project progress to date against project output indicators (as documented in the project document results framework)
- Approval/review of annual work plans
- Assessment of the relevant Monitoring & Evaluation mechanisms, including all evaluations⁹
- Review and assessment of the Project Risk Log (with updating/amendments as needed)
- Assessment of project spending, based on a review of the combined delivery report
- Review of required resources versus available funding (if applicabel) and steps taken to reduce funding gap identified at the project design stage

This will be in addition to the review and approval of any required project execution decisions.

The output of every Project Board will be a written record (minutes) that captures the agenda and issues discussed and the agreed upon action items and decisions (if applicable). Each report should clearly document the members attending the meeting (as well as all participants in the meeting) and the modality used to agree on a certain action or decision (whether formal voting or no-objection or other mechanism). All records of board meetings should be documented and kept by UNDP in their quality assurance function (see next section).

VI. Support Functions to the Project Board

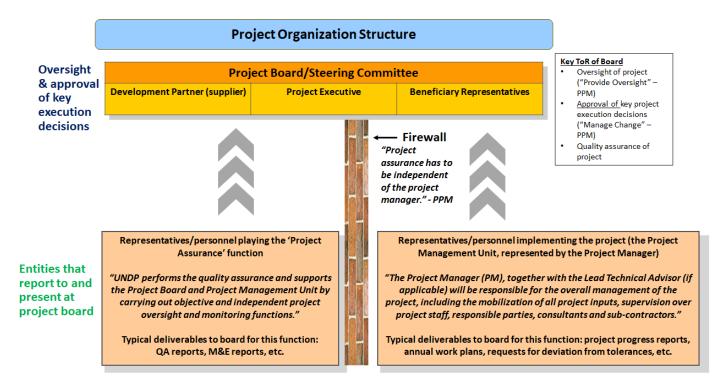
There are two main entities/functions outside the Project Board structure whose role is to report to the Project Board and support board members in effectively fulfilling their roles: project assurance and project management.

The diagram below explains the primary role of these two entities in the context of their support to Board operations. A description of these two entities follows.

Diagram 3 – Standard Figure of Project Organization Structure – Board Support Entities

⁸ UNDP has this special right since the ultimate legal and fiduciary accountability for a UNDP project, irrespective of modality, rests with UNDP and UNDP must (in line with its obligations to donors and to the Executive Board) be able to ensure that no action is taken by any body in a UNDP project that contravenes UNDP rules and regulations.

⁹ Including audit reports and spot checks.



<u>Project Assurance</u>: Project assurance is the responsibility of each Project Board member; however, UNDP has a distinct assurance role for all UNDP projects in carrying out objective and independent project oversight and monitoring functions. UNDP performs quality assurance and supports the Project Board (and Project Management Unit) by carrying out objective and independent project oversight and monitoring functions, including applying UNDP's social and environmental management system to ensure the SES are applied through the project cycle. The Project Board cannot delegate any of its quality assurance responsibilities to the project manager. <u>Project assurance is totally independent of project execution</u>.

A designated representative of UNDP playing the project assurance role is expected to attend all Project meetings and support board processes as a non-voting representative. It should be noted that while in certain cases UNDP's project assurance role across the project may encompass activities happening at several levels (e.g. global, regional), at least one UNDP representative playing that function must, as part of their duties, <u>specifically attend</u> board meetings and provide board members with the required documentation required to perform their duties.

The UNDP representative playing the main project assurance function is the Energy & Environment Programme Manager

Project Support, this function is often covered by the Project Management Unit: The Project Manager (PM) (referred to as Project Coordinator in the original project proposal with the donor),) is the senior most representative of the Project Management Unit (PMU) and is responsible for the overall management of the project on behalf of the Implementing Partner, including the mobilization of all project inputs, supervision over project staff, responsible parties, consultants and sub-contractors. The project manager typically presents key deliverables and documents to the Board for review and approval, including progress reports, annual work plans, adjustments to tolerance levels and risk logs.

A designated representative of the PMU is expected to attend all board meetings and present the required progress reports and other documentation needed to support board processes as a non-voting representative.

The primary PMU representative attending board meetings is the Project Manager.

Annex A – Acknowledgement of this ToR by each designated official Project Board member

Note: The form/evidence for this acknowledgement must be included as an annex or codified in other ways (e.g. note to file or minutes of a board meeting)

The formal acknowledgement of the ToR by board members can be done via various procedures, including the following options:

- Having copies of the ToR be signed by each appointed board member at the Appraise and Approve stage (LPAC) and then having all signed copies attached as an annex to the Project Document
- 2) Having the final ToR be signed by each appointed board member at the first project board meeting after Project Document signing with the approvals recorded in the minutes of the meeting

In both cases, the signature or acknowledgement should include the name, title and category of board representation for the person signing

TORs for Project Manager

1. Position Information

Office/Unit/Project	Lebanon Country Office/ Energy and Environment Programme/ Operation of the Zahle Wastewater Treatment Facility				
Title	Project Manager (Specialist)				
Level	NPSA 10				
Duty station (City and Country)	Beirut, Lebanon				
Type (Regular or Short term)	Regular				
Office- or Home-based	Office-Based				
Expected starting date	As soon as possible				
Expected Duration	12 Months				
Position Number	XXX				

2. Office/Unit/Project Description

The Energy and Environment Programme is one of the main areas of focus in UNDP Lebanon; currently implements numerous projects in Lebanon that range in thematic areas from climate change, biodiversity conservation, institutional support, industrial depollution, decentralized renewable energy projects, and solid waste management. The programme also works on the support of host communities in response to the Syrian refugee crisis and is the Social and Environmental Safeguards focal point for the office; therefore, the team also ensures the integration of environmental best practices into the overall implementation strategy of UNDP.

The Government of Italy has funded the construction and operation of the Zahle Wastewater treatment plant under a soft loan. Under this funding a state-of-art facility has been constructed and was put in operation in October 2017. Due to the economic crisis that Lebanon is experiencing since October 2019, the Lebanese Government, and relevant authorities are no longer capable of securing funds to operate the facility. Hence a 1.5-year funding has been secured under a World Bank fund as of March 2021 up to August 2022. Furthermore, the Italian Government expressed its interest in supporting the operation of this facility for two additional years (September 2022 to August 2024).

The objective of this funding is to ensure the sustainable operation of the facility and give time for Lebanese authorities to conduct reforms and introduce relevant cost recovery system to ensure the sustainability of the operation. Additionally, under the operation services capacity building shall be provided to BWE staff to train them on operating the facility to enable them to manage and operate the facility after two years. Furthermore, support MoEW in establishing the required financial mechanisms that would ensure sustainable operations thereafter.

The Project Manager (Specialist) (PM) will be responsible for the overall management of the project, including the mobilization of all project inputs, supervision over project staff, consultants and sub-contractors.

3. Scope of Work

Overall Project Management:

- Manage the overall conduct of the project and plan the activities of the project and monitor progress against the approved workplan to ensure the smooth operation and maintenance of the Zahle Wastewater Treatmetn Plant;
- Execute activities by managing the procured contracting company, personnel, goods and services and trainings, including drafting terms of reference as needed, testing of samples and work specifications, and overseeing all contractors' work;
- Monitor events as determined in the project monitoring plan, and update the plan as required;

- Provide support for completion of assessments required by UNDP, spot checks, and audits;
- Manage requests for the provision of financial resources through funding advances, direct payments, and all other financial and budgetary transactions including the monitoring of financial resources and accounting to ensure the accuracy and reliability of financial reports to the donor;
- Monitor progress, watch for plan deviations, and make course corrections when needed within project board-agreed tolerances to achieve results;
- Ensure that changes are controlled and problems addressed;
- Perform regular progress reporting to the project board as agreed with the board, including measures to address challenges and opportunities;
- Prepare and submit financial reports to UNDP and the donor on a quarterly basis, 6-monthly, and annual basis;
- Manage and monitor the project risks including social and environmental risks initially identified and submit new risks to the Project Board for consideration and decision on possible actions if required; update the status of these risks by maintaining the project risks log;
- Capture lessons learned during project implementation;
- Prepare revisions to the multi-year workplan, as needed, as well as annual and quarterly plans if required;
- Prepare the inception report no later than one month after the inception workshop;
- Ensure that the indicators included in the project results framework are monitored annually and share with UNDP and the Donor in advance of the reporting deadlines;
- Assess major and minor amendments to the project within the parameters set by the project;
- Monitor implementation plans including any environmental and social management plans.

4. Institutional Arrangement

The Project Manager (Specialist) will be working under the overall guidance of the E&E Programme Manager at the UNDP Lebanon Country Office for all the implementation activities related to the project (procurement, recruitment, contract management, security, etc.), while the Energy and Environment Programme team will ensure quality assurance and quality control oversight towards the overall project objectives. The Project Manager (Specialist) will be located at UNDP Country Office and should be willing to commute regularly to Zahle.

5. Competencies

Core			
Achieve Results:	LEVEL 3: Set and align challenging, achievable objectives for multiple projects, have lasting impact		
Think Innovatively:	LEVEL 3: Proactively mitigate potential risks, develop new ideas to solve complex problems		
Learn Continuously:	LEVEL 3: Create and act on opportunities to expand horizons, diversify experiences		
Adapt with Agility:	LEVEL 3: Proactively initiate and champion change, manage multiple competing demands		
Act with Determination:	LEVEL 3: Think beyond immediate task/barriers and take action to achieve greater results		
Engage and Partner:	LEVEL 3: Political savvy, navigate complex landscape, champion inter-agency collaboration		
Enable Diversity and Inclusion:	LEVEL 3: Appreciate benefits of diverse workforce and champion inclusivity		

People Management

UNDP People Management Competencies can be found in the dedicated site.

Cross-Functional & Technical competencies

Thematic Area	Name	Definition
2030 Agenda: Planet	Nature, Climate and Energy: Climate Change Mitigation: Sustainable Infrastructure	Climate Change Mitigation: Sustainable Infrastructure.
Finance	Budget management	Ability to support budgetary aspects of the work planning process, drawing and management of team budgets.
Business Direction & Strategy	Strategic Thinking	 Ability to develop effective strategies and prioritised plans in line with UNDP's objectives, based on the systemic analysis of challenges, potential risks and opportunities; linking the vision to reality on the ground, and creating tangible solutions; Ability to leverage learning from a variety of sources to anticipate and respond to future trends; to demonstrate foresight in order to model what future developments and possible ways forward look like for UNDP.
Business Direction & Strategy	Effective Decision Making	Ability to take decisions in a timely and efficient manner in line with one's authorities, area of expertise and resources.
Business Direction & Strategy	Project management	Ability to plan, organize, prioritize and control resources, procedures and protocols to achieve specific goals.
Business Direction & Strategy	Risk management	Ability to identify and organize action around mitigating and proactively managing risks.
Business Direction & Strategy	Communication	 Ability to communicate in a clear, concise and unambiguous manner both through written and verbal communication; to tailor messages and choose communication methods depending on the audience; Ability to manage communications internally and externally, through media, social media and other appropriate channels.

6. Minimum Qualifications of the Successful NPSA

Min. Education requirements Min. years of relevant work experience	 Master's degree in Civil Engineering, Environmental Engineering or Water or Wastewater Engineering, or other related fields or Bachelor's degree in the related fields with additional 2 years of relevant experience will be given due consideration in lieu of Master's degree. Minimum 5 years with a Master's Degree or 7 years with a Bachelor's degree of progressive relevant experience in project management and
	waste water management.
Required skills	 Strong leadership; Adaptability and flexibility; Commitment and motivation; Ethics and integrity; Planning and organizing; Professionalism; Working in teams.
Desired skills in addition to the competencies covered in the Competencies section	 Knowledge and experience in the topics related to wastewater challenges in Lebanon; Site supervision and/or contracting experience in the relevant field; Previous experience in water and/or wastewater projects.
Required Language(s)	Fluency in English and Arabic.
Professional Certificates	Not Applicable.