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ANNEX V

to the Commission Implementing Decision on the Annual Action Plan in Favour of Lebanon 2023

Action Document for “Sustainable energy transition programme in Lebanon”

ANNUAL ACTION PLAN

This document constitutes the annual work programme in the sense of Article 110(2) of the Financial Regulation, and action plan in the sense of Article 23(2) of NDICI-Global Europe Regulation.

1. SYNOPSIS

1.1. Action Summary Table

1. Title OPSYS Basic Act	Sustainable energy transition programme in Lebanon Annual Action Plan in Favour of Lebanon 2023 OPSYS business reference: ACT-61952 ABAC Commitment level 1 number: JAD.1167004 Financed under the Neighbourhood, Development and International Cooperation Instrument (NDICI-Global Europe).
2. Economic and Investment Plan (EIP)	Yes
EIP Flagship	Flagship 10 “Energy transition and energy security”
3. Team Europe Initiative	No
4. Beneficiary of the action	The action shall be carried out in Lebanon
5. Programming document	Multi-Annual Indicative Programme for Lebanon 2021-2027 (MIP) ¹
6. Link with relevant MIP(s) objectives/expected results	Priority Area 3 Green and Sustainable recovery Specific Objective: Energy security and transition to energy and resource efficiency improved Expected result: Increased quality and access to sustainable energy solutions for MSMEs

¹ C(2022)8363 final of 24/11/2022

PRIORITY AREAS AND SECTOR INFORMATION				
7. Priority Area(s), sectors	Priority Area 3 Green and Sustainable recovery 231 Energy Policy 232 Energy generation, renewable sources 321 Industry			
8. Sustainable Development Goals (SDGs)	Main SDG: 7. Affordable and Clean Energy Other significant SDGs and where appropriate, targets: 5. Gender equality and empowerment of women and girls 9. Industry, innovation and infrastructure 12. Responsible Consumption and Production 13. Climate Action			
9. DAC code(s)	23210 – Energy generation, renewable sources – multiple technologies-30% 32130 – Small and Medium-sized Enterprises (SMEs) development-30% 23183 – Energy conservation and demand-side efficiency-30% 32161– Agro-industries-10%			
10. Main Delivery Channel	40000 Multilateral organisations			
11. Targets	<input type="checkbox"/> Migration <input checked="" type="checkbox"/> Climate <input type="checkbox"/> Social inclusion and Human Development <input checked="" type="checkbox"/> Gender <input type="checkbox"/> Biodiversity <input type="checkbox"/> Human Rights, Democracy and Governance			
12. Markers (from DAC form)	General policy objective	Not targeted	Significant objective	Principal objective
	Participation development/good governance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Aid to environment	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Gender equality and women's and girl's empowerment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Reproductive, maternal, new-born and child health	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Disaster Risk Reduction	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Inclusion of persons with Disabilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Nutrition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	RIO Convention markers	Not targeted	Significant objective	Principal objective

13. Internal markers and Tags

Biological diversity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Combat desertification	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Climate change mitigation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Climate change adaptation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Policy objectives	Not targeted	Significant objective	Principal objective
EIP	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
EIP Flagship	YES <input checked="" type="checkbox"/>		NO <input type="checkbox"/>
Tags	YES		NO
transport	<input type="checkbox"/>		<input checked="" type="checkbox"/>
energy	<input checked="" type="checkbox"/>		<input type="checkbox"/>
environment, climate resilience	<input checked="" type="checkbox"/>		<input type="checkbox"/>
digital	<input type="checkbox"/>		<input checked="" type="checkbox"/>
economic development (incl. private sector, trade and macroeconomic support)	<input checked="" type="checkbox"/>		<input type="checkbox"/>
human development (incl. human capital and youth)	<input type="checkbox"/>		<input checked="" type="checkbox"/>
health resilience	<input type="checkbox"/>		<input type="checkbox"/>
migration and mobility	<input type="checkbox"/>		<input checked="" type="checkbox"/>
agriculture, food security and rural development	<input type="checkbox"/>		<input checked="" type="checkbox"/>
rule of law, governance and public administration reform	<input type="checkbox"/>		<input checked="" type="checkbox"/>
other	<input type="checkbox"/>		<input checked="" type="checkbox"/>
Digitalisation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tags	YES		NO
digital connectivity	<input type="checkbox"/>		<input checked="" type="checkbox"/>
digital governance	<input type="checkbox"/>		<input checked="" type="checkbox"/>
digital entrepreneurship	<input type="checkbox"/>		<input checked="" type="checkbox"/>
digital skills/literacy	<input type="checkbox"/>		<input checked="" type="checkbox"/>
digital services	<input type="checkbox"/>		<input checked="" type="checkbox"/>
<u>Connectivity</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tags	YES		NO
digital connectivity	<input type="checkbox"/>		<input checked="" type="checkbox"/>
energy	<input checked="" type="checkbox"/>		<input type="checkbox"/>
transport	<input type="checkbox"/>		<input checked="" type="checkbox"/>

	health	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	education and research	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Migration	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Reduction of Inequalities	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	COVID-19	<input checked="" type="checkbox"/>	<input type="checkbox"/>
BUDGET INFORMATION			
14. Amounts concerned	Budget line(s) (article, item): 14.020110 – Southern Neighbourhood Total estimated cost: EUR 11 000 000 Total amount of EU budget contribution: EUR 11 000 000		
MANAGEMENT AND IMPLEMENTATION			
15. Implementation modalities (management mode and delivery methods)	Project modality Indirect management with the entity(ies) to be selected in accordance with the criteria set out in section 4.3.1		

1.2. Summary of the Action

The Action will respond to the ongoing electricity crisis in Lebanon through promoting the transition to renewable energy and energy efficiency in the private sector in line with Priority 3 “Green and sustainable recovery” of the Multi-Annual Indicative Programme 2021-2027 for Lebanon.

The Action will support innovation and sustainable energy transition in the private sector by providing technical assistance and limited grant co-financing of renewable energy and energy efficiency equipment to industries.

This action will encourage renewable energy and energy efficiency investments by SMEs while avoiding creating market distortions, considering the revenue generating nature of these investments. The priority will be given to bankable companies that, given the current state of the Lebanese banking sector, are not in a position to access traditional financing.

It is proposed to intensify the ongoing EU support by developing an integrated approach of both energy efficiency and small-scale renewable energy measures for SMEs, by performing energy audits to determine cost-efficient measures to be applied. In addition to the renewable and energy efficiency investments, accompanying measures will be implemented to raise awareness about energy savings, ensure the sustainability of the installations, maintenance and behavioural changes of users.

By supporting an integrated approach (i.e. renewable energy and energy efficiency measures) in the private sector, the EU will also support energy service companies to ensure quality installation, training, maintenance and behavioural changes based on lessons learnt from our current support programmes. In addition to providing cheaper and renewable energy, the action will significantly reduce air pollution, greenhouse gas emissions, maintain and create sustainable jobs.

The underlying intervention logic for this action is that the activities and outputs foreseen will support the private sector to operate better, reduce production costs, be more competitive, cut emissions, be more inclusive and contribute to Lebanon’s needed sustainable energy transition.

The action will contribute to SDG 5 “Gender equality and women empowerment”, SDG 7 “Affordable and Clean Energy”, SDG 9 “Industry, innovation and infrastructure”, SDG 12 “Responsible Consumption and Production” and SDG 13 “Climate Action”.

It will be aligned with European Investment Plan (EIP) and in particular with the objective of targeting socio-economic sectors, in particular sustainable infrastructure (including energy).

1.3. Beneficiary of the action

The action shall be carried out in Lebanon, which is included in the list of ODA recipients.

2. RATIONALE

2.1. Context

Lebanon is facing an unprecedented crisis, which has led to a dramatic economic contraction, a large increase in poverty, unemployment and brain drain. In March 2020, Lebanon defaulted on its Eurobonds which was followed by a deep recession, a dramatic fall in the value of the Lebanese currency and triple digit inflation. The deteriorating economic situation has hit the public sector to an extent that it is now visibly disintegrating. Public authorities lack the necessary funds to maintain their operations and to pay their staff more than symbolic salaries. The COVID-19 pandemic and the August 2020 port of Beirut explosion have compounded the crisis, while the Russia's unprovoked and unjustified military aggression against Ukraine is exacerbating pressures on inflation and straining further food and fuel supplies. Devastating earthquakes in Türkiye and Syria multiplied the psychological impact of crises in Lebanon, adding further strains on Syrian refugees.

The crisis has had devastating effects on the country's economy and its people, resulting in a massive impoverishment of the middle classes. The public sector has been hit particularly hard with the bulk of the labour force still paid in Lebanese lira, suffering from plummeting purchasing power. Thousands of highly qualified civil servants are leaving for better paid jobs in the private sector or migrating in search of better opportunities.

The current economic crisis in Lebanon is a result of a complex set of factors, including political instability, corruption, and mismanagement of public finances. The economic contraction has resulted in a sharp increase in unemployment, poverty, and inflation, making it difficult for the government to deliver essential services and for the people to access basic necessities. In addition, the 2020 default on public debt cut Lebanon's access to financial markets. In 2021, the devaluation of the national currency against the US dollar accelerated, affecting dramatically an economy highly dependent on imports. The Central Bank and the banking sector severely restricted access to people's savings and limited cash withdrawals. Subsidies (food, gasoline, medications) were lifted abruptly. Lebanon's economy contracted by 10.5% in 2021, the highest contraction amongst 193 countries globally, and is estimated to further contract by 5.2% in 2022, with real GDP more than halved over the span of 4 years. This devastating contraction reflects the near complete destruction of an economy and a GDP shrinking to 21.8 billion USD.

The post-war heavily subsidised electricity system has never provided full-time electricity. The Lebanese power stations owned by Electricité du Liban (EDL) run on imported polluting fuel and rely on an outdated transmission and distribution system where only 60 % of electricity produced is actually delivered, billed and collected, as the remainder is lost for technical (13%) and non-technical (27%) reasons². The electricity sector is at the heart of a financially unsustainable post-war power-sharing system and has contributed to around 46 % of the Lebanese public debt.

EDL's unsustainable model suffers from high production cost, artificially cheap tariffs, low tariff collection rates, poor governance and lack of transparency. Since the summer of 2021, EDL has only produced up to 2-3 hours of electricity per day, forcing households and businesses to increase their reliance on privately owned, expensive and polluting diesel generators. This led to a massive shift to renewable energy (mostly photovoltaic

² https://energyandwater.gov.lb/mediafiles/articles/doc-100778-2022_03_31_10_22_46.pdf

panels) from households and private companies who could afford it (from an average of 100 MW installed capacity in 2020 to an estimated 450 MW installed at end of 2022)³.

The electricity deals signed in 2022 with Egypt (for the purchase of natural gas), Jordan (for the purchase of Jordanian-produced electricity) and Syria (to ensure gas and electricity transmission into Lebanon) are yet to materialise given that the necessary funding backing the deals – a USD 300 million loan by the World Bank - is conditional on reforms that are not yet fully implemented, namely: 1) the audit of Electricité du Liban (EDL), 2) the full establishment of its newly announced electricity regulatory authority (ERA) and 3) the recovering of provision costs through collection. Progress on these reforms has been limited, with the establishment of a new tariff in November 2022, the launch of the recruitment of the ERA Board and the signature of an audit contract on EDL (still to be financed).

The World Bank loan also included the provision of USD 10 million for Technical assistance to support the key reform elements and build the capacity of EDL, the Ministry of Energy and Water and the ERA. The World Bank has indeed been accompanying the Ministry of Energy and Water and the Government in adopting an electricity reform plan in April 2022⁴ and has been pushing for its implementation.

Globally and as a result of trade and production disruptions caused by the Russian invasion of Ukraine, energy prices increased by about 60% in 2022. Energy prices are projected to decline 11% in 2023⁵. Despite this moderation, energy prices in 2023 will still be 75 % higher than the past 5 years' average

In Lebanon, although the energy price increase is mostly linked to the depreciation of the lira, the war has pushed them even higher. Diesel (mostly used for generators and transport) which was selling at 315,000 Lebanese lira (LL) per 20 litre gallon in February 2022 - half the Lebanese minimum wage - has already increased almost fivefold since the start of the Russian invasion of Ukraine, selling at 1,626,000 LL per 20 litre gallon (March 2023).

The action is located under the EU Lebanon Partnership Priorities 2016-2020, extended in November 2021⁶ and the external dimension of the European Green Deal, in particular the uptake of sustainable energy solutions, circular economy and green recovery in both the public and private sector. The action is aligned with the Joint Communication “Renewed partnership with the Southern Neighbourhood – A new Agenda for the Mediterranean”, in particular the proposed actions under its Economic and Investment Plan Flagship 10 “Energy transition and energy security”.

The action is in line with the Multiannual Indicative Programme European Union - Lebanon 2021-2027 and its priority areas. The “Reform, Recovery and Reconstruction Framework (3RF)” launched by the European Union, the United Nations and the World Bank in December 2020 in response to the explosion of the Port of Beirut is complementary to the implementation of this action.

The action is also aligned with the Lebanese unconditional National Determined Contribution (NDC) under the Paris Agreement to reduce by 20 % the Greenhouse gas emissions (GHG) by 2030, increase the renewable energy to reach 18% of the electricity produced by 2030 and a 3 % energy efficiency target by 2030.

A draft Renewable Energy law that would enable the development of distributed renewable energy through private purchase agreement and net metering has been approved by the Lebanese Council of Ministers and submitted to Parliament.

³ <https://www.aub.edu.lb/ifi/Documents/solar-energy-development-lebanon-jordan-yemen.pdf>

⁴ https://energyandwater.gov.lb/mediafiles/articles/doc-100778-2022_03_31_10_22_46.pdf

⁵ <https://blogs.worldbank.org/opendata/high-energy-prices-who-most-impacted-and-why#:~:text=Energy%20prices%20have%20risen%20sharply,over%20the%20past%20five%20years.>

⁶ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:22021D2214>

EU added value

The action will support the implementation of the external dimension of the Green Deal by supporting industries to transition to renewable energy and adopt energy efficiency practices. It will support pressing needs to increase access to affordable and reliable electricity and comprehensive energy management solutions (energy efficiency and small-scale renewable systems), reduce air pollution and improve competitiveness.

This action will notably build on the success of CEDRO IV and V to further support innovation and sustainable energy demonstration projects in the industry, relevant regional programmes like Switchmed II, MeetMed or Green Economy Financing Facility. The role of the EU is to promote best practices for sustainable energy and energy efficiency in the industry. This approach is based on existing and successful programmes in Lebanon to accelerate the green energy transition while creating sustainable jobs.

This programme will complement the 2022 Green Agenda for Lebanon Action⁷ (EUR 32 million) that mainly focuses on the public sector, by increasing our support to the energy transition in the private sector.

The complementarity with other donors has been discussed and will be further ensured through donor coordination meetings. A strong coordination will be particularly ensured with Germany, which has supported the sustainable energy strategy of the health sector and intends to finance a large sustainable energy programme.

The Action will also complement the recently established US (USAID) renewable energy fund⁸ for the private sector.

2.2. Problem Analysis

Short problem analysis

The electricity shortage impacts the good functioning of the economy. The public electricity company Electricité du Liban (EDL) only supplies 2-3 hours of electricity per day on average). This is affecting all Lebanese citizens in particular those who cannot access private generators and the proper operation of schools, hospitals, ministries, municipalities and all other public service providers all over the country, and therefore impacting the quality and continuity of public service delivery.

In the private sector, industry is one of the major sectors in Lebanon with potential to drive economic recovery, local employment, and the generation of hard currency that is urgently needed.

However, high costs of energy have had a direct impact on inflating the operational costs of industries, decreasing their competitiveness and even their ability to sustain operations. The high cost of energy reduces the chances of much needed investments such as research, development, and upscaling operations that could generate employment opportunities.

Although the transition from diesel generators to renewable energy systems is a clear priority investment with a short payback time (1-2 years), most companies do not have enough cash flow to finance such an installation.

Identification of main stakeholders and corresponding institutional and/or organisational issues (mandates, potential roles, and capacities) to be covered by the action.

⁷ C(2022) 9309 final Annex I

⁸ <https://lb.usembassy.gov/u-s-ambassador-shea-announces-20-million-energy-fund-to-help-lebanese-entities-finance-renewable-energy-solutions/>

The **Ministry of Energy and Water** is the Ministry in charge notably of the electricity sector and oversees the activities of EDL who has a monopoly over the production, transport and distribution of electricity. The Ministry has very low capacity and is understaffed due to the current crisis.

Since a number of years, the **Lebanese Center of Energy Conservation** (LCEC) has been acting as a de facto Energy agency (it is currently located at the Ministry). The LCEC has been involved in the elaboration of regulation and leading on renewable energy and energy efficiency efforts by piloting and monitoring projects and controlling the compliance of installations.

The Lebanese economy is composed by 95% of Small and Medium Enterprises (SMEs)⁹ that represent 50% of total employment¹⁰. The industrial sector employs 23.6% of the Lebanese workforce (2019 data). Within the larger industrial sector, priority will be given to exporting and import substituting SMEs. The action will focus on SMEs who have difficulty to access financing for renewable energy and energy efficiency investments.

2.3. Lessons Learned

The highly unpredictable political and economic context in the country has highlighted the need to enable some flexibility in the project modalities and implementation. Political instability, frequent government turnover and lack of transparency as regards the utilization of public finances are also at the roots of the strategy to focus on small-scale interventions rather than on large-scale investments. The authorities will nonetheless be closely associated to the project, in order to facilitate implementation, showcase results, as well as providing useful inputs for further policy formulation.

As per the results and lessons learnt from current EU programmes in the sector (RE-FIT¹¹, REESTART¹² and CEDRO V¹³), implementing partners will be requested to devise strategies to ensure the long-term sustainability of the equipment that the project will provide to the public sector, especially when the certification of the installer, equipment and operation and maintenance (O&M) schemes go beyond the project's lifespan. The environmental sustainability of new equipment (e.g., future disposal of solar panels and their batteries etc.) will also be considered through the project.

Complementarity with existing and future EU and other donors' programmes will be ensured to avoid any duplication, and to build on successful programmes.

In that context, the 3RF Electricity working group provides a forum for discussions and exchange with government representative (EDL and Ministry), civil society organisation, donors and financiers to monitor reform progress, better understand needs and limitations and discuss potential synergies on support programmes.

The main lessons learnt lie in the lack of access to financing, since the banking sector has not been operating properly since the beginning of the financial crisis, and International Financial Institutions (IFIs) are reluctant to provide lending due to the high country risks. Through providing technical assistance and limited grant co-financing, this Action will provide incentives to unlock renewable energy investments in the private sector whilst avoiding market distortions considering the revenue generating nature of these investments.

⁹ <https://www.oecd-ilibrary.org/sites/9789264304161-14-en/index.html?itemId=/content/component/9789264304161-14-en>

¹⁰ <https://www.economy.gov.lb/media/11222/smes-in-lebanon-180412-19-website.pdf>

¹¹ <https://www.refitproject.eu/>

¹² <https://www.reestart.eu/>

¹³ <https://www.cedro-undp.org/>

3. DESCRIPTION OF THE ACTION

3.1. Objectives and Expected Outputs

The Overall Objective/Impact of this action is to improve energy security by promoting green energy transition and energy efficiency in Lebanon.

The Specific Objective (Outcome) of this action are to:

1. Increase the competitiveness of industries through sustainable energy, efficiency measures and access to finance

The **Outputs** to be delivered by this action contributing to the corresponding Specific Objective (Outcome) are:

Contributing to Outcome 1 (or Specific Objective 1)

- 1.1 Increased energy savings and electricity supply from small scale renewable energy and energy efficiency installations in industrial and commercial facilities;
- 1.2 Industrial sector's increased access to finance for the installation of renewable energy and energy efficiency equipment.
- 1.3 Sustainable jobs maintained or created with due focus on female employment.

The objectives of the Action contribute to the general objectives of the EIP, which are:

- Contribute to achieving sustainable development in EU partner countries in a coherent and consistent manner.
- Target socio-economic sectors, in particular sustainable infrastructure (including energy, water, transport, information and communications technology, environment, social infrastructure, human capital), and provide finance for micro-, small- and medium-sized enterprises with a particular focus on decent job creation.

3.2. Indicative Activities

Activity Output 1.1

- Energy audit reports for selected private sector beneficiaries
- Implementation of energy efficiency measures for select beneficiaries
- Implementation of solar PV with energy management control (with or without storage capacity) for select beneficiaries
- Implementation of solar thermal system for hot water or steam generation for select beneficiaries

Activity Output 1.2

- Provide limited co-financing grants to SMEs for renewable energy and energy efficiency investments
- Provide Technical Assistance to structure energy efficiency and renewable energy investments

Activity Output 1.3

- Knowledge exchange and networking events between academics and industry
- An incubation and acceleration program for young innovators in sustainable energy
- Support at least 5 new start-ups in sustainable energy
- Sustainable energy skills gap identification report for women engineers
- Key skills development events and workshop based on skills gap identification

3.3. Mainstreaming

Environmental Protection, Climate Change and Biodiversity

Outcomes of the Environmental Impact Assessment (EIA) screening

The EIA screening classified the action as Category C (no need for further assessment). However, activities funded by the action may be legally required to do EIA. It will be ensured that an environmental statement is undertaken for all projects with significant installations.

Outcome of the Climate Risk Assessment (CRA) screening

The CRA screening concluded that this action is no or low risk (no need for further assessment).

Gender equality and empowerment of women and girls

As per OECD Gender DAC codes identified in section 1.1, this action is labelled as G1. This implies that gender equality and empowerment of women will be addressed among the specific objectives and will be mainstreamed in the Action. The Action will promote meaningful and active participation of women in all activities. In particular the action will support the creation of sustainable jobs and trainings with a specific focus on women.

Human Rights

The proposed action is fully aligned to the existing EU human rights strategies and action plans. Human rights concerns are mainstreamed throughout the action and will be taken into consideration in the finalisation of the activities to be drawn up during implementation stage. The action has been designed following a “rights-based” and “leave-no-one behind” approach. It promotes equal participation of all segments of the population in the decision-making at various levels. Consultations with civil society actors were organised and their recommendations are duly reflected in the design of the action.

Disability

As per OECD Disability DAC codes identified in section 1.1, this action is labelled as D1; this implies that Persons with Disabilities’ concerns will be mainstreamed across the Action, in line with the 3RF process which is based on a people-centred and inclusive approach.

Democracy

In a democratic context, security, education, access to energy is provided or guaranteed by the State. This action will reinforce the access to these services and improve quality of life and green job creation.

Conflict sensitivity, peace and resilience

This action takes into consideration conflict-sensitivity and a do-no harm approach, and addresses related priorities and recommendations.

Disaster Risk Reduction

By introducing renewable energy solutions, private entities will be more independent in their energy supply and thus more resilient against unpredictable developments on the energy market.

3.4. Risks and Assumptions

Category	Risks	Likelihood (High/Medium/Low)	Impact (High/Medium/Low)	Mitigating measures
1. Risks related to the External Environment	Damage to installed equipment and material	Medium	High	Memorandums of understanding will be signed with beneficiaries to ensure the protection, operation and maintenance of the equipment installed.
	Natural disasters and environmental degradation	Low	High	Ensure all outdoor equipment can withstand severe weather conditions expected in Lebanon. Ensure that an environmental statement is undertaken for all projects with significant installations. Ensure that equipment and installation are climate resilient (increased temperature and extreme weather events foreseen due to Climate Change).
2- Risks related to planning, processes and systems	Battery disposal and end-of-life photovoltaic panels	High	Medium	All installation that have battery storage systems integration with them will be followed by assessments and guidelines on future sustainable disposal options. Similar guidance will be provided for end-of-life photovoltaic panels
	Ability to effectively operate and maintain installed systems	Medium	Medium	For private sector beneficiaries, the risk is lower given that they would co-fund the systems and are financially better off.
	Delays in import clearance will cause delays to the project	Medium	Medium	Sufficient time will be given for project implementation to account for expected delays in clearance imported system components.
3. Risks related to people and the organisation	Instability in the security situation in the country	Medium	Medium	Isolated security incidences may occur. Appropriate measures will be taken accordingly. These could include the postponement of some of the works on site, and the coordination with the Internal Security Forces and UN Department of Security as needed.

4. Risks related to legality and regularity aspects	Capital controls and the inability to raise capital for investments.	High	High	Implementing partner's support in designing bankable investment plans and identifying co-funding sources. Contractual agreements to be signed between the Implementing partner and the private sector beneficiaries that would overcome banking challenges to the extent possible.
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External Assumptions

The main external assumption is that progress in the energy sector reforms will be limited, therefore the action has been designed in such a way as to be nonetheless successful in spite of the lack of conducive policy and regulatory framework for the sector.

3.5. Intervention Logic

The underlying intervention logic for this action is that the activities and outputs foreseen will support the private sector to operate better, save costs, reduce air pollution, be more competitive, be more inclusive and contribute to Lebanon's needed sustainable energy transition while improving the energy security. With only three hours of daily electricity, companies rely on expensive and heavy polluting diesel generators.

Industries in Lebanon are struggling to survive. Among the myriad of challenges that they are facing is the need to overcome limited fuel supplies and interruptions in the supply chain. Therefore, the possibility to save production costs through resource efficiency and cleaner production, find alternative sources of energy can make a significant difference to companies' survival. The intervention will help companies develop sustainable business models and will make available technical expertise and financial support to co-invest in them.

IF innovation, entrepreneurship and investment in energy efficiency and renewable energy measures for industries are supported, AND financial incentives in the form of limited grant co-financing are put in place whilst avoiding market distortions THEN it will increase Industrial sector's bankability and access to finance for the installation of renewable energy and energy efficiency equipment and result in energy savings and electricity supply from small scale renewable energy and energy efficiency installations in industrial and commercial facilities.

IF there is an increase of energy savings and electricity supply from small scale renewable energy and energy efficiency installations in industrial and commercial facilities THEN it will increase competitiveness of industries through sustainable energy and resource efficiency BECAUSE It will reduce the industry's dependency on expensive and polluting diesel generators, optimise its energy consumption thus reducing air pollution and greenhouse gases emissions and eventually improving its competitiveness. Indeed by optimising their production, companies will save costs, increase their efficiency and competitiveness and be better equipped to compete in local and international markets.

IF competitiveness of industries through sustainable energy and resource efficiency is increased THEN it will improve energy security and to promote transition to energy and resource efficiency in Lebanon BECAUSE it will reduce the dependency of industry on expensive or unreliable source of electricity, increase the renewable energy installed capacity and reduce greenhouse gases and other air pollutants.

3.6. Indicative Logical Framework Matrix

Results	Results chain: Main expected results	Indicators	Baselines (values and years)	Targets (values and years)	Sources of data	Assumptions
Impact	Improve energy security by promoting green energy transition and energy efficiency in Lebanon	<ol style="list-style-type: none"> 1. Amount of fossil fuel import (tons/year) 2. Greenhouse Gas (GHG) emissions avoided (tonnes CO₂ eq/year) with EU support (GEF 2.7) 	All baselines to be defined at inception phase	<ol style="list-style-type: none"> 1. Reduction of annual Fossil Fuel import by at least 4,900 Tons 2. Reduction of GHG by at least 16,000 Tons/year 	Baseline and endline surveys conducted by the EU-funded intervention	<i>Not applicable</i>
Outcome 1	Increase the competitiveness of industries through sustainable energy, efficiency measures and access to finance	1.1 Percentage of savings generated from improved energy efficiency	All baseline values to be defined at inception phase	1.1. Min. 20% savings in energy bill	1.1- Baseline and endline surveys conducted and budgeted by the EU-funded intervention	
Output 1 related to Outcome 1	1.1 Increased energy savings and electricity supply from small scale renewable energy and energy efficiency installations in industrial and commercial facilities	<ol style="list-style-type: none"> 1.1.1 Tons of CO₂ emissions avoided per year with EU support 1.1.2 Energy saved per year (MWh) with EU Support 	To be defined at inception phase	<ol style="list-style-type: none"> 1.1.1 6000 Tons per year 1.1.2 4250 MWh energy 	1.1.1 Report EU-funded intervention's M&E system, Progress reports,	1.1.1 Tons of CO ₂ emissions saved per year with EU support

		1.1.3 Renewable energy generation capacity installed (MW) with EU support (GERF 2.4)		per year saved 1.1.3 At least 3 MW RE installed per year	ROM reviews, evaluations 1.1.2 Baseline and endline surveys conducted and budgeted by the EU-funded intervention 1.1.3 Baseline and endline surveys conducted and budgeted by the EU-funded intervention	1.1.2 Energy saved per year (MWh) with EU Support 1.1.3 Renewable energy power generated per year (MWh) with EU Support
Output 2 related to Outcome 1	1.2 Industrial sector's increased access to finance for the installation of renewable energy and energy efficiency equipment	1.2.1 Number of supported industrial enterprises accessing financial instruments to purchase renewable energy and energy efficiency equipment	All baseline values to be defined at inception phase	1.2.1 Min. 15	1.2.1- Baseline and endline surveys conducted and budgeted by the EU-funded intervention	

Output 3 related to Outcome 1	1.3 Green jobs supported/sustained with a particular focus on female employment.	1.3.1 Number of green jobs supported/sustained by the EU (sex disaggregated) (GERF 2.13)	All baseline values to be defined at inception phase	1.3.1 Min 50 jobs	1.3.1- Baseline and endline surveys conducted and budgeted by the EU-funded intervention	
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4. IMPLEMENTATION ARRANGEMENTS

4.1. Financing Agreement

In order to implement this action, it is not envisaged to conclude a financing agreement with the Government of Lebanon.

4.2. Indicative Implementation Period

The indicative operational implementation period of this action, during which the activities described in section 3.1 will be carried out and the corresponding contracts and agreements implemented, is 96 months from the date of adoption by the Commission of this Financing Decision.

Extensions of the implementation period may be agreed by the Commission's responsible authorising officer in duly justified cases.

4.3. Implementation Modalities

The Commission will ensure that the EU appropriate rules and procedures for providing financing to third parties are respected, including review procedures, where appropriate, and compliance of the action with EU restrictive measures.¹⁴

4.3.1. Indirect Management with a pillar-assessed entity¹⁵

This action may be implemented in indirect management with a pillar assessed entity, which will be selected by the Commission's services using the following criteria:

- a sound track record of successfully implementing large cooperation projects (similar amounts) in Lebanon;
- sound track record in implementing projects in Lebanon relating to renewable and energy efficiency in the industrial sector and public sector;
- sound experience in implementing projects to improve access to finance for SMEs;
- sound knowledge of the sector's challenges and the stakeholders;
- neutrality and capacity to work with governmental and private sector actors in all areas of Lebanon;
- a transparent, and recognised successful implementing partners by all stakeholders.

The implementation by this entity entails the whole action (outcome 1 and the 3 related outputs).

4.3.2. Changes from indirect to direct management (and vice versa) mode due to exceptional circumstances

In case indirect management with an international organisation as per section 4.3.1 cannot be implemented due to circumstances outside of the Commission's control, the Action may be implemented under direct management through Grants as follows:

a) Subject matter of the grant:

¹⁴ www.sanctionsmap.eu Note that the sanctions map is an IT tool for identifying the sanctions regimes. The source of the sanctions stems from legal acts published in the Official Journal (OJ). In case of discrepancy the OJ prevails.

¹⁵ The signature of a contribution agreement with the chosen entity is subject to the completion of the necessary pillar assessment.

- Increase the competitiveness of industries through sustainable energy, efficiency measures and access to finance

b) Type of applicants: NGOs responding to the following criteria:

- a sound track record of successfully implementing large cooperation projects (similar amounts) in Lebanon;
- sound track record in implementing projects in Lebanon relating to renewable and energy efficiency in the industrial sector and public sector;
- sound experience in implementing projects to improve access to finance for SMEs;
- sound knowledge of the sector's challenges and the stakeholders;
- neutrality and capacity to work with governmental and private sector actors in all areas of Lebanon;
- a transparent, and recognised successful implementing partners by all stakeholders

4.4. Scope of geographical eligibility for procurement and grants

The geographical eligibility in terms of place of establishment for participating in procurement and grant award procedures and in terms of origin of supplies purchased as established in the basic act and set out in the relevant contractual documents shall apply, subject to the following provisions.

The Commission's authorising officer responsible may extend the geographical eligibility on the basis of urgency or of unavailability of services in the markets of the countries or territories concerned, or in other duly substantiated cases where application of the eligibility rules would make the realisation of this action impossible or exceedingly difficult (Article 28(10) NDICI-Global Europe Regulation).

4.5. Indicative Budget

Indicative Budget components	EU contribution (amount in EUR)
Implementation modalities – cf. section 4.3	
Outcome 1 Increase the competitiveness of industries through sustainable energy, efficiency measures and access to finance composed of:	11 000 000
Indirect management with a pillar assessed entity – cf. section 4.3.2.	11 000 000
Evaluation – cf. section 5.2 Audit – cf. section 5.3	Will be covered by another decision
Strategic communication and Public diplomacy – cf. section 6	N.A.
Contingencies	N.A.
Total	11 000 000

4.6. Organisational Set-up and Responsibilities

A project steering committee (PSC) shall be set up to oversee and validate the overall direction and policy of the projects. It will also provide guidance for the programme activities and oversight of implementation, provide co-ordination to ensure overall coherency. The PSC shall meet minimum twice a year.

The implementing partners will assist the PSC by fulfilling a technical secretariat functioning jointly and ensuring an active and meaningful participation of right holders as applicable (i.e. representatives of the relevant Ministries, beneficiaries, public and private sector organisations...) in each of the programme activities and in the decision making.

As part of its prerogative of budget implementation and to safeguard the financial interests of the Union, the Commission may participate in the above governance structures set up for governing the implementation of the action.

5. PERFORMANCE MEASUREMENT

5.1. Monitoring and Reporting

The day-to-day technical and financial monitoring of the implementation of this action will be a continuous process, and part of the implementing partner's responsibilities. To this aim, the implementing partner shall establish a permanent internal, technical and financial monitoring system for the action and elaborate regular progress reports (not less than annual) and final reports. Every report shall provide an accurate account of implementation of the action, difficulties encountered, changes introduced, as well as the degree of achievement of its results (Outputs and direct Outcomes).

The Commission may undertake additional project monitoring visits both through its own staff and through independent consultants recruited directly by the Commission for independent monitoring reviews (or recruited by the responsible agent contracted by the Commission for implementing such reviews).

Roles and responsibilities for data collection, analysis and monitoring:

- Implementing partners will be requested to identify clear baselines setting and targets and specify whether additional surveys are needed in case data are not yet available and/or should be refined during the inception phase. If needed, additional survey can be funded at contract level and budget lines to this aim to be clearly identified in the contract.
- Implementing partners will set in place a robust system to monitor the impact of the actions (in terms of energy savings, GHG emissions reduction...).
- Collection of data will be the responsibility of the implementing partners and baselines data must be available at the latest at the end of the inception phase while results data must be collected on time for the submission of the final report.
- Analysis of sex-disaggregated data will be encouraged whenever relevant and possible.
- Implementing partners will be requested to identify yearly milestones/targets to ensure a proper monitoring of the achievements at the time of the submission of the annual report. Grants contracts (or relevant agreements with final beneficiaries) logical framework will be developed based on the logical framework for each of the Outcomes to promote coherent data collection and reporting.
- To promote the measurement of the impact of the action, the programme will make use of and possible participate in surveys done by others (i.e. national authorities or other donors).
- Peer review mechanisms will be favoured, alongside with the engagement of relevant national stakeholders in order to promote stronger national M&E capacities.

5.2. Evaluation

Having regard to the importance of the action, a mid-term evaluation will be carried out for this action or its components via independent consultants contracted by the Commission.

It will be carried out for problem solving, learning purposes, in particular with respect to the overall strategic approach to the EU in Lebanon in supporting the external dimension of the Green Deal¹⁶.

The Commission shall form a Reference Group (RG) composed by representatives from the main stakeholders at both EU and national (representatives from the government, from civil society organisations (private sector, NGOs, etc.), etc.) levels. If deemed necessary, other donors will be invited to join.

The Commission shall inform the implementing partner at least one calendar month in advance of the dates envisaged for the evaluation missions. The implementing partner shall collaborate efficiently and effectively with the evaluation experts, and inter alia provide them with all necessary information and documentation, as well as access to the project premises and activities.

The evaluation reports shall be shared with the partner country and other key stakeholders following the best practice of evaluation dissemination. The implementing partner and the Commission shall analyse the conclusions and recommendations of the evaluations and, where appropriate, in agreement with the partner country, jointly decide on the follow-up actions to be taken and any adjustments necessary, including, if indicated, the reorientation of the project.

The financing of the evaluation shall be covered by another measure constituting a financing Decision.

5.3. Audit and Verifications

Without prejudice to the obligations applicable to contracts concluded for the implementation of this action, the Commission may, on the basis of a risk assessment, contract independent audit or verification assignments for one or several contracts or agreements.

6. STRATEGIC COMMUNICATION AND PUBLIC DIPLOMACY

All entities implementing EU-funded external actions have the contractual obligation to inform the relevant audiences of the Union's support for their work by displaying the EU emblem and a short funding statement as appropriate on all communication materials related to the actions concerned. To that end they must comply with the instructions given in the [Communication and Visibility Requirements of 2018](#) (or any successor document).

This obligation will apply equally, regardless of whether the actions concerned are implemented by the Commission, the partner country, service providers, grant beneficiaries or entrusted or delegated entities such as UN agencies, international financial institutions and agencies of EU Member States. In each case, a reference to the relevant contractual obligations must be included in the respective financing agreement, procurement and grant contracts, and delegation agreements.

For the purpose of enhancing the visibility of the EU and its contribution to this action, the Commission may sign or enter into joint declarations or statements, as part of its prerogative of budget implementation and to safeguard the financial interests of the Union. Visibility and communication measures should also promote

¹⁶ https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en

transparency and accountability on the use of funds. Effectiveness of communication activities on awareness about the action and its objectives as well as on EU funding of the action should be measured.

Implementing partners shall keep the Commission and the EU Delegation fully informed of the planning and implementation of specific visibility and communication activities before the implementation. Implementing partners will ensure adequate visibility of EU financing and will report on visibility and communication actions as well as the results of the overall action to the relevant monitoring committees.

Any actions related to the communication and visibility will be coordinated with the strategic communication actions of the EU Delegation to ensure coherence of narrative and message, as well as horizontal strategic communication.

Appendix 1: IDENTIFICATION OF THE PRIMARY INTERVENTION LEVEL FOR REPORTING IN OPSYS

A Primary intervention (project/programme) is a coherent set of results structured in a logical framework aiming at delivering development change or progress. Identifying the level of the primary intervention will allow for:

- ✓ Differentiating these Actions or Contracts from those that do not produce direct reportable development results, defined as support entities (i.e. audits, evaluations);
- ✓ Articulating Actions and/or Contracts according to an expected common chain of results and therefore allowing them to ensure a more efficient and aggregated monitoring and reporting of performance;
- ✓ Having a complete and exhaustive mapping of all results-bearing Actions and Contracts.

The present Action identifies as:

Contract level (i.e. Grants, Contribution Agreements, any case in which foreseen individual legal commitments identified in the budget will have different log frames, even if part of the same Action Document)		
<input checked="" type="checkbox"/>	Single Contract 1	PC30033 – Contribution Agreement