



This action is funded by the European Union

ANNEX 2

of the Commission Implementing Decision on the Annual Action Programme 2015 and Annual Action Programme 2016 part 1 in favour of Jordan

Action Document for Renewable Energy and Energy Efficiency Programme in Jordan - REEE II

INFORMATION FOR POTENTIAL GRANT APPLICANTS

WORK PROGRAMME FOR GRANTS

This document constitutes the work programme for grants in the sense of Article 128(1) of the Financial Regulation (Regulation (EU, Euratom) No 966/2012) in the following sections concerning calls for proposals: 5.4.1 “Grants – call for proposals (direct management)”.

1. Title/basic act/ CRIS number	Renewable Energy and Energy Efficiency Programme in Jordan (REEE II) CRIS number: ENI/2015/037-735 Financed under the European Neighbourhood Instrument
2. Zone benefiting from the action/ location	Jordan. With focus on Amman, Jordan Valley and highlands and others.
3. Programming document	Single Support Framework (SSF) for Jordan 2014-2017
4. Sector of concentration/ thematic area	Energy Sector / Renewable Energy and Energy Efficiency.
5. Amounts concerned	Total estimated cost: EUR 90.25 million Total amount of EU budget contribution is EUR 90 million of which: EUR 47.5 million for budget support and EUR 42.5 million for complementary support. The contribution is for an amount of EUR 45 million from the general budget of the European Union for 2015 and for an amount of EUR 45 million from the general budget of the European Union for 2016, subject to the availability of appropriations following the adoption of the relevant budget. Budget line: 21.030102 This action is co-financed by potential grant beneficiaries for an

	indicative amount of EUR 250,000.			
6. Aid modality(ies) and implementation modality(ies)	Budget Support: Sector Reform Contract Implementation modality: <ul style="list-style-type: none"> - Direct management mode: Sector Reform Contract, grants (call for proposals), procurement (services). - Indirect management with the EBRD. 			
7. DAC code(s)	23030			
8. Markers (from CRIS DAC form)	General policy objective	Not targeted	Significant objective	Main objective
	Participation development/ good governance	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Aid to environment	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Gender equality (including Women In Development)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Trade Development	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Reproductive, Maternal, New born and child health	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	RIO Convention markers	Not targeted	Significant objective	Main objective
	Biological diversity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Combat desertification	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Climate change mitigation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Climate change adaptation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	9. Global Public Goods and Challenges (GPGC) thematic flagship	NA		

SUMMARY:

Jordan is a country with major energy supplies challenges. For many years, Jordan imported 97% of its energy supplies making almost one fifth of the annual gross domestic product (GDP). Latest political changes in the region have also affected Jordan, especially the Syrian crisis, where hundreds of thousands of refugees are based now in different parts of Jordan, making extra pressures on housing, health, education, water and energy services.

The government represented by the ministry of Energy and Mineral resources developed the 2007-2020 Energy Sector Strategy, with an aim to enhance local sources of energy towards 2020. Renewable energy was set high on the strategy targets, which aims at an increase from 1% renewable energy as part of the energy mix (in 2007) to 7% by 2015 and 10% by 2020. As for Energy Efficiency (EE), a target was set to reach 20% savings by 2020.

This was further enhanced by the adoption of Vision 2025 in May 2015, where energy was a main development area, and the renewable energy share was set to reach 11% by 2025. Vision 2025 also looked at other main sectors such as water, in which a clear objective to invest in Renewable Energy and Energy Efficiency (REEE) applications in main pumping stations was set to reduce the energy bill of the sector that consumes more than 14% of the sector budget.

The EU has always shown understanding to the energy challenge for Jordan, and signed a declaration of cooperation in 2007 to support Jordan in three main areas: Jordan as part of the EuroMediterranean (Euromed) networks, green sources of energy and nuclear safety and security. The EU Delegation provided its support to green energy in Jordan since 2008, conducting twinning and capacity building projects and the first sector support to green energy starting in 2012.

The EU-Jordan energy cooperation was further enhanced following the advance status that was granted to Jordan in 2010, and due to the fact that both Jordan and the EU are currently co-chairing the Union for the Mediterranean, where clear emphasis is put on energy cooperation.

Accordingly, the EU and Jordan decided to set renewable energy and energy efficiency as a main objective for cooperation under the 2014-2017 SSF, in which 30% of the envisaged financial support will be targeting the REEE sectors.

This programme is designed to continue supporting Jordan with green energy enhancement. A focus will be given to: electricity supply, as Jordan imports 97% of its energy needs still; energy efficiency in the building sector, since this sector consumes the majority of electricity (43% households, 17% commercial); apply renewable energy and energy efficiency measures to the water sector, which consumes 14% of the total generated electricity; replace conventional water pumps with solar ones in agriculture, which will lead to reducing negative impacts of Climate change; and set a model for "waste to energy" with Greater Amman Municipality with an aim to generate 1-2 megawatt of electricity from the proposed facility.

1 CONTEXT

1.1 Energy Sector

Jordan depends heavily on imports for energy. This being a basic commodity, its persistent shortage or unaffordability contributes significantly to poverty and overall economic instability. Imports of energy increased dramatically over the period 2010-2013 by an average of 19.2%. Jordan imports over 97% of its domestic energy needs, at a cost of about one-fifth of its GDP, reaching JOD 4.6 billion in 2012 and JOD 4.1 billion in 2014 thanks to the decrease in oil prices. Jordan has only very limited production of national natural gas, while renewable energy (RE) contribution is still marginal. The average growth of electricity consumption was 5.54%, in the period 2007-2013- but sharper after 2011 due to the demand generated by the Syrian Refugees, whose population of 650,000 registered refugees represents more than 10% of the Jordan population and is set to rise by 6-7% in the coming years. The Government of Jordan subsidises energy in order to mitigate the adverse socio-economic effects on population and businesses, however, under the International Monetary Fund (IMF) ongoing agreement, a reform of the energy subsidy system was initiated in 2012 leading to the complete abandon of subsidies of fuel at petrol

station and progressive reduction for electricity subsidies that will be completed in 2017. The public debt is to a significant extent attributed to the losses of the National Electricity and Petrol Company (NEPCO), which suffered from the halting of the Egyptian gas supply since Arab Spring uprisings. Public debt reduction is heavily hampered by subsidies to energy, fuel and food supply. The public debt increased from 75.5% of GDP in 2012 to 81% by end-2014.

Hence, and in order to reduce dependence, energy resource diversification and increased contribution of domestic ones have become key priorities for the government. Natural gas, oil shale and RE are foreseen to contribute increasingly to the electricity generation mix by 2020. Nuclear energy is also assumed to contribute a significant share of the new electricity capacity by 2025.

Jordan has a high RE potential, particularly solar and wind energy. The intensity of solar radiation is between 5-7 kilowatt-hour per square meter (Kwh/m²) and the wind speed in various locations can range between 7-9 m/s. These figures establish promising prospects for utilising renewable energy sources to generate electricity.

Similarly, a **high potential for Energy Efficiency (EE)** exists through energy saving across many sectors as well as other sources such as waste to energy. Demand side management, building codes, labelling of home appliances, standards, lighting, solar water heaters, are different elements that the country developed, however, lack of investments is hampering the EE potential. As for sectors, the building, water pumping, street lighting sectors have the highest potential for enhanced EE.

Over the last few years the energy demand represented by electricity has increased drastically, in sectors such as household, commercial, water pumping, street lighting, and industrial. This shows a need to work on rationalising energy consumption in such sectors, starting by those with high and increased consumption.

Following is a summary of the electricity consumption in Gigawatt/hour (GWh) of main sectors in Jordan:

Sector/Year	2009	2010	2011	2012	2013
Household	4926	5219	5548	6126	6265
Industrial	2981	3258	3445	3461	3541
Commercial	1978	2184	2269	2427	2415
Water pumping	1761	1867	1939	1955	2076
Street lighting	310	315	334	305	291
TOTAL	11956	12843	13535	14274	14588

1.1.1 Public Policy Assessment and EU Policy Framework

Jordan's oil and natural gas resources are very limited, despite the exerted efforts of the Government to develop and prospect for other domestic resources. The effort to follow up with Egyptian authorities on the supply of natural gas for electricity generation was without sustainable results so far. Fortunately, Jordan has a huge

amount of oil shale, equivalent to more than 7 billion tons of oil, which can add to the national energy mix in the mid-term.

Jordan is currently implementing its national development plan having the National Agenda 2006-2015 as the guiding document. On 11th of May 2015 Jordan launched its 10 years socio economic development **Vision 2025**, where it sets its main development targets within different sectors towards 2025. **Energy and Renewable energy are a clear cluster in this vision**, and the targets of RE towards 2025 are set at 11% of the Energy mix, where the document proposed a phased approach increasing the current 2% RE of the energy mix by an average of 3-4 percentage points every 3 years.

For the Energy sector, **Jordan has developed the National Energy Strategy**, which was updated in 2007¹. In accordance with the strategy, RE should reach 10% of primary energy supply in 2020 and 20% energy savings should be obtained in the same year.

The current **contribution of new and renewable energy sources to the total energy mix does not exceed 2%**. The involvement of the private sector is crucial to the development of the RE and EE sectors, and to reach the 2020 targets. In the RE sector, the first successes have occurred: 117 Megawatt (MW) of Wind and 200 MW of photovoltaic (PV) have already been signed in Public Private Agreements (PPAs) in 2013 and 2014. The Jordan Poverty Reduction Strategy 2013 points at the link between poverty and missing energy services.

The Government of Jordan has decided that the use of REEE is a way to solve the problem of chronic energy shortage, to secure reliability of energy supply and to contribute to economic growth. The **Renewable Energy and Energy Efficiency Law** (passed in 2012, revised in 2014): (a) sets the conditions under which electricity generating facilities based on RE can be financed, constructed and connected to the grid, and (b) has established a **Renewable Energy and Energy Efficiency Fund** (JREEEF), for supporting and promoting REEE projects and stimulating public private partnership. It is currently working to secure funds to start targeting different REEE projects, surveys and development, as set in the national plans and strategy.

Besides, a **National Energy Efficiency Action Plan** (NEEAP) has been adopted in 2013, but it did not cover the REEE potential across all sectors and currently lacks funds for implementation. It comprises several promising measures. These tackle both, the demand side (e.g. energy labels, lighting, reduction of energy consumption of public buildings by 10%, buildings code, development of minimum standards/specifications for appliances) as well as the supply side (e.g. solar water heaters, PV, capacity building in wind energy and concentrating solar power, solar energy code). Furthermore, the NEEAP outlines several horizontal and cross-sectorial measures (tax exemptions for energy efficient and renewable energy equipment, development of energy service companies, green lending programme, university curricula). Certain sectors such as the transport and the industrial sectors needs to be further integrated NEEAP for Jordan in the future.

¹ According to this document, the strategy envisages the installation of up to 1000 MW of wind energy and 600 MW of thermal solar projects by 2020, and programmes and measures for energy use rationalisation in all economic sectors.

Jordan's Energy & Minerals Regulatory Commission (EMRC) has put in place Price Reference List (PRL) for all RE technologies except for geothermal. EMRC will be in the process of reviewing PRL applying to solar PV and associated draft contracts (power purchase and grid connection agreements). These proposed enhancements to the regulatory framework would result in increased private sector interest in Jordan's RE sector.

Consistency with EU policy, programming framework and the aid effectiveness agenda

The Association Agreement of May 2002 governs the EU-Jordan relations. In 2010, Jordan was granted the advanced status of partnership with the EU. This EU programme is in line with the EU-Jordan Action Plan, where energy is clearly identified as a key sector for partnership and networking within the region. Namely, the EU programme is in line with the national strategy for Jordan on developing renewable energy and applying energy efficiency schemes.

The new EU programme is also aligned to the European Neighbourhood Instrument (ENI) 2014-2017 programming document the **Single Support Framework (SSF)** and its third focal sector "Renewable energy and energy efficiency" that has received 30% of the budgetary allocations.

The EU is the main strategic partner of Jordan in REEE promotion and reform, providing sector budget support, intensive technical assistance, support on sector strategies, legislations and testing facilities.

The programme is coherent with the priorities set in the EU Joint Communication of March 2013 concerning the 'European Neighbourhood Policy: Working towards a Stronger Partnership'² as it provides a strong focus on sustainable and inclusive growth, economic development and support to Small and Medium Enterprises (SMEs).

Moreover, it is in line with the special Joint Declaration on Energy Cooperation signed aside the Euro-Med energy Ministerial Declaration (November 2007), i.e. Jordan should continue as part of the EuroMed energy & electricity networks and be further supported to develop green energy sources. Most importantly, the programme respects the **Union for the Mediterranean (UfM)** vision, according to which Jordan and the EU should collaborate closely to enhance green energy development and networks within the Mediterranean.

The programme will also assist in enhancing the enabling environment for REEE development, which will allow more investment opportunities for domestic and foreign investors and will lead to future EuroMed energy networks based on sustainable energy sources.

1.1.2 Stakeholder Analysis and Partners

The Ministry of Planning and International Cooperation (MoPIC) plays its main role to reflect the National development policies into sector strategies and ensures overall donor coordination. The other main stakeholders are:

- Government sector entities such as:

² http://eeas.europa.eu/enp/pdf/docs/2013_enp_pack/2013_comm_conjoint_en.pdf.

- **Ministry of Energy and Mineral Resources (MEMR):** Main policy maker in the energy sector, working to ensure security of energy supply, and implementing the national sector strategy, which focusses on diversification of energy resources including local ones, especially REEE;
- **Ministry of Public Works and Housing (MoPWH) :** Responsible for setting policies and strategies for improving indoor comfort and functionality, lower energy use and infrastructure modernisation in public buildings, setting the building thermal code, enforcement of building codes, renovation of building stock and conducting energy audits in buildings;
- **Ministry of Water and Irrigation (MoWI) and Ministry of Environment (MoEnv),** with roles in fostering sustainable energy across major developmental sectors. **MoEnv** is mandated to address the climate change adverse impacts, by adopting national mitigation and adaptation measures;
- **Greater Amman Municipality (GAM)** is the main municipality in Jordan, and conducts a comprehensive approach to solid waste management including waste to energy facilities;
- **Energy and Mineral Resources Commission (EMRC):** as the main regulator of the sector, EMRC is responsible for RE and EE regulations. EMRC also works on licensing and establishment rules and regulations for new energy service companies;
- **National Electricity and Petrol Company (NEPCO),** as the owner of the national electricity grid, reflects the National energy strategies for electricity supply, and is mandated to interconnect all new RE sources in to the grid.
- **Private sector:** main developer of energy sources as stipulated in the 2007-2020 strategy, where all generation and distribution facilities for electricity are commercialised.
- Civil society organisations such as the **National Energy Research Centre (NERC on applied research³)** work to set examples and bridge the gap between government and private sector as well as to implement projects enhancing integration of REEE within local and rural communities, as well as with public authorities.

1.1.3 Priority areas for support/problem analysis

A number of technical, economic, institutional and legal impediments have prevented meaningful investments in REEE to date jeopardise the RE energy mix targets as set by the Energy strategy. These impediments include the lack of technical capacities and credible data, selling price of RE produced energy, restrictions on public and municipal borrowings; absence of credible energy service companies (ESCOs), etc. While potential market entrants are present, the institutional and regulatory framework for REEE remains incomplete, with no secondary legislation, rulebooks, financing mechanisms and other critical elements.

³ NERC currently acts as the technical arm of the sector and supports the Ministry of Energy. It seeks to enhance its cooperation with the Ministry and the JREEEF to monitor and follow up the REEE sector at large.

NERC is positioned since years as a technical arm for the REEE sector, yet remains understaffed and under-resourced. As a consequence of undeveloped markets; technical capacities, financing modalities and contractual/standardised expertise are limited.

RE existing licensing and permitting requirements are not streamlined and administrative processes for buildings are under the responsibility of various institutions at different government levels. Also, many of the requirements are generic (not designed or adjusted to the specific characteristics of EE projects).

The Residential Sector is the most energy-consuming sector. Its share in electricity consumption was 43% in 2013 according to the energy balance published in 2014; the target is to achieve a 25% saving by 2020 that corresponds to a targeted minimum saving of 5.6% in 2014.

In Jordan, 14% of the consumed electricity is used for water pumping, since water has to be transferred horizontally and vertically to reach end-users from the South to the North in places with elevation of 1 km or more. Water resources are scarce: 47% from renewable groundwater sources, 32% from surface water sources, 12% from wastewater treatment and 9% from non-renewable groundwater sources. Water pumping from underground or wastewater treatment covers 68% of the water consumption. Hence, the high-energy consumption in the water sector is attributed to water pumping and to deliver water through pipelines for long distances. Following the changes in the electricity tariff system introduced in 2013, but also due to population increase due to the Syrian crisis, costs will increase significantly. The MoWI is therefore considering generating electricity for water pumping from RE.

The **energy cost for the agricultural industry is high** due to the said water pumping and transports. The energy cost is very much linked to food security: cost of food production and distribution and cost of inputs. The Jordan Poverty Reduction Strategy 2013 points at the link between poverty and energy services.

The Municipal waste: With a flow of 3000 tons of waste per day, GAM accounts for approximately 50% of Jordan's total municipal solid waste. The municipality directly manages the collection, transfer and disposal of waste. There are serious inefficiencies in solid waste management, and the costs of providing services are quite high and have become even more critical with the massive arrival of the Syrian Refugees (representing 10 to 15% of the population). GAM has been working to increase revenues related to solid waste management, including generating revenues from recoverable materials and landfill gas (LFG) recovery. Under the Environmental Protection Law of Jordan No (52) of 2006, some attempts have been made for protecting the environment in terms of waste management. A promising pilot is under way by the Amman Municipality to convert waste to energy.

The new programme REEE II will focus on the following priority areas:

Priority Area 1: Enhancing the institutional, legislative, regulatory and strategic framework

According to the latest development of the REEE sector, including the 2012 law and its update in 2014, and the regulatory set-up by the regulator to touch on REEE themes, many areas were still in need to be enhanced, including human capacity, further development of legal and regulatory frameworks based on progress made in the sector and on the implementation experience over 2012-2015.

Policy dialogue and monitoring of the sector development are other key areas that need enhancement and consolidation.

Priority Area 2: *Supporting the implementation of the RE and EE components under the National Energy Strategy*

The national targets for REEE development were set under the energy sector strategy of 2007-2020, as well as in the Vision 2025. National action plans in these fields are focussed on increasing the percentage of RE into the energy mix, as well as EE applications in different sectors, such as installing 30,000 Solar Water Heaters with a targeted minimum saving of 147 GWH ($\approx 1.6\%$) in addition to 5,162 Solar Water Heaters (SWHs), which have been distributed in cooperation with the Jordan River Foundation. Another example is to enhance the photovoltaic rooftop systems for electricity generation at public and residential buildings. New sources such as waste to energy are also planned, and will lead to integrated solutions for waste management, energy generation and environment protection through mitigating measures. Greater Amman Municipality is the leading municipality in Jordan in this process and develop the energy generation potential from waste.

Priority Area 3: *Supporting REEE applications in few selected high electricity consuming sectors and in some public entities (construction and street lighting)*

In the Building Sector, interventions with high potential for EE improvement have not been sufficiently developed so far. For instance, the residential sector has a new building code that forces the use of solar water heaters for any house with a minimum area of 150 square metres; however such code has not been fully enforced due to human and financial capacity challenges.

Priority Area 4: *Provision of REEE services and demand side management in the Water and Irrigation Sector.*

Introduction and operationalisation of REEE in the water and irrigation sector will help reduce the related electricity bill and will provide a better base for meeting its increasing needs. For basic water pumping, it will lead to a significant reduction in the energy bill of the sector, which suffers from major challenges to pump the water vertically and horizontally for long distances throughout Jordan. Establishing energy efficient agricultural facilities could reduce cost of agricultural inputs, provide savings to farmers at various levels and reduce CO₂ and its effects on climate change.

1.2 Other areas of assessment

1.2.1 Fundamental values

Jordan has ratified the 6 major international conventions related to protection of human rights. However, Jordan has not ratified some optional protocols, inter alia the Optional Protocol to the Convention against Torture (OPCAT), the first and second Optional Protocols of the International Covenant on Civil and Political Rights (ICCPR), the International Labour Organization convention No 87, No 169, No 189, and the conventions on refugees and stateless persons. Jordan expressed reservations on a few articles of the UN Convention on Elimination of All Forms of Discrimination against Women (CEDAW) and on the Convention of the Right of the Child. Jordan is the only country in the region that has offered a standing invitation to all UN Special Rapporteurs. Yet, the Committee on the Right of the Child (CRC) has underlined important weaknesses in terms of legislation, institutions and allocation of resources that prevent the state from implementing the Convention.

The year 2014 was marked by increased tensions and instability in the region (in particular Syria and Iraq), which impacted overall on the political dynamics in Jordan, with security considerations becoming paramount in the leadership's decision-making. As a consequence, the pace of political and governance reforms slowed down in 2014 and space for political activists, civil society and opposition seems to have shrunk. The deteriorated security environment and increased radicalisation in the region led the King to actively pursue the traditional Jordanian policy of religious moderation, also to counter religious extremism in the region.

A number of important laws were passed in 2014 and the Government of Jordan has committed itself in the follow up of the Universal Periodic Review (UPR) to adopt a new human rights strategy and created several committees to further evaluate and assess the different recommendations issued during the exercise. The amendments to the Anti-Terrorism Law and the December executions of thirteen death-row inmates are undoubtedly worrying developments.

In 2014, Jordan acted upon some key recommendations contained in last year's European Neighbourhood Policy (ENP) progress report, most notably by strengthening the impartiality of the judiciary through the new judicial independence law, and through measures for the legal implementation of the Anti-Corruption Strategy. Other key recommendations made previously remain however valid. In line with the commitments agreed in the ENP Action Plan, Jordan should pursue the reforms process and enforce the laws adopted without following a strategy of selective implementation.

Jordan's commitment to fundamental values remains valid. However several risks of deterioration of the human rights situation were identified in the latest update of the Risk Management Framework carried out in February 2015 and the EU's concerns about freedom of media and expression, freedom of association, space for civil society, death penalty and refugees, amongst other issues, were raised at the human rights sub-committee meeting in March 2015.

1.2.2 Macroeconomic policy

The Government of Jordan has demonstrated commitment to the macroeconomic policy targets set under the IMF under the Stand – By Arrangement (SBA) agreed in 2012. This is confirmed by the most recent IMF Staff Report of April 2015 for the sixth review of the SBA. It concluded that the authorities have been implementing strong macroeconomic policies to reduce external and fiscal imbalances, despite the adverse external environment.

Under the IMF programme, brought in following a deteriorating fiscal deficit, debt and foreign reserves position experienced since 2012, the government has adopted certain measures towards fiscal and monetary stability, including reversing the decision to freeze fuel and energy price rises to consumers imposed during the Arab Spring in 2011 that resulted in significant subsidies.

As a result of the large growth in public revenues in 2014, the central government budget deficit (including grants) fell sharply by 55.6% to reach JOD 585.3 million or about of 2.3% GDP for 2014 compared to 5.5% of GDP in 2013. When excluding the large value of grants received in 2014, the budget declined by 6.9% from its value in 2013, to reach JOD 1,822 million or 7.1% of estimated GDP for 2014

compared to 8.2% of GDP for 2013⁴. Despite the improvement in public finances was largely the result of a higher value of grants, domestic public finances also improved. The Government introduced in 2014 a package of measures to increase revenues based on the increase of excises and fees and did not disburse the last cash compensation⁵ payment foreseen in 2014 since the international oil price went well below the USD 100 per barrel.

The authorities have tried to contain expenditures but have to face large debt service payments and an instable environment, which have limited the extent of actions on the expenditure side.

In early 2015, the Parliament approved an increase of the electricity tariff of 7.5%, half the increase initially proposed by the Government. The increase in the electricity tariff is framed in the cost-recovery strategy for NEPCO.

The 2015 General Budget foresees additional revenue raising measures aimed at reducing the central government deficit to around 1.7% of GDP in 2015. The mounting debt is a key concern, in particular the mounting debt due to NEPCO's losses. However the latest IMF mission of February-March 2015 for the 6th review considered the debt situation sustainable. Other concerns that have been expressed by the IMF in their missions include the possible negative impact of the neighbouring conflicts on trade performance -as important routes and markets are affected by the neighbouring conflicts- and on investment, as well as, the heavier dependency on foreign assistance and an increase in domestic borrowing.

The monetary stance remains a strong point and appropriate according to the IMF. Safeguarding the exchange rate peg remains the lynchpin for the maintenance of financial stability. The peg of the Jordanian dinar to the US dollar has anchored inflation expectations and provided a measure of fiscal stability. Nonetheless, by the middle of 2012, foreign currency reserves had reached their lowest level since the mid-1990s, dropping to JOD 4.78 billion (3.8 months of imports). However, reserves have increased in 2014 and are again above a healthy level according to the IMF, covering over 7 months of imports (March 2015). Maintaining the reserves and keeping them at a comfortable level will be instrumental in reinstating investor confidence and maintaining confidence in the local currency. Both are essential for boosting economic stability and growth.

The Jordanian economy is vulnerable to external shocks, which have had a negative impact on the performance of all key macroeconomic aggregates during the past years. However, as evidenced by the recent agreement with the IMF to approve the release of the sixth tranche of Jordan's SBA, the Jordanian economy remains resilient despite the external challenges. The conflicts in Syria and Iraq continue to weigh on its economy, but activity is gradually picking up. Growth rate rose to 3.1% in 2014 and is expected to reach around 3.8% in 2015⁶. Unemployment fell from 12.6% in 2013 to 11.9% in 2014 and inflation declined to 2.8% year on year at the end 2014. The current account deficit continues to narrow and is estimated at 7.6%

⁴ *Monthly Report – March 2015*. Central Bank of Jordan.

⁵ A cash compensation mechanism was put in place in end 2012 as a balancing measure to low income families, and disbursement of that assistance will take place as long as the price of oil remains above USD 100 per barrel.

⁶ *IMF Country Report No. 15/115. May 2015*. International Monetary Fund.

of GDP for 2015 (including grants)⁷. Although Jordan remains vulnerable to further external shocks, the macroeconomic framework has been successfully managed.

Overall, there is a credible and stability oriented macro-economic policy in place.

1.2.3 *Public Financial Management (PFM)*

Jordan continues to fulfil the public financial management reform eligibility criterion for budget support. Based on the analysis presented in the EU latest PFM Report (November 2014), it is apparent that Jordan pursues a credible and relevant programme to improve public financial management. Implementation of the programme - *Comprehensive Reform Strategy of PFM 2014-2017* - to improve and reform public finance management is positive with several reforms already completed or well advanced in their implementation with donor support, including the EU. EU new Public Finance/Public Administration Reform budget support programme was put in place in October 2014. In terms of achieving medium term budgetary outcomes Jordan continued to be on-track with the IMF Stand-By Arrangement and is in the process of adopting some important directions of change to improve budgetary outcomes.

1.2.4 *Transparency and oversight of the budget*

The government of Jordan continues to make significant strides in improving financial information transparency and oversight. As per the EU Budget Support Guidelines of September 2012, the entry point for the fourth eligibility criteria – transparency and oversight of the budget – has been met by the Government of Jordan, going well beyond the eligibility criteria as regards improving transparency and oversight significantly.

Key budget documents are produced and made available and accessible to the public. The general budget is made public on the Internet in its draft form prior to submission to the Parliament and also once approved by Parliament. The budget speeches were published on the newspapers and published on the internet. Monthly budget execution reports are published on the internet prepared by the Ministry of Finance, even if sometimes with 2-3 months delay, particularly in the beginning of the year period. Preliminary figures are also published on the Internet by the Ministry of Finance a few days after month's end. The Audit Bureau's annual report is also now made publicly available on the internet. The timeliness of this release has improved significantly. Remaining weaknesses will continue to be addressed as more data becomes available through the completed Government Financial Management Information System (GFMIS).

2 RISKS AND ASSUMPTIONS

Implementation risk is rated as moderate mostly on account of to external risks related to political factors; the programme 4-year implementation period and Ministries' capacity. The future development of the energy sector will have major ramifications on the continued investment in the REEE sector, development sectors such as buildings, water and farming. The multi-sector nature of the project and line ministries limited knowledge of EU procedures and Sector Reform Contracts will need to be carefully managed and supervised throughout the project implementation

⁷ *ibid.*

period with strong support by the planned Technical Assistance (TA). This also applies to the involvement of the private sector, where the TA support will contribute positively to the inclusion of the private sector within the REEE themes and enhancing investments in this sector.

Risks	Risk level (H/M/L)	Mitigating measures
<p><u>Operational / Implementation</u> MEMR may encounter difficulties in the proposed reforms and coordination of activities including the needed support to operate within its mandate, and enhance the institutional capacities and capabilities, while coordinating with line ministries. Lack of suitably qualified and experienced staff delays or prevents implementation of the project. Stakeholders in the respective sectors do not cooperate and consequently prevent meaningful change and improvement. Lack of a coordinated approach by the wide variety of stakeholders prevents or delays change in a cohesive and comprehensive way</p>	L	<p>The creation of the steering committee and the technical committee/s within REEE II will ensure enhanced cooperation, and the REEE II programme foresees to direct its proposed Technical Assistance to further enhance the needed institutional, regulatory, legal and technical capacities among the different stakeholders</p>
Assumptions		
<p>- The Government of Jordan is committed to the promotion and reform of REEE; enhanced competitiveness is maintained and political willingness exists to implement the necessary regulatory reforms; the Government of Jordan prepares and adopts the strategy and the bylaws of JREEEF; a power purchase agreement is in place; the priorities of REEE national development are sustained.</p> <p>- MEMR/MoPWH/MoA/MoWI/MoEnv have the resources and mandate to pursue development of the greening productive (e.g. agro- business) sectors; there is commitment and willingness on the part of the business community/ farmers to develop capacities and pursue best practices of REEE. There is involvement of Civil Society and Non-Government Organisations (NGOs).</p>		
<p><u>Financial:</u> EU allocations to the overall sector support are not sufficient to fully achieve targets.</p>	L	<p>Close monitoring and evaluation of the programme is needed as well as guidance from the steering committee to the different stakeholders and Ministries to ensure proper allocations to implement the programme objectives, according</p>

		to the programme work plan
Assumptions		
Sufficient resources are available to ensure coordination between the stakeholders and beneficiaries. The Government of Jordan ensures complementary of support by various donors.		
Political: The Jordanian economy is facing serious challenges, high electricity bill, flux of refugees, while the IMF-Stand-By-Arrangement (SBA) with clear consolidation policies might go off track. The impact of the crisis in the region, e.g. growing inflation, might go beyond the programme's influence. Such challenges may also endanger structured policy dialogue.	H	The programme will support the development of the sector in line with national plans/visions and special resilience plans for refugees' influx, and will ensure synergies through the proposed activities as well as Technical Support.
Assumptions		
<p>- The Government of Jordan is committed to provide the needed developmental services and to tackle the political challenges posed by the changes in the region due to political instability. The Government of Jordan's national economic and development plans on short to mid-term reflect clearly the vision to address these political challenges.</p> <p>- A policy dialogue is structured and adopted officially as continuous dialogue, to enhance the collaboration and communication of different stakeholders</p>		

3 LESSONS LEARNT, COMPLEMENTARITY AND CROSS-CUTTING ISSUES

3.1 Lessons learnt

The following lessons were drawn from the experience gained through the implementation of the first Budget Support programme (REEE I) and through the assessment of the sector, which included a critical analysis of the policy framework of the REEE sector with a focus on problems hampering the shift of the Jordanian energy system into an environmentally sound, cost-efficient and reliable energy service system.

Policies and Incentives: Currently there are almost no policies to mandate or encourage EE with clear incentives such as benchmarking of energy consumption, enforcement of regulations to reduce energy consumption in buildings, or labelling household and industrial machinery, equipment and appliances. It was established that MEMR, the primary decision authority in the energy sector, will be involved in technical activities (programme and project formulation, implementation, elaboration of technical standards etc.) rather than focusing on its policy mandate and strategies.

Budget Support modality: Focussing on measurable impacts for monitoring and evaluation as defined in its benchmarks, the Budget Support modality served as an anchor of a wider policy dialogue assisted by further capacity development of related national institutions.

Heavy administrative procedures: Inefficient and unclear tendering procedures caused delays in the implementation of REEE interventions, mainly when the private sector or donor agencies were involved. Furthermore, the decision process on RE project's approval and licensing involves too many governmental actors. This results in extra cost, loss of business opportunities and lack of attractiveness for investors.

Programme monitoring and evaluation: energy auditing based on internationally accepted quality standards and codes are not common practice in Jordan. However, such qualified auditing would improve EE, thus contributing to the results of this programme while enhancing project monitoring and evaluation (e.g. through measurable benchmarks).

Capacity building and knowledge transfer: Lack of human resources capacity in both qualification and number, hampers the competent development of legislation, quality standards and codes, and monitoring and evaluation of projects impacts. In addition, organisation and management capacities as well as technical skills for REEE project's design and implementation need to be improved. A serious challenge in the public service is high fluctuation of staff on the decision-making level and discontinuity. Therefore, establishing a **policy dialogue platform** and scaling up capacity development are critical to overcome emerging obstacles.

A Monitoring and Evaluation tracking system is needed to assess performance and create a feedback loop into the design of policies.

3.2 Complementarity, synergy and donor coordination

The EU assistance in the field of REEE development is complemented by the support to the public sector development by various other donors and actors, as follows:

- The EU continued to provide bilateral important support to other Jordanian energy sector institutions, including in nuclear safety. these programmes include: Capacity Building in Wind Energy and concentrated solar power (WECS⁸) (EUR 14 million), the first sector support programme: Renewable Energy and Energy Efficiency Programme in Jordan (REEE, EUR 40 million⁹), support to the Nuclear Regulatory Commission and the Energy Regulatory Commission to enhance Nuclear safety and Security and sustainable management of radio-active waste (around EUR 4 million in total), twinning to the National Electric Power Company NEPCO to enhance their capacity to introduce renewable energy into the National grid (EUR 1.7 million).
- EU regional initiatives such as EuroMed energy efficiency cooperation in the building sector (Med-ENEC¹⁰), cooperation between the Euro-Mediterranean Energy Regulators Project (MEDREG¹¹) and other member states programmes aiming at harmonising the regulatory framework in the region.

Other Donors' initiatives include:

- Kreditanstalt für Wiederaufbau (KfW) is implementing EE projects in education and health sectors (Schools and Health Centres). A pilot programme on lighting in

⁸ C(2009)7521 see www.wecsp.org.jo/.

⁹ C(2011)5702.

¹⁰ www.med-enec.eu.

¹¹ <http://www.medreg-regulators.org/>.

residential buildings was implemented with *Agence Française de Développement* (AFD) financing.

- In addition, the AFD energy sector loan approved and launched in 2012 (EUR 150 million) was building on EU funded programmes, and the REEE policy matrix in particular. The support addressed main reforms in the energy sector in line with the sector strategy, including the green energy part in which synergies and complementarities with the EU REEE programme were ensured.
- AFD also launched a "Sustainable Credit Facility" in Jordan (EUR 41.5 million out of which is 5% NIF grant) to enhance investments in renewable energy, energy efficiency and environment protection.
- European Bank for Reconstruction and Development (EBRD): Since the launch of their office in 2012, EBRD have focussed their support on main infrastructure sectors, mostly energy and water. They have supported conventional and renewable energy generation facilities, and also supported energy efficiency projects in buildings and water sector. They have shown big interest in the water sector and started in close collaboration with the Ministry of Water and Irrigation to study the feasibility to introduce renewable energy into the main pumping stations, which is in line with activities foreseen in the sector strategy and vision 2025.

In addition, there is active donor engagement in Jordan's energy sector and the activities proposed under this project have been coordinated with them to ensure full complementarity.

MoPIC chairs a donor-government working group on energy, but there is a need to enhance coordination for synergy effects and complementarities. A clearer consensus among the Jordanian administrations and institutions involved in REEE related policies and future reforms would be beneficial to attract and optimise foreign support.

3.3 Cross-cutting issues

Governance: The programme will further contribute to the EU support for improving governance in the sector, e.g. through cross-sector institutional capacities and coordination at policy and implementation levels, including policy development, planning, joint implementation, financing mechanisms, public finance management at sector level with enhanced results-oriented budgeting, monitoring and evaluation, and increased involvement of social partners and civil society. The increased involvement of Civil Society Organisations (CSOs) is foreseen through the dissemination strategy on solar water pumping systems and through their capacity building to engage effectively with the national authorities.

Gender: Measures to support the involvement of women in the labour market of REEE have been emphasised in the frame of the programme identification, consultative process with all stakeholders and implementation strategy. Increasing women's participation and reflecting this in the current sector budget support together with other gender specific issues are foreseen in different components of the programme, including in policy development, strategies and action plans, gender sensitive budgeting practices, etc.

Youth Unemployment: The programme intends to address the inadequate quality and relevance of the education and training on REEE and Environmental issues, as

well as the mismatch between individuals' skills and employers' needs, and the weak school-to-work transition systems. It is important to take stock, for instance, that over 75% of unemployed males have a high school education or below, while over 75% of unemployed females have diplomas or higher. Vocational training institutions are highly needed to link the needs of REEE to the educational system.

Effective participation, Environment and Climate Change: Promoting participation in REEE and reforms could lead to increasing opportunities in green businesses. Further investments in those sectors are to be applied at household, commercial, industrial, water and public transport sectors, reflecting the implementation of the National Energy Efficiency Action Plan.

4 DESCRIPTION OF THE ACTION

4.1 Objectives/results

The Overall Objective: to contribute to the development and implementation of effective policies that would help Jordan reach its renewable energy and energy efficiency (REEE) targets for 2020.

Specific Objectives

1. To complement the relevant institutional, legislative and fiscal reforms, creating the enabling environment to mobilise public and private actors, in order to achieve the goals of 10% renewable energy and 20% of energy savings by 2020.
2. To contribute to full scale implementation of activities for enhancing sustainable production and consumption patterns and inducing behavioural changes, including in the water sector, resource demand management, adoption of best available technologies, research & development and promotion of investments towards green and low carbon economy.

4.2 Main activities

Priority Area 1: Institutional, legislative, regulatory and strategic framework

Activities: Focused on the creation of the necessary **conducive environment** for boosting the REEE in Jordan:

Under Budget Support

- 1.1 Energy policy reform assessment: preparing, updating, revising and approving further needed institutional, legislative, regulatory and strategic framework for the REEE across developmental sectors (e.g. regulation -waste to energy potential etc.). This action will also result in the revision and update of NEEAP and the Renewable Energy Action Plan (RENAP) based on a business model approach as well as setting up a multi stakeholders' sustainable policy dialogue and will lead to enhanced investments in the RE sector of an average of 100 Megawatt/year. (MEMR & EMRC).
- 1.2 Establishing a cooperation model (possible future agency structure) by further linking NERC and JREEEF for the REEE sector development & monitoring, and demonstrating the capacity and internal organisation, inter alia to support the implementation of REEE II (MEMR & NERC).
- 1.3 Assessing and analysing in details the future of renewable energy beyond 2020 and the role of NEPCO in absorbing these sources into the Grid beyond 2020,

including technical elaboration of conditions for renewable energy development (e.g. through grid code development) (NEPCO).

Priority Area 2: Supporting the implementation of the RE and EE components under the National Energy Strategy

Activities

Under Budget Support

- 2.1 Designing, installing, operationalising and commissioning a **5-7 MW Photovoltaic (PV)** plant in Al Azraq and on-grid connection (MEMR).
- 2.2 Promoting widespread installation of Solar Water Heating systems in rural community areas (about 20,000 units), in close collaboration with CSOs and JREEEF and installing 1,000 roof-top PV systems with a focus on public sector and rural areas for low-income communities (community based approach) and market-based approach for lower-middle income households (MEMR).

Under Complementary support

- 2.3 Designing and installing a treatment facility for energy production with a capacity of 400-500 t/d producing 2MW at the existing transfer station, to be connected to the national grid (GAM).

Priority Area 3: Supporting REEE applications in few selected high electricity consuming sectors and in some public entities (construction and street lighting)

Under Budget Support

- 3.1 Modernising 5 to 10 significant public facilities by undertaking EE measures, following at least 20 energy audits across administrative buildings (including insulation, double glazing, rehabilitation) and increasing the use of Solar Water Heaters and PV in public building sector (MoPWH).
- 3.2 Installation of LED lamps within the cities and new designed roads, following a feasibility study by the Ministry of public works and Housing together with Municipalities (MOPWH & Municipalities).

Priority Area 4: Provision of REEE services and demand side management in the Water and Irrigation Sector to enhance the business model and agro industry.

Activities

Under Budget Support

- 4.1 Enhancing the agriculture production by installation of Solar Water Pumping facilities and equipping Irrigated farms in Jordan with REEE, along the Jordan valley area (200 units) and uplands in Mafraq, Azraq & Madaba (617 Dunum) with 100 units (MoEnv).

Under Complementary support

- 4.2 Assessing the needs and operationalise/ install REEE in 3-5 water supply stations using PV water pumping systems¹² (MoWI).

Further Complementary support (for all priority areas)

¹²

e.g. Zai treatment conveyance and pumping systems¹², Al Zaatari and Al Azraq stations and possibly (Zaraa Maen and Wadi Arab old station).

- Reinforce capacities for promotion, awareness and lobbying of REEE solutions in Jordan- of civil societies, NGOs and business associations (grants).
- General support to main institutional stakeholders and associated partners (including private sector, banks, academia, NGOs) to support for legislations and regulations, identification of projects, training, joint programmes between line ministries, development of communication, visibility & awareness strategies, accreditation for ESCOs establishment and market development; support to revision of NEEAP and RENAP (technical assistance contracts).

4.3 Intervention logic

From the national policy/strategy point of view, the REEE II programme is in line with the national targets of the energy strategy set for 10% RE of the energy mix and 20% EE enhancement by 2020. It is also in line with Vision 2025 aiming at 11% RE from the energy mix by 2025. The action reflects clear EU understanding of the needs for Jordan to enhance the REEE sector development and move to deliver more tangible outcomes represented by different visible activities.

REEE II does not stop at the support to the energy sector, yet extends further support to improve resource sustainability in the building, water and irrigation and municipal waste sectors. The expected sustainable results, which are totally in line with the priorities of Jordan, and equally important to the EU general policy on green energy and minimising negative impacts of Climate Change.

In summary, REEE II will lead to the following results:

Results 1

Under Budget Support

- 1.1 Enhanced institutional, legal, regulatory frame for REEE promotion across developmental sectors resulting in the updated National Energy and Energy Efficiency Action Plan (NEEAP) across developmental sectors and action plan for RENAP.
- 1.2 An average of 100 Megawatt/year RE investments are accomplished within 2016-2018.
- 1.3 A national REEE cooperation model (possibly with an Agency structure) is established and operates efficiently.
- 1.4 A Policy stakeholder dialogue structure representing all partners is established, recognised and operationalised.
- 1.5 A NEPCO vision for RE beyond 2020/Grid is formulated and set including the technical conditions.

Results 2

Under Budget Support

- 2.1 A 5-7 MW- PV Power Plant in the area of Al AZRAQ is installed and operated.
- 2.2 Enhanced and strengthened Solar Water Heater Systems use, with installation of **20,000** units all over the country, and the applications of 1000 PV rooftop systems in public institutions and rural areas.

- 2.3 Strengthened technical, managerial and organisational capacities of public and private operators involved in the REEE sector.

Under Complementary support

- 2.4 An energy generation model from municipal waste is installed and commissioned with a capacity of **2.0 MW**.

Results 3

Under Budget Support

- 3.1 Enhanced energy service in public sector by the use of REEE in the Construction Sector – through, inter alia, 20 EE audits, EE enforcement code-labelling & standards-standardisation, accreditation and certification (in collaboration with Jordan Institute for Standards and Metrology - JSIM).
- 3.2 Enhanced and modernised energy services in public sector through EE measures (e.g. insulation, double glazing, rehabilitation) while increased the use of SWH and PV in 5 to 10 main public buildings.¹³
- 3.3 Trained Engineers and technicians from the Association of construction operators and Association of Engineers (**200** staff).
- 3.4 5-6 projects for installation of LED bulbs in Municipalities –rural areas are fully completed.

Results 4

Under Budget Support

- 4.1 200 Solar Water pumping Systems for Jordan Valley and 100 units for the highlands area for irrigation and enhancement of the agro business in Jordan (Nexus approach: energy, water and food) are installed.

Under Complementary support

- 4.2 Decentralised REEE facilities (P.V Solar Power and enhanced efficiency measures), installed and operated at the main three-five domestic Water Pumping Stations.

Further complementary support results:

- Established awareness and lobbying modalities and operations
- Enhanced communication, visibility, reforms, training, outreach and dissemination strategy for REEE promotional programme through the planned TA.

5 IMPLEMENTATION

5.1 Financing agreement

In order to implement this action, it is foreseen to conclude a Financing Agreement, signed with the partner country, referred to in the budget (Article 184(2)(b) of Regulation (EU, Euratom) No 966/2012.

¹³ Proposed public buildings are MoEnv; MEMR, EMRC etc.

5.2 Indicative implementation period

The indicative operational implementation period of this action, during which the activities described in section 4.1 will be carried out and the corresponding contracts and agreements are implemented is 48 months from the date of entry into force of the financing agreement.

Extensions of the implementation period may be agreed by the Commission's authorising officer responsible by amending this decision and the relevant contracts and agreements; such amendments to this decision constitute technical amendments in the sense of point (i) of Article 2(3)(c) of Regulation (EU) No 236/2014.

5.3 Implementation of the budget support component

5.3.1 *Rationale for the amounts allocated to budget support*

The amount allocated for budget support component is EUR **47.5** million, and for complementary support is EUR 42.5 million. This amount is based on the identification and formulation analysis that showed the need to support the REEE sectors across different development sectors. For the water sector a special feasibility study by EBRD on investing in REEE solutions in the main pumping stations showed that the needed investment cost for few of the main stations exceeded JOD 250 million. Furthermore, the fund JREEEF has an allocation of JOD 20 million to facilitate its activities. Jordan has clear set targets to enhance the REEE sector development towards 2020 and 2025. The latest response plan to mitigate the impact of the Syrian Crisis shows the need to invest in RE in host communities for an estimated USD 30 million, and to install Solar Water Heaters for a projection of USD 25 million, which are major challenges for the country. In order to enhance this, the EU support is designed to support meeting these targets.

5.3.2 *Criteria for disbursement of budget support*

- a) **The general conditions for disbursement of all tranches** are as follows:
- Satisfactory progress in the implementation of the sector policy and/or Energy strategy 2007-2020 and continued credibility and relevance thereof;
 - Implementation of a credible stability-oriented macroeconomic policy;
 - Satisfactory progress in the implementation of Comprehensive Reform Strategy of PFM 2014-2017 and/or its future follow-up programmes;
 - Satisfactory progress with regard to the public availability of timely, comprehensive and sound budgetary information.
- b) **The specific conditions for disbursement** that may be used for variable tranches are performance criteria and indicators relating to five broad components of REEE II policies and strategies:
- 1) The proper updated definition and contents of policies and strategies, and full government's commitment to strategy implementation, in particular the results in terms of energy generation from renewable sources and energy saved;
 - 2) The update, preparation and adoption of legislation, regulations and standards;
 - 3) The restructuring and organisation of responsible institutions and establishments of the cooperation model (JREEEF and NERC) and policy

dialogue, so that the REEE II sector is capable of updating and implementing strategies and programme development;

- 4) The provision of works, services and infrastructures for REEE in different sectors: water, construction, street lighting and environment (mitigation and adaptation measures);
- 5) The development of adequate monitoring and evaluation methods and procedures.

The chosen performance targets and indicators to be used for disbursements will apply for the duration of the programme. However, in duly justified circumstances, the MOPIC may submit a request to the Commission for the targets and indicators to be changed. The changes agreed to the targets and indicators may be authorised by exchange of letters between the two parties.

In case of a significant deterioration of fundamental values, budget support disbursements may be formally suspended, temporarily suspended, reduced or cancelled, in accordance with the relevant provisions of the financing agreement.

5.3.3 Budget support details

Four tranches are indicatively foreseen, one fixed and three variable tranches. Budget support is provided as direct untargeted budget support to the national Treasury. The crediting of the Euro transfers disbursed into Jordanian dinar will be undertaken at the appropriate exchange rates in line with the relevant provisions of the financing agreement.

5.4 Implementation modalities for complementary support of budget support

5.4.1 Grants: Call for proposals to CSOs for effective awareness on REEE (direct management)

- (a) Objectives of the grants, field of intervention, priorities of the year and expected results

The global objective of the call is to contribute to the development and implementation of effective awareness, communication and lobbying activities that would be used to help Jordan reach its renewable energy and energy efficiency targets for 2020, and setting models for the climate change agenda and green economy enhancement by REEE developments and promoting cooperation between CSOs and Private/ Public sector around RE and EE initiatives.

- (b) Eligibility conditions

Potential applicants include legal persons and specific type of organisations such as: non-governmental organisation, local authority, private entities with a particular link with RE and/or EE, international (inter-governmental) organisation as defined by Article 43 of the Rules of application of the EU Financial Regulation and be established in a Member State of the European Union or in Jordan (this obligation does not apply to international organisations) and be directly responsible for the preparation and management of the action with the co-applicant(s) and affiliated entity(ies), not acting as an intermediary.

Subject to information to be published in the call for proposals, the indicative amount of the EU contribution per grant is EUR 100,000-200,000 and the grants may be awarded to sole beneficiaries and to consortia of beneficiaries (coordinator and co-

beneficiaries). The indicative duration of the grant (its implementation period) is 18-24 months.

(c) Essential selection and award criteria

The essential selection criteria are financial and operational capacity of the applicant.

The essential award criteria are relevance of the proposed action to the objectives of the call; design, effectiveness, feasibility, sustainability and cost-effectiveness of the action.

(d) Maximum rate of co-financing

The maximum possible rate of co-financing for grants under this call is 80% of the eligible costs of the action.

In accordance with Articles 192 of Regulation (EU, Euratom) No 966/2012, if full funding is essential for the action to be carried out, the maximum possible rate of co-financing may be increased up to 100%. The essentiality of full funding will be justified by the Commission's authorising officer responsible in the award decision, in respect of the principles of equal treatment and sound financial management.

(e) Indicative timing to launch the call

Second quarter of 2017.

5.4.2 Indirect management with EBRD.

A part of this action may be implemented in indirect management with EBRD in accordance with Article 58(1)(c) of Regulation (EU, Euratom) No 966/2012. This implementation entails to install REEE applications in main water pumping stations, and to demonstrate a "waste to energy" model in Amman. This implementation is justified since both areas are main priorities to enhance REEE development, and EBRD have started working on both areas with the relevant Jordanian authorities. The EU support will thus build on the existing experience of EBRD.

The entrusted entity would carry out the following budget-implementation tasks:

- The action will support developing 3-5 REEE applications in water pumping stations, based on the existing feasibility study implemented by EBRD. This will be done fully by EBRD from design, tender, contracting and implementation.
- As for the waste to energy project, the Government of Jordan is working through different municipalities to enhance proper waste management practices, including energy generation. EBRD has already provided a loan for Greater Amman Municipality in this regard, and the action will build on this potential to do a demonstration site for a main transfer station. This will be done fully by EBRD from design, tender, contracting and implementation.

If negotiations with the above-mentioned entrusted entity fail, that part of this action may be implemented in indirect management with the French Development Agency (AFD). The implementation by this alternative entrusted entity would be justified because they have existing projects within the same areas with the Government of Jordan, and established good working mechanisms. The alternative entrusted entity would basically take over the same tasks, to install REEE applications in main water pumping stations, and to demonstrate a "waste to energy" model in Amman.

The EBRD is currently undergoing the ex-ante assessment in accordance with Article 61(1) of Regulation (EU, Euratom) No 966/2012. The Commission's

authorising officer responsible deems that, based on the compliance with the ex-ante assessment based on Regulation (EU, Euratom) No 1605/2002 and long-lasting problem-free cooperation, the international organisation can be entrusted with budget-implementation tasks under indirect management.

5.4.3 Procurement

A Technical Assistance Team (TAT) will assist the Beneficiary in the implementation of the project, including the provision of:

- Technical expertise tasks, including giving the needed support to MEMR and different stakeholders/partners on both project component and Sector Budget Support component.
- Administrative, preparatory and ancillary tasks relating to planning, monitoring, reporting on project components, procurement, and financial management.
- Communication and awareness plans/actions as set in their TOR.

<i>Subject in generic terms, if possible</i>	<i>Type (works, supplies, services)</i>	<i>Indicative number of contracts</i>	<i>Indicative trimester of launch of the procedure</i>
Technical Assistance	TA+ evaluation/appraisal/s (services)	3	1 st quarter 2016

These tasks will involve neither the exercise of public authority nor the use of discretionary powers of judgement.

The TA team will be hosted in the premises of MEMR who in turn will provide the required facilities. The TA will work under terms of reference agreed by both the Beneficiary and the EU.

5.5 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 in accordance with Article 9(2)(b) of Regulation (EU) No 236/2014 on the basis of urgency or of unavailability of products and services in the markets of the countries concerned, or in other duly substantiated cases where the eligibility rules would make the realisation of this action impossible or exceedingly difficult.

5.6 Indicative budget

This budget has been set based on the contribution for an amount of EUR 45 million from the general budget of the European Union for 2015 and for an amount of EUR 45 million from the general budget of the European Union for 2016, subject to the availability of appropriations following the adoption of the relevant budget:

	2015 EU	2016 EU	EU	Indicative

	contribution (amount in million EUR)	contribution (amount in million EUR)	contribution (amount in million EUR)	third party contribution, in currency identified
5.3.- Budget support Sector Reform Contract	18	29.5	47.5	
5.4. – Complementary support	27	15.5	42.5	
5.4.1 – Call for proposals CSOs (direct management)	0	0.5	0.5	0.25
5.4.2 – PAGODA (indirect management)	20	15	35	
5.4.3 – Procurement (direct management)	4.5	0	4.5	
5.9 – Evaluation, 5.10 - Audit	0.5	0	0.5	N.A.
5.11 – Communication and visibility	0.5	0	0.5	N.A.
Contingencies	1.5	0	1.5	N.A.
Totals	45	45	90	0.25

5.7 Organisational set-up and responsibilities

5.7.1 General organisation

The Ministry of Planning and International Cooperation (MoPIC) is the signatory of the Financing Agreement and the project supervisor, with overall responsibility for coordination with the EU and the various stakeholders involved. It is also responsible for facilitating the monitoring and appraisal missions to be conducted in the framework of this programme. MoPIC may assign a staff/team to work on managing/monitoring/facilitating this programme.

A Programme Steering Committee (SC) will be formed and will meet at least three times a year to endorse strategic orientations, oversee programme execution, and facilitate implementation of the activities. The SC will be chaired by the MoPIC. It will include representatives from the MEMR, MoWPH, MoWI, MoEnv, MoF and EMRC, NERC and EU Delegation as well; and its composition will reflect the variety of stakeholders in the programme. NEPCO and GAM may be asked to join certain meetings under the Steering committee structure. Also possible CSOs, private sector representatives may also take part according to their set roles needed, which will enhance Policy dialogue to develop the REEE sector.

The SC will monitor the overall implementation of the project, review project progress, coordinate the different results areas and guide the actions to the successful achievement of the project objectives. It approves the reports and work plans. It will also help coordinate between all Jordanian institutions and groups likely to be involved in the project.

A *Technical Committee*, chaired by the MEMR as a Secretariat, will be set and will report to the Steering Committee to facilitate implementation of the activities including technical and financial planning. The composition will reflect the variety of stakeholders in the REEE promotion and reform effort. It will include at least one representative of each of the following institutions: MEMR, MOPIC, MoPWH, MoWI, MoEnv, NEPCO, GAM, Private sector (represented by the Chamber of Commerce, Associations and Foundations, Vocational Training Corporation, and JISMO, NERC, and HCST. The EU technical assistance will participate in the Technical Committee as an advisor. The stakeholders will be called for meetings every 3-4 months and more often if deemed necessary. The other line ministries, semi-governmental institutions, private sector and non-governmental organisations will be called upon when needed.

The management and implementation of sub-components mentioned in section 5.4.2 shall be carried out under indirect management by EBRD Institution on behalf of the Ministry of Water and Irrigation (MoWI) and Greater Amman Municipality (GAM). The implementation phase of these sub-components is going to start only after the signature of a delegation agreement with EBRD. The implementation, follow-up and reporting will be carried out pursuant to the rules and procedures set out in the practical guide to EU procedures.

5.8 Performance 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) as measured by corresponding indicators, using as reference the logframe matrix (for project modality) or the list of result indicators (for budget support). The report shall be laid out in such a way as to allow monitoring of the means envisaged and employed and of the budget details for the action. The final report, narrative and financial, will cover the entire period of the action implementation.

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).

5.9 Evaluation

Having regard to the nature of the action, a final and ex-post evaluation will be carried out for this action or its components, via independent consultants contracted by the Commission. A mid-term evaluation might also take place.

The mid-term evaluation, if any, will be carried out for problem solving and learning purposes, in particular with respect to the intention to launch a second phase of the action.

Final and ex-posts evaluations will be carried out for accountability and learning purposes at various levels (including for policy revision), taking into account in particular the fact that some of the activities are covering innovative actions such as waste to energy and others which can be considered as a pilots.

The Commission shall inform the implementing partner at least 1 month in advance of the dates foreseen 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. 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.

Indicatively, 2 contracts for evaluation services shall be concluded in 2018.

5.10 Audit

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 audits or expenditure verification assignments for one or several contracts or agreements.

5.11 Communication and visibility

Communication and visibility of the EU is a legal obligation for all external actions funded by the EU. This action shall contain communication and visibility measures which shall be based on a specific Communication and Visibility Plan of the Action, to be elaborated at the start of implementation and supported with the budget indicated in section 5.6 above. The TA team will help implement this plan.

In terms of legal obligations on communication and visibility, the measures shall be implemented by the Commission, the partner country, contractors, grant beneficiaries and/or entrusted entities. Appropriate contractual obligations shall be included in, respectively, the financing agreement, procurement and grant contracts, and delegation agreements.

The Communication and Visibility Manual for European Union External Action shall be used to establish the Communication and Visibility Plan of the Action and the appropriate contractual obligations.

The communication and visibility measures might be implemented by way of procurement (beyond the procurement foreseen in section 0 with an overall budget allocation EUR 0.5 million, while the type of contract will be decided during the implementation process (including use of framework contracts, if needed). The launching of the procedures might be in 2016.

APPENDIX 1- INDICATIVE LOG FRAME MATRIX (FOR PROJECT MODALITY)

Project title: Support to Renewable Energy and Energy Efficiency Programme in Jordan, total EU contribution: EUR 90,000,000

The inputs, the expected direct and induced outputs and all the indicators, targets and baselines included in the list of result indicators are indicative and may be updated during the implementation of the action without an amendment to the financing decision. The table with the indicative list of result indicators will evolve during the lifetime of the action: new columns will be added for intermediary targets (milestones), when it is relevant and for reporting purpose on the achievement of results as measured by indicators.

	INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	BASELINE 2015	TARGETS	SOURCES OF VERIFICATION	ASSUMPTIONS
OVERALL OBJECTIVE	to contribute to the development and implementation of effective policies that would help Jordan reach its renewable energy and energy efficiency (REEE) targets for 2020.	-Renewable energy contribution to the Energy mix. - Energy efficiency/savings (EE) based on the 2007 energy consumption.	- 1.5% RE in energy mix - 5% EE	-4% RE in energy mix by 2017 (MEMR) -6% RE in energy mix by 2019 (MEMR) -11% EE in 2017(MEMR) -18% EE in 2019(MEMR)	<ul style="list-style-type: none"> ● Publications/reports of MEMR, energy balance & statistics. ● Publications/reports and web site of the EMRC and NEPCO. MEMR monitoring and evaluation reports and milestones 	<ol style="list-style-type: none"> 1. The statistics and energy information system available at MEMR are further improved for reaching the REEE targets. 2. Proper use of the EU Programme for capacity development and for setting a schedule for progress including definition of milestones and monitoring/supervision for verifying the indicators. 3. External TA to reach the REEE targets will be provided by the EU Programme. 4. Government of Jordan (GOJ) will continue to attract developers to implement an average of 100 megawatt RE projects annually. 5. GOJ will implement REEE into main development sectors

	INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	BASELINE 2015	TARGETS	SOURCES OF VERIFICATION	ASSUMPTIONS
SPECIFIC OBJECTIVES	<p>To complement the relevant institutional, legislative and fiscal reforms, creating the enabling environment to mobilise public and private actors, in order to achieve the sector goals</p> <p>To contribute to full scale implementation of activities for enhancing sustainable production and consumption patterns and inducing behavioural changes.</p>	<ol style="list-style-type: none"> 1. Number of legal and regulatory framework and institutional structure for reaching the REEE adopted/in place enhanced by MEMR and EMRC to raise more participation from the private sector. 2. REEE applications are reflected in MEMR MTEF and confirmed within their annual budgets 3. Legal and regulatory framework for ESCOs setting is prepared and approved by MEMR and EMRC 	<ol style="list-style-type: none"> 1- the set of laws and regulations as in 2014 (updated 2012 REEE law by MEMR, direct proposals by-law and related regulations under EMRC namely the Wheeling regulation) 2 - MEMR MTEF : JOD 2 million 3 - 0, not existing 	<ol style="list-style-type: none"> 1-Update Sector plans namely NEEAP and RENAP including implementation, monitoring and evaluation, and further develop the regulatory and legal frameworks in line with merging needs (MEMR & EMRC), with a focus on the ESCOs regulation/s 2- 1, with monitoring reports (MEMR) 3- 1(MEMR & EMRC) 	<ul style="list-style-type: none"> ● updated legal, regulatory and sector plans, including private sector and ESCO related frames ● National gazette ● Annual reports and publications of MEMR, NEPCO and EMRC ● GOJ annual budget, and MEMR MTEF 	<ol style="list-style-type: none"> 1. The GoJ is willing and active in REEE development through establishing/ supporting/ funding appropriate departments, units or institutions, to take responsibility for: <ul style="list-style-type: none"> – Relevant legislation/ standards; – Budgeted action plans; – Coordination with other ministries and stakeholders; – Monitoring the enforcement of legislation; – Market- and consumer-oriented activities leading to RE & EE investments on both sides: generation and consumption. 2, GOJ ensures Donor coordination for better development of the REEE sector

	INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	BASELINE 2015	TARGETS	SOURCES OF VERIFICATION	ASSUMPTIONS
INDIRECT MANAGEMENT COMPONENT with EBRD						
PRIORITY AREA 4: Provision of decentralised REEE facilities (P.V Solar Power Plant), installed and operated at the main three-five domestic Water Pumping Stations						
PRIORITY AREA 2: Electricity Generation Capacity of RE and EE						
OUTPUTS 1	<ul style="list-style-type: none"> ◆ Decentralised REEE facilities (PV solar power plant), installed and operated at the main 3-5 Domestic Water Pumping Stations (Zai station; Azraq station, Zaatari and possibly at Zaraa Maen, and Wadi Arab old station) ◆ An energy generation model from municipal waste is installed and commissioned 	<ol style="list-style-type: none"> 1. number of key water pumping stations equipped with REEE technologies 2. A waste to energy model for electricity generation and heat is implemented in Amman through tendering to transform a current waste transfer station to an energy generation facility, connected to the Grid 	<ul style="list-style-type: none"> • 0 • 0 	<ul style="list-style-type: none"> • 3-5 by 2019 (EBRD/MOWI); • 1 (2 MW facility) by 2017 (EBRD/GAM) 	<ul style="list-style-type: none"> • Annual reports and website of MoWI and GAM • Project design documents including cost benefit analysis, and tender documents • Monitoring and evaluation reports • 	<ol style="list-style-type: none"> 1. EU Delegation to sign a PAGODA agreement/s with EBRD to implement both support projects to the water sector and the waste to energy model 2. Land area is cleared by MoWI for the PV system 3. Full collaboration of the Ministry with firms for installation 4. Feasibility study with costing and financial viability is within the allocated funds by EU 5. Social and environmental impacts assessment is conducted 6. 2 MW energy generated and operated under GAM 7. GOJ to facilitate the interconnection of the RE facilities for water sector and Waste sector, into the grid, and provide needed licences and agreements
COMPLEMENTARY SUPPORT						
<i>Action: Establishment and implementation of a CSOs call for proposals</i>						

	INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	BASELINE 2015	TARGETS	SOURCES OF VERIFICATION	ASSUMPTIONS
<u>OUTPUTS 2</u>	♦ REEE awareness campaigns and lobbying actions by NGOs/CSOs	1. Number of grants allocated to NGOs/CSOs for REEE awareness and lobbying	<ul style="list-style-type: none"> • 0 	<ul style="list-style-type: none"> • 2-3 grants by 2017 (EU) 	<ul style="list-style-type: none"> • Press and media surveys and reports • Labour marked statistics & surveys for involvement of women and youth • Call for proposal documentation 	<ol style="list-style-type: none"> 1. Participation of NGOs/CSOs and private business associations in the call 2. Communication and awareness campaigns are launched by NGOs/ CSOs and private business associations enhancing EU visibility
Action: TECHNICAL ASSISTANCE						
<u>OUTPUTS 3</u>	♦ Enhanced communication, visibility, reforms, training, outreach and dissemination strategy for REEE promotional programme through the planned Technical Assistance (TA)	<ol style="list-style-type: none"> 1. Number of participants to the planned TA 2. Number of REEE awareness/communication campaigns by GOJ 3. Monitoring and Evaluation of the TA activities 	<ul style="list-style-type: none"> • 0 • 0 • 0 	<ul style="list-style-type: none"> • 200 between 2016-2018 (EU) • 1 national campaign in 2017 (EU with MEMR leading) • TA annual reports and questionnaire for trainees evaluation (2016-2019) (TA with EU) 	<ul style="list-style-type: none"> • TA tenders, and workplans • Curricula & Syllabus • Participation lists • Personal evaluation certificates • Participant's evaluation reports. • External monitoring & evaluation reports • Participants' answered questionnaires • Social media, general media and interviews, etc. 	<ol style="list-style-type: none"> 1. Availability of qualified international experts 2. ToRs for TA are based on a detailed demand analysis 3. Willingness of the technicians and engineers, bankers, farmers etc. to receive training

APPENDIX 2- INDICATIVE LOG FRAME MATRIX (FOR SECTOR BUDGET SUPPORT)

Project title: Support to Renewable Energy and Energy Efficiency Programme in Jordan, total EU contribution: EUR 90,000,000

The inputs, the expected direct and induced outputs and all the indicators, targets and baselines included in the list of result indicators are indicative and may be updated during the implementation of the action without an amendment to the financing decision. The table with the indicative list of result indicators will evolve during the lifetime of the action: new columns will be added for intermediary targets (milestones), when it is relevant and for reporting purpose on the achievement of results as measured by indicators.

	INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	BASELINE 2015	TARGETS	SOURCES OF VERIFICATION	ASSUMPTIONS
OVERALL OBJECTIVE	to contribute to the development and implementation of effective policies that would help Jordan reach its renewable energy and energy efficiency (REEE) targets for 2020	- Renewable energy contribution to the Energy mix - Energy efficiency/savings (EE) based on the 2007 energy consumption	- 1.5% RE in energy mix - 5% EE	-4% RE in energy mix by 2017 (MEMR) -6% RE in energy mix by 2019 (MEMR) -11% EE in 2017(MEMR) -18% EE in 2019(MEMR)	<ul style="list-style-type: none"> ● Publications/reports of MEMR, energy balance & statistics ● Publications/reports and web site of the EMRC and NEPCO ● MEMR monitoring and evaluation reports and milestones 	<ol style="list-style-type: none"> 1. The statistics and energy information system available at MEMR are further improved for reaching the REEE targets 2. Proper use of the EU Programme for capacity development and for setting a schedule for progress including definition of milestones and monitoring/supervision for verifying the indicators 3. External TA to reach the REEE targets will be provided by the EU Programme 4. GOJ will continue to attract developers to implement an average of 100 megawatt RE projects annually 5. GOJ will implement REEE into main development sectors

	INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	BASELINE 2015	TARGETS	SOURCES OF VERIFICATION	ASSUMPTIONS
SPECIFIC OBJECTIVES	<p>To complement the relevant institutional, legislative and fiscal reforms, creating the enabling environment to mobilise public and private actors, in order to achieve the sector goals</p> <p>To contribute to full scale implementation of activities for enhancing sustainable production and consumption patterns and inducing behavioural changes</p>	<ol style="list-style-type: none"> 1. legal and regulatory framework and institutional structure for reaching the REEE targets are in place, and enhanced by MEMR and EMRC to meet arising needs for sector development, with more participation from the private sector 2. REEE applications are reflected in MEMR MTEF and confirmed within their annual budgets 3. Legal and regulatory framework for ESCOs setting is prepared and approved by MEMR and EMRC 	<ol style="list-style-type: none"> 1- the set of laws and regulations as in 2014 (updated 2012 REEE law by MEMR, direct proposals by-law and related regulations under EMRC namely the Wheeling regulation) 2 - MEMR MTEF : JOD 2 million 3 - 0, not existing 	<ol style="list-style-type: none"> 1-Update Sector plans namely NEEAP and RENAP including implementation, monitoring and evaluation, and further develop the regulatory and legal frameworks in line with merging needs (MEMR & EMRC) with a focus on the ESCOs regulation/s 2- 1, with monitoring reports (MEMR) 3- 1(MEMR & EMRC) 	<ul style="list-style-type: none"> ● updated legal, regulatory and sector plans, including private sector and ESCO related frames ● National gazette ● Annual reports and publications of MEMR, NEPCO and EMRC ● GOJ annual budget, and MEMR MTEF 	<ol style="list-style-type: none"> 1. The GoJ is willing and active in REEE development through establishing/ supporting/ funding appropriate departments, units or institutions, to take responsibility for: <ul style="list-style-type: none"> – Relevant legislation/ standards; – Budgeted action plans; – Coordination with other ministries and stakeholders; – Monitoring the enforcement of legislation; – Market- and consumer-oriented activities leading to RE & EE investments on both sides: generation and consumption. 2. GOJ ensures Donor coordination for better development of the REEE sector

	INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	BASELINE 2015	TARGETS	SOURCES OF VERIFICATION	ASSUMPTIONS
PRIORITY AREA 1: Institutional, legislative, regulatory and strategic framework						
INDUCED OUTPUTS I	<ul style="list-style-type: none"> - An average of 100 Megawatt/year RE investments are accomplished within 2016-2018; - A national REEE cooperation model (possible future Agency structure) is established and operates efficiently; - A Policy stakeholder dialogue structure representing all Partners is established, recognised and operationalised. - A NEPCO vision for RE beyond 2020/Grid is formulated and set including the technical conditions. 	<ul style="list-style-type: none"> - Introduction of 1-2% RE annually (of the energy mix) into the national grid - Establishment of REEE cooperation model to enhance REEE sector development. - Establishment of a functional policy dialogue structure led by MEMR and meets regularly - Setting up of a new NEPCO strategy with RE components beyond 2020 following the finalisation of related feasibility studies/surveys 	<ul style="list-style-type: none"> ● 1.5 % of RE into the energy mix of Jordan ● Signed MOU for cooperation between JREEEF and NERC ● 0 (no structured dialogue) ● 0 (no clear vision for NEPCO on RE beyond 2020) 	<ul style="list-style-type: none"> ● 2016: 100 megawatt 2017:100 megawatt 2018:100 megawatt 2019: 100 megawatt (MEMR) ● 2016: start with technical surveys/studies for REEE sector ● 2017-2019: joint reporting including monitoring reports for REEE sector development (JREEEF & NERC) ● 1 by 2016 (MEMR) ● 1 by 2019 (NEPCO) 	<ul style="list-style-type: none"> ● Signed MoUs & contracts – between JREEEF and NERC (cooperation model) ● Policy dialogue forums, meetings minutes, invitations ● MEMR, EMRC, MoPWH reports and publications ● Assessment reports on NEPCO's role in the revised strategies concerning RE inclusion and grid extension beyond 2020 ● NEPCO grid study 	<ul style="list-style-type: none"> 1.GOJ continues its policy to attract RE developers to support electricity generation 2. International donor agencies and development banks intend to support/ fund REEE related activities and interventions 3.The RE/EE cooperation model has needed organisation targeted to RE/EE consumers / investors markets and support departments on economics monitoring, training and communication; with a sustainable budget 4. NEPCO revises its vision beyond 2020 to include further RE projects

	INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	BASELINE 2015	TARGETS	SOURCES OF VERIFICATION	ASSUMPTIONS
PRIORITY AREA 2: Electricity Generation Capacity of RE and EE						
OUTPUTS 2	<ul style="list-style-type: none"> ◆ A 5-7 MW PV Power Plant in the area of Al AZRAQ is installed and operated; ◆ Enhanced/ strengthened Solar Water Heater Systems use, with installation of 20,000 units all over the country; ◆ Strengthened PV Roof Top systems and in particular in rural areas through dissemination strategy and financing support for 1000 systems; 	<ol style="list-style-type: none"> 1. Tender to install a 5-7 MW PV plant and connect it to the Grid in Al Azraq is finalised 2. Number of installed SWH systems in residential areas by MEMR 3. Technical surveys and tenders/call for applications to install 1000 PV roof top systems at public and residential buildings by MEMR are finalised and PV systems are connected to the Grid 	<p>1- 0 2- 2500 3- 0</p>	<ul style="list-style-type: none"> • 5-7 MW facility In 2018 (MEMR) • 2017: 12500 SWH, 2019:22500 SWH (MEMR) • 2017:500, 2019:1000 (MEMR) 	<ul style="list-style-type: none"> • Annual reports and web site of MEMR and JREEF/NERC cooperation model • Contract with buildings owners/land allocation & clearance (where needed) 	<ol style="list-style-type: none"> 1. GOJ and Private sector and CSOs are jointly developing capacity for REEE projects 2. GOJ will support solar water heaters and PV systems penetration 3. Feed in tariffs are attractive for house owners and operators 4. User groups (private and commercial) are aware of the advantage of investing in REEE in order to minimise energy expenditure in the long run 5. Collaboration and effective cooperation /communication with NERC by JREEEF/MEMR
PRIORITY AREA 3: Cross-sectorial REEE applications (Construction and Street Lighting)						
OUTPUTS 3	<ul style="list-style-type: none"> ◆ Enhanced energy service in public sector by introduction of REEE mainly in the Construction Sector 	Finalisation of the EE rehabilitation of public buildings, by MOPWH	<ul style="list-style-type: none"> • 0 	<ul style="list-style-type: none"> • 5 by 2017 • 5 by 2019 (MOPWH) 	<ul style="list-style-type: none"> • Energy audits balance sheet for public buildings 1. MOPWH reports showing 5-10 public buildings have undergone a full rehabilitation based EE (insulation, glazing, efficient lamps, use of efficient appliances ...etc 	<ol style="list-style-type: none"> 1. Qualified international expertise is made available 2. Effective participation of the private sector (e.g. Public buildings owners/occupiers are collaborating with MoPWH

	INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	BASELINE 2015	TARGETS	SOURCES OF VERIFICATION	ASSUMPTIONS
OUTPUTS 3	◆ Modernised and enhanced street lighting	6-7 pilot street lighting with REEE technologies installed by MOPWH	• 0	• 7 by 2019 (MOPWH)	<ul style="list-style-type: none"> ● Cost benefit analysis ● Public media reports ● LEDs have been installed on street lighting 	<ol style="list-style-type: none"> 1. LED bulbs of satisfactory quality are available 2. Authorities responsible for Streets lighting and cooperate
PRIORITY AREA 4: Provision of REEE services and demand side management in the Water and Irrigation Sector						
OUTPUTS 4	◆ Mitigation and Adaptation: measures for climate change: REEE support to rural enterprises by providing solar water pumping Systems for enhancement of agro business in Jordan (Jordan Valley and highlands)	number of SWP units installed in the Jordan valley and the highlands	• 0	• 200 in JV and 100 in the highlands (2019) (MOENV)	<ul style="list-style-type: none"> ● Cost benefit analysis ● Public media reports ● Process monitoring reports of 200 units of SWP in Jordan Valley and 100 SWP in Highlands ● Documentation on environmental and social impacts (e.g. reduction of CO² emissions) 	<ol style="list-style-type: none"> 1. MOENV to lead the efforts to achieve this result 2. Only proven technology is implemented 3. Effective quality control of technology is available and applied 4. Tender document and contracts award 5. 300 solar water pumping systems operationalised 6. Financial mechanism is documented 7. Support and collaboration of NGOS (Farmers Association) and JVA