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# CES-MED

CLEANER ENERGY SAVING MEDITERRANEAN CITIES

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## Jordan Report

Donors and other Funding Initiatives  
in the Areas of Sustainable Development  
at the Local Level



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EuropeAid/132630/C/SER/Multi

**CLEANER ENERGY SAVING MEDITERRANEAN CITIES**

*Contract No ENPI 2012/309-311*

**REPORT**

***Donors and Other Funding Initiatives in the Areas of Sustainable development at the Local Level for Jordan***

**JUNE 2015**



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***HULLA & CO HUMAN DYNAMICS KG***

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***Associated Consulting Engineers (ACE)***

***Institute of Communications and Computer Systems of the***

***National Technical University of Athens***

***The Assembly of European Regions (AER)***

***The EuroMed Cities Network***

## List of Abbreviations and Acronyms

AFD	Agence Development Française
AFESD	The Arab Fund for Economic and Social Development
ASEZA	Aqaba Special Economic Zone Authority
BEI	Baseline Emissions Inventory
CES-MED	Cleaner Energy Saving Mediterranean Cities Project
CoM	Covenant of Mayors
CSO	Community Service Organizations
DEG	Deutsche Investitions – und Entwicklungsgesellschaft
EBRD	European Bank for Reconstruction and Development
EE	Energy Efficiency
EIB	European Investment Bank
ENPI	European Neighborhood and Partnership Instrument
ESCB	Energy Sector Capacity Building
ESMAP	Energy Sector Management Assistance Program
EU	European Union
FEMIP	Facility for Euro-Mediterranean Investment and Partnership
GEEREF	Global Energy Efficiency and Renewable Energy Fund
GEF	Global Environmental Facility
GHG	Green House Gases
GIZ	German International Cooperation
GoJ	Government of Jordan
IDB	Islamic Development Bank
IDRC	International Development Research Center
IDF	Infrastructure Development Fund
IFC	International Financing Cooperation
IFI	International Finance Institution
JCP	Jordan Competiveness Program
JICA	Japan International Cooperation Agency
JGBC	Jordan Green Building Council
JNBC	Jordan National Building Code Council
JRC	Joint Research Center
JREEEF	Jordan Renewable Energy and Energy Efficiency Fund
JSC	Joint Service Council
KfW	Kreditanstalt fuer Wiederaufbau (German Development Bank)
LENS	Local Enterprise Support Project
MEMR	Ministry of Energy and Mineral Resources
MENA	Middle East and North Africa
MIF	Mediterranean Investment Facility
MIGA	Multilateral Investment Guarantee Agency
MoPWH	Ministry of Public Works and Housing
MoEnv	Ministry of Environment
MoF	Ministry of Finance
MoMA	Ministry of Municipal Affairs
MoPIC	Ministry of Planning and International Cooperation
NCG	National Coordination Group
NEEAP	National Energy Efficiency Action Plan
NERC	Nation Energy Research Center
NGO	Non-Governmental Organization
NREAP	National Renewable Energy Action Plan
OiER	Organization for International Economic Relations

PPP	Public Private Partnership
PV	Photovoltaic
RCREEE	Regional Center for Renewable Energy and Energy Efficiency
RE	Renewable Energy
REEEL	Renewable Energy and Energy Efficiency Law
SEAP	Sustainable Energy Action Plan
SEMED	Southern and Eastern Mediterranean
SIP	Small Investment Program
SudeP	Sustainable Urban Demonstration Project
SWH	Solar Water Heater
UfM	Union for the Mediterranean
UNDP	United Nations Development Programme
UPFI	Urban Projects Finance Initiative
USAID	United States Agency for International Development
USD	United States Dollar
WB	World Bank

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## 1 EXECUTIVE SUMMARY

Municipalities can play a crucial role in reduction of GHG emissions; therefore the EU initiated the **Cleaner Energy Saving Mediterranean Cities Project (CES-MED)** to support the efforts of local authorities in nine European Neighborhood and Partnership Instrument (ENPI) South Mediterranean Partner Countries, including Jordan. The project aims at:

- Developing the local authorities' capacities to formulate and implement sustainable local policies.
- Expanding the use of sustainable policies, such as solutions to renewable energy, measures to reduce CO<sub>2</sub> emissions, efficient water and waste management, and environment-friendly public transport.
- Increasing the awareness and responsiveness of national authorities to the need for and benefits of a strong involvement of cities in local sustainable policy issues.

**CES-MED in Jordan** is coordinated, under the Ministry of Planning and International Cooperation, and with the National Coordination Group (NCG). CES-MED partners with three municipalities for the development and implementation of Sustainable Energy Action Plans:

- Aqaba in the South, falling under the Aqaba Special Economic Zone Authority (ASEZA).
- Irbid in the North, falling under the Ministry of Municipal Affairs (MoMA).
- Kerak in the Middle highlands, falling under MoMA.

**The availability of support and financing** for the preparation of detailed studies as well as the implementation of SEAP that can be allocated to, or benefit cities and municipalities is indicated in this report. The listed funding opportunities include contact details and ways for applications both at national and international level, including International Financing Institutions (IFIs) international, regional and bilateral donors funding opportunities, including grants, loans and investments opportunities and National funding instruments dedicated to Local Authorities in Jordan.

The IFIs that are active in Jordan are Agence Development Francaise (Afd), European Bank for Reconstruction and Development (EBRD), International Financing Cooperation (IFC), Kreditanstalt fuer Wiederaufbau (KfW) and the World Bank (WB)

Donor organizations with ongoing projects in Jordan are European Union (EU) – Technical Assistance to the Renewable Energy and Energy Efficiency Programme (TA to REEEP) in MEMR, Deutsche Gesellschaft fuer Internationale Zusammenarbeit (GIZ), Japan International Cooperation Agency (JICA), United National Development Programme (UNDP) and United States Agency for International Development (USAID).

National funds for environmental and energy projects are in place, the Jordan Environmental Fund (JEF) and the Jordan Renewable Energy and Energy Efficiency Fund (JREEFF) however not yet with operational access for municipalities.

Ongoing projects are dealing reduction of energy consumption in the following subjects:

Transport	: Vehicle maintenance and mobility (transportation) planning.
Buildings	: Lighting, HVAC, Appliances, EE Building Code Enforcement
Electricity	: (PV) Street lighting and pumping for public water supplies
Waste	: Waste management

Energy production<sup>1</sup> : Solar electricity (PV), Wheeling, Waste to Energy, Agriculture-Biogas, Solar Thermal (SHW).

## Recommendations

### 1. Government Financing

The SEAP development can be connected to the political commitment and existing regulations regarding energy conservation (REEEL and Bylaw 73/2012), therefore SEAP development and monitoring of energy actions and projects, should be included in municipality annual budgets. Political commitment is even more convincing when relevant budgets are assigned.

### 2. Donor Support

Capacity of municipalities to apply for grants and technical assistance is weak in general, however it is the question whether this capacity should be available at all municipalities, the Joint Services Councils, or future “Cities Alliances” could play a supporting role for smaller municipalities. Besides specific capacity building for SEAP development, on the technical side of applications, **‘packages’ of Energy Saving measures** could be developed specific for Municipalities, including cost estimations and technical specifications, such as for Low consumption vehicles and vehicle management, Public Transport Promotion, EE Building renovation, PV and EE street lighting, PV – local building integrated solutions and wheeling, Waste to Energy for Agricultural biogas, Commercial licensing criteria, Enforcement procedures, Fine collection, Public Communication.

**Donor institution need to be informed on the actual needs of municipalities**, for targeted and coordinated to support the development and implementation of SEAPs at municipality level. MoPIC could play a role in coordination with MoMA as it has the donor contacts, while MoMA (EE Unit) should be aware of the SEAP initiatives on municipality level.

### 3. National Funds JREEEF and JEF

The existing national funds as JREEEF and JEF have to be made operational, and foresee in funding mechanism for Municipality EE and RE projects according to specific criteria and predefined technology packages, to facilitate quick application and assessment procedures.

**A revolving fund for bankable EE/RE Municipality projects** is to be considered. It could be explored with the development of the new AFD support for JREEEF to develop a specific technology revolving fund, for instance PV for municipalities<sup>2</sup>.

JREEEF to include a financing mechanism as Guarantee for PPP projects, in which private sector takes the financing obligation.

The development of any ‘bankable project’, requires **availability of and access to relevant energy related data**, such as electricity consumption, to establish baselines.

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<sup>1</sup> non-conventional energy

<sup>2</sup> The Prosol and Promosol programmes in Tunisia are successful references

**Criteria and application procedure should be published** (online, and updated when needed) in a way that municipalities can have easy access to the information.

#### 4. National Financing CVDB

CVDB could consider assessing the potential options for a specific Municipality EE Fund. As for any loan that a municipality would like to take, approval for CVDB loans from GoJ is needed.

The CVDB training unit might consider specific training on how to develop bankable projects for EE and RE, since assistance on economic feasibility of projects is part of their current tasks. Cooperation with the National Energy Research Center (NERC) could be considered for technology specific aspects.

#### 5. Private Sector Cooperation

For bankable SEAP measures the cooperation with the Private Sector, through either Public Private Partnership, or ESCOs (for instance for street lighting and EE renovation of municipality buildings) could be promoted, for instance through the National Sharing Platform of the Green Economy Unit (MoEnv).

**ESCO business models for Municipalities** could be developed, by donor organisations, including information on how to work with ESCOs, tendering document, model contracts, and monitoring and verification procedures.

For both, PPP and ESCO projects, Municipalities need approval of the Minister of Municipality Affairs. Therefore, to facilitate the approval process, also the 'packages' of energy saving measures, mentioned under "2. Donor support" could be very useful. Additionally, with such 'packages' delivered information is consistent and already checked for technical/contractual issues, which makes decision making more convenient.

#### 6. New innovative income generating options

New, and innovative income generating options for municipalities should be explored, to cover the cost for the energy action that are not bankable, but useful for energy savings in general.

- The introduction of an **Energy Tax**, or E-Tax, or fees, for commercial establishments that do not comply with the Bylaw 73/2012, article 5, mandatory Energy Audits for consumers larger than 50 TOE<sup>3</sup>, as part of their annual licensing.
- Cooperation with Utilities (JEDCO, EDCO, IDCO) in **demand side management programmes** is another option to be considered when **linked to licensing** responsibilities of municipalities.
- Consider '**Wheeling**' for public spaces, such as parking spaces (part of mobility plans), **to generate income for the non-bankable (indirect) energy actions**. With support of donors the feasibility of this idea could be further developed.

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<sup>3</sup> The Bylaw 73/2012 does not indicate whether this is primary or final energy

## 2 INTRODUCTION

The European Union (**EU**) is leading the global fight against climate change, and is considering it as an urgent matter that needs immediate attention. The EU committed itself to reducing its overall emissions to at least 20 % below 1990 levels by 2020 through the development, among others, of Sustainable Energy Projects that can help reduce the emission of Green House Gases (**GHGs**).

Since Municipalities can play a crucial role in reduction of GHG emissions, the EU initiated the **Cleaner Energy Saving Mediterranean Cities Project** (CES-MED) to support the efforts of local authorities in nine European Neighborhood and Partnership Instrument (ENPI) South Mediterranean Partner Countries: Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, occupied Palestinian Territory and Tunisia to respond more actively to sustainable policy challenges. The project aims at:

- Developing the local authorities' capacities to formulate and implement sustainable local policies.
- Expanding the use of sustainable policies, such as solutions to renewable energy, measures to reduce CO<sub>2</sub> emissions, efficient water and waste management, and environment-friendly public transport.
- Increasing the awareness and responsiveness of national authorities to the need for and benefits of a strong involvement of cities in local sustainable policy issues.

CES-MED also aims at promoting the adherence of cities and municipalities from these countries to the **Covenant of Mayors (CoM<sup>4</sup>)** and will directly support the adhesion of two to three cities/municipalities per partner country. **CES-MED in Jordan** partners with three municipalities for the development and implementation of Sustainable Energy Action Plans (SEAPs) or SEAP like action plans:

- Aqaba in the South, falling under the Aqaba Special Economic Zone Authority (ASEZA);
- Irbid in the North, falling under the Ministry of Municipal Affairs (MoMA);
- Kerak in the Middle highlands, falling under MoMA.

**The availability of support and financing** for the preparation of detailed studies as well as the implementation of SEAPs, that can be allocated to or benefit cities and municipalities is indicated in this report. The listed funding opportunities include contact details and ways for applications both at national and international level, including:

- International Financing Institutions (IFIs), international, regional and bilateral donors' funding opportunities, including grants, loans and investments opportunities.
- National funding instruments dedicated to Local Authorities in Jordan and funds available through (or allocated to) Non-Governmental Organizations (NGOs) and Community Service Organizations (CSOs).

The information for this report has been gathered in the following way:

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<sup>4</sup> "The Covenant of Mayors is the mainstream European movement involving local and regional authorities, voluntarily committing to increasing energy efficiency and use of renewable energy sources on their territories. By their commitment, Covenant signatories aim to meet and exceed the European Union 20% CO<sub>2</sub> reduction objective by 2020". [www.ces-med.eu/support/faq](http://www.ces-med.eu/support/faq)

- Internet search of sustainable energy programs and projects available on websites of the donor community, international organizations, and governments;
- Analysis of the RCREEE MEDA Finance Study 2014<sup>5</sup>;
- Information obtained from the specific institutions, organizations and programmes operational in Jordan, through meetings, phone calls and email exchange, see interview list Annex I.

## **2.1 Agreement with the NCG and cities/municipalities**

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In Jordan, the CES-MED project is coordinated, under the Ministry of Planning and International Cooperation, and with the National Coordination Group (NCG), consisting of the following members:

- **Mr. Naguib Amin:** CES-MED Team leader;
- **Mr. Maher Abdel Raheem:** Focal Point, MOPIC;
- **Mr. Emad Shana'a:** Head of EU Partnership division, MOPIC;
- **Eng. Mohammad Dabbas:** Assistant of Secretary General, Ministry of Energy and Mineral Resources (MEMR);
- **Eng. Hussain Mhaidat:** Chairman of Joint Services Council for Irbid Governorate, and Head of the Emergency Unit of the Northern Region, MoMA;
- **Mr. Raouf Dabbas:** Advisor to the Minister, Ministry of Environment (MoEnv).

During a meeting in the EU delegation offices, contacted members agreed to support the project and take part in the NCG. The NCG agreed to the following:

- Assist Municipalities in terms of guidance in regards to CoM initiatives that can be replicated on a National level;
- Ensuring logistic support to CES-MED actions during all its phases;
- Providing regional helpdesks for municipalities;
- Offering technical assistance to municipalities.

The condition of meeting the CO<sub>2</sub> reduction of 20% in 2020 is not included in the cooperation agreement between CESMED and Jordan, since this target was considered not to be realistic. Therefore the CES-MED project focus is on the development and implementation of Sustainable Energy Action Plans, as much as possible according to the Guidelines developed specific for the South Mediterranean Countries<sup>6</sup>.

This report and its recommendations have been discussed with the NCG at April 20<sup>th</sup>, 2015 at MoPIC, and provides an overview of available support and financing programmes in Jordan, together with recommendations for funding the development and implementation of SEAPs to municipalities. The focus is on issues related to energy saving, including Energy Efficiency (EE) and Renewable Energy (RE).

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<sup>5</sup> <http://www.rcreee.org/content/international-funding-opportunities-sustainable-energy-programs-rcreee-member-states>

<sup>6</sup> <http://iet.jrc.ec.europa.eu/energyefficiency/publication/guidebook-how-develop-sustainable-energy-action-plan-seap-south-mediterranean-cities>

All partners and stakeholders that have been consulted during the preparation of this report (see Annex I) are generously thanked for their time and efforts to provide information. Without their support the content of this report could not have been developed.

Especially thanks to the Focal Point, NCG Members and attendees of the coordination meeting in Jordan for their support and input: Mr. Maher Abdel Raheem (MoPIC), Mr. Emad Shana'a (MoPIC), Eng. Hussain Mhaidat (MoMA), Eng. Murad Al-Baqeen (MoMA), Eng. Mohamed Abu Gouad (MoMA), Eng. Mohammad Dabbas (MEMR), Mr. Muawiyah Faydi (MEMR), Mr. Raouf Dabbas (MoEnv), Eng. Walid Shahin (NERC), and Mr. Omar Abu Eid from the EU Delegation to Jordan.

### 3 IFIs, INTERNATIONAL, REGIONAL AND BILATERAL DONOR TOOLS

Jordan is one of the few countries in the ENPI region that has relatively comprehensive EE and RE policies in place<sup>7</sup>. Many donor organizations are active in this field and the reduction of GHG emissions. Additional, **due** to the influx of Syrian refugees, the donor activities in Jordan increased, to cover basic needs for the municipalities hosting refugees, such as waste management and electricity supply.

However, the capacity of most of the municipalities to apply for funds, grants and/or technical assistance, as indicated in many of the interviews, is limited both in terms of available staff resources and required experience to fulfill application requirements successfully.

This chapter focuses on the available resources, technical assistance, grants and loans, from international organizations. The chapter 4 addresses the national funds available to Municipalities.

Table 1 presents the IFIs and donor organizations, separated in those available to Municipalities and those targeting private sector (grey). Municipalities could benefit from those when entering into a Public- Private Partnership, in which the private sector takes the financing responsibilities. This is only optional for sustainable energy projects that are bankable and have an economic return on investment.

IFIs that have an establishment in Jordan are:

- Agence Development Francaise (AfD);
- European Bank for Reconstruction and Development (EBRD);
- International Financing Cooperation (IFC);
- Kreditanstalt fuer Wiederaufbau (KfW);
- World Bank (WB).

Donor organizations with (project) office(s) in Jordan are:

- European Union (EU) – Technical Assistance to the Renewable Energy and Energy Efficiency Programme in MEMR;
- Deutsche Gesellschaft fuer Internationale Zusammen Arbeit (GIZ), country office and programmes located in Ministries of Environment and Water and Irrigation;
- Japan International Cooperation Agency (JICA);
- United National Development Programme (UNDP);
- United States Agency for International Development (USAID), Country and programme offices.

Some organizations appear on both lists, since they can support or lend to both Governmental entities and private sector, such as AfD and EBRD.

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<sup>7</sup> AFEX Energy Efficiency 2015 (<http://www.rcreee.org/projects/arab-future-energy-index%E2%84%A2-afex>) and AFEX Renewable Energy 2013 [http://www.rcreee.org/sites/default/files/reportsstudies\\_afex\\_re\\_report\\_2012\\_en.pdf](http://www.rcreee.org/sites/default/files/reportsstudies_afex_re_report_2012_en.pdf)

The detailed information on the funding and financing institutions and organizations that could be used by the governments, NGOs, cities and municipalities in Jordan is listed in **Annex II IFIs and International Donors – Fiches**.

**Table 1 Overview of International Support - Funding - Financing Program**

Organization	Loans	Grants	Technical Assistance
<b>Applicable for Governmental Entities</b>			
AFD	✓ <sup>8</sup>		✓
EBRD	✓		✓ <sup>9</sup>
EU - Sector Support 2013-2015 & 2016-2019		✓	✓
EU EIB FEMIP	✓		
GEEREF			✓
GIZ			✓
IDB	✓		
IDF	✓		
IFC - PEP-MENA Public Private Partnership/ Privatization	✓		✓
JICA	✓	✓	✓
KfW Bankgruppe	✓	✓	✓ <sup>10</sup>
MENA Transition Fund		✓	✓
OiER	✓	✓	✓
UNDP-GEF		✓	✓
UNDP Third National Communication on Climate change (2013-2020)			✓
USAID Energy Sector Capacity Building			✓
USAID Jordan Competiveness Program		✓	✓ <sup>11</sup>
USAID Local Enterprise Support Project (LENS)		✓	✓ <sup>12</sup>
World Bank - ESMAP			✓
<b>Applicable for Private Sector - PPP</b>			
AFD Green Lending Programme	✓		✓
AFESD	✓	✓	✓
DEG Climate Partnerships with Private Sector		✓	
DEG Technical Assistance Program			✓
EBRD SEMED	✓		
IFC			✓
UfM InfraMed	✓		
World Bank MIGA SIP	✓		

<sup>8</sup> Soft Loans Non Commercial

<sup>9</sup> As part of (pre) loan package, feasibility studies, technical assistance for implementation, etc.

<sup>10</sup> As part of (pre) loan package, feasibility studies, technical assistance for implementation, etc.

<sup>11</sup> Includes access to finance component

<sup>12</sup> Includes access to finance for SME's

### 3.1 Support Tools for Municipalities from International Donors

To make a useful selection of the support tools in the donor community, it is important to have a good understanding of what kind of sustainable energy actions are most relevant in the context of local authorities. Municipalities can promote or implement measure to reduce energy consumption on two levels:

- **Direct:** their own energy consumption, electricity for buildings, fuel for vehicles, street lighting, etc. Energy actions on this level will have a direct effect on their energy bills and annual budget. When investments for such action have an interesting Return of Investment, ‘bankable projects’ can be developed.
- **Indirect:** by influencing consumption patterns of the general public in the other sectors (Residential, Commercial, Industrial, Tourism, etc). For these actions there is no direct cost saving aspect for the municipality budget. This means that cost for these actions can not directly be recovered, and cooperation with private sector on such measures will not be likely, since a ‘bankable project’ cannot be developed. Cost for these actions need to be covered by annual budget or charging fees or taxes<sup>13</sup>.

**Table 2 Relevant Sustainable Energy Actions for Municipalities**

Sector	Direct	Indirect
<b>Transport</b>	<ul style="list-style-type: none"> <li>• <b>Vehicles, use reduction,</b> maintenance and fuel efficiency.</li> <li>• Waste collection.</li> </ul>	<ul style="list-style-type: none"> <li>• Promotion of alternative or public transport, Carpooling, awareness.</li> <li>• <b>Mobility/Transportation Plan.</b></li> <li>• EE Urban Planning for new developments.</li> </ul>
<b>Buildings</b>	<ul style="list-style-type: none"> <li>• <b>Lighting, HVAC,</b> Appliances &amp; Equipment (pumps &amp; fans).</li> </ul>	<ul style="list-style-type: none"> <li>• <b>EE Building Code Enforcement</b></li> <li>• Requirements for commercial sector (mandatory audits).</li> </ul>
<b>Electricity</b>	<ul style="list-style-type: none"> <li>• <b>(PV) Street lighting.</b></li> <li>• <b>Pumping for public water supplies.</b></li> </ul>	<ul style="list-style-type: none"> <li>• Requirements for commercial and industry sectors, (mandatory audits), opening hours.</li> </ul>
<b>Waste</b>	<ul style="list-style-type: none"> <li>• <b>Waste management<sup>14</sup></b> and reduction of municipal facilities.</li> </ul>	<ul style="list-style-type: none"> <li>• Waste reduction &amp; management for residential commercial, tourism and industry sectors.</li> </ul>
<b>Energy production (non-conventional energy).<sup>15</sup></b>	<ul style="list-style-type: none"> <li>• <b>Solar electricity (PV) / Wheeling</b></li> <li>• <b>Waste to Energy.</b></li> <li>• <b>Biogas from waste (Agriculture).</b></li> </ul>	<ul style="list-style-type: none"> <li>• Facilitate licensing for RE systems.</li> </ul>

<sup>13</sup> To be sustainable on the long term. On the short term donor grants could cover such cost to start up such activities or cover the learning cost.

<sup>14</sup> Please note that according to Sweep Net 2011 Jordan Country Report, all municipalities are operating without full cost recovery. Aqaba is the only city with private sector involvement in the collection and transport of solid waste.

<sup>15</sup> Local or through **wheeling**.

- **Solar Thermal (Solar Water Heaters (SHW)).**
- Wind.

Considering the duties and responsibilities of Municipalities by law, the sectors, fields or activities where energy consumption can be reduced are shown in Table 2. The actions in bold in the above table are the covered by existing donor project and programmes (see Annex III overview of Donor programmes and projects) and most of them require (significant) investments. When it comes to ‘bankable projects’, some initiatives came to a hold because the required changes of conditions to get an interesting return of investment are not acceptable in the local context. For example the increase of the waste disposal fees in order to make a waste to energy facility economic viable (World Bank Waste to Energy project)<sup>16</sup>.

Donor activities related to the actions of table 2 cover a wide range, from feasibilities studies, technical support (technical standards and tender specification, application procedures), demand side management, training (energy managers), institutional support (Energy Efficiency Officers), access to finance, to implementation support and/or grants, mostly to the national authorities or pilot projects.

However, municipalities could make use of the tools and lessons learned developed by these activities. The following tables provide a summary overview of activities and tools that can or could also support development and implementation of SEAPs at municipality level, table 3 for donors’ activities and table 4 for IFIs activities. For further details of these activities, projects and programmes refer to Annex III.

**Table 3 Summary of donor activities relevant for SEAP development and implementation**

EU Sector Support 2013-2015 <b>TA to REEEP</b>	<ul style="list-style-type: none"> <li>• NEEAP Update - End July 2015</li> <li>• NREAP - Mid 2015</li> <li>• Training with NERC on Economic Energy Project proposals</li> <li>• Best Practices from Pilot Projects (EE Building, PV, Biogas, Wheeling)</li> <li>• Energy Data Base – MEMR</li> <li>• EE Building Codes Enforcement Roadmap</li> </ul>
EU Sector Support 2016-2019	<ul style="list-style-type: none"> <li>• Support to Pilot Projects (2017)- call for proposals</li> <li>• National Plan for PV roof tops to invest in Public sector and rural area’s (MEMR)</li> <li>• Enhancing EE in public buildings Ministry of Public Works and Housing (MPWH)</li> <li>• Training component</li> </ul>
GIZ	<ul style="list-style-type: none"> <li>• Training to improve efficiency in the water and energy sector<sup>17</sup></li> <li>• Waste to Energy – Biogas from Agricultural waste with GJU</li> <li>• Waste management in Kerak and Irbid, CO2 reduction could be included in co-financing agreement with the EU.</li> <li>• Vehicle maintenance, route efficiency (fuel consumption reduction), Kerak</li> <li>• Landfill rehabilitation in Mafraq – CO2 reduction</li> </ul>
JICA	<ul style="list-style-type: none"> <li>• Best Practices: PV plants - wheeling for municipalities (Shams Aqaba under development)</li> </ul>

<sup>16</sup> This suggests that there is a need to develop plans to create incentives for private sector to take role in Solid Waste Management.

<sup>17</sup> [www.giz.de/en/worldwide/24677.html](http://www.giz.de/en/worldwide/24677.html)

OiER	<ul style="list-style-type: none"> <li>Smart City project Amman, the website is being uploaded: <a href="http://www.unitedsmartcities.com">www.unitedsmartcities.com</a>. It will include projects from all urban sectors, plans and finance mechanisms and opportunities.</li> </ul>
UNDP	<ul style="list-style-type: none"> <li>Appliance labelling with NERC</li> <li>Street lighting project 5mIn with GAM</li> <li>NAMA – emission reduction from Solid Waste Management (several other donors involved in the project implementation)</li> <li>United Nations Development Assistance Framework 2013-2017</li> <li>Appliance Labelling – NERC – testing labs ready by end of 2015</li> <li>Domestic MRV system - 2016</li> <li>EE Building Code Enforcement with GAM</li> <li>15-year strategic investment plan in street lighting</li> <li>Third National Communication on Climate change – GHG Emissions reporting</li> </ul>
USAID	<ul style="list-style-type: none"> <li>Support access to finance – ESCB / JCP / LENS (Private Sector)</li> </ul>
Energy Sector Capacity Building programme (ESCB)	<ul style="list-style-type: none"> <li>PV - tool kit bidding document specification and procedure for grid connection- end 2015</li> <li>Accreditation for ESCO's &gt; Municipalities can make use of it.</li> <li>ESCO – municipal street lighting – MRV – case study</li> <li>DSM Incentive mechanisms could be considered for Municipalities.</li> <li>Economic Analysis of energy projects – input cost output savings and subsidies reduction &gt; could be transferred to Municipal programs</li> <li>Professional association for Jordanian energy engineers</li> <li>CMVP certification exam on the fundamentals of measurement &amp; verification of energy savings</li> <li>Energy Efficiency Officers training on EE action planning and energy auditing</li> <li>JREEEF – criteria for grant scheme for municipality projects</li> </ul>
Jordan Competitiveness Programme (JCP)	<ul style="list-style-type: none"> <li>GAM power plant incentives for Green Buildings – regulation</li> <li>EDAMA business platform development</li> <li>PV for M. 16 MW – combined with street lighting - technical RfP under preparation with EBRD</li> </ul>
World Bank	<ul style="list-style-type: none"> <li>Tool for Rapid Assessment of City Energy (TRACE)<sup>18</sup> –No Jordan update</li> <li><b>Energy-Efficient Urban Transport Plan for Zarqa</b>, major restructuring of the public transport network, lower emission buses, a parking plan, junction improvements and improved pedestrian facilities.<sup>19</sup></li> </ul>

**Table 4 Summary of IFIs activities relevant for SEAP development and implementation**

AfD	<ul style="list-style-type: none"> <li>Green lending Program Soft loans, Non-commercial for Private Sector, open until November 2015</li> </ul>
AfD /EIB FEMIP /UfM	<ul style="list-style-type: none"> <li>Urban Projects Finance Initiative (UPFI). A Local and Regional Development Plan, Public space and equipment, Mobility plan for AZESA, and biogas from the land fill Al Ekaider in Irbid</li> </ul>
EBRD	<ul style="list-style-type: none"> <li>Can lend to Municipalities and private sector</li> <li>PPP street lighting project</li> <li>Solid waste solutions – to waste to energy</li> </ul>

<sup>18</sup> [www.esmap.org/TRACE](http://www.esmap.org/TRACE)

<sup>19</sup> <http://www.esmap.org/node/1291>

KfW	<ul style="list-style-type: none"> <li>• Energy Efficiency in Public Buildings MPWH, MoEdu and MoH</li> <li>• The loan serves to finance technical measures in these buildings with respect to the building envelope and technical installations</li> <li>• Schools project – Pilot Project with EE design to set example</li> <li>• Greywater recycling for Mosques<sup>20</sup></li> </ul>
World Bank	<ul style="list-style-type: none"> <li>• Feasibility Study for waste to energy –not economic at the moment</li> </ul>

The most interesting activities for municipalities are those that relate to actual implementation, since many studies, reports, and action plans have been developed, with donor support, however implementation is still behind due to feasible financing, lack of available technologies and required skills for implementation and maintenance.

**TA to REEEP (EU)** supports nine pilot projects. It is significant that there are no pilot projects with a municipality as applicant, as they did not meet the criteria for the application procedure. Measures and lessons learned from these projects that could be useful for municipalities:

- **Fostering Renewable Energy and Energy Efficiency Initiatives in the Jordan Building Sector in Madaba, Shobak, Ramtha, Mafraq, Rabba and Kerak**, implements **EE measures and RE technologies in 5 public buildings** of the National Centre for Agricultural Research.
- **Solar District Heating Demonstration Project for Al Bashir Hospital**, in Amman implements a **central solar system for Hot Water Supply** (design, and installation) in Al-Bashir Hospital in Amman.
- **Fostering the Role of Worship Houses in promoting Green Economy**, in different Masjids and Churches in different Governorates across the Kingdom, develops an EE and RE Action Plan and implementation of **RE and EE measures in 18 selected buildings**.
- **Realizing the Sahara Forest Project in Jordan**, establishes a 2-ha Sahara Forest Project Launch Station near Aqaba, consisting of solar-powered, saltwater cooled greenhouse buildings with year-round climate control, solar powered desalination, outdoor cultivation of fodders and fuels, revegetated desert, **solar PV panels to power all facilities**, and salt processing ponds to reduce waste brine to dry salt.
- **Renewable Energy and Energy Efficiency Demonstration Projects**, in Amman, implements energy refurbishment of the existing building of the National Centre for Research and Development (NCRD) with **energy efficiency (EE) and renewable energy (RE) technologies**.
- **Biogas Production in Local Communities in Jordan, Amman**, develops a **hybrid biogas plant design for agricultural and food waste in local communities** as well as the design, installation and evaluation of a pilot hybrid biogas plant with a PV system
- **Green Development at the Islamic Hospital, Amman / Wheeling Concept**, in Amman, develops a **Renewable Energy Action Plan** for the Islamic Charity Centre Society, building capacities of the Islamic Charity Centre Society in the field of sustainable energy and **installing 4 MW PVs** at the Islamic Hospital.

**SUDEP (EU)** – Sahab develops a local EE & RE plan, implements EE & RE for municipality buildings, introduces EE technologies to municipalities, builds capacities of employees, and raises awareness of the general public and relevant stakeholders.

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<sup>20</sup> <http://www.greywater-recycling.info/en/the-partners/>

**The Residential and Street Lighting Project (AfD)** implemented energy efficiency measures in residential buildings and street lighting in a number of selected pilot areas, done in cooperation with NERC and MOPIC. Lessons learned from this project may be of use for municipalities.

**Improvement of Energy Efficiency in the Water Authority of Jordan (GIZ)** was implemented from 2008 to 2013 with the Water Authority of Jordan and to improve the energy efficiency of water pumping. The project developed an energy-contracting model in the water sector allowing specialized energy management companies to cooperate with the water authorities in innovative ways. These contracting models could also be very interesting for Municipalities.

**Agriculture Bio Gas (GIZ)** is a cooperation project with the German Jordan University (GUJ) and the municipality of Madaba using agricultural waste to produce biogas, which can be used for electricity generation, or direct use (more efficient). An additional benefit of such projects would be that transport related to waste would be reduced as well.

**Advice to Refugee Hosting Communities in Waste Management (ADHOC)** does not focus on CO<sub>2</sub> reduction; however activities could be extended in this field under the co-financing agreement with the EU. Part of the project is on the job training for the **vehicle fleet maintenance**, including redesigning the routing system, which can **impact fuel consumption reduction, landfill rehabilitation** in Mafrag, where CO<sub>2</sub> reduction plays a role, and implementation of **municipal master plans for waste management** in Irbid, Ramtha and Mafrag, where trainings for technicians and decision maker in waste management inside the municipalities as well as in the Joint Services Councils are included. Here a direct linkage to CO<sub>2</sub> reduction is not yet indicated.

### **3.2 Fiche per action including references to steps and requirements to apply**

Detailed information on IFIs and donor organizations listed in Tables 1, 3 and 4 is provided in Annex II Funding Fiches - IFIs and International Donors. Each fiche indicates, if relevant:

- Location;
- Type of Assistance;
- Amount;
- Sector;
- Target group;
- Application Procedure;
- Selection Criteria;
- Website.

### **3.3 General recommendations for successful application by cities/municipalities**

The subject of SEAPs at municipal level is new in the region, and thus also in Jordan. Targeted funding or financing programmes are not yet in place. MoPIC indicated that the Government of Jordan is not interested to increase the financial burden by taking on new loans, for municipalities. The financial health of many municipalities is weak, they cannot go direct into loan agreements and the government budget approval procedures do have their own time planning. Therefore at the moment it seems that resources for SEAP development are depending mostly on donor support (technical assistance) and funding (grants to cover learning cost). Especially the indirect sustainable energy actions will rely on

donor funding for the first pilots. The direct energy actions that are bankable can be financed in cooperation with private sector that seems to be the fastest track for implementation at this moment.

In the interviews it was often indicated that the capacity of municipalities to apply for calls for proposal, grants and technical assistance is weak in general (lessons learned from the EU TA to REEEP call for pilot project proposals). However a question could be whether this capacity should be available at all municipalities.

In large municipalities (Category I), like Aqaba, GAM and Irbid, with an economy of scale, targeted capacity building on how to develop 'bankable projects' could be considered.

For smaller communities (Category II, III, and IV) like Kerak and Sahab, application efforts could be supported by a mediating entity, for instance through the existing Joint Services Councils (JSC), or the '*cities alliances*', foreseen in the updated municipality law (which is currently in process of review).

The JCSs can, especially for waste related projects, play a role, since the current activities of the JCSs concentrate around waste management. It would be a question for MoMA whether the activities of the JCSs could be expanded to energy projects in the future.

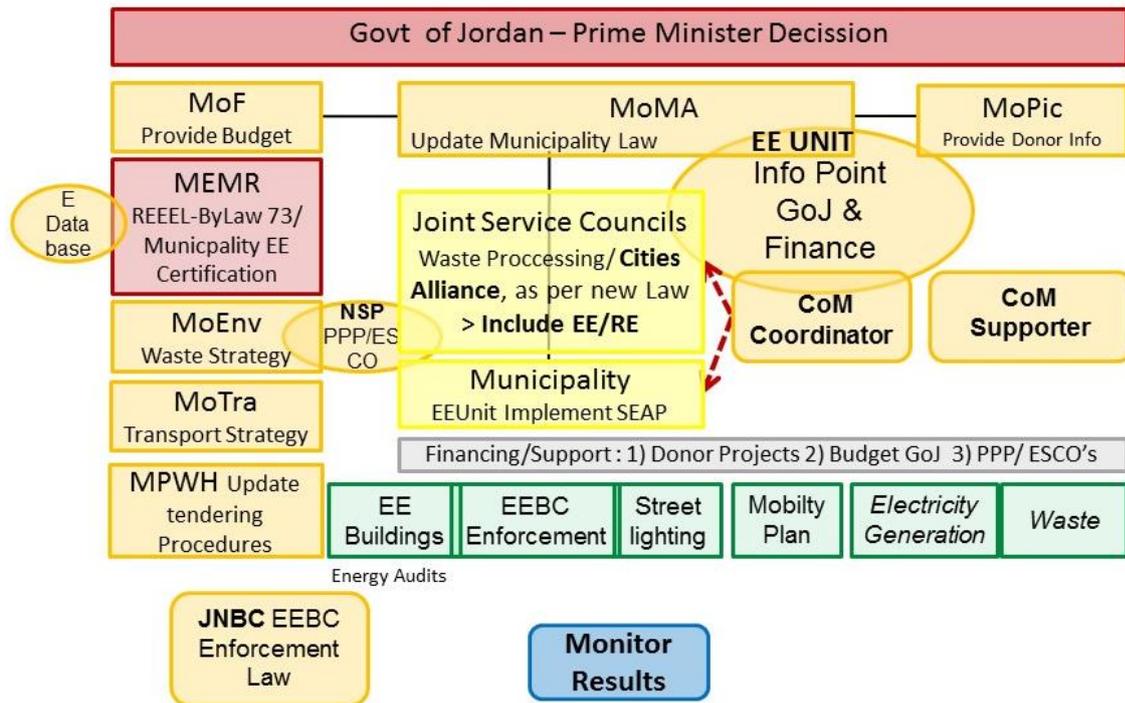
**The question is also "how donors can be informed on the actual needs of municipalities?"** How can their support be targeted and coordinated to supporting the development and implementation of SEAPs at municipality level, until structural budgeting for SEAPs is in place from the Governmental side (see chapter 6)?

**An information access point** could be considered on the short term, to help municipalities to get updated information on actual status and possibilities of funding options, as well as inform the donors on actual needs. Since the international projects all run through MoPIC, a liaison with MoMA could be established to direct municipalities to the right funding or donor organisation. On long term this function should be transferred to **the CoM Coordinator**, once installed.

**A link with the National Sharing Platform (NSP)**, under development by the Green Economy Unit (MoEnv), could provide the opportunity to function as well as a 'hub' for private sector, interested in developing sustainable energy projects and municipalities planning to include such projects in their SEAP. In this case, the private sector could support the grant application, as they eventually also (indirect) benefit from it. The set-up of this **information exchange mechanism is to be made available to municipalities**, see figure 1 below.

**Access to relevant energy related data**, is needed for the development of 'bankable projects', and grant applications, such as electricity consumption, to establish baselines, to be able to report on the energy savings and economic feasibility. Municipalities need to be able to access such data.

These points are illustrated in Figure 1, below, from the **Recommended National Sustainable Urban Energy Savings Actions report**.



**Figure 1 Institutional set up: National Sharing Platform (NSP) for private sector financing and recommended Info point for funding.**

## 4 EXISTING NATIONAL TOOLS

Jordan has already several funding tools in place on a National level for environmental and energy projects. Table 5 National funding opportunities for SEAP development and implementation, below, lists the type of financing or support that is provided per fund, Technical Assistance, Grants and Loans.

**Table 5 National funding opportunities for SEAP development and implementation.**

Organization	Loans	Grants	Technical Assistance
CVDB	√ <sup>21</sup>		√
GDF (through JEDCO)	√	√	
JEF		√	
JREEEF	√	√	√

**The City and Village Development Bank<sup>22</sup>**, regulated under the Law 63/1985<sup>23</sup>, provides long term loans to establish both services and productivity projects through the local councils, grants and technical assistance in the form of trainings for municipalities. The CVDB was established in 1979, as an official public institution, chaired by the Minister of Municipal Affairs, which is administratively and financially independent. The CVDB administers and guarantees loans held between the councils and any other party, assists the local councils in setting priorities for economic feasible projects and provides the technical experience and services including the training of the technicians. Beside the loans component CVDB has a capacity building component which provides specific training. The bank administers the councils treasury collected by the government.

The CVDB financial health, as well as its financing structure and purposes, is not clear. In interviews it was indicated that municipalities often do not repay their loans.

**The Governance Development Fund (GDF)** provides loans and grants through the Jordanian Enterprise Development Corporation (JEDCO) to SMEs. For PPP projects with Jordanian companies, this fund could be interesting indirectly for Municipalities.

**The Jordan Environment Fund (JEF)**, established under the Environmental Protection Law No. 52/2006, at the MoEnv provides revolving loans, grants, guarantees and technical assistance for projects related to environment protection and sustainability, to Public and Private Sector, NGOs and local communities. Currently the fund is not yet operational. A call for proposals took place in 2012, and received proposals were evaluated. However due to changes of Ministers, proposal awarding did not take place, as submitted proposals had to be re-evaluated again.

<sup>21</sup> Loans and Loan Guarantees

<sup>22</sup> <http://cvdb.gov.jo/en/about-the-bank/about-the-bank>

<sup>23</sup> [www.cvdb.gov.jo/images/banklaw\\_a.pdf](http://www.cvdb.gov.jo/images/banklaw_a.pdf)

**The Jordan Renewable Energy and Energy Efficiency Fund<sup>24</sup>** (JREEEF) provides revolving loans, grants, guarantees and technical assistance specific for Renewable Energy and Energy Efficiency projects to public and private sector and individuals. JREEEF was established under Law No. 13 of 2012, the Renewable Energy and Energy Efficiency Law. The management committee is chaired by H.E. Minister of Energy and Mineral Resources, three representatives of the public sector and three representatives of the private sector.

Currently, the operational side of the fund is being elaborated with support of the ESCB (USAID funded), by Q3 -2015 the criteria for municipalities' eligibility are planned to be finalized.

AfD has supported JREEEF in the past in the set-up, and is now looking with JREEEF at functional financing programmes.

#### **4.1 Fiche per action including steps and requirements to apply**

Detailed information on National funding opportunities is provided in Annex III Funding Fiches - Existing National Tools. Each fiche indicates, if relevant:

- Location;
- Type of Assistance;
- Amount: Sector;
- Target group;
- Application Procedure;
- Selection Criteria;
- Website.

#### **4.2 Recommendations for successful project formulation and application for funding**

A good set of National financing and funding tools is in place but not yet all are operational in efficient manner. Currently application procedures are not all clear yet and need to be made transparent, with specific criteria. JREEEF indicated it is working on this. For JEF further investigation is needed to assess the current status development of the fund.

Once established, information on these financing products is to be made available to municipalities. Online information (in Arabic) where and how to apply is to be in place. And this information needs to be updated regularly.

The information access point mentioned in the previous chapter should also have the full contact and application information of these national financing tools.

MEMR can support municipalities in the application of JREEEF, for municipalities outside Amman, the Joint Services Councils, or future 'Cities Alliances' could play the role of providing information, specific for municipalities, to provide easier access for the smaller and medium size municipalities (of the category II, III, and IV), as mentioned in previous chapter. This would

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<sup>24</sup> <http://www.edama.jo/Content/Events/Presentations/39a856ba-6553-45e6-be19-49c361d059cc/ae4f71a3-0baf-40a1-a707-62730020f670.pdf>

require training of Council or Alliance members/staff on the application procedures and criteria of these funds, to assist municipalities in application for their projects.

Alternatively, also the CoM Coordinator in Jordan could be an access point for application to National Funds, providing also advice on which fund would be the most suitable for a specific project.

Most important for the National funding tools is that developed instruments are to be institutional, so that change of Minister would not restart processes again from scratch.

Specific for JREEEF, since the project and eligibility criteria are under development, a special fund for municipality projects could be considered. A revolving fund for street lighting, Solar Water heater and/or PV projects, with technical specific tin packages, to facilitate quick assessment would be helpful for municipalities.

AFD is developing their Green Lending Program. Their consultants working on the cooperation with JREEEF, showed interest to further explore such financing mechanisms.

## 5 PARTNERSHIP OPPORTUNITIES

### 5.1 Networks

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Several networks are active to very active in Jordan. They could play a role in support to municipalities on the technical side, or business side, whether for capacity building (specific) knowledge transfer, or grant application. The most relevant for the development and implementation of SEAPs on municipality level are:

- **EDAMA** - [www.edama.jo](http://www.edama.jo)  
A business association seeking innovative solutions for energy and water independence and productivity
  - **Jordan Green Building Council (JGBC)** – [www.jordangbc.org](http://www.jordangbc.org)  
An NGO for sustainable building, providing seminars and trainings, specific for energy efficient buildings.
  - **SWEEP NET** [www.sweep-net.org](http://www.sweep-net.org)  
A regional network for integrated waste management in the MENA region.
  - **REES** is a newly established society for Renewable Energy, supported in its set-up by USAID. At time of preparing this report, no further information was available yet.
  - **The PV Supplier Association** organises the PV suppliers' branch in Jordan. It is recently established and at time of preparing this report, no further information was available yet.
1. **The National Sharing Platform** is being established by the Green Economy Unit of MoEnv. It aims at sharing information on environmental projects, including energy projects such as waste to energy, and to bridge between project initiators and private sector interested to implement such projects.
  2. **Eco Cities of the Mediterranean** is an annual conference that brings together many stakeholders in the region, for discussion on environmental issues at city level. The last conference was held in October 2014 at the Dead Sea, Jordan.
  3. **The European Energy Award**<sup>25</sup> is an EU networking platform to support municipalities willing to contribute to sustainable energy policy and urban development through the rational use of energy and increased use of renewable energies. More than 1,300 municipalities are participating currently.

### 5.2 Twinning

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Twinning<sup>26</sup> is a European Commission initiative that was originally designed to help candidate countries acquire the necessary skills and experience to adopt, implement and enforce EU legislation. Since 2004, twinning is also available to some of the eastern and southern Neighborhood partner countries.

Twinning projects bring together public sector expertise from EU Member States (MS) and beneficiary countries with the aim of enhancing cooperative activities. They must yield concrete

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<sup>25</sup> [www.european-energy-award.org/home/](http://www.european-energy-award.org/home/) and [www.european-energy-award.org/international-projects/medeea-project/](http://www.european-energy-award.org/international-projects/medeea-project/)

<sup>26</sup> [http://ec.europa.eu/enlargement/tenders/twinning/index\\_en.htm](http://ec.europa.eu/enlargement/tenders/twinning/index_en.htm)

operational results for the beneficiary country under the terms of the Association Agreement between that country and the EU.

To set up projects, the Commission relies on the co-operation and administrative experience of Member States. They are expected to mobilize experts from government and other public sector organizations. Twinning projects are built around the secondment of at least one full-time Member State expert – the Resident Twinning Adviser (RTA) who goes to work in a beneficiary country administration. Projects mobilize a number of actions run by the MS public body (ies) partner(s) to the project, including workshops, training sessions, expert missions, study visits and counseling.

This institution-building instrument helps partner countries acquire the necessary skills and experience to adopt, implement and enforce EU legislation. Twinning seeks to help transfer, adopt and/or adapt to EU legislation, standards and practices and to modernize partner countries' administrations through re-organisation, drafting of laws and regulations and through capacity-building. It is based upon close cooperation between a public administration institution in a Neighborhood country and the equivalent institution in an EU Member State in a specific field related to the EU legislation or any other relevant field of cooperation.

**Twinning Light** is a programme that offers a more flexible, mid-term approach (up to six months) without the presence of a RTA permanently located in the beneficiary administration.

In Jordan there is a twinning project running on statistics, see

<https://www.facebook.com/EUJordanTwinningProjectOnStatistics>

Twinning could be considered for capacity building on SEAP development, more specific for the planning of energy actions, as a capacity building for Municipal energy units or officers. Or at national level, a **twinning project for the Jordan CoM coordinator** could be considered, with a European counterpart that is also CoM coordinator on how to fulfill this support to Municipalities in the SEAP and BEI development.

The MoPIC EU coordinator is the entry point for application to twinning cooperation in Jordan, and interested to explore the further options.

### **5.3 Opportunities through CoM adherence**

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The opportunities through CoM adherence could not be investigated in the preparation of this report, since the three municipalities are still in process of SEAP development, and it is not yet clear what the specific planned sustainable energy actions are.

Furthermore, the GoJ has indicated not to be interested to sign agreements which would not be feasible, such as the 20% reduction of CO<sub>2</sub> by 2020. This means that currently Jordanian municipalities cannot sign the Covenant of Mayors.

Research of existing CoM projects outside Jordan was not part of the scope of this report; therefore, potential links with existing CoM in Europe could not be identified.

It is recommended that once SEAPs are developed for Aqaba, Irbid and Kerak, regional exchange with (southern) European countries takes place, to explore the opportunities through CoM Adherence, even without signing the CoM, but based on SEAP development and implementation.

## 6 RECOMMENDATIONS FOR SEAP FINANCING

In order to be able to provide specific recommendations on the financing of the SEAP, the revenues or income sources of municipalities need to be made clear. For the current situation this is shown in Figure 2 Potential sources of SEAP funding, below, in blue the current situation, in red potential recommendations.

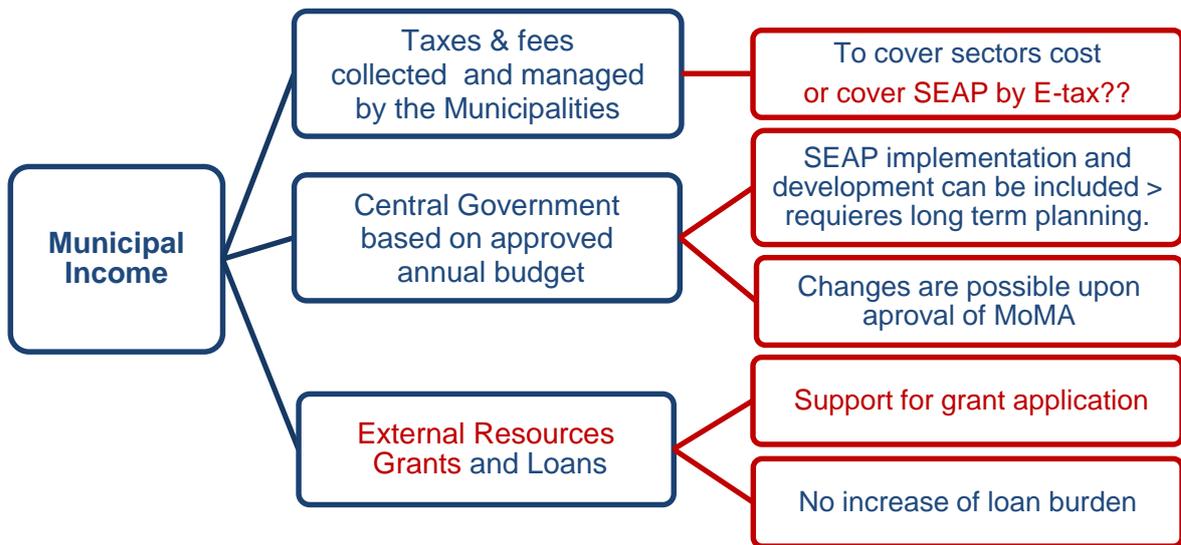


Figure 2 Potential sources for SEAP funding

The financing of SEAPs takes place in several stages; development of SEAP, implementation of the energy action in the SEAP and monitoring of the results of the implemented projects, as show in Figure 3 below, from the **Recommended National Sustainable Urban Energy Savings Actions report**.

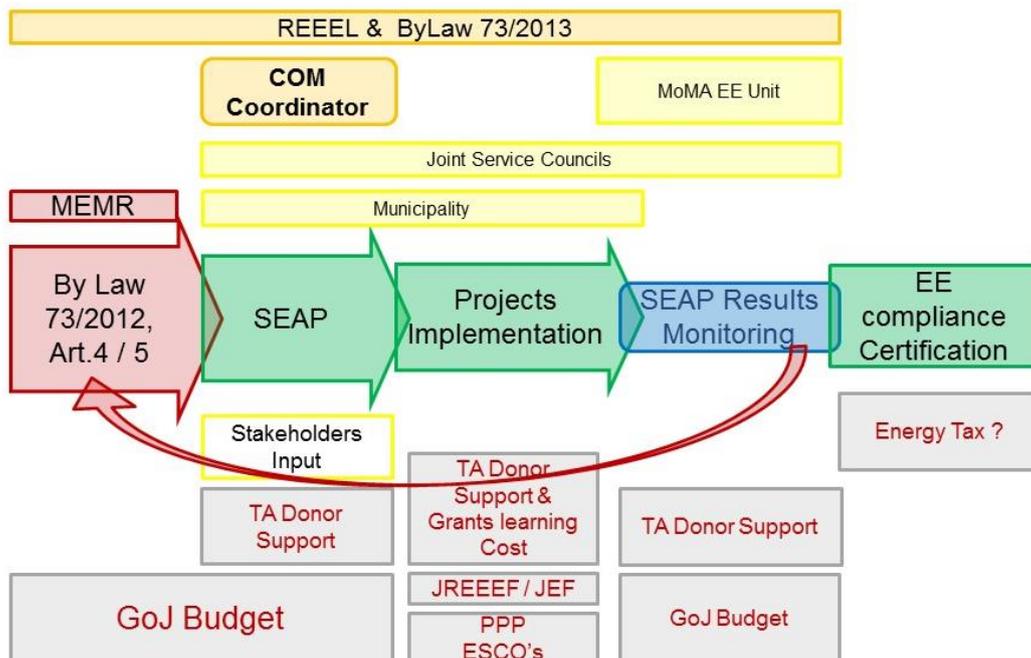


Figure 3 Proposed financing for each stage of the SEAP process.

## 1. Government Financing

The SEAP development can be connected to the political commitment and existing regulations regarding energy conservation (REEEL and Bylaw 73/2012), therefore SEAP development and monitoring of energy actions and projects, should be included in municipality annual budgets. Political commitment is even more convincing when relevant budgets are assigned, or even made a requirement.

For the implementation of the planned energy actions and projects MoMA (EE Unit or the Information Point as show in Figure 1) could provide support for grant and TA application, to Municipalities of Category I) or through Joint Services Councils or the planned '*Cities Alliances*' for Municipalities of Category II, III, IV.

Additionally, faster and more flexible procedures for budget changes for SEAP through MoMA could be considered to be able to adjust to projects and or implementation needs.

Recommendation for the GoJ is to approve SEAP development and implementation of sustainable energy actions in the Municipal Budgets and to provide mechanisms for quick approval of adjustments in case project implementation requires it.

**On the long run the financing should thus come from the Government of Jordan for development and monitoring of SEAPs.**

## 2. Donor Support

On the short term, until municipal budgets are in place, funds for SEAP development can come from Donor support, or cooperation with NGOs for application to grants and funds.

Capacity of municipalities to apply for grants and technical assistance is weak in general, however it is the question whether this capacity should be available at all municipalities.

In large municipalities (Category I) with an economy of scale, targeted capacity building on how to develop 'bankable projects' could be considered.

For smaller communities (Category II, III, and IV) application effort could be supported through local development council or the Joint Services Councils (JSC), especially for waste related projects, since the current activities of the JSC concentrate around waste management.

For the development of SEAPs, capacity building is needed. Depending on the sector the international donor community and national NGOs such as EDAMA (business models) and Green Building Council (EE Building) could provide specific capacity building.

**For match making**, CES-MED could organize an event to further explore the interest of the existing networks to get involved in SEAP development, or a part of it (like building sector for JGBC).

On the technical side of applications, based on lessons learned from currently ongoing Pilot Project, '**packages**' of **Energy Saving measures** could be developed for Municipalities, including cost estimations and technical specifications, such as:

- Low consumption vehicles and vehicle management, Public Transport Promotion,
- EE Building renovation,

- PV and EE street lighting,
- PV – local building integrated solutions and wheeling,
- Waste to Energy for Agricultural biogas,
- Commercial licensing criteria,
- Enforcement procedures,
- Fine collection,
- Public Communication.

**On the other side donor institutions need to be informed on the actual needs of municipalities.**

So the donor support should be targeted and coordinated to support the development and implementation of SEAPs at municipality level, until structural budgeting for SEAPs is in place from the Governmental side. MoPIC could play a role in coordination with MoMA as it has the donor contacts, while MoMA (EE Unit) should be aware of the SEAP initiatives on municipality level.

For instance, the new Sector Support programme of the EU for 2016-2019 should include activities related to municipal SEAPs, to follow up on the activities and recommendations of the CES-MED project, technical assistance for the implementation of the energy projects and the monitoring of the results of the implemented projects, for the municipalities of Aqaba, Irbid and Kerak.

Furthermore ECSO business models for Municipalities could be developed, including information on how to work with ESCOs, tendering document, model contracts, and monitoring and verification procedures.

### **3. National Funds JREEEF and JEF**

For the financing of implementation of SEAP measures, more alternative need to be explored and investigated, since it was indicated that GoJ is not interested increasing the burden of loans. The existing national funds as JREEEF and JEF have to be made operational, and ideally foresee a funding mechanism for Municipality EE and RE projects according to specific criteria and predefined technology packages (as indicated above under 2. Donor Support), so as to facilitate quick application and assessment procedures. The advantages of these funds are:

- 1) They are grants, so there is no additional burden on municipal budgets.
- 2) Application could be done in Arabic, which makes it easier to understand at the municipality level.

On the side of IFIs, only EBRD indicated the willingness or possibility to work with municipalities. IFIs often deal with larger loan amount, which is channelled through the central government. A mechanism for distribution to smaller (soft) loans at municipal level could be considered, for projects that are bankable.

JREEEF could play such a role, by developing a specific fund for Municipality SEAP and related project implementation. And since JREEEF is in process of developing the criteria for applications, also specific for municipalities, this should be taken in consideration.

A revolving fund for bankable EE/RE municipal projects is to be considered. It could be explored with the development of the new AFD support for JREEEF to develop a specific technology revolving fund, for instance PV for municipalities<sup>27</sup>.

Another mechanism to be considered under JREEEF could be financing the Guarantee for PPP projects, in which private sector would take the financing obligation.

The development of 'bankable projects', whether by municipality or private sector and application for grant and support requires availability of and access to relevant energy related data, such as electricity consumption per sector, to establish baselines, see also the **Recommended National Sustainable Energy Savings Actions report**.

When criteria and application procedures are finalized, they should be published (online, and updated when needed) in a way that municipalities can have easy access to the information.

#### **4. National Financing CVDB**

CVDB could consider assessing the potential options for a specific municipal EE Fund, which could be used as a direct lending or as guarantee for private sector cooperation. This could be done in cooperation with the UPFI by AfD/EIB/UfM.

The training unit under the CVBD might be considered for specific training on how to develop bankable projects for EE and RE, since assistance on economic feasibility of projects is part of their current tasks. However, specific issues related to EE and RE projects might need capacity building of the CVBD training center.

Cooperation with the National Energy Research Center (NERC) could be considered, for capacity building on 'bankability of projects' as NERC recently received Technical Assistance (from the EU), in development and assessment of economic feasibility of (renewable) energy projects.

#### **5. Private Sector Cooperation**

Bankable SEAP measures under Private Sector cooperation, through either Public Private Partnership, or ESCOs (for instance for street lighting and EE renovation of municipality buildings) could be promoted, for instance through the National Sharing Platform of the Green Economy Unit (MoEnv).

Furthermore **ECSSO business models for Municipalities** could be developed, by Donor organisations, including information on how to work with ESCOs, tendering document, model contracts, and monitoring and verification procedures.

#### **6. New innovative income generating options**

New and innovative income generating options for municipalities should be explored, to cover the cost for the energy actions that are not bankable, as indicated in the Table 2 under the indirect column.

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<sup>27</sup> The Prosol and Promosol programmes in Tunisia are successful references

- The introduction of an **Energy Tax**, or E-Tax, or fees, for commercial establishments that do not comply with the Bylaw 73/2012, article 5, mandatory Energy Audits for consumers larger than 50 TOE<sup>28</sup>, as part of their annual licensing. Though, such a measure would still need a municipal budget line for implementation and enforcement.
- Cooperation with Utilities (JEDCO, EDCO, IDCO) in **demand side management programmes** is another option to be considered when **linked to licensing** responsibilities of municipalities.
- Mobility plans that include (re)structuring of parking spaces, could integrate electricity generation, so these areas can be used as a location for wheeling (PV shading over the parking lot). **The income from this public space electricity generation** could then be used for the non-bankable (indirect) energy actions. With support of donors the feasibility of this idea could be further developed.

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<sup>28</sup> The Bylaw 73/2012 does not indicate whether this is primary or final energy

## 7 REFERENCES

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- AFEX Renewable Energy 2013:  
[www.rcreee.org/sites/default/files/reportsstudies\\_afex\\_re\\_report\\_2012\\_en.pdf](http://www.rcreee.org/sites/default/files/reportsstudies_afex_re_report_2012_en.pdf)
- Covenant of Mayors: [www.ces-med.eu/support/faq](http://www.ces-med.eu/support/faq)
- Guidebook how to develop a sustainable action plan for south Mediterranean Cities:  
<http://iet.jrc.ec.europa.eu/energyefficiency/publication/guidebook-how-develop-sustainable-energy-action-plan-seap-south-mediterranean-cities>
- CVDB: [www.cvdb.gov.jo/en/about-the-bank/about-the-bank](http://www.cvdb.gov.jo/en/about-the-bank/about-the-bank) and [www.cvdb.gov.jo/images/banklaw\\_a.pdf](http://www.cvdb.gov.jo/images/banklaw_a.pdf)
- EDAMA: [www.edama.jo](http://www.edama.jo)
- ESMAP – World Bank: [www.esmap.org/TRACE](http://www.esmap.org/TRACE) and <sup>1</sup> <http://www.esmap.org/node/1291>
- EU Energy Award: [www.european-energy-award.org/home/](http://www.european-energy-award.org/home/) and [www.european-energy-award.org/international-projects/medeea-project/](http://www.european-energy-award.org/international-projects/medeea-project/)
- Jordan Green Building Council (JGBC): [www.jordangbc.org](http://www.jordangbc.org)
- Jordan Renewable Energy and Energy Efficiency Fund (JREEEF):  
[www.edama.jo/Content/Events/Presentations/39a856ba-6553-45e6-be19-49c361d059cc/ae4f71a3-0baf-40a1-a707-62730020f670.pdf](http://www.edama.jo/Content/Events/Presentations/39a856ba-6553-45e6-be19-49c361d059cc/ae4f71a3-0baf-40a1-a707-62730020f670.pdf)
- GIZ Training to improve efficiency in the water and energy sector: [www.giz.de/en/worldwide/24677.html](http://www.giz.de/en/worldwide/24677.html)
- KfW project Greywater recycling for Mosques: [www.greywater-recycling.info/en/the-partners/](http://www.greywater-recycling.info/en/the-partners/)
- RCREEE Finance Study: [www.rcreee.org/content/international-funding-opportunities-sustainable-energy-programs-rcreee-member-states](http://www.rcreee.org/content/international-funding-opportunities-sustainable-energy-programs-rcreee-member-states)
- SWEEP NET, 2011 Jordan Country Report: [www.sweep-net.org](http://www.sweep-net.org)
- Twinning: [www.ec.europa.eu/enlargement/tenders/twinning/index\\_en.htm](http://www.ec.europa.eu/enlargement/tenders/twinning/index_en.htm)

## 8 ANNEXES

### 8.1 Annex I – Consultation Contacts

Title	Name	Function	Date
Jordan Cooperation Partners and Stakeholders			
Mr.	Maher Raheem	Abdel Focal Point International Cooperation Officer EU Partnership Division-International Cooperation Department, Ministry of Planning and International Cooperation – MoPIC	30.03.15 NCG 20.04.15
Mr.	Emad Shana'a,	NCG Head of EU Partnership division, MOPIC	NCG 20.04.15
Eng.	Hussain Mhaidat,	Director of Joint Services Councils MoMA	07.04.15, NCG 20.04.15
Eng.	Murad Baqaeen Eng. Areej Zureikat	MoMA	02.04.15 NCG 20.04.15
	Eng. Abdallah abdallat	Emad Al- Director of planning and Development department MoMA	02.04.15
	Mohammed Gaoud	Abu energy projects with follow up Ministry of planning	07.04.15 NCG 20.04.15
Mrs.	Nancy Rimawi	EU focal point at MEMR	02.04.15
Eng.	Mohammad Dabbas,	NCG Assistant to Secretary General	02.04.15
Eng.	Mohammed Khaled Daghash	Head of environment and Energy Division MEMR	06.04.15
Mr.	Muawiyah Faydi	EE Unit MEMR	19.04.2015 NCG 20.04.15
Mr.	Raouf Dabbas	MoE Prime Minister Advisor Ministry of Environment	02.04.15 Tel.
Eng.	Samir Kilani,	NCG Head of Projects Department, MoE.	05.04.15
Mrs.	Indira Dahaby	Director Climate Change Ministry of Environment	06.04.15 Tel.
Mr.	Rasmi Hamzeh	JREEEF coordinator	01.04.15 Tel. 02.04.15 Email
Eng.	Walid Shahin	Director- National Energy Research Center(NERC)	08.04.15 NCG 20.04.15
Eng.	Eman Alkouz	Aqaba Special Economic Zone Authority - ASEZA Environment Directorate	06.04.15 Tel.
Dr.	Mohammad	German Jordan University, Bio Gas project in	

<b>Title</b>	<b>Name</b>	<b>Function</b>	<b>Date</b>
	Aladous	corporation with GIZ	
<b>Donors &amp; IFIs</b>			
Mr.	Omar Abu Eid	Energy, Environment & Climate Change Programme Manager – Operations Section EUD to Jordan	30.03.15
Mrs	Lena Lampropoulou	Senior Expert for RE/EE in Buildings Technical Assistance to the Renewable Energy & Energy Efficiency Programme in Jordan	02.04.15
Mr.	Rafik Missoui	Alcor, Consultant TA to REEEP for NEEAP	19.04.15 22.04.15
Mr.	Serge Snrech	Director Agence Developpement Francaise - AfD	08.04.15
Eng.	Hoda Matamet	Projects Officer - AfD	
Mr.	Michale Broege	Consultant to AFD SUNREF Jordan Project TA to JREEF	21.04.15
Mrs.	Nodira Mansurova	Senior Banker Municipal and Environmental Infrastructure European Bank for Reconstruction and Development - EBRD EIB	02.04.15 Tel.
	-	JICA PV plants national wheeling for municipalities – Shams Aqaba under development	No Reply
Mr.	Ralph Senzel	Project Coordinator, Advice to Refugee Hosting Communities in Waste Management (ADHOC) project, GIZ	12.04.15 Email &Tel.
Mrs.	Elke Zimmerman	GIZ Solar Cooling Project	01.04.15 Email No reply
Mr.	Mohammed Atoom	Al Environment Programme Analyst Head of Environment & Climate Change Portfolio United Nations Development Programme - Jordan	01.04.15 Email 06.04.15 Tel.
Mrs.	Beate Richter	National Director KfW	07.04.15 Tel.
Mrs.	Kari Anna Eik	Secretrary General, OiER	14.04.15
	Ramzi Sabella	USAID Project management Specialist – Energy Office	01.04.15 Tel.
Eng.	Ruba Al Zu'obi	Director of Jordan Competitiveness Program - USAID	05.04.15
Mrs.	Mary Worzala	Chief of Party Energy Sector Capacity Building Activity USAID	08.04.15
Mr.	Adrien Bassompierre	de WB initiative in Jordan ESMAP trace tool –where are they now?	<i>Email</i> 06.04.15
	Farhat Esen	WB initiative in Jordan ESMAP trace tool –where are they now?	<i>Email</i> 02.04.15

Title	Name	Function	Date
Mrs.	Carolin Huwiler	MENA Energy Award	28.03.15 Tel.

## 8.2 Annex II – Funding Fiches

### IFIs and International Donors

Organization	Loans	Grants	Technical Assistance
<b>Applicable for Governmental Entities</b>			
AFD	✓ <sup>29</sup>		✓
EBRD	✓		✓ <sup>30</sup>
EU - Sector Support 2013-2015 & 2016-2019		✓	✓
EU EIB FEMIP	✓		
GEEREF			✓
GIZ			✓
IDB	✓		
IDF	✓		
IFC - PEP-MENA Public Private Partnership/ Privatization	✓		✓
JICA	✓	✓	✓
KfW Bankgruppe	✓	✓	✓ <sup>31</sup>
MENA Transition Fund		✓	✓
OiER	✓	✓	✓
UNDP-GEF		✓	✓
UNDP Third National Communication on Climate change (2013-2020)			✓
USAID Energy Sector Capacity Building			✓
USAID Jordan Competiveness Program		✓	✓ <sup>32</sup>
USAID Local Enterprise Support Project (LENS)		✓	✓ <sup>33</sup>
World Bank – ESMAP			✓
<b>Applicable for Private Sector – PPP</b>			
AFD Proparco	✓		
AFESD	✓	✓	✓
DEG Climate Partnerships with Private Sector		✓	
DEG Technical Assistance Program			✓
EBRD SEMED	✓		
IFC			✓
UfM InfraMed	✓		
World Bank MIGA SIP	✓		

<sup>29</sup> Soft Loans Non Commercial

<sup>30</sup> As part of (pre) loan package, feasibility studies, technical assistance for implementation, etc.

<sup>31</sup> As part of (pre) loan package, feasibility studies, technical assistance for implementation, etc.

<sup>32</sup> Includes access to finance component

<sup>33</sup> Includes access to finance for SME's

### **Agence Française du Développement (AFD)**

Location:	At French Amman Embassy, Al Mutanabbi St. 40, Jabal Amman, Jordan
Type of Assistance:	Grants, Technical Assistance
Amount:	€250,000,000
Sector:	Renewable Energy, Energy Efficiency
Target group:	Support to government entities, to support loan programs to Private Sector
Selection Criteria	Eligible for SME's with an annual turnover between EGP 1,000,000 and EGP 40,000,000 (between € 120,000 and € 5,000,000).
Website:	<a href="http://www.ambafrance-jo.org/-Francais-">http://www.ambafrance-jo.org/-Francais-</a>

### **European Bank for Reconstruction and Development (EBRD)**

Location :	Amman- Jordan, Emmar Towers, 6th Circle, 196 Zahran Street, 15th Floor, Tel: +962 6 563 50 30
Type of Assistance:	Debt, Equity, Mezzanine Capital
Amount:	Capacity for debt: €5,000,000 – €250,000,000 Capacity for smaller investments: €1,000,000 – €10,000,000
Sector:	Renewable Energy, Energy Efficiency
Target group:	SME's, EBRD indicated it can also work with Municipalities
Application Procedure:	The application must contain project information including a brief description of the project, background information on the sponsor, details of the product or service that will be developed and a market review, financial information and environmental and regulatory information.
Selection Criteria:	To be eligible for EBRD funding, the project must be located in an EBRD country of operations, have strong commercial prospects, involve significant equity contributions in-cash or in-kind from the project sponsor, benefit the local economy and help develop the private sector and satisfy banking and environmental standards.
Website:	<a href="http://www.ebrd.com/pages/news/features/ebrd-and-semed.shtml">www.ebrd.com/pages/news/features/ebrd-and-semed.shtml</a>

### **Global Energy Efficiency and Renewable Energy Fund (GEEREF)**

Location:	Luxemburg, Luxemburg
Type of Assistance:	Equity, Grants for Technical Assistance
Amount:	Funding: €10,000,000 to €12,000,000 Technical Assistance: €500,000 to €1,000,000

Sector: Renewable Energy (small hydro, solar, wind, biomass and geothermal)  
Energy Efficiency (waste heat recovery, energy management in buildings, co-generation of heat & power, energy storage, smart grids)

Target Group: Specialist funds developing small to medium sized projects

Website: [geeref.com/about/investment-strategy.html](http://geeref.com/about/investment-strategy.html)

#### **GIZ – Jordan**

Location: Amman- Jordan National Office:  
Mohammad Baseem Al-Khammasch Street No 13 Sweifieh  
Project office MoEnv: PO Box 926238, Amman 11190, Jordan

Type of Assistance: Technical Assistance

Amount: N/A

Sector: Waste management , Renewable Energy, Energy Efficiency in water sector

Target Group: Specialist funds targeting governmental institutions

Website: <http://www.giz.de/en/worldwide/360.html>

#### **Islamic Development Bank (IDB – Awqaf)**

Location: Jeddah, Saudi Arabia

Type of Assistance: Islamic Debt

Amount: N/A

Sector: Focus on Renewable Energy (included in their Energy Prosperity Vision & Strategy for 2013-2017)

Target group: Large energy infrastructure works

Website: <http://www.isdb.org/iri/portal/anonymous?NavigationTarget=navurl://edf803d247c875cd27629f89614458e6>

#### **International Financing Corporation (IFC)**

Location: Ahmed Orabi Street 38, Shemeisani Amman, Jordan,  
+962 6 567 8040

Type of Assistance: Loans, Equity Participation, Trade Finance,  
Technical/Advisory Assistance

Amount: US\$ 1,000,000 - US\$ 100,000,000  
(IFC finances no more that 25% of total project costs)

Sector: Renewable Energy

Target Group:	Private Sector Investment Advisory services to business and governments
Application Procedure:	The procedure application must contain the following information: a brief description of project in terms of sponsorship, management and technical assistance; market and sales; technical feasibility, manpower, raw material resources and environment; investment requirements, project financing and returns; government support and regulations; timetable envisaged for project preparation and completion. After this initial contact and a preliminary review, IFC may proceed by requesting a detailed feasibility study or business plan to determine whether or not to appraise the project.
Website:	<a href="http://www.ifc.org/wps/wcm/connect/Industry_EXT_Content/IFC_External_Corporate_Site/Industries/Infrastructure/Power/Renewables/">www.ifc.org/wps/wcm/connect/Industry_EXT_Content/IFC_External_Corporate_Site/Industries/Infrastructure/Power/Renewables/</a>

### **Japan International Cooperation Agency (JICA)**

Location:	Amman, Jordan, Fountain Plaza, Abdel Rahim Haj-Mohammad Street, Sweifieh
Type of Assistance:	Loans, Grants, Technical Assistance
Amount:	N/A - Program Grant Aid for Environment and Climate Change
Sector:	Global Warming Countermeasures
Target Group:	Public Sector: support for adoption of policies and planning
Website:	<a href="http://www.jica.go.jp/english/our_work/types_of_assistance/index.html">www.jica.go.jp/english/our_work/types_of_assistance/index.html</a>

### **KfW Bankengruppe**

Location:	Mohammad Baseem Al-Khammasch Street 13, Sweifieh, Amman, Jordan.
Type of Assistance:	Loans, Grants, Technical Assistance
Amount:	€500,000,000 in Climate & Sector Energy Fund
Sector:	Renewable Energy, Energy Efficiency
Target Group:	SME's , Renewable Energy and Energy Efficiency, Infrastructure
Website:	<a href="http://www.kfw.de/inlandsfoerderung/Unternehmen/Energie-Umwelt/index-2.html">www.kfw.de/inlandsfoerderung/Unternehmen/Energie-Umwelt/index-2.html</a>

### **MENA Transition Fund - World Bank**

Location:	Amman- Jordan, Ministry of Planning and International Affairs, Coordination Unit hosted by World Bank headquarters at Washington DC, United States.
Type of Assistance:	Grants, Technical Assistance

Amount: Above € 5,000,000  
Sector: Sustainable Growth And Development  
Target Group: Public and Private institutions and entities  
Application Procedure: The Transition Fund seeks proposals for reform-focused technical assistance projects that support investment in sustainable growth, inclusive development and job creation, enhanced economic governance and competitiveness, the proposal should be submitted through Jordan Ministry of planning and International Cooperation  
Website: <https://www.menatransitionfund.org/>

#### **OiER - United for a smarter and more sustainable world**

Location: Vienna / Austria  
Type of Assistance: Grants, Technical Assistance  
Amount: N/A  
Sector: Renewable Energy, Energy Efficiency, Urban development  
Target group: Support to government entities, to support loan programs to Private Sector  
Website: <http://unitedsmartcities.com/#programme-objectives>

#### **United Nation Development Program (UNDP)**

Location: Haq Al Edwan street, 16, Opposite to Shmeisani Police station, Amman, Jordan, Tel: +96265100420  
Type of Assistance: Technical Assistance ,Grants  
Amount: N/A  
Sector: Renewable Energy, Energy Efficiency, waste management.  
Target group: All Development areas and projects  
Application Procedure: The application must contain project information including a brief description of the project, background information on the sponsor, details of the product or service that will be developed, financial information and environmental and regulatory information.  
Website: <http://www.undp.org/>

#### **United Nation Development Program Global; Environment Facility (UNDP) - GEF**

Location: Haq Al Edwan street, 16, Opposite to Shmeisani Police station, Amman, Jordan, Tel: +96265100420  
Type of Assistance: Technical Assistance ,Grants  
Amount: N/A

Sector: Renewable Energy, Energy Efficiency, waste management,  
Target group: All Development areas and projects in the governmental and non-governmental local institutions  
Application Procedure: The application must contain project information including a brief description of the project, background information on the sponsor, details of the product or service that will be developed, financial information and environmental and regulatory information.  
Website: <https://sgp.undp.org/>

#### **UNDP Third National Communication on Climate change – (2013-2020)**

Location: Haq Al Edwan street, 16, Opposite to Shmeisani Police station, Amman, Jordan, Tel: +96265100420  
Type of Assistance: Technical Assistant  
Amount: N/A  
Sector: Environment Sector  
Target Group: All development areas and Projects  
Website: <http://www.jo.undp.org/content/jordan/en/home.html>

#### **USAID Energy Sector Capacity Building (ESCB)**

Location: Amman- Jordan, Arar St. 38, Wadi Saqra Building  
Type of Assistance: Technical Assistance  
Amount: \$19,000,000  
Sector: Renewable Energy, Energy Efficiency  
Target group: Governmental institutions, Public Private Sector Partnership  
Website: <http://escb-jordan.org/>

#### **USAID Jordan Competiveness program (JPC)**

Location: Amman- Jordan , Amman - Al Jandaweel King Hussein Business Park - Bld. 3  
Type of Assistance: Technical Assistant , Grants  
Amount: \$67,000,000  
Sector: Renewable Energy, Energy Efficiency ,clean tech  
Target group: SME's, Start-up business, governmental institutions  
Application Procedure: The application must contain project information including a brief description of the project, background information on the sponsor, details of the product or service that will be developed and a market review, financial information and environmental and regulatory

information.

Website: <http://www.jcp-jordan.org/en>

**USAID Jordan Local Enterprise Support Project (LENS)**

Location: Amman, Jordan

Type of Assistance: Technical Assistance, Grants

Amount: N/A

Sector: Renewable Energy, Energy Efficiency

Target group: SME's, Start-up business, Municipalities

Application Procedure: The application must contain project information including a brief description of the project, background information on the sponsor, details of the product or service that will be developed and a market review, financial information and environmental and regulatory information.

Website: <http://www.jordanlens.org/index.php/en/>

## Eligible to Private Sector – a potential for Public Private Partnership Projects

### Agence Française du Développement (AFD) – Green Lending Programme

Location:	Paris, France (Regional headquarters in Cairo, Egypt)
Type of Assistance:	Soft credit line to Cairo Amman Bank and Capital Bank for onward lending to Businesses and households Supported by a 5% cash-back by EU
Amount:	53.000.000 USD
Sector:	Renewable Energy, Energy Efficiency
Target group:	Private Investment sector  Minimum participation from the client beneficiary to the total investment cost: 15%.
Selection Criteria:	EE projects: Minimum Internal Rate of Investment (IRR): 10%, at least 50% of overall project IRR should be attributable to energy efficiency gains, Minimum energy savings: 20%.  All RE project are eligible. RE projects are defined as projects producing any form of energy (heat, steam, power) without any fossil fuels or any radioactive source.  <a href="http://www.sunrefjordan.com">www.sunrefjordan.com</a>
Website:	For PV and SHW a list of eligible manufacturers, suppliers, installers and equipments is available at: <a href="http://www.nerc.gov.jo/SITE%202013/index.html">www.nerc.gov.jo/SITE%202013/index.html</a>

### Arab Fund for Economic and Social Development (AFESD)

Location:	Kuwait City, Kuwait
Type of Assistance:	Loans, Grants, Technical Assistance
Amount:	800,000,000 Kuwaiti Dinars
Sector:	Energy Business Sector
Target Group:	Private Entrepreneurs
Application Procedure:	The application procedures requires a financing request from the governor representing the country requesting the loan, along with a technical and economic feasibility study for the proposed project.
Website:	<a href="http://www.arabfund.org">www.arabfund.org</a>

### Deutsche Investitions – und Entwicklungsgesellschaft (DEG)

Location:	Köln, Germany
Type of Assistance:	Loans, Guarantees
Amount:	€40,000,000 total fund

Sector: Renewable Energy, Electricity Generation and Distribution  
Target Group: Small and medium scale private investment infrastructure projects  
Website: [www.deginvest.de/International-financing/DEG/Unsere-Investitionen/Branchen/Infrastruktur/](http://www.deginvest.de/International-financing/DEG/Unsere-Investitionen/Branchen/Infrastruktur/)

**Deutsche Investitions – und Entwicklungsgesellschaft (DEG) - Climate Partnerships with Private Sector**

Location: Köln, Germany  
Type of Assistance: Grants  
Amount: €200,000 per project  
Sector: Renewable Energy, Energy Efficiency  
Target Group: Non-statutory, non-started climate friendly energy projects  
Application Procedure: The application must contain a feasibility study, an investment plan, and a cost study that must be commensurate with the costs of the planned investment.  
Website: [www.deginvest.de/International-financing/DEG/Unser-Angebot/F%C3%B6rderprogramme/Klimapartnerschaften/](http://www.deginvest.de/International-financing/DEG/Unser-Angebot/F%C3%B6rderprogramme/Klimapartnerschaften/)

**European Bank for Reconstruction and Development, Southern and Eastern Mediterranean (EBRD SEMED)**

Location: Luxemburg, Luxemburg (regional headquarters in Cairo, Egypt)  
Type of Assistance: Debt, Equity, Mezzanine Capital  
Amount: Capacity for debt: €5,000,000 – €250,000,000  
Capacity for smaller investments: €1,000,000 – €10,000,000  
Sector: Renewable Energy, Energy Efficiency  
Target group: SME's  
Application Procedure: The application must contain project information including a brief description of the project, background information on the sponsor, details of the product or service that will be developed and a market review, financial information and environmental and regulatory information.  
Selection Criteria: To be eligible for EBRD funding, the project must be located in an EBRD country of operations, have strong commercial prospects, involve significant equity contributions in-cash or in-kind from the project sponsor, benefit the local economy and help develop the private sector and satisfy banking and environmental standards.  
Website: [www.ebrd.com/pages/news/features/ebrd-and-semed.shtml](http://www.ebrd.com/pages/news/features/ebrd-and-semed.shtml)

### **Netherlands Development Finance Company (FMO) - Infrastructure Development Fund (IDF)**

Based in:	The Hague, The Netherlands
Type of Assistance:	Long-term financing, Loans, Investments in international or multilateral funds to facilitate defined infrastructure project
Amount:	Loans: up to €15,000,000 Minority shares in equity investment: up to €7,750,000
Sector:	Fund to stimulate private investment in infrastructure, under which energy production & distribution
Target Group:	Attract private investors to invest in Public-Private Infrastructure projects
Website:	<a href="http://www.fmo.nl/infrastructurefund">www.fmo.nl/infrastructurefund</a>

### **IFC PEP-MENA Public-Private Partnership/Privatization**

Location:	Cairo, Egypt
Type of Assistance:	Technical Assistance
Amount:	N/A
Sector:	Power Sector
Target Group:	Advisory services to governments on private sector participation in infrastructure and the restructuring of state owned enterprises.
Website:	N/A

### **Union for Mediterranean (Ufm) – Inframed**

Location:	Paris, France (Regional headquarters in Cairo, Egypt and Casablanca, Morocco)
Type of Assistance:	Loans (Mezzanine Capital) Equity, Quasi Equity Funding
Amount:	Min. €10,000,000, Max. €50,000,000
Sector:	Sustainable Energy
Target Group:	Greenfield and brownfield projects: energy infrastructure PPA's Investment projects in need of private equity
Website:	<a href="http://www.inframed.com/cms/Investment_Strategy.html">www.inframed.com/cms/Investment_Strategy.html</a>

### **The World Bank MIGA Small Investment Program (SIP)**

Location:	Washington, United States
Type of Assistance:	Guarantees, Technical Assistance
Amount:	Up to US\$ 10,000,000.

	SIP covers up to 90% of investment for equity, up to 95% for debt
Sector:	All Energy Projects eligible under criteria
Target Group:	Support to SME's
Application Procedure:	Applicants should submit an online application to receive eligibility criteria and discuss preliminary pricing as well as the potential size of the guarantee. The next step involves submitting a definitive application and supporting documentation which may include a feasibility study or a business plan supporting the economic viability and financial soundness of the project, a financial forecast, loan and guaranties documentation, financial statements and incorporation documents, environmental permits/environmental impact assessment and all other applicable project licenses.
Website:	<a href="http://www.miga.org/investmentguarantees/index.cfm?stid=1801">www.miga.org/investmentguarantees/index.cfm?stid=1801</a>

## Existing National Tools

Organization	Loans	Grants	Technical Assistance
CVDB	√ <sup>34</sup>		√
GDF (through JEDCO)	√	√	
JEF		√	
JREEEF	√	√	√

### Cities and Villages Development Bank (CVDB)

Location : Head office located Prince Shaker bin Zaid St. Amman- Jordan.  
Tel : +0096265692052

Type of Assistance: Grants  
Lighting Projects delivered by electric utilities Program

Amount: 50,000, 000 JD

Sector: Local development

Target Group: Municipalities, Local Councils

Application Procedure: Local Authority applies directly

Website: <http://cvdb.gov.jo/en/about-the-bank/about-the-bank>

### Governance Development Fund (GDF)

Location : Amman, Jordan

Type of Assistance: Loans, Grants

Amount: N/A

Sector: Infrastructure and development projects

Target Group: Governance

Application Procedure: Application through JEDCO

Website: <http://tinyurl.com/ourl6r7>  
<http://moi.gov.jo/arabic/pages/%D9%88%D8%B2%D8%A7%D8%B1%D8%A9-%D8%A7%D9%84%D8%AF%D8%A7%D8%AE%D9%84%D9%8A%D8%A9.aspx>  
[http://www.jedco.gov.jo/joomla/index.php?option=com\\_content&view=article&id=396&Itemid=229&lang=en](http://www.jedco.gov.jo/joomla/index.php?option=com_content&view=article&id=396&Itemid=229&lang=en)

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<sup>34</sup> Loans and Loan Guarantees

### **Jordan Environmental Fund (JEF)**

Location: Ministry of Environment 4<sup>th</sup> Floor, Amman- Jordan  
Tel : +962 6 5560113 6

Type of Assistance: Grants

Amount: N/A

Sector: Environment Protection and Sustainability

Target Group: Public and Private Sector, NGO's and local Communities

Application Procedure: Through Ministry of Environment

Website: <http://www.moenv.gov.jo/EN/Pages/default.aspx>

### **Jordan Energy Efficiency and Renewable Energy Fund (JREEEF)**

Location: Ministry of Energy and Mineral Resources – 6<sup>th</sup> Floor, Amman- Jordan. Tel : +962 65803060  
<http://www.memr.gov.jo/Default.aspx?tabid=219>

Type of Assistance: Grants  
Lighting Projects delivered by electric utilities Program

Amount: 40,000,000 JD<sup>35</sup>

Sector: Renewable Energy and Energy Efficiency

Target Group: Public and Private Sector, Individuals

Application Procedure: Through Ministry of Energy and Mineral Resources

Website: <http://www.edama.jo/Content/Events/Presentations/39a856ba-6553-45e6-be19-49c361d059cc/ae4f71a3-0baf-40a1-a707-62730020f670.pdf>

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<sup>35</sup><http://www.assabeel.net/local/item/99729-%D8%A7%D9%84%D8%A7%D8%B1%D8%AF%D9%86-%D8%A7%D9%84%D8%AB%D8%A7%D9%86%D9%8A-%D8%B9%D8%B1%D8%A8%D9%8A%D8%A7-%D9%81%D9%8A-%D9%85%D8%AC%D8%A7%D9%84-%D9%83%D9%81%D8%A7%D8%A1%D8%A9-%D8%A7%D9%84%D8%B7%D8%A7%D9%82%D8%A9>

### **8.3 Annex III – Donor Projects**

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For overview of the Donor projects see excel table (soft copy), for easier search of relevant donor projects. The following search methodology is advised:

- 1) Search in the Donor Project table (excel file) for the technology or type of project desired, note the relevant donor(s) (or IFI's).
- 2) Go to Annex II, select the table for either National or International organization.
- 3) Check the relevant organizations, whether it has Technical Assistance, Grant or loans.
- 4) Depending on the requested kind of support, select those organization meeting the project criteria.
- 5) Find the detail of the selected organization(s) the information fiche below the relevant table.

Ongoing and planned projects					
Project	Time	Description	Entity	Website	Budget
<b>Municipality Projects</b>					
Shams Aqaba	N/A	PV plants national wheeling for municipalities – under development	JICA		N/A
EU Sector support Technical Assistance to Renewable Energy and Energy Efficiency Programme (TA to REEEP)	2016-2019	<ul style="list-style-type: none"> <li>• Support to Pilot Projects (2017)- call for proposals</li> <li>• National Plan for PV roof tops to invest in Public sector and rural area's (MEMR)</li> <li>• Enhancing EE in public buildings (MPWH)</li> <li>• Training component</li> </ul>	EU		43 Mln EUR
Urban Projects Finance Initiative (UPFI)	2014-2018	A regional project in the MENA region aiming at integrated urban development, with three projects initiatives is Jordan. A Local and Regional Development Plan, Public space and equipment, Mobility plan for AZESA, and biogas from the land fill Al Ekaidar in Irbid.	AfD /EIB FEMIP/UfM		
United Smart City	2015-NA	UNECE, the Organization for International Economic Relations (OIER), UN-Habitat, the International Society of City and Regional Planners (ISOCARP), the Royal Institution of Chartered Surveyors (RICS) and the Environmental Agency Austria (EAA) are bringing together international organizations, cities and companies to: Promote Sustainable development World Wide, Support cities to develop and plan sustainable urban solutions, Identifying and develop Smart Cities financing Mechanisms. The main project in Jordan is the Smart City project, where Amman is member, website is being uploaded: www.unitedsmartcities.com. It will include projects from all urban sectors, plans and finance mechanisms and opportunities	OieR	<a href="http://unitedsmartcities.com/#programme-objectives">http://unitedsmartcities.com/#programme-objectives</a>	N/A
Biogas GJU and	2015-NA	Agricultural waste collection for the production of biogas in Madaba	GIZ		N/A
Street lighting project	2015- NA	Converting street lamps along major streets to energy-saving technologies, including light-emitting diode (LED) and solar powered lights, said Ayman Smadi, GAM transport and traffic	UNDP-GEF	<a href="http://www.ammancity.gov.jo/en/resource/snews.asp?id=80B33F6C-3F34-">http://www.ammancity.gov.jo/en/resource/snews.asp?id=80B33F6C-3F34-</a>	5 Mln EUR
Energy Efficiency for Governmental Buildings	2015-2017	KfW loan to MoPWH for financing of technical measures in Building of MoPWH, MoEdu and MoH with respect to the building envelope and technical installations.	KfW	<a href="https://www.kfw-entwicklungsbank.de/International-">https://www.kfw-entwicklungsbank.de/International-</a>	15 Mln EUR

Solid Waste Project GAM	2015-2017	Construction of a landfill gas recovery (“LFG”) system at the Al Ghabawi landfill site of Amman under a design, build, and operate (“DBO”) contract.	EBRD	<a href="http://www.ebrd.org">http://www.ebrd.org</a>	18 Mln USD
Sustainable Urban Demonstration Projects (SUDeP) – South	2014-2018	Implementation of sustainable energy actions leading to increased levels of energy savings and energy efficiency and to the deployment of renewable energy sources for Sahab Municipality (575.000 €)	EU	<a href="http://www.europa.eu">http://www.europa.eu</a>	10.5 Mln EUR
EU Sector support Technical Assistance to Renewable Energy and Energy Efficiency Programme (TA to REEEP)	2013-2015	<ul style="list-style-type: none"> <li>• NEEAP Update - End July 2015</li> <li>• NREAP - Mid 2015</li> <li>• Training with NERC on Economic Energy Project proposals</li> <li>• Best Practices from Pilot Projects (EE Building, PV, Biogas, Wheeling)</li> <li>• Energy Data Base – MEMR</li> <li>• EE Building Codes Enforcement Roadmap</li> </ul>	EU		1.5 Mln EUR
Replacement Of Mercury Lamps By Efficient Lamps And Use Automatic Street Lighting Controls And Advice to Refugee Hosting Communities in Waste Management (ADHOC) Waste Management Project	2012-Ongoing	Reducing the electricity consumption and power load for residential areas and street lighting in Amman, in addition to contributing to the implementation of a public policy for energy saving in the housing and municipal sector	AFD	<a href="http://www.mop.gov.jo/Page.s/viewpage.aspx?pageID=157">http://www.mop.gov.jo/Page.s/viewpage.aspx?pageID=157</a>	0.42Mln EUR
Regional network for integrated waste management in	2009-2015	CO2 reduction does not play a role, but a co-financing agreement with the EU was signed and therefore activities in waste management will be expanded (planned for example is a landfill rehabilitation in Mafraq, where CO2 reduction plays a role). Implementation of municipal master plans for waste management in IRBID, Ramtha and Mafraq, trainings for technicians and decision maker in waste management inside the municipalities as well as in the Joint Service Councils, on the job training for the vehicle fleet maintenance (redesigning the routing system might have an impact on CO2 reduction).	GIZ		
Regional network for integrated waste management in	2009-2015	Project objective: Human and institutional competencies in integrated waste management are strengthened in the MENA region.	GIZ	<a href="http://www.giz.de/en/worldwide/14946.html">http://www.giz.de/en/worldwide/14946.html</a>	N/A

**Other projects that could be relevant for Municipalities**

USAID Energy Sector Capacity Building (ESCB) Program	2013-2017	Jordanian energy sector partners to cultivate effective policies and decision-making in the energy sector; and to build sustainable institutional and organizational capacity to increase the adoption of renewable energy and energy efficiency technologies and practices. ESCB places a high priority on addressing gender issues in the energy sector, including promotion of women in energy-related careers. Specific projects: EE Officer capacity building in each ministry, Energy Action plan for the ministries, Helping MEMR to reach out to other Ministries to achieve this goal, PV pilot project at MopIC and Customs buildings, Training center, Tool kit bidding document specification and procedure for grid connection, Waste to Energy for Aqaba and Irbid, GAM preparing tender documents for waste to energy power plant, Building Pilot Projects action plan for implementation, JREEEF support on criteria & grant scheme, Demand Side Management: ERCO and NEPCO capacity building on regulations and energy efficiency, streetlighting, incentive mechanisms for utilities, economic analysis of energy projects (input cost	USAID	<a href="http://escb-jordan.org/">http://escb-jordan.org/</a>	19 Mln USD
USAID Jordan Competitiveness program (JCP)	2013-2017	Private sector oriented program includes Clean Energy component, a transformative project to prove concepts and introducing innovation. Ongoing projects: Converting King Hussein Business Park to a solar enabled smart business park, EE Access to finance component, Irbid Municipality - RE powerplant for 16 MW, combined with streetlighting (technical RfP under preparation with EBRD) Solid waste for Dead Sea Development Zone, development of financing products with banks			
Alignment of National Action Programs with the UNCCD 10-Year Strategy and reporting process, as per obligations to the UNCCD	2012 - Ongoing	Project objective: Update the NAP	GEFSEC	<a href="http://www.thegef.org/gef/project_detail?projectID=4924">http://www.thegef.org/gef/project_detail?projectID=4924</a>	0.421 Mln USD
Energy Efficiency Standards and Labeling of Building Appliances	2010 - Ongoing	Project objective: Remove the most significant barriers and permit a more rapid transformation process for energy efficient electrical equipment	UNDP	<a href="http://www.thegef.org/gef/project_detail?pr">http://www.thegef.org/gef/project_detail?pr</a>	1,12 Mln USD

Amman East Power Plant	2007 - Ongoing	* Project objective: The project's main objective is to meet the electricity needs of the country in an economically and environmentally sustainable manner to contribute to economic growth and well-being of the population of Jordan. The project would add about 370 MW of additional power to the system, help to ensure the reliability of power supply and help maintain a margin between available capacity and demand of at least 10 percent.	* Beneficiary: Greater Amman Municipality  * Project Team Leader: Rome Chavapricha	<a href="http://www.worldbank.org/projects/P094306/jo-amman-east-power-plant?lang=en">http://www.worldbank.org/projects/P094306/jo-amman-east-power-plant?lang=en</a>	375 Mln USD
Assessment of Capacity Building Needs and Country/Authority Specific Priorities in Biodiversity (Additional Financing)	2001 - Ongoing		UNDP		EA
National Capacity Self-Assessment (NCSA) Environmental Management	2003 - Ongoing	Multi Focal Area	UNDP	<a href="http://www.thegef.org/gef/project_detail?pr">http://www.thegef.org/gef/project_detail?pr</a>	EA
Building Capacity for GHG Inventory and Action Plans in the Hashemite Kingdom of Jordan in Response to UNFCCC Communications Obligations	1996 - Ongoing	Project objective: The project will build capacity in Jordan to advance national interests related to climate change. This includes capacity to respond to the FCCC, to more actively and effectively pursue energy and natural resource management activities related directly or indirectly to climate change mitigation and adaptation, and to take advantage of new opportunities related to the procurement of funding or projects related to climate change.	UNDP	<a href="http://www.thegef.org/gef/project_detail?projID=279">http://www.thegef.org/gef/project_detail?projID=279</a>	0.24 Mln USD
Energy Efficiency Investment Support Framework, with the goal of promoting investment in energy	2011 - Ongoing	Project objective: Promote investment in energy efficiency.	IBRD	<a href="http://www.thegef.org/gef/project_detail?projID=3671">http://www.thegef.org/gef/project_detail?projID=3671</a>	MSP
Promotion of a Wind Power Market	2008 - Ongoing	Project objective: The main objective of this IPP Wind Power project is to help create a sustainable wind power market in Jordan in order to increase the supply of electricity in an environmentally sustainable way by overcoming barriers to windfarm development such as higher generation cost from windfarms, lack of a legal and regulatory framework for windfarm development, lack of institutional capacity, and inadequate information on wind resources.	EBRD	<a href="http://www.thegef.org/gef/project_detail?projID=2555">http://www.thegef.org/gef/project_detail?projID=2555</a>	FP

<p>Promotion of a Wind Power Market</p> <p>Project ID: P093201</p>	<p>2008 - 2015</p>	<p>* Project objective: Increase power supplied from renewable energy sources in a sustainable manner through the private sector to help reduce the level of carbon emissions from hydrocarbon-based power generation sources. The project has four components.</p> <p>* Project activities: a) Develop promotional wind Independent Power Producer (IPP) power plant. b) Develop renewable energy and energy efficiency fund in Jordan. c) Provide renewable energy technical assistance support. d) Develop market for renewable energy.</p>	<p>* Beneficiary: Government of Jordan</p> <p>* Project Team Leader: Rome Chavapricha</p> <p>* Implementing Agency: Ministry of Energy and Mining</p>	<p><a href="http://www.worldbank.org/projects/P093201/promotion-wind-power-market?lang=en">http://www.worldbank.org/projects/P093201/promotion-wind-power-market?lang=en</a></p> <p><a href="http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2007/05/31/000104615">http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2007/05/31/000104615</a></p>	<p>41. 9mln USD</p>
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**Implemented Projects**

<p>Climate Change Enabling Activity (Additional Financing for Capacity Building in Priority Areas</p>	<p>2002 - Closing</p>	<p>Project objective: Climate Change Enabling Activity (Additional Financing for Capacity Building in Priority Areas</p>	<p>UNDP</p>	<p><a href="http://www.thegef.org/gef/project_detail?projectId=1573">http://www.thegef.org/gef/project_detail?projectId=1573</a></p>	<p>EA</p>
<p>Network of demonstration activities for sustainable integrated wastewater treatment and reuse in the Mediterranean</p>	<p>2012-2014</p>	<p>Project objective: Non-conventional water resources are used more in Egypt, Jordan, Morocco and Tunisia. These countries' technical and administrative skills are strengthened with a view to sustainable and integrated water strategies. Jordan: to use alternative technologies in decentralised wastewater treatment facilities for public buildings in semi-urban areas; to promote reuse of processed wastewater to irrigate green spaces and restore the environment</p>	<p>GiZ</p>	<p><a href="http://www.giz.de/en/worldwide/14318.html">http://www.giz.de/en/worldwide/14318.html</a></p>	<p>N/A</p>

Energy Efficiency Standards and Labeling in Jordan	2010 - 2014	<p>* Project objective: Provide relevant Government ministries with technical assistance and support for the introduction of the first set of appliance standard and labelling regulations as well as support for the design and implementation of support programs.</p> <p>Provide tools and methods to the ministries responsible for enforcement so they can ensure that the new regulations are applied consistently.</p> <p>Transform the appliance market in Jordan towards more energy efficient technologies through the introduction of energy performance labelling and a set of minimum energy performance standards.</p> <p>Educate customers on the importance of selecting a high efficiency appliance to avoid medium- and long-term operating costs.</p> <p>Encourage retailers to offer more efficient products in Jordan.</p> <p>Stimulate the introduction of cost-effective, energy efficient technology</p>	<p>* Beneficiary: Government of Jordan</p>	<p><a href="http://www.jo.undp.org/content/jordan/en/home/operations/projects/environment_and_energy/EE.html">http://www.jo.undp.org/content/jordan/en/home/operations/projects/environment_and_energy/EE.html</a></p>	1.17 Mln USD
Jo-Amman solid waste Management and carbon Finance	2008 - 2014	<p>* Project objective: Strengthen the operational, financial and environmental performance of Municipal Solid Waste Management (MSWM) in Amman.</p> <p>* Project activities: a) Institutional strengthening and capacity development to finance technical assistance and capacity-building activities benefiting Greater Amman Municipality (GAM) departments involved in the planning, development, operation and evaluation of solid waste operations.</p>	<p>* Beneficiary: Greater Amman Municipality</p> <p>* Project Team Leader: Francois Boulanger</p>	<p><a href="http://www.worldbank.org/projects/P104960/jo-amman-solid-waste-management-carbon-finance?lang=en">http://www.worldbank.org/projects/P104960/jo-amman-solid-waste-management-carbon-finance?lang=en</a></p>	40.5 Mln USD
Improvement of energy efficiency of the Water Authority of Jordan	2008 - 2014	<p>* Project objective: The energy efficiency of water pumping stations has improved. New operator schemes have been developed and implemented for sub-contracting the operation of pumping stations. Using private capital and donor funds, investments have been made in pumping stations and booster stations.</p>	<p>* Beneficiary: Government of Jordan</p> <p>*Implementing Agency: Water Authority of Jordan</p>	<p><a href="http://www.giz.de/en/worldwide/17228.html">http://www.giz.de/en/worldwide/17228.html</a></p>	

<p>Jordan - Cultural Heritage, Tourism &amp; Urban Development</p> <p>Project ID: P081823</p>	<p>2007 - 2014</p>	<p>* Project objective: Contribute to tourism development in the five key historically and culturally important cities of Jerash, Karak, Madaba, Salt and Ajloun, and thereby create the conditions for local economic development. Contribute to the consolidation of the tourism industry in Petra, Jordan's premier tourism asset and destination.</p> <p>* Project activities: a) Revitalization of historic city centers, urban infrastructure improvements and cultural landscapes regeneration in and around the historic cores of the cities of Jerash, Karak, Madaba, Salt and Ajloun (the Project Municipalities). b) Construction of a new Visitors Center at the Petra Sanctuary. c) Provision of financial and technical support to local entrepreneurs and community groups to encourage the creation and/or expansion of environmentally appropriate and financially viable small and medium enterprises in the urban core areas. d) Technical assistance for capacity building and project management.</p>	<p>* Team Leader: Chantal Reliquet</p> <p>* Implementing Agency: Ministry of Tourism and Antiquities</p> <p>* Project Team Leader: Rome Chavapricha</p>	<p><a href="http://www.worldbank.org/projects/P081823/jordan-cultural-heritage-tourism-urban-development?lang=en">http://www.worldbank.org/projects/P081823/jordan-cultural-heritage-tourism-urban-development?lang=en</a></p>	<p>71.1 MIn USD</p>
<p>Regional and Local Development Project</p> <p>Project ID: P070958</p> <p>SECTOR: Renewable energy</p>	<p>2006 - 2014</p>	<p>* Project objective: Assist the Government of Jordan in promoting regionally balanced local development through municipalities and other ancillary support mechanisms. This will be the second extension of the project's closing date and would bring the cumulative closing date extensions of the project to 24 months.</p> <p>* Project objective: a) Ensure the successful completion of ongoing activities in municipal infrastructure services and municipal capacity building. b) Prepare an action plan for implementation, which includes clear targets for the remaining period of project implementation.</p>	<p>* Beneficiary: Government of Jordan</p> <p>* Project Team Leader: Chantal Reliquet</p> <p>* Implementing Agency: Ministry of Energy and Mining</p>	<p><a href="http://www.worldbank.org/projects/P070958/jo-regional-local-development?lang=en">http://www.worldbank.org/projects/P070958/jo-regional-local-development?lang=en</a></p> <p><a href="http://www.wds.worldbank.org/external/default/WDStentServer/WDSP/IB/2006/10/05/000104615_20061005165_055/Rendered/">http://www.wds.worldbank.org/external/default/WDStentServer/WDSP/IB/2006/10/05/000104615_20061005165_055/Rendered/</a></p>	<p>48.3 MIn USD</p>

<p>Designing and Establishing an Energy Labeling System for Household Appliances</p>	<p>2010 - 2013</p>	<p>* Project objective: Reduce Jordan's energy-related greenhouse gas emissions through increased adoption of energy efficient domestic refrigerators, air conditioners, freezers and washing machines. Remove the barriers that are currently present in Jordan for the rapid and widespread usage of energy efficient appliances in the domestic sector.</p> <p>* Project activities: a) Complete a legal Review of the energy sector (completed December 2012). b) Establish the Project Advisory committee (1st meeting took place in 2010, 2nd meeting took place on June 2011, 3rd meeting took place on October 2011, 4th took place on February 2012).</p>	<p>* Beneficiaries: NERC, Ministry of Energy and Mineral Resources, manufacturers of electrical domestic appliances, Jordanian customers, National Electric Power Company, JSMO</p> <p>* Project Manager: Mohammad Maaytah</p> <p>* Project Assistant: Farah Shammout</p>	<p><a href="http://www.undp.org/index.php?page_type=projects&amp;project_id=50&amp;cat=3#TB_inline?height=150&amp;width=500&amp;inlineid=background_details">http://www.undp.org/index.php?page_type=projects&amp;project_id=50&amp;cat=3#TB_inline?height=150&amp;width=500&amp;inlineid=background_details</a></p>	<p>1.17 Mln USD</p>
<p>Adaptation to Climate Change</p>	<p>2009 - 2013</p>	<p>* Project objective: The joint project aims at enhancing Jordan's key government and civil society's capacities to adapt to climate change threats to health, food security, productivity, and human security under the conditions of severe water scarcity.</p>	<p>UNDP</p>	<p><a href="http://www.jo.undp.org/content/jordan/en/home/operations/projects/environment_and_energy/imple">http://www.jo.undp.org/content/jordan/en/home/operations/projects/environment_and_energy/imple</a></p>	<p>4 Mln USD</p>

<p>Jordan Energy Efficiency</p> <p>Project ID: P108064</p> <p>SECTOR: General energy sector / Banking</p>	<p>2009 - 2013</p>	<p>* Project objective: The objective of this project is to increase energy efficiency investments in the recipient's industrial and commercial sectors through building the capacity of Jordan Renewable Energy and Energy Efficiency Fund (JREEEF)</p>	<p>* Beneficiary: Government of Jordan</p> <p>*Implementing Agency: Ministry of energy and mineral resources</p>	<p><a href="http://www.worldbank.org/projects/P108064/jordan-energy-efficiency?lang=en">http://www.worldbank.org/projects/P108064/jordan-energy-efficiency?lang=en</a></p>	<p>44.6 Mln USD</p>
<p>Integrated Ecosystem and Natural Resource Management in the Jordan Rift Valley</p>	<p>2007 - 2013</p>	<p>Project objective: The main objective of the project is to secure the ecological integrity of the Jordan Rift Valley, as a globally important ecological corridor and migratory flyway, through a combination of integrated land use planning, ecologically appropriate and nature-based socioeconomic development, and biodiversity protection and management</p>	<p>IBRD</p>	<p><a href="http://www.thegef.org/gef/project_detail?projectID=1214">http://www.thegef.org/gef/project_detail?projectID=1214</a></p>	<p>6.1 Mln USD</p>

<p>Developing policy-relevant capacity for implementation of the Global Environmental Conventions in Jordan (CB2 GEF)</p>	<p>2008 - 2012</p>	<p>* Project objective: Develop policy-relevant capacities for implementation of the global environmental conventions (particularly the three Rio Conventions: the UN Convention on Biodiversity, CBD, the UN Framework Convention on Climate Change, UNFCCC, and the UN Convention to Combat Desertification, UNCCD) in Jordan by enhancing connectivity between research and policy-making for optimal global environmental management.</p> <p>* Project activities: Develop the necessary knowledge base in this regard by building on existing in-house capacities and existing policies and legal frameworks to ensure that the current national efforts for reforming and implementing these frameworks are enabled and strengthened to catalyze the required reforms.</p>	<p>* Beneficiaries: research institutions and centers, line ministries involved in the implementation of UNFCCC, UNCCD, CBD</p> <p>* Executing Agency: Ministry of Environment</p> <p>* Contributing Partners: GEF, UNDP - Jordan</p>	<p><a href="http://www.undp.org/jordan.org/index.php?page_type=projects&amp;project_id=45&amp;cat=3">http://www.undp.org/jordan.org/index.php?page_type=projects&amp;project_id=45&amp;cat=3</a></p> <p><a href="http://www.undp.org/uploads/projects/pd_1280851558.pdf">http://www.undp.org/uploads/projects/pd_1280851558.pdf</a></p>	<p>0.57 Mln USD</p>
<p>Tafila Wind Farm</p> <p>Project ID: 20110433</p> <p>SECTOR: Energy</p>	<p>2012</p>	<p>* Project objective: The project comprises the construction and operation of a greenfield wind Independent Power Producer (IPP) to produce 117 MW electricity in Jordan. The project will contribute to Jordan's development objective in the energy sector by increasing both electricity production and the share of renewable energy in Jordan's electricity generation portfolio. It will contribute to climate change mitigation by displacing fossil fuel-based generation and avoiding greenhouse gas emissions.</p>	<p>* Financial Intermediary: Jordan Wind Project Company PSC (Jordan)</p>	<p><a href="http://www.eib.org/projects/pipeline/2011/20110433.htm">http://www.eib.org/projects/pipeline/2011/20110433.htm</a></p>	<p>195 Mln EUR</p> <p>EIB: 49 Mln EUR</p>
<p>Conservation and Sustainable Use of Biodiversity in Dibeen Nature Reserve</p>	<p>2002 - 2012</p>	<p>Project objective: The overall objective of the project is to establish a nature reserve in Dibeen Forest to conserve unique and globally significant biodiversity, develop sustainable alternative economic uses of the forest resources in context of a regional forest park, and build in-country capacity in forest management and conservation-orientated land use planning.</p>	<p>UNDP</p>	<p><a href="http://www.thegef.org/gef/project_detail?projectId=1438">http://www.thegef.org/gef/project_detail?projectId=1438</a></p>	<p>MSP</p>

Capacity-Building in Wind Energy and Concentrating Solar Power (CSP) in Jordan	2010-2012	Project objectives: to support the National Energy Research Centre to steer and facilitate the implementation of the Renewable Energy section in the 2007-2020 energy strategy for Jordan with special emphasis on wind energy and concentrated solar power	National Energy Research Center	<a href="http://www.wecsp.org.jo/about">http://www.wecsp.org.jo/about</a>	16.4 USD Million
Paper and Carton residues recycling project	2010 - 2011	Project objective: recycling project in Muath bin Jabal	EU	<a href="http://eeas.europa.eu/delegations/jordan/projects/list_of_projects">http://eeas.europa.eu/delegations/jordan/projects/list_of_projects</a>	148 500 EU
TT-Pilot (GEF-4) DHRS: Irrigation Technology Pilot Project to face Climate Change Impact	2009 - 2011	Project objective: To reduce the vulnerability to climate change of the agricultural system in Jordan, particularly from its impacts on water resources, by testing an innovative and efficient water-use technology	IFAD	<a href="http://www.thegef.org/gef/project_detail?projectId=4036">http://www.thegef.org/gef/project_detail?projectId=4036</a>	FP
The Project for Introduction of Clean Energy by Solar Electricity Generation System	2010	Project activities: Package 1: The Supply of 280kW Solar Electricity Generation System Package 2: The Supply of 100kW Solar Electricity Generation System	Japan International Cooperation System	<a href="http://www.jics.or.jp/jics.html-activities/grant/environment">http://www.jics.or.jp/jics.html-activities/grant/environment</a>	Total budget: 640 million Japanese
WECSPP	2010		Europeaid	<a href="http://www.wecsp.org.jo/about">http://www.wecsp.org.jo/about</a>	
Adaptation Fund	2007		UN	<a href="https://www.adaptation-">https://www.adaptation-</a>	200 Mln USD
Mise a niveau urbain d'Aqaba	2007	Project activities: Several areas are integral to the projects: public spaces and equipment; mobile transport and planning of the centre	AFD		
Reduction of Methane Emissions and Utilization of Municipal Waste for Energy in Amman	1997 - 2007	Project objective: The project addresses a number of barriers that hinder the local utilization of MSW for methane (CH4) production and extraction to be used as a fuel for the generation of electric power.	UNDP	<a href="http://www.thegef.org/gef/project_detail?projectId=280">http://www.thegef.org/gef/project_detail?projectId=280</a>	5.6 Mln USD
PDRL II (Plan de Developpement Local et Regional)	2006	Project activities: The programme is following PDRL I and is composed of two essential elements: reinforce the management capacity and the financing of operations in the municipalities in Jordan	AFD		
Vulnerability and Adaptation to Climate Change.	1997	Project objective: This project will assist the national Government to comply with the provisions of the UNFCCC.	UNDP	<a href="http://www.thegef.org/gef/project_detail?pr">http://www.thegef.org/gef/project_detail?pr</a>	EA
Mise à niveau de la décharge Al Ekaider (Irbid)		Project objective: Rehabilitation and extension of waste treatment of Al Ekaider	AFD		N/A

<p>MENARID Mainstreaming Sustainable Land and Water Management Practices</p>	<p>2008-Ongoing</p>	<p>Jordan's natural resources are very limited since only 5\% of the land is arable and it is one of the most water deficit countries in the world. The primary objective of the baseline project is to increase food security and income levels of resource poor households, to be achieved by an integrated program comprising soil and water conservation activities to arrest soil degradation, restore soil fertility and improve sustainable agricultural production, and credit program to provide alternative income sources, mostly for women. The rationale of the GEF support is to facilitate the enhancement of the enabling policy regulatory and incentive frameworks that govern natural resources use, promote integrated land use planning and mainstream SLM into national planning frameworks. Specific project objectives will include: Enhancing the application of SLM by enhancing the scope of the baseline project. Enhancing IWRM and application in the project area as tool for SLM. Support development of an environmental monitoring system at national and project level. Initiate a policy dialogue to harmonize government policies and legislation and extend public and governmental awareness programs to enhance the priority of SLM. Support development of a coordination mechanism to ensure that an efficient and cost effective inter-sectoral planning system is developed and provide capacity building</p>	<p>IFAD</p>	<p><a href="http://www.thegef.org/gef/project_detail?projectId=2631">http://www.thegef.org/gef/project_detail?projectId=2631</a></p>	<p>29,9 MIn USD</p>
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The European Union is made up of 28 Member States who have decided to gradually link together their know-how, resources and destinies.

Together, during a period of enlargement of 50 years, they have built a zone of stability, democracy and sustainable development whilst maintaining cultural diversity, tolerance and individual freedoms.

The European Union is committed to sharing its achievements and its values with countries and peoples beyond its borders.

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