



TECHNICAL ASSISTANCE TO THE RENEWABLE ENERGY AND ENERGY EFFICIENCY PROGRAMME IN JORDAN (REEE II-TA)

REEEII-TA Support to MOMA and Jordanian Municipalities

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OUR CONSORTIUM



Energy finance, private sector involvement, RE/EE in water sector, project management

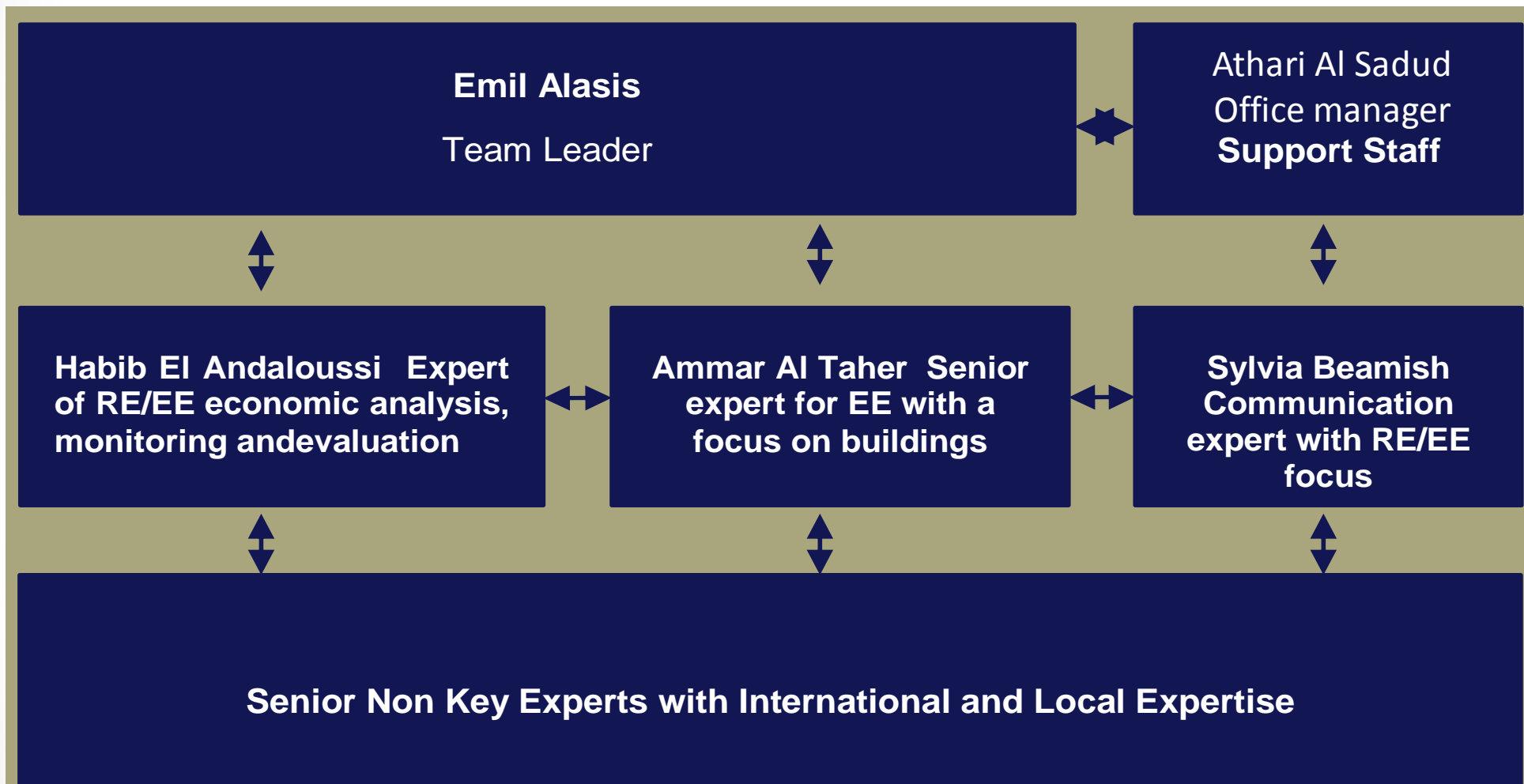
Engineering in RE/EE , energy policy, energy planning, institution building

Training and capacity building in all areas of RE and EE, certified courses

Long standing experience in Jordan and the Mediterranean region; state-of-the-art expertise, commitment for efficient solutions for Jordan

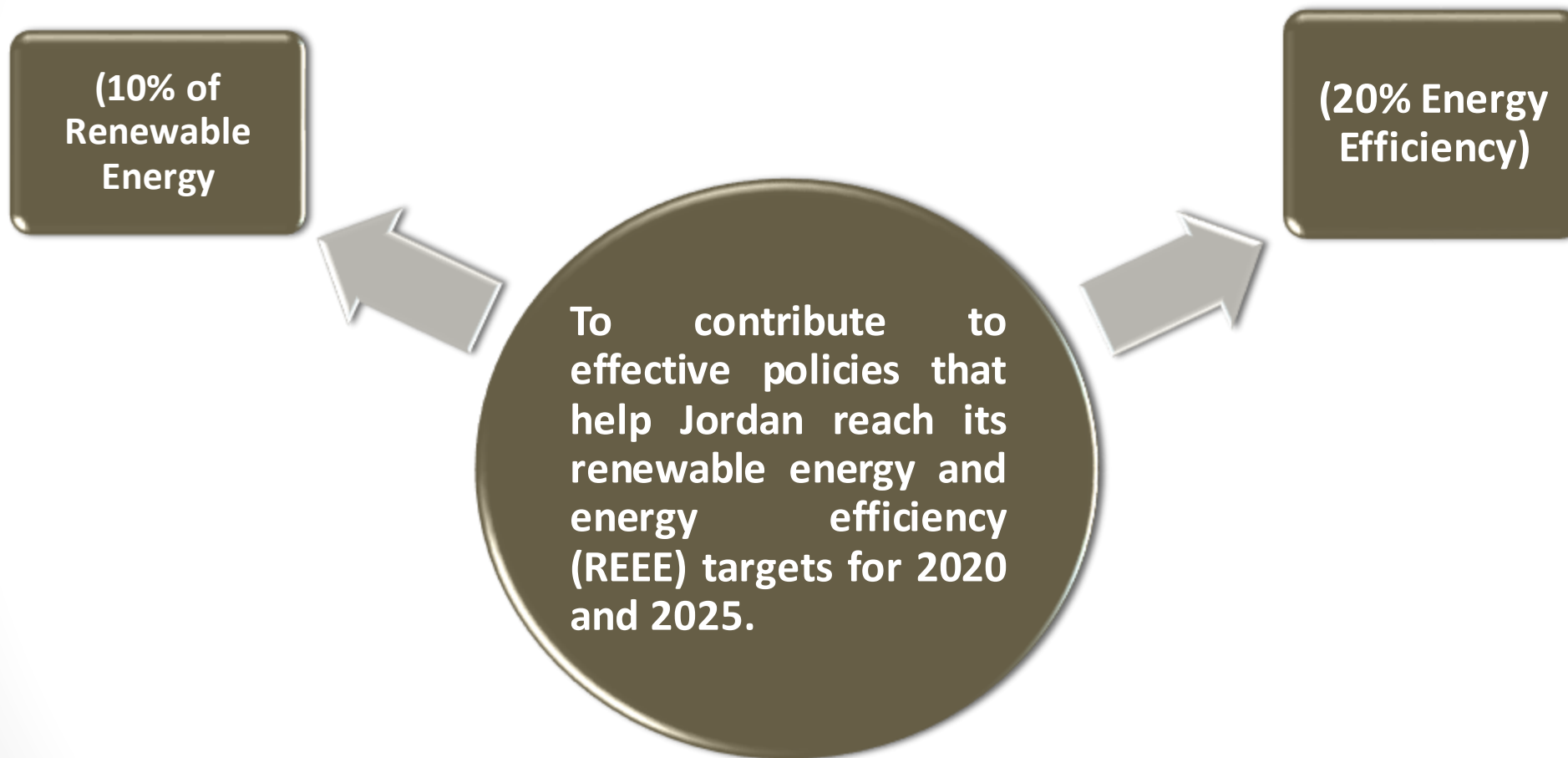


MEET THE TEAM





OVERALL OBJECTIVE OF REEE II-TA





MAIN TASKS



Help all stakeholders implement relevant policies, regulations and incentives.

Support specific pilot initiatives

Monitor implementation and sector development



Supporting MEMR Efforts to



Planning and Coordination

Upgrade energy statistics as a basis for planning

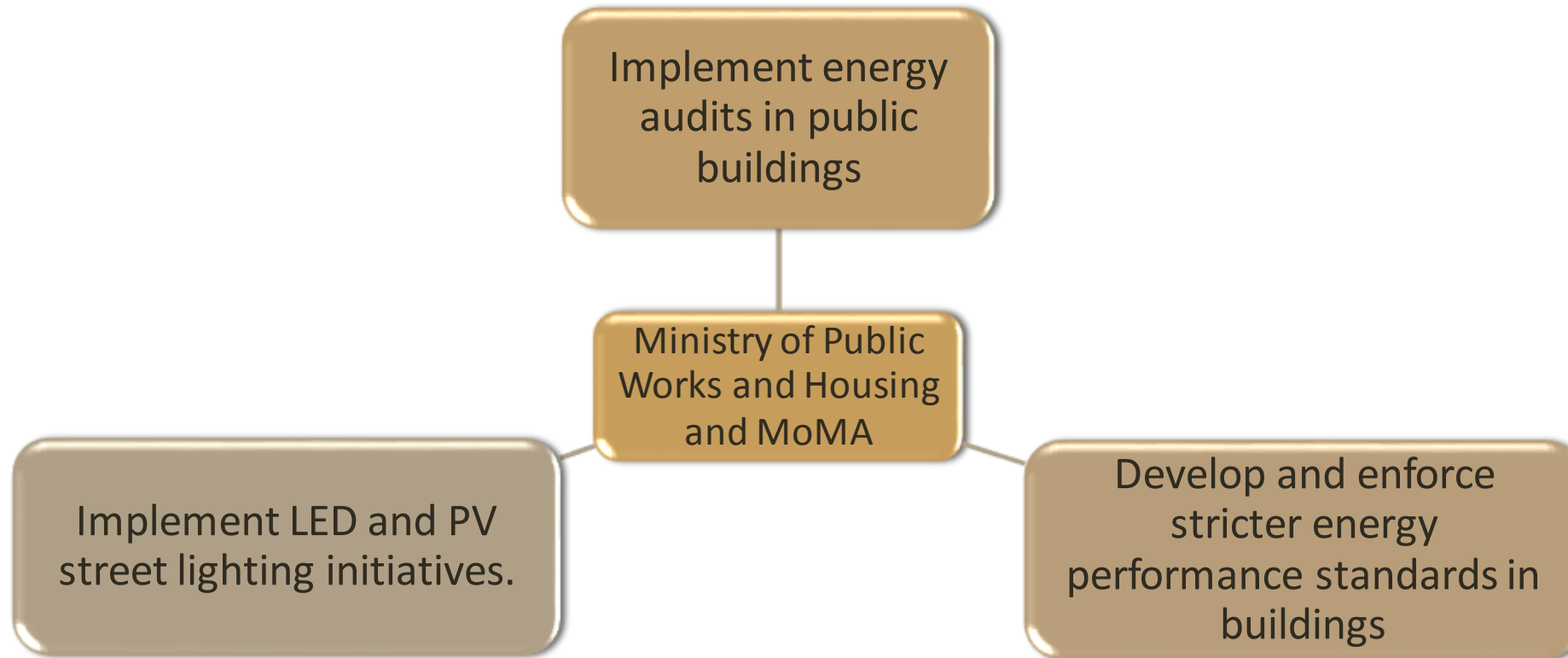
Develop long-term renewable energy targets

Help JREEEF and NERC / RSS establish an effective model to monitor green energy sector development.

Involve everyone, including the private sector and academics in structured dialogue to advance green energy measures that work for everyone.



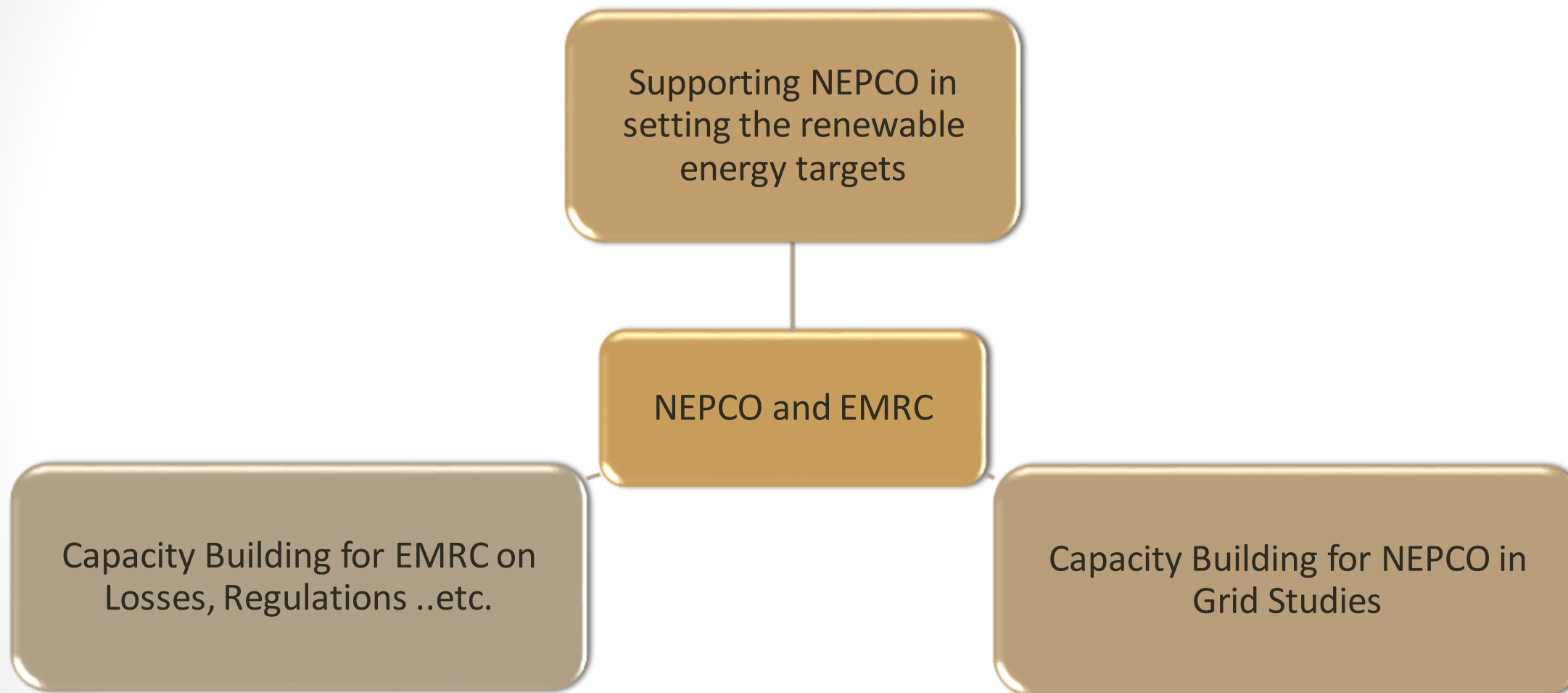
Supporting MoPWH / MoMA Efforts to



A 2 MW waste-to-energy system for Greater Amman Municipality (GAM) / already under development through REEEII.



Supporting EMRC & NEPCO efforts to...





..plus Supporting MoWIr and MoEN Efforts to...



Introduce solar power to main MoWIr pumping stations and 300 PV Pumping Systems with the MoEN.

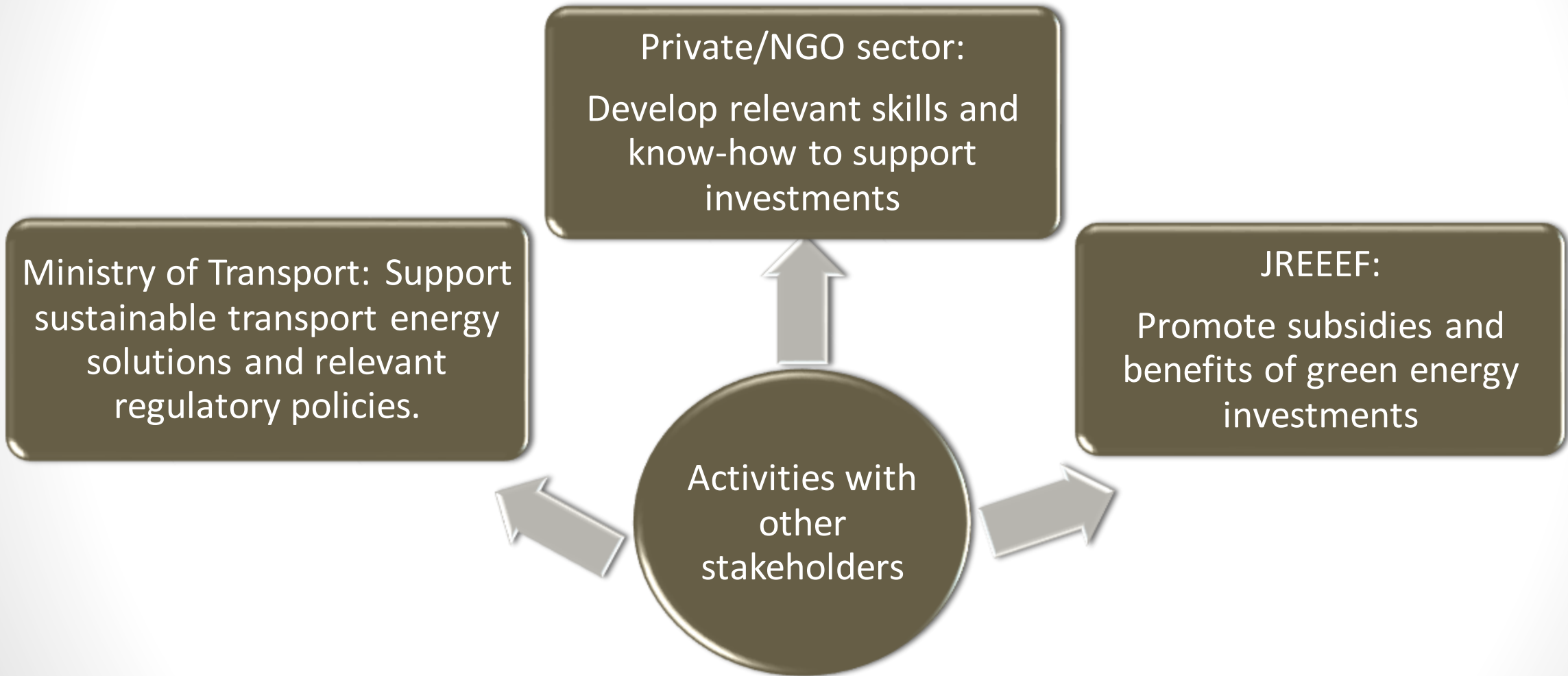
Implement Energy efficiency measures in other pumping stations

Ministry of Water and Irrigation





Stakeholders Support





Technical Assistance to MoMA



Capacity Building for
Ministry of Municipal
Affairs in EE/RE



MOMA

Communication Strategy
Development

Pilots Planning, Projects
Monitoring, Funding Platforms,
Financial Schemes Development

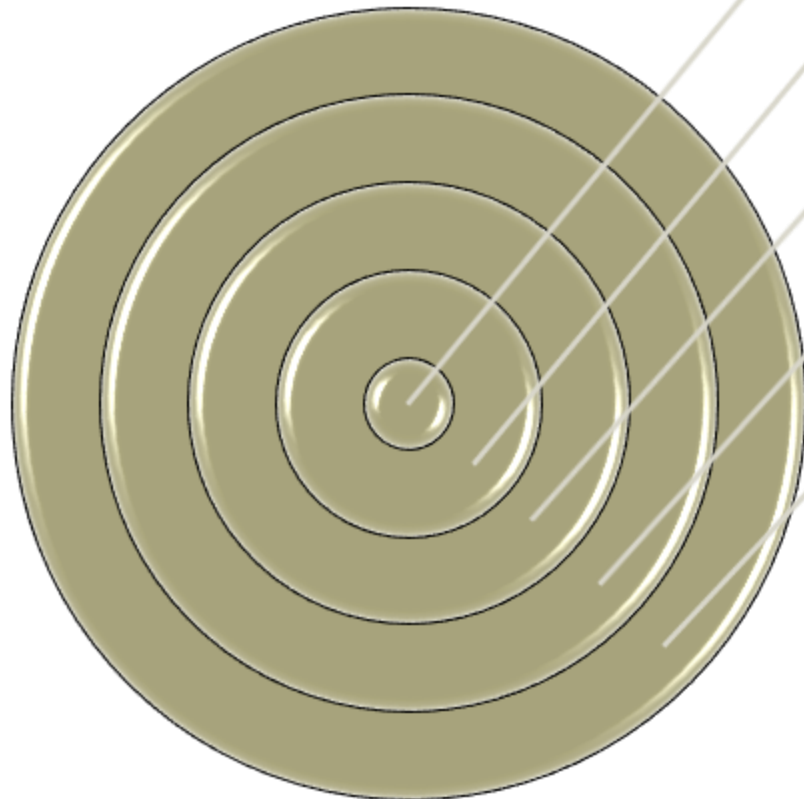


Technical Assistance to Municipalities

NEEAP Included many EE Measures relating to SECAP such as SWH, Street Lighting, EE Building Codes, Retrofit of Existing Buildings....



EE Building Codes
Info-Graphics



REEEI-TA can assist municipalities in setting up the SECAP Pilot Projects

NEEAP includes the SECAP as an ACTION

NEEAP was developed by REEEI-TA and its stakeholders

MoMA part of Sectorial EE in Building Working Group

EE in Transport Sector included in NEEAP and a dedicated sectorial WG





Technical Assistance to Municipalities



REEEII Technical Assistance to Municipalities

Sustainable Energy and Climate Action Plan (SECAP)/ **EE Measures based on NEEAP 2017-2020**

No	Measures	Description	Period	Electricity saving (GWh)	Program Cost (MJD)	Bill saving for users (MJD)	Implementing Agency	EE Working Group
1	Replacement incandescent lamps with LED for low and medium households income classes (<600 kWh/month)	1 million LED targeting 250000 consumers	2017-2020	155	10	12	MEMR/JREEEF	JREEEF
2	Enforcement of Energy Label and standards program for 4 home appliances	Air conditioning - Refrigerators - Freezers - W machines	2017-2020	400	NA	21	JSMO	Quality control & assurance of products & services
3	EE building codes enforcement in residential sector (just insulation)	About 66000 new households during the next 5 years.	2017-2020	401	259	75	MoPWH/JNBC, Municipalities	Buildings
4	Program for roof insulation of existing building in residential sector	15000 houses with around 2 million m ² of roof	2017-2020	41	32	7	MEMR/JREEEF	JREEEF
Total				998	301	116		

Table 1: Summary of EE measures in residential sector

Technical Assistance to Municipalities



REEEI Technical Assistance to Municipalities

Sustainable Energy and Climate Action Plan (SECAP)/ **EE Measures based on NEEAP 2017-2020**

No	Measures	Description	Period	Electricity saving (GWh)	Program Cost (MJD)	Bill saving for users (MJD)	Implementing Agency	EE WG
5	Jordan public building energy efficiency program	Government program of public building retrofiting	2015-2017	36	12	7	MoPWH	Buildings
6	Replacement of Fluorescent Tubes in public buildings	80,000 of 10-watt Tube-LED Lamps	2017-2020	2	1	1	MEMR, MoPWH, Sector Ministries..	Buildings
7	Energy efficiency in health centers	300 to 400 small and medium hospitals in all Jordan.	2017-2020	12	5	2	JREEEF	JREEEF
8	Replacement of Fluorescent Tubes in commercial buildings by LEDs	Replacement of 250.000 units of Fluorescent Tubes 4x18 watt with LED 60 cm Tubes.	2017-2020	66	15	10	Chamber of Cpmmerce, MEMR/JREEEF & NERC	JREEEF
9	Energy efficiency in existing small and medium hotels	100 to 120 small and medium hotels in all Jordan.	2017-2020	11	5	2	JREEEF	JREEEF
10	EE building codes enforcement in tertiary sector (Just insulation)	About 5700 new units during the next 5 years.	2017-2020	249	95	19	MoPWH/JNBC, Municipalities & developers	Buildings
	Total			376	133	41		





Technical Assistance to Municipalities



REEEII Technical Assistance to Municipalities

Sustainable Energy and Climate Action Plan (SECAP) / **EE Measures based on NEEAP 2017-2020**

Regarding EE measures in water
pumping sector, we have 11
Actions / projects

Regarding EE measures in
Transport sector, we have 6
Actions / projects



Technical Assistance to Municipalities



REEEI Technical Assistance to Municipalities

Sustainable Energy and Climate Action Plan (SECAP)/ **EE Measures based on NEEAP 2017-2020**

No	Measures	Description	Period	Electricity saving (GWh)	Program Cost (MJD)	Bill saving for users (MJD)	Implementing Agency	EE WG
11	EE program in industrial Sector	Energy Efficiency measures implementation 50 industries annually	2017-2020	383	105	53	JREEEF, Chamber of Industry, Industries, Energy Auditors, NERC	Buildings
Total				383	105	53		

Table 4: Summary of EE measures in industrial sector

No	Measures	Description	Period	Electricity saving (GWh)	Program Cost (MJD)	Bill saving for users (MJD)	Implementing Agency	EE WG
23	Replacement of Mercury lamps by efficient lamps and use Automatic street lighting controls and voltage regulators	The project includes a replacement of 230,137 units of mercury lamps of 125 watt with 70-watt high pressure sodium.	2017-2020	55	11	4	MoMa & Municipalities	MoMA
Total				55	11	4		

Table 5: Summary of EE measures in street lighting



Technical Assistance to Municipalities



REEEI Technical Assistance to Municipalities

Sustainable Energy and Climate Action Plan (SECAP)/ **EE Measures based on NEEAP 2017-2020**

No	Measures	Period	Electricity saving (GWh)	Program Cost (MJD)	Bill saving for users (MJD)	Implementing Agency	EE WG
24	Improve the energy performance of Al-Karak municipality Buildings to reduce energy consumption and its associated costs.	2017-2020	0.8	0.08	0.160	RSS/NERC	RSS/NERC
25	Reduce the consumption of street lighting for Al-Karak Municipality.	2017-2020	0.055	0.03	0.065	RSS/NERC	RSS/NERC
	Total		0.9	0.11	0.225		

Table 6: Summary of EE measures in the Municipalities



Technical Assistance to Municipalities



REEEII Technical Assistance to Municipalities

Sustainable Energy and Climate Action Plan (SECAP)/ **EE Measures based on NEEAP 2017-2020**

No	Measures	Implementation period	Implementing Agency	EE WG
27	RE and EE Custom Duties and Sale Taxes exemption	On-going since 2014 and updated in 2015	MEMR, Custom Department & Sales Tax Department	MEMR
28	Jordan Renewable Energy and Energy Efficiency Fund (JREEEF)	Since May 2015	MEMR/JREEEF	JREEEF
29	Energy Efficiency Buildings Codes (7 codes)	- 2 of them adopted in 2014 - All to be enforced starting in 2017	- MoPWH, MoMA & Municipalities	Buildings
30	European Commission- (REEE II) Program	2017-2020	MEMR	MEMR
31	Minaret project	2017-2020	RSS/NERC	RSS/NERC
32	CES-MED project	2014-2020	RSS/NERC	RSS/NERC
33	SUDEP/Sahab project	2015-2017	NERC/RSS	RSS/NERC
34	National Green Growth Plan- GGGI-	2017-2020	MoEn	MoEn
35	Implementation of the Energy Conservation By-Law 73 of 2012	2017-2020	MEMR/JREEEF	JREEEF



THANKS FOR YOUR ATTENTION

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