



# Energy Efficiency Policy In Jordan

## - EE Roadmap-

4<sup>th</sup> ERC & CO PUC Partnership  
Denver – CO.

24-28 Jan. 2011



Electricity Regulatory  
Commission



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Association of  
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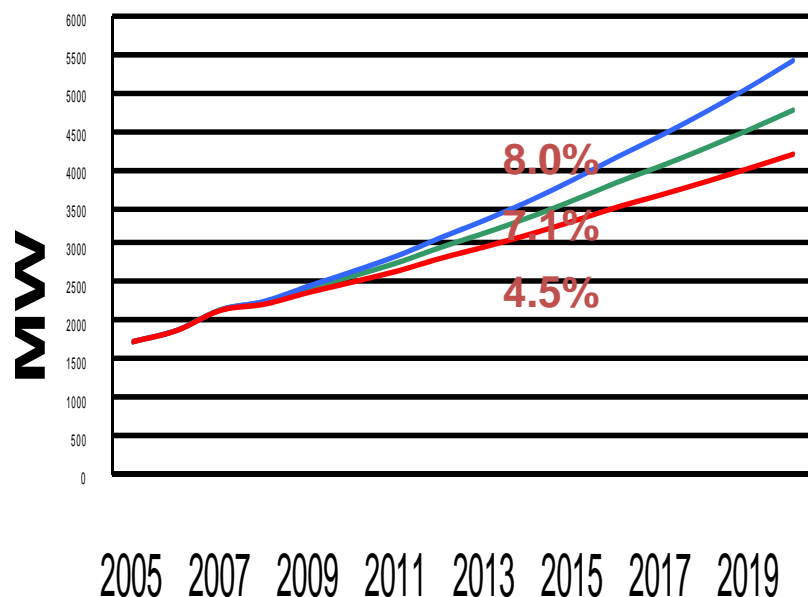
CO PUC



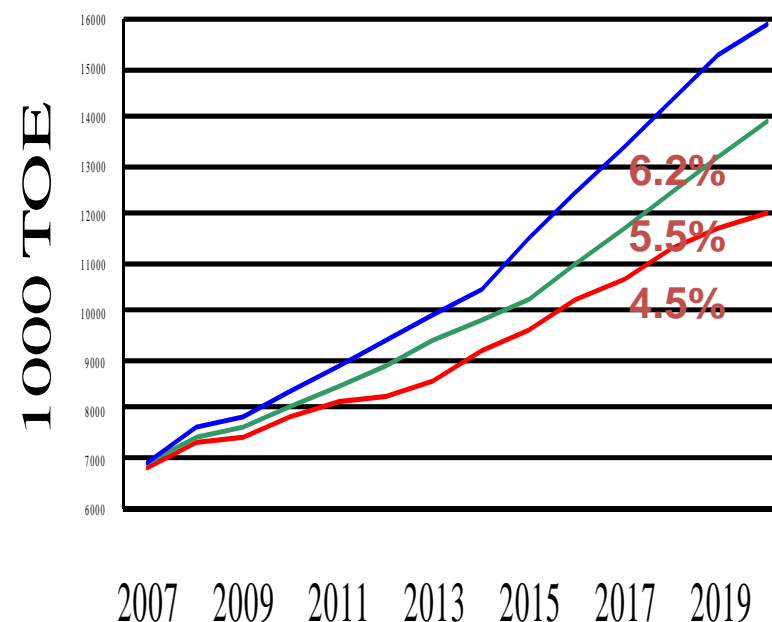
# Energy Demand

Period	Electricity Demand Growth (%)	Primary Energy Demand Growth (%)
(2009-2020)	7.1	5.5

Growth of Electricity Demand 2009-2020.



Growth of Primary Energy Demand 2009-2020





## **The Main Challenges of Energy Sector**

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**Jordan is facing real challenges in securing of energy supply due to :**

- **Almost no indigenous energy resources .**
- **Highly dependency on imported energy (97% import in 2009).**
- **High cost (The energy imports accounted for 12.3% of GDP in 2009).**
- **High growth of primary energy demand.**
- **Lack of water resources.**



# Current Energy Efficiency Activities in Jordan

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- ❑ Jordan's energy efficiency strategy- 2004.
- ❑ Commercial and industrial energy audits.
- ❑ Residential and street lighting efficiency program by AFD.
- ❑ Equipment energy efficiency labels and standards
- ❑ RE & EE Law issued 2010:
  - EE By-law.
  - EE Roadmap/ EEO.



## Jordan's Energy Efficiency Strategy:

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- The GoJ adopted a **National Energy Efficiency Strategy** in **2004** that calls for promotion of energy efficiency measures in all sectors, development of local energy resources including renewable energy and adopting a rational pricing policy for meeting high energy demand.



# Renewable Energy & Energy Efficiency Law

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## □ Main Goals:

- Provide a legal mandate for the government and a regulatory framework for the EE development.
- Promoting energy conservation and awareness.
- Encourage private-sector investment in EE.
- Reduce greenhouse gases.
- Develop in-country expertise related to EE.



## RE & EE Law:

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### □ Main Articles:

- allows the Ministry of Energy and Mineral Resources (MEMR) to work with stakeholders to conserve energy and increase Energy Efficiency (EE) in different sectors (Article 3c), and
- The GOJ is requested to issue by-laws necessary for execution of the provisions of the renewable energy and energy efficiency law, including procedures and measures for energy conservation and energy efficiency in the various sectors (Article 17).



## Jordan Renewable Energy and Energy Efficiency Fund (JREEF)

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- ❑ The new Energy Law introduce the establishment of a fund to provide the necessary investment for the development of renewable energy and energy efficiency projects. The new fund is known as Jordan Renewable Energy and Energy Efficiency Fund (JREEF)
- ❑ It is established as a legally independent entity with financial and administrative autonomy. It is also allowed to receive donors' grants and financial assistance.





## EE By law and EE Road map

- Article 17 of the REEE law: calls for by-laws and political action for EE.
- National Energy Strategy 2007-2020: Improve EE by 20% by 2020
- Arab League: Arab End Use Electricity Efficiency Improvement and Conservation Directive.



**Energy Efficiency by-law: Legal and institutional framework for energy efficiency improvement actions.**

**Energy Efficiency Roadmap: Policy document that defines major steps to create an enabling environment for EE actions.**



# EE by-law: Content



1. **Introduction:** Purpose, scope, general guidelines and definitions.
2. **Section I:** Roles and responsibilities of ministries, energy efficiency office, semi-governmental institutions, municipalities, local governments and the private sector.
3. **Section II:** Energy data collection and monitoring  
Provides for a continuous planning and monitoring process and obliges stakeholders to report on energy efficient indicators.
4. **Section III:** Energy Efficiency Policy instruments  
Give guidelines for sector-specific provisions including basic principles of Jordanian EE policy and a set of eligible instruments.
5. **Section IV:** Detailed regulations on energy efficiency standards, technical regulations and labeling schemes.
6. **Section V:** Energy Service Companies.
7. **Section VI:** Public Sector  
EE public buildings, public procurement etc. to guarantee that the public sector leads by example.
8. **General rules:** Enforcement and sanctions.



## EE by-law and EE Roadmap: Link of policy paper and legislative framework

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1. **Obligation to develop Roadmap legally fixed in EE by-law**
  - Article 2: Energy Efficiency Roadmap and Targets  
'The Government shall develop a Roadmap to Energy Efficiency.'
2. **Obligation to establish National Energy Efficiency Action Plans (as recommended by Arab League) to implement Roadmap included in Article 2**
  - 'The Roadmap shall be implemented through three-year National Energy Efficiency Action Plans (NEEAP).'
3. **Role of Energy Efficiency Office as coordinating body for the implementation of the Roadmap to be defined by EE by-law**
  - Article to be introduced in Section I after Article 4 on role of MEMR
  - Article should clearly relate NERC and the office and define its tasks



# EE Roadmap: Content

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- I. **General statement** on importance of EE and past work on policy development (introduction).
- II. **Goal and results framework**: Definition of the 20% goal and remarks on aspects to be considered when measuring progress.
- III. **Government role in the enabling environment**: Definition of 10 enabling steps (see next slide).
- IV. **Non-government role in the enabling environment**: Description of role of Electricity Utilities, Financial Sector, Manufacturers of EE products & Merchants, Educational Institutions .
- V. **Energy efficiency actions/ programs**: Link to National Energy Efficiency Actions Plans, role of public and private sector.
- VI. **Roadmap implementation mechanism**: Definition of coordination, funding and reporting mechanism between MEMR, NERC, JREEF and EEO; definition of tasks of the EEO.
- VII. **Indicative timeline**: rough timeline including prioritization.



## EE Roadmap: Role of government - 10 enabling steps

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1. **Government of Jordan commits** to energy conservation efforts as a cross-cutting policy issue with national priority.
2. **MEMR** conducts an overall inventory to define the starting point for any future EE-related policies.
3. **Government of Jordan leads by example**
4. Government of Jordan creates **financial and/or tax incentives** for the different stakeholders to promote the implementation of energy efficiency projects
5. **Electricity Regulatory Commission** develops a **rate structure that encourages energy efficiency**
6. **Authorities** establish **minimum energy performance standards (MEPS)** and **labels** for buildings, equipment and service organizations



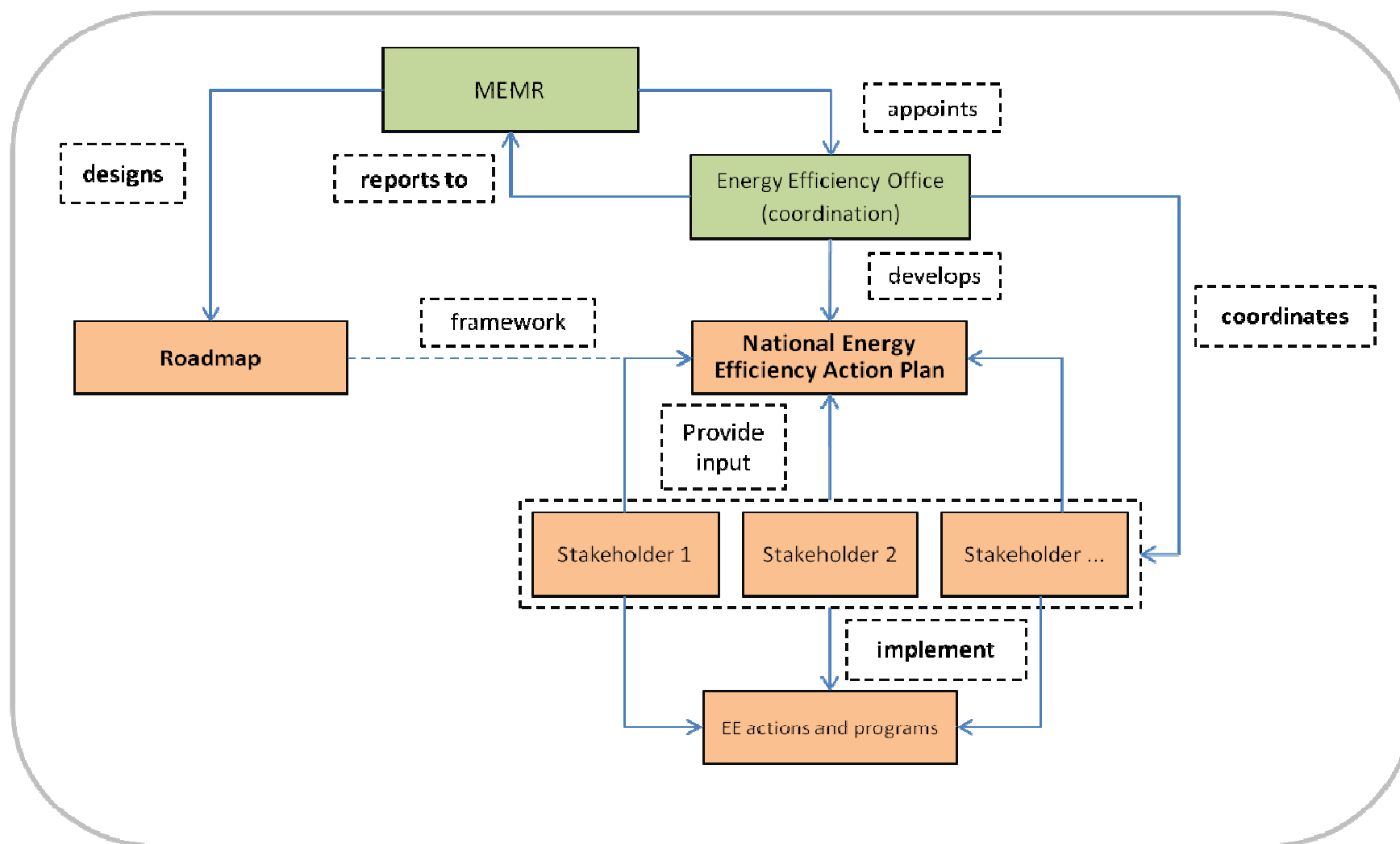
## EE Roadmap: Role of government - 10 enabling steps

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7. **Jordan National Building Council** strengthens energy efficiency building codes and clear responsibility is established to monitor adherence to the building codes by all planning and certifying agencies.
8. **Ministry of Transport, the Municipalities and GAM** incorporate energy efficiency in their activities to improve the energy impact of transport sector policies / plans.
9. **The Ministry of Energy and Mineral Resources and NERC** establish a monitoring, evaluation and verification (MEV) mechanism to continually review and refine the government policies.
10. **Authorities** seek out and examine innovative approaches to encourage energy efficiency.



# Roadmap Implementation process





# Role of the Energy Efficiency Office (EEO)

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## ▪Coordination:

- a. Coordinate Roadmap as a guiding policy document
- b. Coordinate stakeholders' contribution to the National Energy Efficiency Action Plan (NEEAP);
- c. Coordinate different activities under the NEEAP stipulated by the EE by-laws;
- d. Main contact point for agencies wishing to be involved in energy efficiency activities.

## ▪Input:

- a. Suggest programs and activities in areas where shortcomings have been identified to relevant stakeholders;
- b. Set up criteria to be used by stakeholders to prioritize actions;
- c. Assist stakeholders in designing actions plans in the framework of the NEEAP for identified activities ;
- d. Assist stakeholders, in collaboration with JREEF, in identifying possible sources of funding.





# Role of the Energy Efficiency Office (EEO)



## ▪Follow up of on-going projects and evaluation:

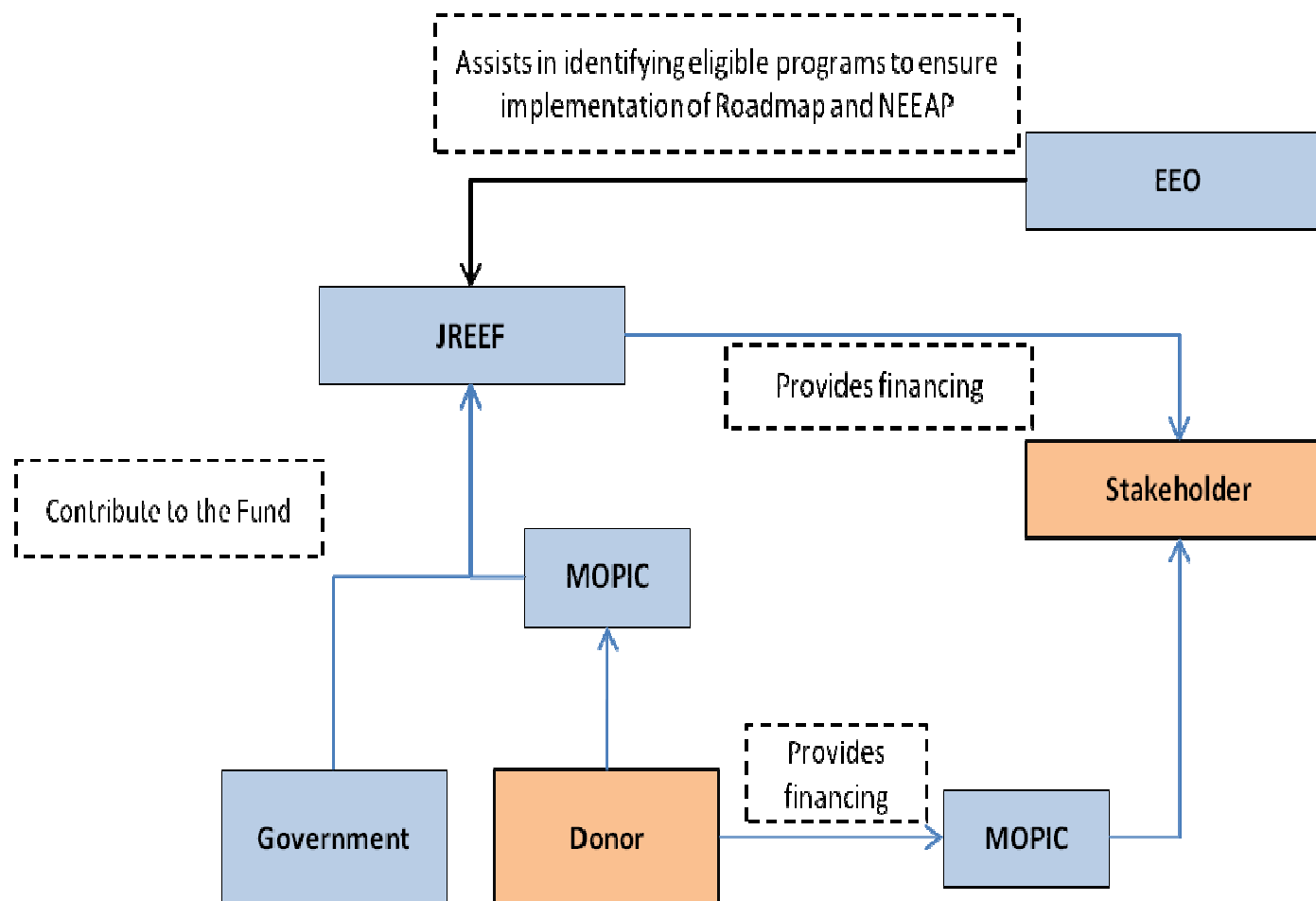
- a) Collect regular updates on the current status of stakeholders' activities and be mandated to collect all relevant data from stakeholders;
- b) Assess timely implementation of stakeholder activities and highlight issues which require action to stakeholders;
- c) Suggest improvements on implementation if necessary;
- d) Regularly map activities, stakeholders, funding agencies and progress;
- e) Support MEMR in assessment of achieving overall target and sub-targets.

## ▪Reporting to MEMR:

- a) Identify Quarterly update on progress of Roadmap implementation, shortcomings and planned next steps;
- b) Action and communication of best practice.

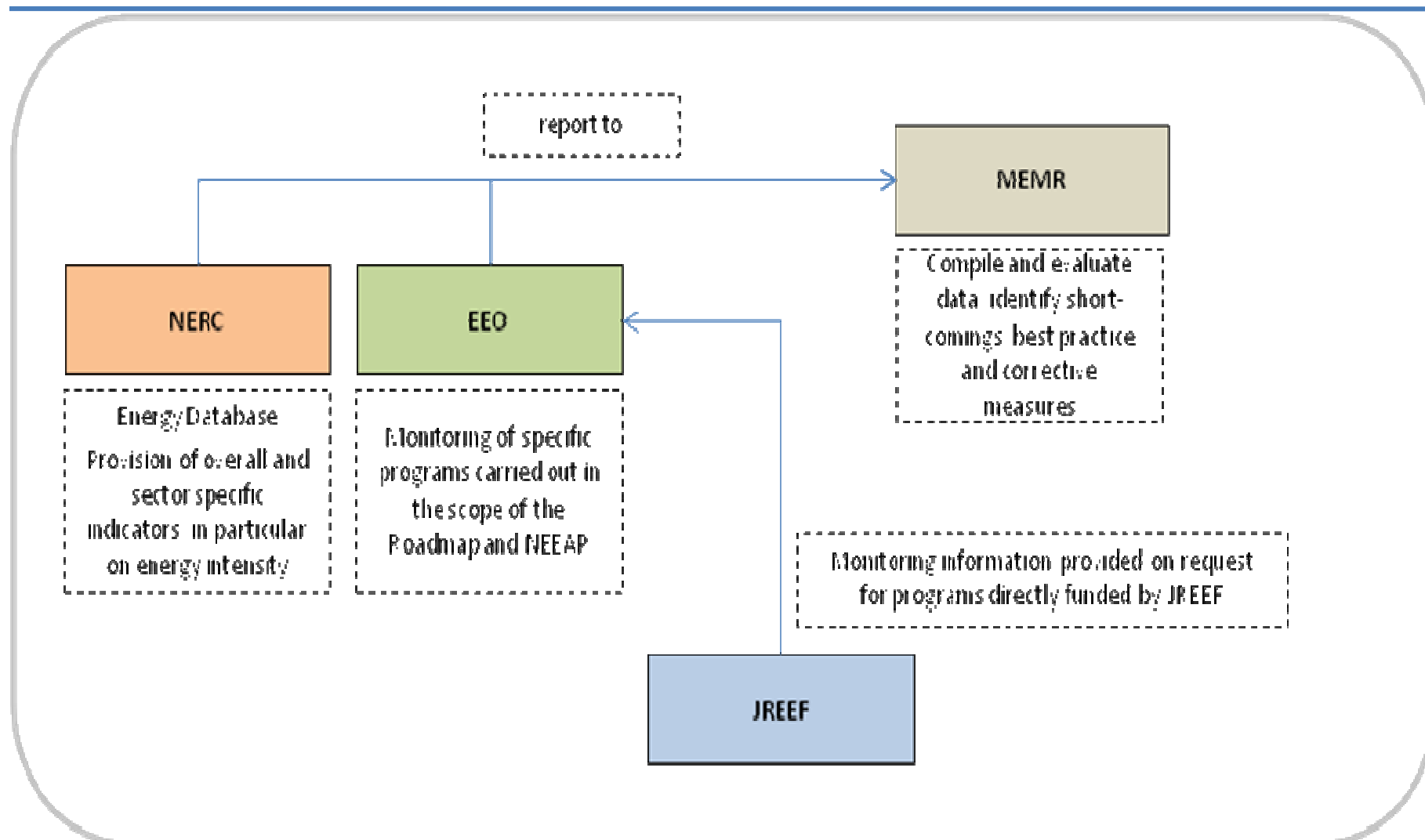


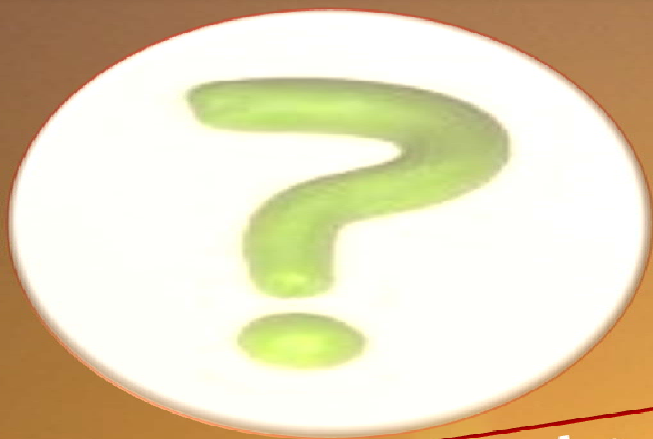
## Funding Process :





## Monitoring of implementation process:





Thank You For Your Attention  
ALI Mashaqba

[amashaqba@erc.gov.jo](mailto:amashaqba@erc.gov.jo)

ERC - JORDAN  
+962777208865