

EU-MENA RISE

EU-MENA Research Institute for Sustainable Energy

2015 – 2018 CONCEPT NOTE FOR STAKEHOLDERS AND FUNDING ORGANIZATIONS

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This publication summarizes the idea and concept to stakeholders and donors.

1 Introduction

1.1 Background

In the past years, a number of transnational organizations have emerged to promote sustainable energy cooperation between Europe and the Middle East and North Africa (MENA). There exist already relatively solid institutions dealing with this topic on the political level (Union for the Mediterranean), in the industry (Dii, Medgrid) and also in the area of regulation and infrastructure planning (MED-TSO, MED-REG).

However, in the area of academia and science, an overarching, transnational institution is still absent. This was the motivation behind an initiative of the Desertec University Network (DUN) and the Wuppertal Institute for Climate, Environment and Energy (WI) to create in 2011 such a scientific institution also for the EU-MENA energy research community. The initiative received strong support from the Regional Center for Renewable Energy and Energy Efficiency (RCREEE).

The idea grew in the subsequent years into an informal academic network¹ of universities, institutes and other research bodies from presently eleven different countries of the Arab region and Europe. A series of stakeholder consultation workshops in Germany (2011), Tunisia (2012) and Egypt (2013 and 2015) enabled a more precise definition of the scientific scope of the future institute and provided a clearer picture of its organizational and working structure.

At the current stage, the idea has matured to a level where decisions must be taken about an actual establishment of the institute as a formalized entity. A possible name of the institute would be **EU-MENA Research Institute for Sustainable Energy (EU-MENA RISE)**.

The present concept note shall inform interested stakeholders and potential funding organizations about the key objectives, the research agenda and the organizational and financial perspective of the institute for the next three years.

¹the network's initial working title was "Desert Institute for Socio-economic development and Energy in the MENA region (DISEM)". Acknowledging a widened scientific scope (transition aspects, climate, energy-water nexus), but also considering the Euro-Mediterranean context, this name was later changed "EU-MENA Institute for Sustainable Energy Research".

1.2 Vision and mission

The institute is expected to serve as the leading forum for exchange of ideas and expertise about sustainable energy transitions in the MENA region. In that context, the vision and mission of the institute is defined as follows:

Vision Statement:

Connecting and empowering EU-MENA scientific community in addressing challenges (including techno- and socio-economic as well as institutional and cultural aspects) for a transformation to achieve sustainable energy in the MENA region

Mission Statement:

A catalyst for interdisciplinary and transdisciplinary work to address the challenges and serving as a knowledge, information and communication hub for decision makers from policy, economy and civil society

Here, climate change and energy-water-nexus are relevant part of the sustainable energy transitions in the MENA region.

2 Research

2.1 Research focus

According to the vision and mission statement and its understanding, the institute's research is focused on questions related to:

- Energy system transition – in the context of transitions to sustainability
- Energy and climate change
- Energy-water nexus

For the MENA region, these three topics are of paramount importance for several reasons: Exploring the patterns of Energy system transitions from fossil fuels to renewable energies notably from desert regions will be a key research activity because of the multitude of pressures challenging the incumbent, fossil fuel-based energy supply structures of the MENA region. Energy systems must quickly be modernized and adopt new technologies in order to cope with the soaring demand and increasing energy costs, but must also satisfy the aspirations of MENA populations for more participation, economic welfare, employment and a sustainable future. Against that background energy system transition will be discussed consequently in the broader context of transitions to sustainability. Climate change and the Energy-water nexus are additional topics deserving the attention of the scientific community, as both issues are very strongly linked with the energy question and are garnering increasing significance because of the MENA region's particular vulnerability to climate change and water scarcity.

2.2 Research approach

The institute's research activities are motivated by two key concepts in the discipline of *transformative science*: transition research and transformative research. Transition research explores transition processes and strategies of change towards sustainable lifestyles and production/consumption patterns in our society. Transformative research complements this view by focusing on real-term implementation processes resulting in system innovations. The Wuppertal Institute has been following a research agenda dedicated to transformative science for several years. As a founding partner of the EU-MENA Institute for Sustainable Energy Research (EU-MENA RISE), the Wuppertal Institute will be committed to transfer this knowledge and experience to the newly founded institute.

An outline of the research approach is given in Figure 1. Transformative science essentially bases on three knowledge areas, being categorized as system, target and transformation knowledge. While 'system knowledge' helps to understand socio-technical systems in their natural environment, 'target knowledge' is needed to define common socio-ecological objectives for achieving sustainability. 'Transformation knowledge', the third and central knowledge pillar, helps to unveil and describe the underlying processes of complex societal transitions.

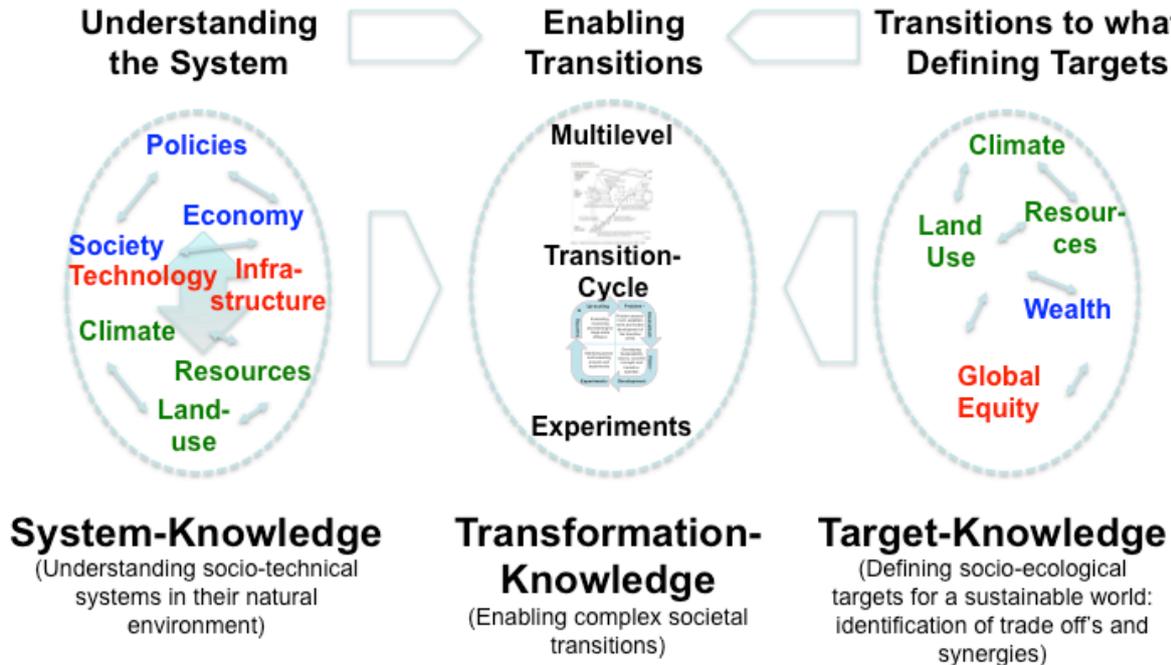


Figure 1: Schematic of transformative science approach (source: Wuppertal Institute)

Knowledge from different scientific disciplines is essential to understand and describe transitions of real energy systems. It is seen as a particular asset of the future EU-MENA Research Institute for Sustainable Energy (EU-MENA RISE) that it can source its knowledge

from a wide range of research activities of its member institutes or associated scientists across the entire EU-MENA region. This transnational perspective will not only cater for quality of the research output (via research projects and publications), it will also foster the overall trans-Mediterranean integration by establishing stronger links between researchers of Europe, North Africa and the Middle East.

3 Operational perspective

3.1 Strategic key goals

The institute can be a reliable source of independent knowledge through the studies it will conduct to guide the decision making process in policy, society and the private sector. The following three key goals will serve as the frame for the institute's future activities:

- Build a research community in the EU-MENA region for sustainable energy research.
- Create a knowledge platform on (scientific) tools for transition research and for facilitating transition processes for a sustainable energy system in the EU-MENA context.
- Outreach activities to provide relevant information for science, politics and the private sector (science – policy/society interface)

3.2 Operational model

Based on the three strategic goals, the institute anticipates an operational model as illustrated in Table 1. Generally spoken, operational activities will intensify in parallel to the creation progress of the institute. In the initial stage, network activities will dominate, with members/partners interacting through an internet-based, virtual networking platform. In the mid-term, these activities shall lead to more “face-to-face” interactions between the network members, e.g. in terms of mutual research projects, summer schools or exchange programs carried out under the umbrella of the institute. In a final stage, activities will be operated independently by the institute itself.

Operational Model			
	Build a Research Community	Outreach and Engagement	Knowledge Platform
Short Term	<ul style="list-style-type: none"> • Virtual networking platform (intranet for members) • Identify projects, outsourcing to institute's members. 	<ul style="list-style-type: none"> • Website • Information leaflets • Communication briefs 	<ul style="list-style-type: none"> • Create a database of competences of institute members (competence matrix).
Medium Term	<ul style="list-style-type: none"> • Mutual research projects among partner institutions • Summer schools for training / PhD students • Internship exchange programs 	<ul style="list-style-type: none"> • Newsletters • Client-specific outreach activities (seminars, workshops) for industry, policy makers and NGOs. 	<ul style="list-style-type: none"> • Internal, web-based database (intranet) of relevant information / literature. • Initiating an open-access data retrieval system.
Long Term	<ul style="list-style-type: none"> • Permanent scientific staff in the secretariat conducting studies and its own research. 	<ul style="list-style-type: none"> • Scientific outreach: peer reviewed journal edited by the institute. • Establish an Industry Advisory Board on the regional level. 	<ul style="list-style-type: none"> • Open-access data retrieval system • Provision of independent research results of mutual studies.

Table 1: EU-MENA Research Institute for Sustainable Energy: Operational Model

4 Organizational perspective

4.1 Organizational overview

At its inception the institute will be established on the basis of a thin secretariat and a virtual research network presence. Founding members are looking for kick-starting first operations at this stage. It was realized by the partners that a virtual network with thin secretariat presence is a convenient model of operation for the launching phase of this network that combines several advantages.

It is proposed to host the institute under one of the network partner institutes or any other body in partner countries in the region; where they can enjoy offices, meeting facilities, internet and some administrative services. Based on that, the institute will need funding to mobilize the initial phase of its establishment and an institutional basis funding to support the general and independent working ability. The basic funding will be used for:

- Financing basic working facilities and secretary (including executive director).
- Fostering and improving the network of scientific member institutions.
- Setting up and organization of timely limited dialogue oriented task forces (pure scientific task forces, or combined science – civil society task forces) focusing on specific research questions.

- Exchange of knowledge with partners from the region, through workshops, capacity building programs for PhD students, internships.
- Exchange of knowledge with foreign partner organizations.
- Conducting internal research projects.
- Preparing and conducting outreach activities.
- Preparing concepts for capacity building measures.
- Summarizing relevant research studies and activities (and broad scale circulation of the results) – the institute is acting as independent knowledge platform.

Against that background two development phases can be distinguished:

- **Short run**

During the launching (initial) phase, the institute will rely on support from donors concerned with diffusion of socio-economic aspects related to sustainable development and promotion of renewable energy technologies (e.g. development banks, governments, foundations, organizations).

- **Long run**

After the initial phase the institute will start to acquire and conduct third-party financed research projects. The basis for funding will mostly be third-party financed by products (particularly research projects) and services that the institute will provide to its clients. Membership fees, training courses and capacity building packages generate additional revenues at a later stage.

4.2 Financial perspective

The overall expected financial expenses to mobilize the institute's initial phase (short run) for the initial three years are shown below (starting from April 2015 to March 2018):

Financial Breakdown					
Currency (Euro)	2015	2016	2017	2018	Subtotal
Staffing of Secretariat (Director, Liaison Assistant, and Support Structure)	145,000	185,000	190,000	35,000	555,000
Fostering Dialogue and Exchange Activities (Virtual Network Development & Maintenance)	47,500	30,000	30,000	22,500	130,000
Facility for Task Forces and Regional and International Dialogue Activities (Travel and Venue Facility)	90,000	120,000	120,000	30,000	360,000
Kick starting Funds for: Conducting internal research, preparing research proposals, preparing concepts for capacity building, etc.)	115,000	130,000	150,000	35,000	430,000
Total					1,475,000€

Table 2: Financial Breakdown.

4.3 Organizational structure

The following diagram represents the proposed structure for the operation of the institute. The rationale behind this structure is to facilitate networking between members participating in task forces and project work while providing effective support for task forces, networking, project management and outreach. To guarantee the practical application of the institute's research, a strong exchange of the members council, steering committee and secretariat exists with external partners from private sector. The steering committee (incl. chair of committee) consists of selected members of partners from the members council (members from MENA and EU) and serves as interface between the members council and institute's secretariat. An illustration of the organizational structure is presented in figure 2.

Figure 2: Organizational structure

