

# Energy, Food and Water Intersection

“NEXUS Approach”

Jordan as an Example

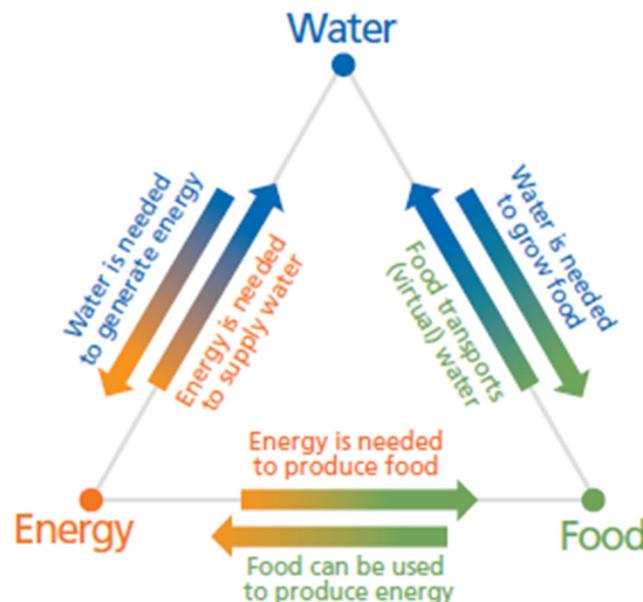
Event Name: Solar Pumping: An Emerging Market and a  
Major Driver for Sustainable Energy and Jobs”

Cairo, Egypt

May 2017

# WHAT IS NEXUS?

- ▶ Food, water and energy systems are interconnected. The NEXUS is how and where these three systems intersect. Because actions related to one system can impact one or both of the other systems, it is necessary to take a NEXUS APPROACH.

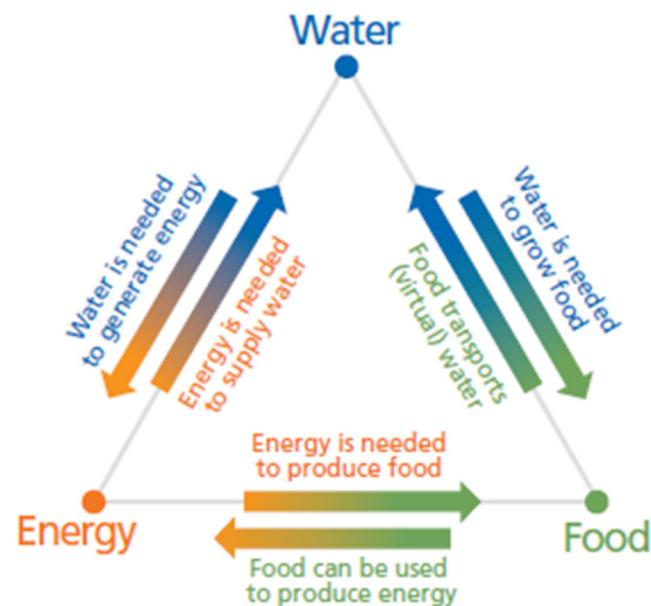


# WHAT IS NEXUS APPROACH?

- ▶ the heart of the NEXUS APPROACH is a strong understanding of the interdependencies among these three systems and how to ensure food, water and energy security for an ever-growing population. This will require the work of individuals, businesses and government.
- ▶ To advance the goal of integrated planning, policy and management, it is important to increase awareness about how these systems three intersect, and why greater coordination is necessary.

# WHY NEXUS?

- ▶ addressing the sustainability challenges and opportunities in the following fields:
  - ▶ Resource Efficiency, Sustainable development
  - ▶ Renewable energy
  - ▶ Energy efficiency
  - ▶ Water availability
  - ▶ Food security

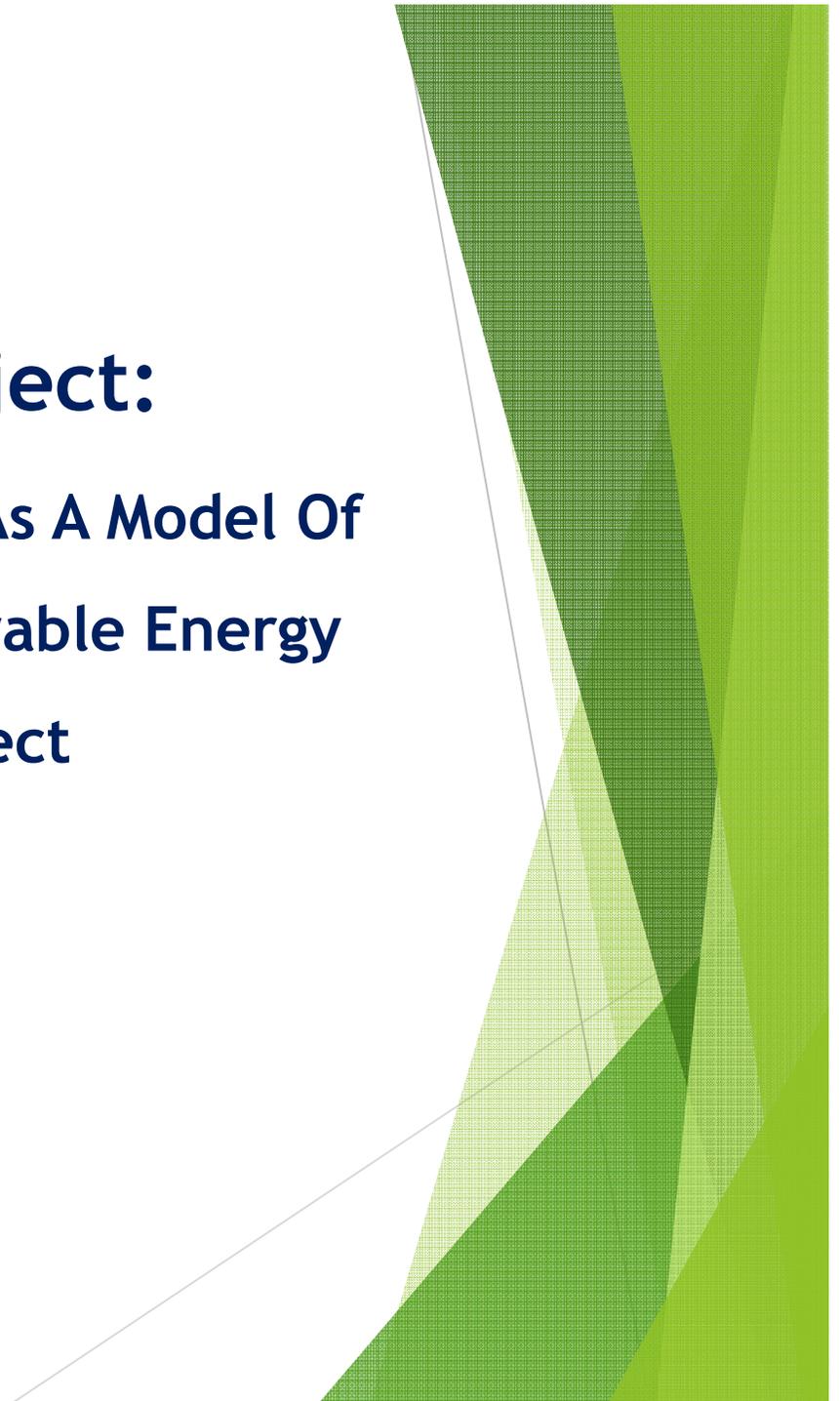




# Jordan Initiatives

# **1. MINARET Project:**

**The MENA Region Initiative As A Model Of  
Nexus Approach And Renewable Energy  
Technologies Project**



## Project's Main Objective

The overall goal of the proposed project is to “Strengthen regional cooperation within the MENA region through implementing the NEXUS approach (energy/water/food) integrated with renewable energy technologies at the municipality level, to mitigate climate change impacts and combat poverty”.

# Targeted Countries

- **Jordan** : Sahab & Karak Municipalities
- **Lebanon**: Jdaidet Al-Shouf Municipality
- **Tunisia** : Monastir Municipality

## Project's Specific Objectives

- Build the municipality's resilience to climate change.
- Strengthen institutional capacities of the relevant governmental authorities involved in the project
- Promote inter-municipal regional cooperation to enhance good governance, and equitably dealing with the needs and human rights especially for refugee's surviving in and around municipalities.
- Reinforce the role of women, youth and marginalized groups in developing and implementing NEXUS approach.
- Develop a MENA dialogue platform focusing on knowledge share, education and lesson learned at national, regional policy levels.

# MINARET Project importance

- ▶ project will tailor long-term strategies fitting the regional environmental and climate peculiarities to manage natural resources in a sustainable, effective and productive manner.
- ▶ project activities are meant to trigger a bottom up change in people's habits and to frame a more effective integration of environmental issues, into sectorial and development policies
- ▶ This project is going to tackle sustainable development in all four municipalities by focusing on five(5) main UN SDGs (4, 6, 7, 11,13)
- ▶ Improves municipalities chances of joining the covenant of Mayors
- ▶ Deals with Cross cutting themes:

# Rationale

- ▶ Contributing in the achievements of the SDGs
- ▶ Building on successful pilot projects in Jordan
- ▶ Expanding “Making Sahab Municipality Green” project
- ▶ Promoting renewable energy sources and energy efficiency (low carbon technologies)
- ▶ Reducing external dependency - increasing self-sufficiency
- ▶ Building on the Arab Renewable Energy Framework (AREF) approved by the League of Arab States

## **2. REEEII Project:**

**Renewable Energy and Energy Efficiency  
Program II**

**Funded by the EU and implemented by the  
Consortium led by GFA Germany**





**THE RENEWABLE ENERGY AND ENERGY  
EFFICIENCY PROGRAMME TECHNICAL  
ASSISTANCE (REEE II TA)  
Europe Aid/137922/DH/SER/JO**



**“This Project is funded by the European Union and implemented by a consortium led by  
GFA”**



## OVERALL OBJECTIVE هدف المشروع



The overall objective of the project is to contribute to the development and implementation of effective policies that would help Jordan reach its renewable energy and energy efficiency (REEE) targets for 2020 and 2025.

الهدف العام للمشروع هو المساهمة في وضع وتنفيذ سياسات فعالة من شأنها أن تساعد الأردن في تحقيق اهدافه الموضوعه في الطاقة المتجددة وكفاءة الطاقة لعامي 2020 و 2025.

## الاهداف الرئيسية MAIN PURPOSE (IN SHORT)



1. To support the main stakeholders in establishing detailed plans of actions and implementing a set of policy instruments.

دعم أصحاب المصلحة الرئيسيين في وضع خطط تفصيلية للإجراءات وتنفيذها.

2. To provide the main stakeholders and main beneficiaries with corresponding technical assistance.

تزويد أصحاب المصلحة الرئيسيين والمستفيدين الرئيسيين بالمساعدة الفنية اللازمة.

3. To help monitor REEE-II implementation and the sector development, and provide recommendations for follow-up and complementary solutions if deemed necessary.

المساعدة في مراقبة تنفيذ نشاطات المشروع وتطوير القطاع، وتقديم التوصيات اللازمة إذا اقتضت الضرورة.

## الاهداف الرئيسية MAIN PURPOSE (IN SHORT)



4. To assist MEMR to establish a cooperation model (between NERC and JREEEF) to oversee the overall sector development/monitoring.

مساعدة وزارة الطاقة في وضع نموذج تعاون بين المركز الوطني لبحوث الطاقة وصندوق دعم الطاقة المتجددة وكفاءة الطاقة للإشراف على القطاع.

5. Support the ministries in executing their REEEII tasks and activities.

أنشطتها في هذا المشروع. دعم الوزارات في تنفيذ

6. Support NEPCO and utilities in their REEEII activities.

أنشطتها في هذا المشروع. دعم شركة الكهرباء الوطنية وشركات التوزيع في تنفيذ

7. Provide guidance to GoJ regarding their energy future plans.

توفير الدعم اللازم للحكومة الاردنية لتحقيق اهدافها المتعلقة بالطاقة المتجددة وكفاءة الطاقة.

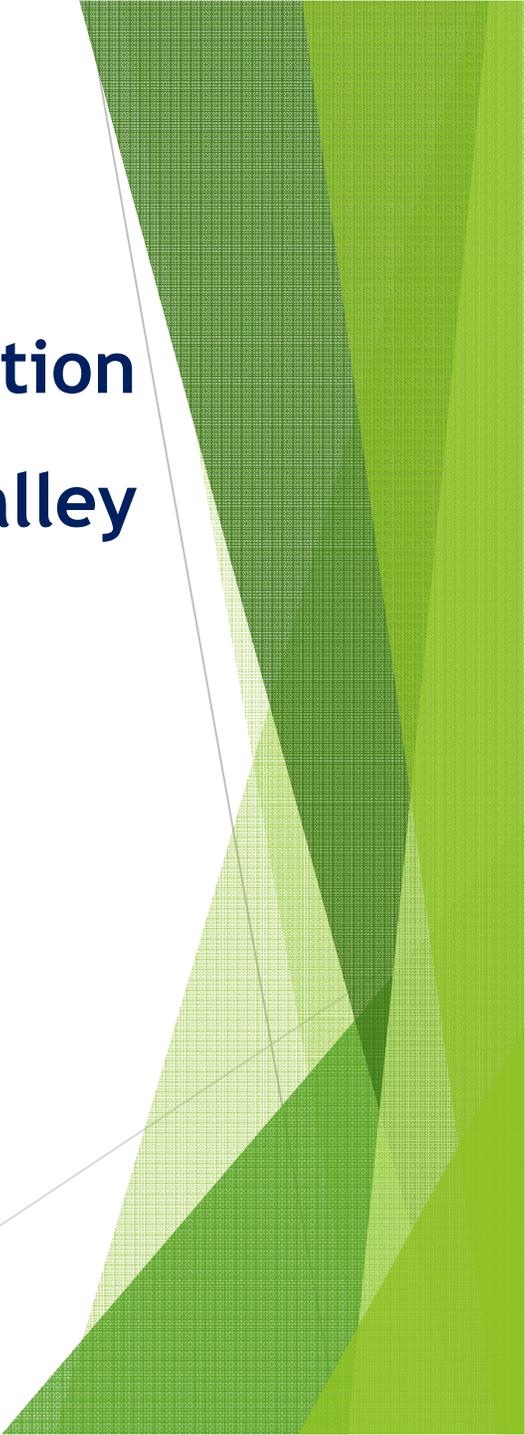
**This project provides Technical  
and financial support for 3 NEXUS  
projects.**

# **1. Five Solar Powered Pumping**

**Irrigation stations:**

**Total Investment / Fund: EUR 30,000,000**





**2. 300 PV-Powered water irrigation pumps for 300 farms in Jordan Valley and the Highlands.**

**Total Investment / Fund: EUR 7,100,000**



### **3. Waste to Energy Project (Energy Generation from Solid Waste)**

**Total Investment / Fund: EUR 5,000,000**

# Donor

The European Union





**Thank you for your attention**