



# Enabling renewables in the context of the Egyptian-German Cooperation



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## Overview of the German cooperation Implementing Organizations



- GIZ operates in more than 120 countries worldwide
- Proud of our long-lasting partnership in Egypt dating back to 1956
- The priority areas agreed with the Egyptian government are
  -  Renewable energies and energy efficiency
  -  Water supply and sanitation, irrigation and waste Management
  -  Sustainable economic development for employment



## Fields of Technical Cooperation





## The Egyptian-German Joint Committee for Renewable Energy, Energy Efficiency, and Environmental Protection (JCEE)

- ✓ On-going cooperation **since 2008** with the Ministry of Electricity and Renewable Energy (MoERE)
- ✓ Next phase starts in **June 2019** for four years

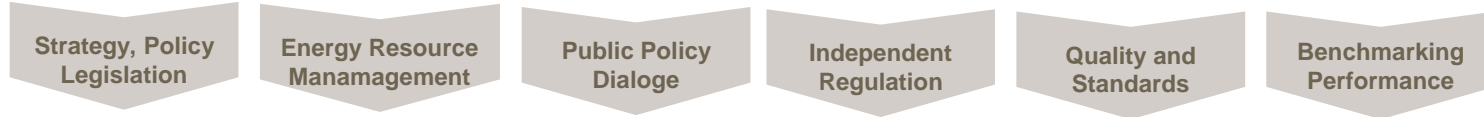
### Framework conditions for investments in RE/EE are improved

Renewable Energy	Energy Efficiency	Institutional Transformation	Awareness and Communication	Climate Change
MoERE NREA EETC	DSOs	NREA EETC EgyptERA	EgyptERA	EEAA MoERE

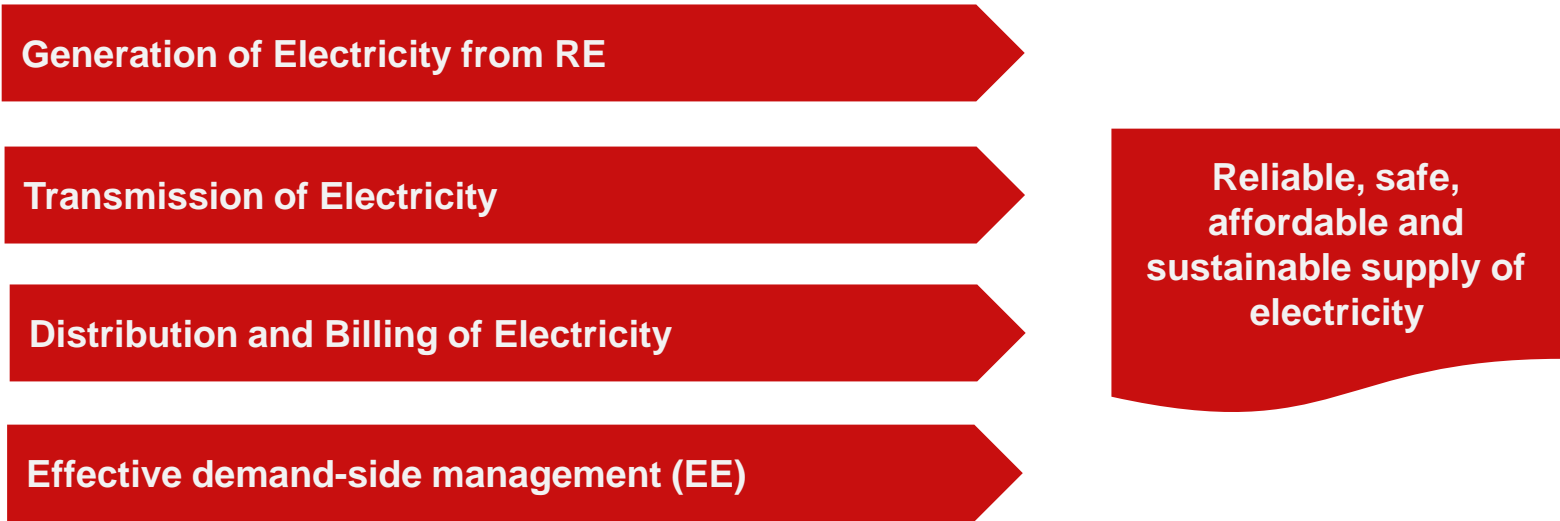
**Cross-cutting topics including capacity development, policy mechanisms, innovative technologies and applications**



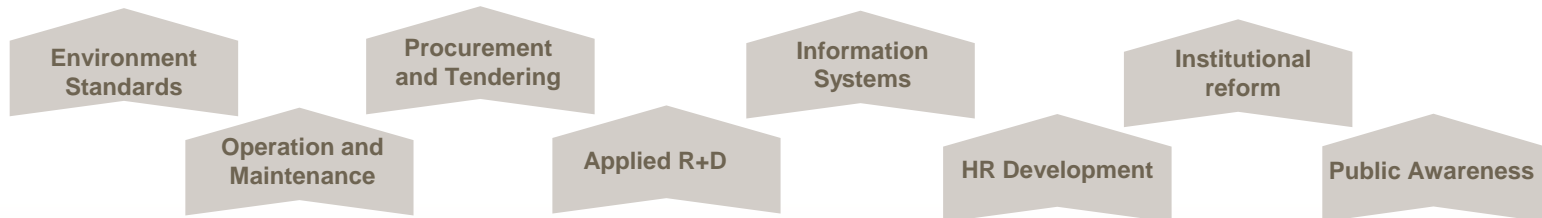
Steering

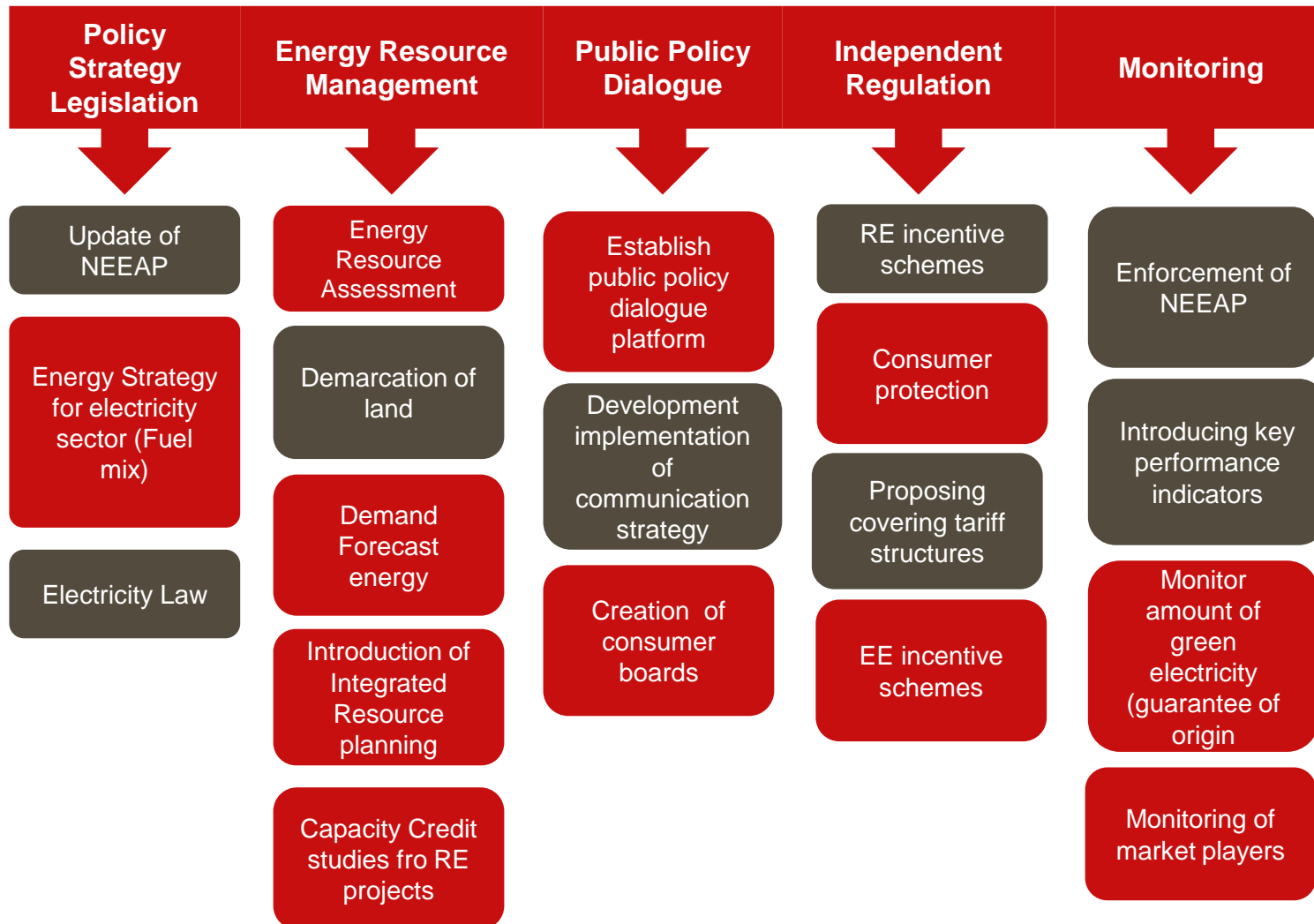


Core Processes



Support







## Capacity building and quality infrastructure of rooftop PV installers

Partner: NREA  
DSOs

06/2012 – on-going



## Establish a QI for rooftop installations

- Introduction of a certification scheme for installers
- Build a pool of local trainers

## Capacity Building

- Training of more than 350 installers working in the field operating in the supply, installation, and O&M
- Rooftop PV systems (less than 500 kWp)



## The FiT scheme

## Net-metering regulations

## Land demarcation for RE

Partner: EgyptERA  
NREA

07/2009 – on-going



## Introducing supportive mechanism

- Collaborated directly with EgyptERA for FiT phase 1

## Capacity Building

- Human capacity development for EgyptERA staff
- Procurement of a market simulation software PLEXOS®

## Support in the land demarcation process

- Direct collaboration with NREA
- Development of wind and solar atlas





## Upgrading the of PV, EnEff, and SWH test labs

Partner: NREA

09/2014 – 03/2018



## Lab test equipment

- Upgraded existing outdoor solar water heater test facility
- Established a state-of-the-art testing facility for PV modules
- Support for the IEC 61215 tests

## Human Capacity

- Capacity development of NREA staff

## Integration into installers certification scheme



## Support in the tendering procedure of Benban Local Monitoring Center

**Benban PV farm 1650 MWp**

Partner: EETC

05/2018 – on-going



## Development of the RfP bidding documents

- Design of the SCADA system of the LMC
- Communication between PV plants, LMC and national dispatch control center

## Contract negotiations

- Bid technical evaluation
- Contractual issues with the winning bidder



## Introduction of innovative technologies incl. smart grids and e-mobility

Partner: MoERE  
EgyptERA  
EETC

10/2017 – on-going



## Grid impact studies

- Effect of integrating high-share on renewables into the grid, including EVs, wind, and PV farms

## Roadmap and blueprints

- Development of the smart grid roadmap for both the transmission and distribution systems

## Capacity building

- Support in building human capacities



Thank you for your time  
Contact us

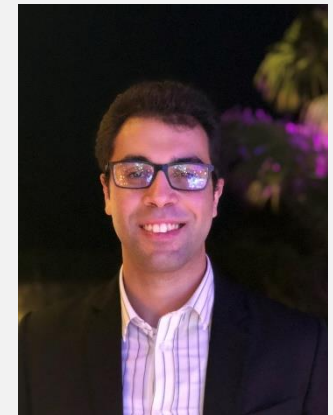


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