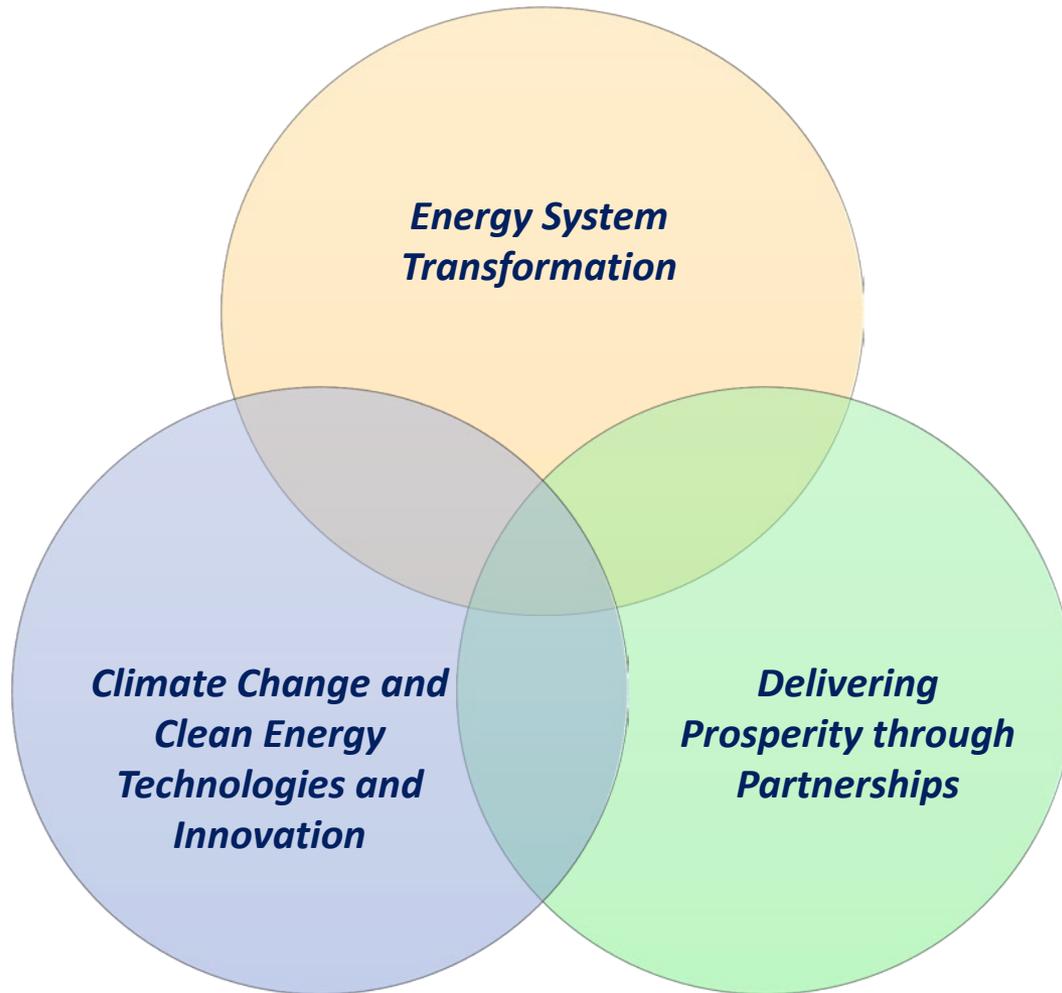


**UNIDO Seminar**  
**Japan-UNIDO Multi-stakeholder Cooperation Dialogue**  
**“Partnering to Achieve SDGs”**  
**Session I: “UNIDO’s activities to achieve SDGs”**

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**Department of Energy**  
**UNIDO**

**17 April, 2018**

# Powering Innovation for Prosperity



***SDG 9: Inclusive & Sustainable Industrial Development***



***SDG 7: Sustainable Energy***



***SDG 13: Climate Action***



# LCET Programme

OBJECTIVE:	Facilitating industrial development through dissemination of low carbon low emission technologies from Japan to African countries
COUNTRIES:	Kenya, Ethiopia, and Morocco
BUDGET:	Approximately JPY 1.2 billion
DONOR:	Ministry of Economy, Trade and Industry (METI)
SINCE:	2013



- Kenya: Demonstrating 2 x 10kW ULH-MHP systems in Mwea  
Capacity building, etc.
- Ethiopia: Demonstrating 1 x 10kW ULH-MPH and PV hybrid system in Fentale  
Capacity building, etc.
- Morocco: Demonstrating redox flow battery system in Quarzazate  
Capacity building, etc.

\* ULH-MHP: ultra-low head micro hydropower



Community members observing works on the ULH-MHP system in Fentale (Ethiopia)

Before & After installation of the ULH-MHP at Mwea Irrigation Canal in Kenya



# Geothermal Power Programme

**BUDGET:** Approximately JPY 1.5 billion  
**DONOR:** Ministry of Economy, Trade and Industry (METI)  
**SINCE:** 2017

## 1. Small Geothermal Power Generation Project

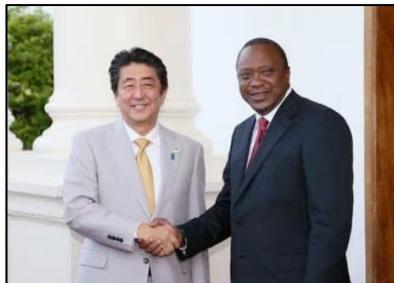
- Demonstration of small wellhead geothermal power in the Rift Valley.
- Early generation
- Reservoir development:
  - Reduction in development cost as captive power
  - Assessment of steam and reservoir through actual power generation

## 2. O&M Enhancement Project with IoT Technologies

- O&M strengthening for Olkaria power station
- Introduction of IoT solutions to strengthen O&M through digitization
- Collaboration with JICA



(Source: Website of Ministry of Foreign Affairs of Japan)



Olkaria IV

(Source: Public Relations Office. Government of Japan)

# PV Clean Water Project

**BUDGET:** Approximately USD 260,000  
**DONOR:** Ministry of Foreign Affairs (MOFA)  
**SINCE:** 2018

- Improving public health by PV-powered water sanitation systems in Ethiopia
- Ecological system with slow sand filtration
  - Physical filtration (sand, gravel) + biological filtration (algae, microorganism)
  - Low running cost (no use of membrane filters and coagulants)
  - Easy operation and maintenance, without technicians, by local community

