



UNIDO initiatives in *“Promoting Energy Efficiency in MSMEs”*

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Key Facts

- Established in 1966, Specialized Agency since 1985
- Constitutional mandate to promote Inclusive and Sustainable Industrial Development in developing countries and countries in transition
- UNIDO is the only UN specialized agency promoting the creation of wealth and tackling poverty through industry/manufacturing.
- UNIDO has HQ in Vienna, Austria, a network of 45 field offices, 41 National Cleaner Production Centers and 11 Investment and Technology Promotion Offices



Three inter-related thematic priorities



**Poverty reduction through
productive activities**



Trade capacity building

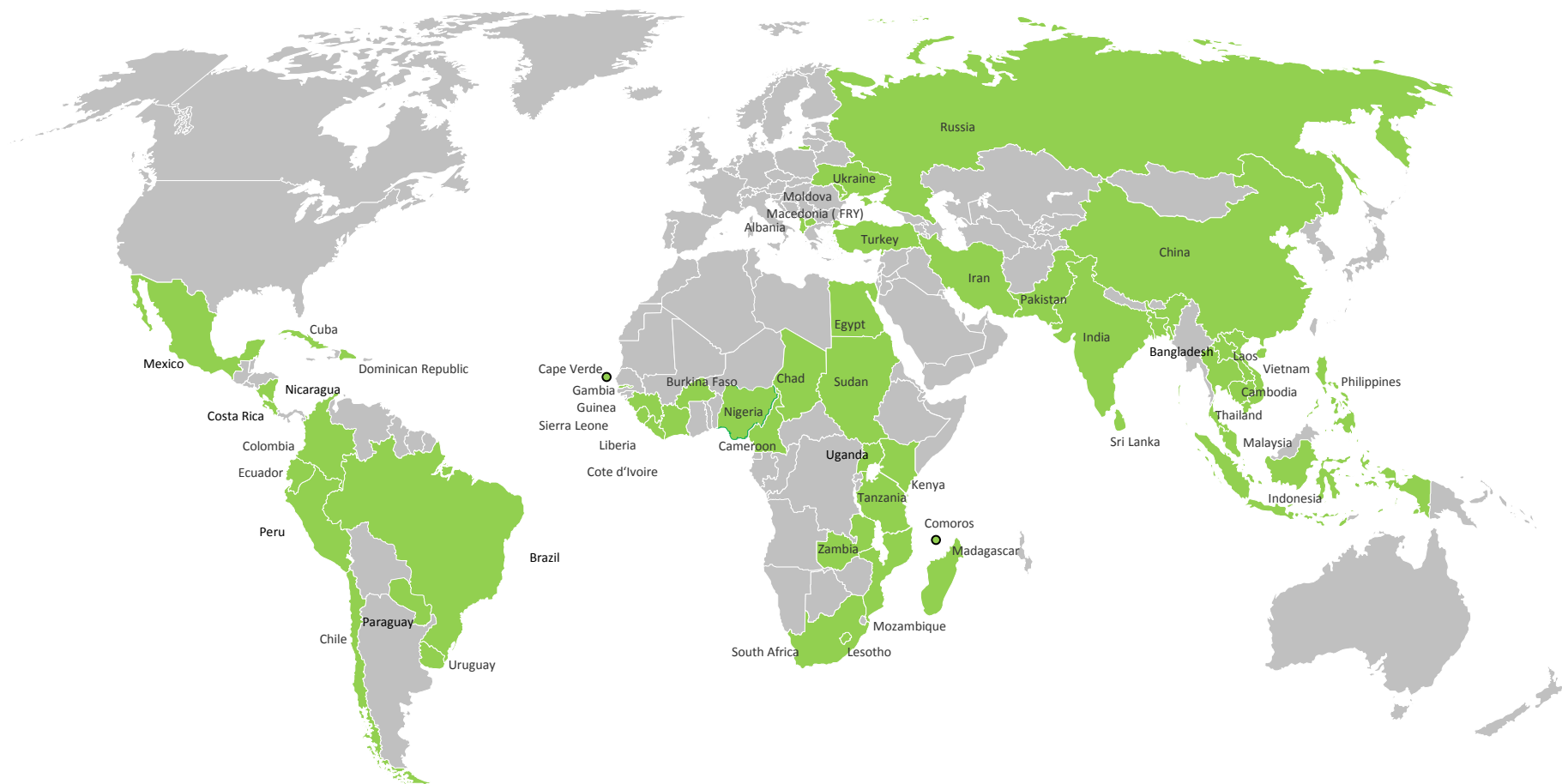


Energy and Environment



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UNIDO ECC energy projects





Key Technology Focus

- **INDUSTRIAL ENERGY EFFICIENCY TECHNOLOGIES**
- **INNOVATIVE LOW CARBON TECHNOLOGIES**
- **RENEWABLE ENERGY TECHNOLOGIES FOR PRODUCTIVE USES**
 - Off-Grid Mini-grids and On-Grid Generation
 - **INDUSTRIAL APPLICATIONS, i.e. solar thermal**, biomass, waste

Key Technology Focus

■ **INDUSTRIAL ENERGY EFFICIENCY TECHNOLOGIES**

- Cross-cutting, i.e. Energy Management System standards – ISO 50001, systems optimization (steam, pumps, compressed-air), benchmarking
- Sub-sector, process and product specific, i.e. cement, food, textile; heat recovery, low-carbon technology; process and product design

■ **INNOVATIVE LOW CARBON TECHNOLOGIES**

- Hydrogen technology applications for power management (RE+H₂), stationary and mobile fuel-cells (industry and transport)
- Carbon Capture and Storage technology in selected industrial sectors



UNIDO ECC projects for MSMEs operational in India

UNIDO-GEF Promoting energy efficiency and renewable energy in selected MSME clusters in India

Project Objective

- *The aim of the project is to develop and promote a market environment for introducing energy efficiencies and enhanced use of RE technologies in process applications in 12 selected energy-intensive MSME clusters in India with expansion to more clusters later, in order to improve the productivity and competitiveness of units as well as to reduce overall carbon emissions and improve the local environment.*
- **Industries:** *where both potential and interest is*
- **Key national partners:** BEE, MNRE, MSME, SIDBI, Industry associations, target enterprises
- **Targeted GEF budget:** 7.1 MUSD; co financing 24-26 MUSD

Expected Outcomes :

- *The capacity of suppliers of EE/RE product suppliers/service providers /finance providers to support the expansion of EE/RE in the clusters is increased*
- *The level of end-use demand and implementation of EE and RE technologies and practices by MSMEs increased*
- *The project is scaled up to a national level*
- *Policy, institutional and decision-making frameworks strengthened*

- **Industrial Sectors:** *Brass, Ceramic, Dairy, Foundry and Hand tools*

UNIDO-GEF Cleantech Programme for SMEs in India

Project Objective

- Promoting Clean Energy Technology Innovations and Competitiveness of SMEs in India - investing in clean low carbon technologies is seen as a solution that can significantly reduce energy consumption and CO2 emissions in India's industrial sector, while enabling the Indian economy to alleviate energy poverty and maintain steady growth. The project will help to promote SMEs that can innovate and develop commercially viable clean low carbon technologies to reduce GHG emissions.
- **Industries:** *where both potential and interest is*
- **Key national partners:** MSME, SIDBI, Industry associations, target enterprises
- **Targeted GEF budget:** 1 MUSD; co financing 3 MUSD

Expected Outcomes :

- *A national level coordinating mechanism / platform established to promote clean technology innovations and entrepreneurship amongst SMEs*
- *National Capacity developed for continuation of annual cleantech competition. Mentoring and training programme developed for high-growth SMEs identified through competition activities.*
- *Policies and institutional framework strengthened to promote cleantech innovations in SMEs in the country.*

UNIDO-GEF Promoting business models for increasing penetration and scaling up of solar energy in India

Project Objective

- *Promoting industrial applications of solar thermal energy in support of the priorities outlined in the National Solar Mission*
- *To improve competitiveness of industrial sectors through technological innovation, while lowering carbon intensity*
- **Technology focus:** *concentrating solar technologies, heat pipes, non-imaging concentrators*
- **Output:** *Solar thermal for heating and cooling and tri-G*
- **Temperature range:** *medium temperature: 200 - 400° Celsius (for CSTs)*
- **Industries:** *where both potential and interest is*
- **Key national partners:** MNRE, MSME, Solar Energy Centre, IREDA, Industry associations, target enterprises
- **Targeted GEF budget:** 5 MUSD; co financing 20-22 MUSD

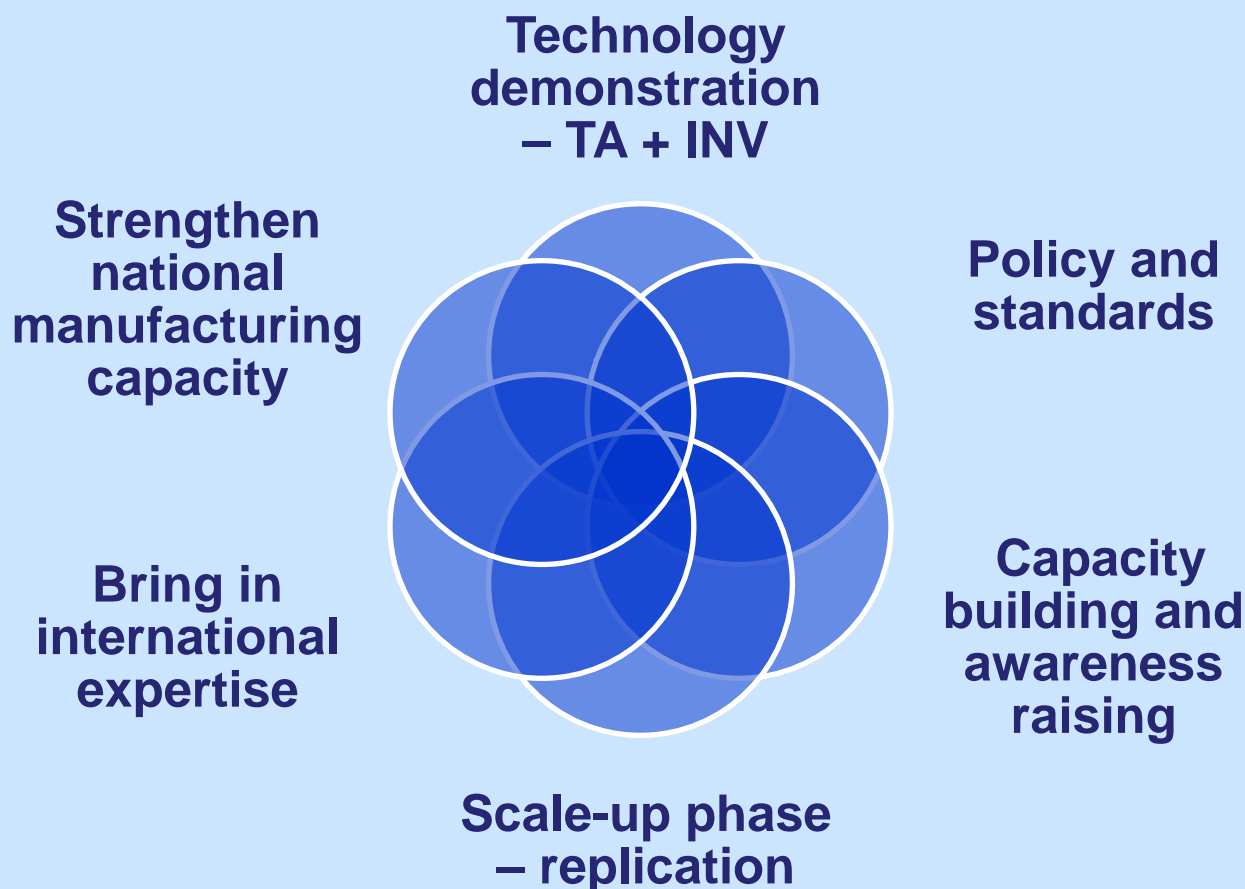


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Planned project activities





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THANK YOU!

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