



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION



GLOBAL ENVIRONMENT FACILITY  
INVESTING IN OUR PLANET

# Sustainable Energy Initiative for Industries in Pakistan

[WWW.UNIDOGEFPAKISTAN.ORG.PK](http://WWW.UNIDOGEFPAKISTAN.ORG.PK)

## Promoting Renewable Energy and Energy Efficiency in Pakistan



### UNIDO Energy Programme

The United Nations Industrial Development Organization (UNIDO) promotes sustainable energy solutions to assist industries in reducing their energy consumption, as well as using clean renewable energy in the most efficient manner for the enhancement of industrial competitiveness and productivity while mainstreaming gender and increasing employment opportunities.

UNIDO's Energy Programme is built on three strategic pillars, namely industrial energy efficiency, renewable energy for productive uses, climate policy, and networks. The core building blocks of the Energy strategy are technology demonstration, knowledge management, policy and standards, awareness-raising, programmatic approaches, and building capacity to provide inclusive and sustainable energy solutions. The energy strategy also focuses on mainstreaming the role of women and promoting youth employment in the design and implementation of energy projects, creating job opportunities, and fostering clean energy technological innovations to promote Sustainable and Inclusive Industrial Development.

### Sustainable Energy Initiative for Industries in Pakistan Project Overview

Sustainable Energy Initiative for Industries in Pakistan, also known as the Renewable Energy and Energy Efficiency (REEE) project, is funded by the GEF and implemented by UNIDO with the aim to avoid greenhouse gas (GHG) emissions by developing and promoting a market environment that will stimulate investments in renewable energy and energy efficiency in industries which, in turn, will support Inclusive and sustainable industrial development in Pakistan.

UNIDO collaborated with the Ministry of Climate Change along with government institutions including the Small and Medium Enterprise Development Authority (SMEDA), National Productivity Organization (NPO), the National Energy Efficiency and Conservation Authority (NEECA), and the Alternate Energy Development Board (AEDB), has achieved many

#### PROJECT AT A GLANCE

Country: Pakistan



DONOR



#### COUNTERPARTS

Government of Pakistan  
Ministry of Climate Change

#### IMPLEMENTING AGENCY

United Nations Industrial  
Development Organization

#### MAIN PARTNERS

NEECA  
AEDB  
NPO  
SMEDA

#### DURATION

2015-2022

#### BUDGET

US\$ 3.55 Million

## Project Components



### DEVELOP THE POLICY AND REGULATORY FRAMEWORK ON THE USE OF RE AND EE IN INDUSTRY

UNIDO provided technical assistance to relevant authorities, for reviewing of current policy framework on RE & EE. Recommendations are formulated by undergoing a series of consultations with all major stakeholders and a roadmap for the adoption of these recommendations into the existing policy framework developed.

Another part of this component includes a sectoral analysis, which was conducted to assess the potentiality of RE & EE technologies and their growth opportunities in the industrial sector of Pakistan. This report provides industry and policy developers with valuable insights on energy consumption patterns (including energy benchmarks) and corresponding gaps in each sector.



### INVESTMENT IN RE AND EE IN THE INDUSTRY

The activities of this component were developed to replicable demonstration projects on RE and EE as well as enabled the industry to make their manufacturing units more energy efficient. UNIDO provided technical as well as financial support to help the industries to initiate a few RE demonstration projects and implement a number of energy management systems in the factories. The industry also technically supported undergoing system optimizations, to help reduce its energy consumption.

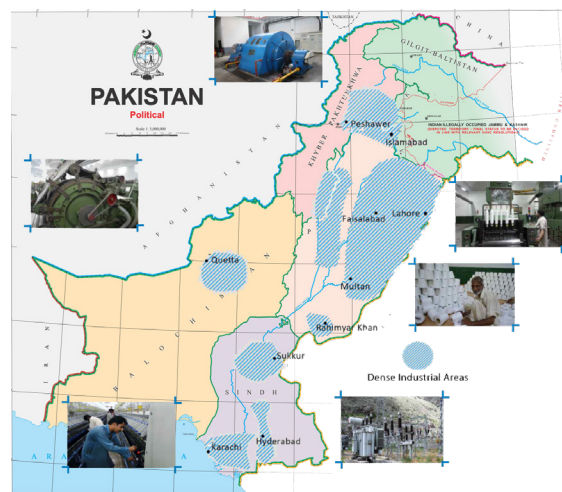


### CREATE PLATFORM FOR PROMOTING INVESTMENT AND SUSTAINABILITY

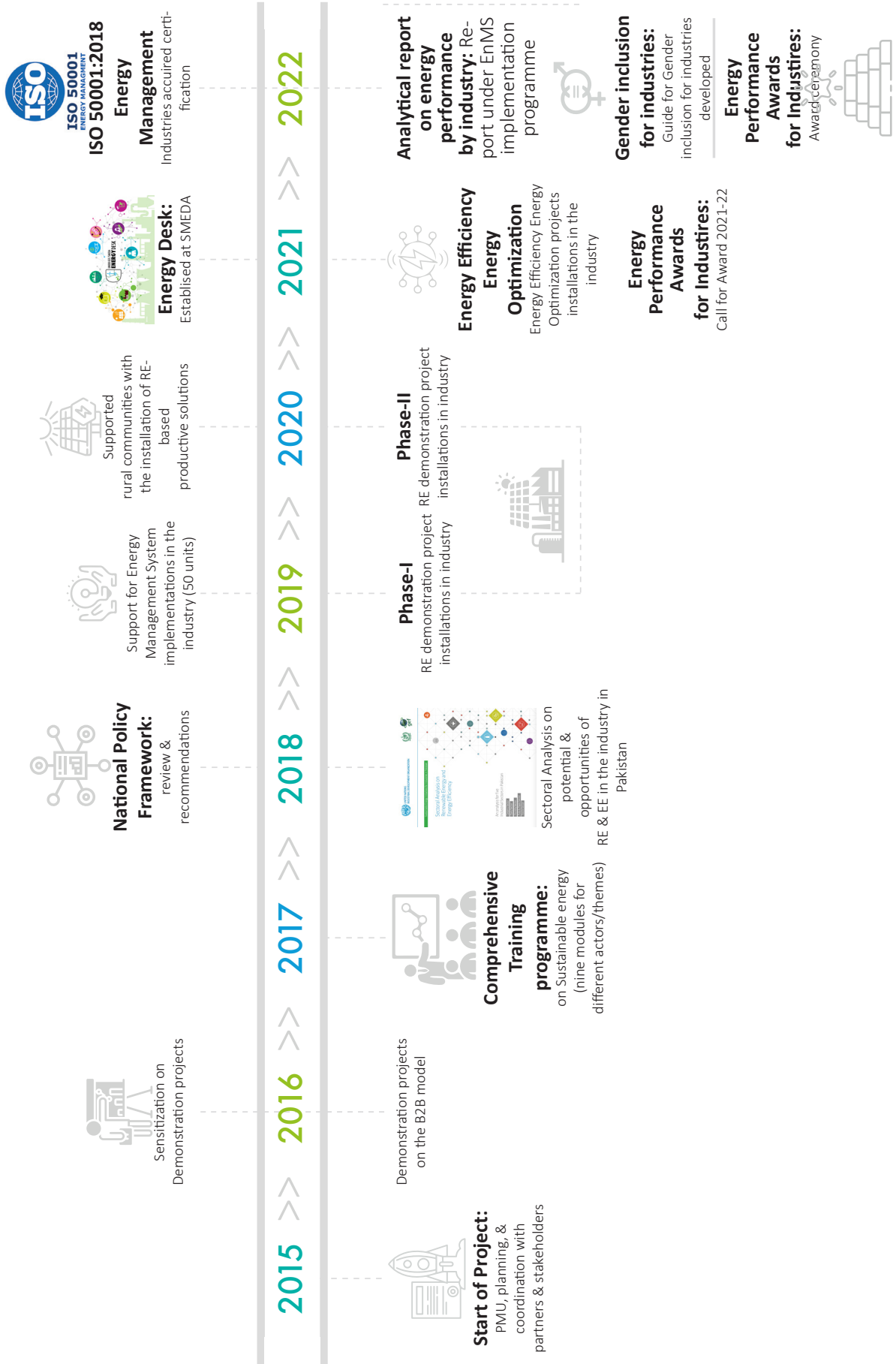
UNIDO under this project component supported and strengthened existing public sector organizations, and multiple stakeholders relevant to industries, to promote investments in RE & EE projects, by building their capacity in technology and finance. A series of RE & EE-related training provided, on subjects like renewable energy technologies, energy management systems, system optimizations, project financing, ISO-50001:2018, etc. The energy Desk at SMEDA is established while energy professionals form AEE Chapter in Pakistan, with UNIDO support.

successes. The project has worked in synchronization with both the primary target groups of the project which are the institutions mandated for the development of REEE including government policy-making and implementing institutions, and with project beneficiaries (industries), energy consultants, professionals, suppliers, and academia.

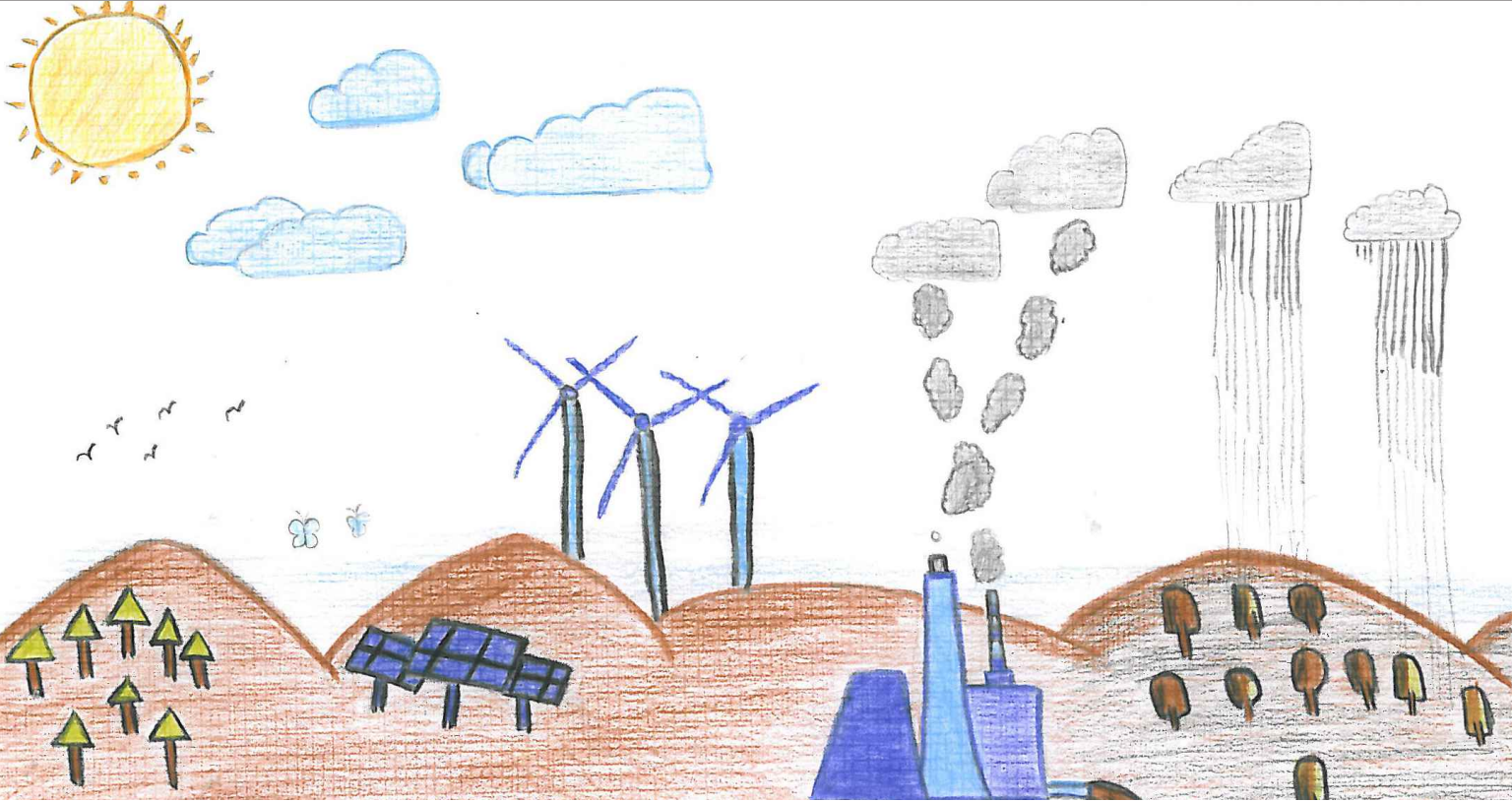
The REEE project has reduced carbon emissions by more than 17,000 Metric tons of CO<sub>2</sub> over its lifetime of investments besides the other indirect emission reductions related to post-project replications. The project has helped the industrial sector through the development of a policy regulatory framework on RE/EE, capacity development of energy consultants, conducting energy surveys, implementation of Energy Management Systems, energy optimization interventions, ISO 50001-2018 Certifications, and development of RE to help build replicable models. The project has generated multiple benefits for different players and stakeholders within Pakistan and at the global environmental level. In addition to economic benefits, energy efficiency measures and the adoption of renewable energy technologies have great potential to reduce CO<sub>2</sub> emissions and reduce local and regional air pollution. On a futuristic note, the project is leaving a legacy of contributing its fair share to a better functioning industrial sector that has helped and will trigger the creation of more new jobs or increased payment for current skill-enhanced jobs.



# Results Timeline







## Project's Energy Portfolio

Total GEF granted amount on investments during project **USD 814,607**

Co-financing generated during the project **USD 20,544,648**

Total Units Saved from National Grid **131,952 MWh/year**

Energy Equivalent for number of households **53,443<sup>1</sup>**

The approximate number of persons who benefitted **358,068<sup>2</sup>**

Cumulative Solar projects Installed **12.5 MW**

tons of CO<sub>2</sub>e emissions avoided every year **~60,000**

Number of enterprises benefiting from projects **~650**

<sup>1</sup> <https://www.mdpi.com/2075-5309/11/11/566/pdf#:~:text=Their%20study%20found%20that%20a,%2Fm2%2Fyear%20of%20electricity.>

<sup>2</sup> [https://www.finance.gov.pk/survey/chapters\\_17/12-Population.pdf](https://www.finance.gov.pk/survey/chapters_17/12-Population.pdf)



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION



Level 7, Serena Business Complex, Khayaban-e-Suharwardy,  
Sector G-5/1, Islamabad, Pakistan



[office.pakistan@unido.org](mailto:office.pakistan@unido.org)



+92 51 835 4803



[www.unido.org](http://www.unido.org)



@UNIDOPakistan



@UNIDO\_Pakistan