



EUROPEAN UNION



Implementation of Resource and Energy Efficient Technologies in the Sugar Sector of Pakistan (IREET)



Implementation of Resource Conservation & Energy Efficiency Technologies for Sugar Sector in Pakistan





EU Switch-Asia Programme



switchasia
P R O G R A M M E

Background

- Initiated by the European Union and SWITCH-Asia II is the action response of the European Commission to the priorities set in the Strategy Paper for Asia (2014-2020) to tackle Sustainable Consumption and Production.
- Programme aims to promote
 - Sustainable growth
 - Contribute to economic prosperity
 - Poverty reduction
 - mitigation of climate changeby enhancing resource efficiency of the sugar sector through adoption of R&EE technologies.

Implementation of Resource Conservation & Energy Efficiency Technologies for Sugar Sector in Pakistan



Project Objective

- Promotion of sustainable production of sugar, through reduction in specific energy consumption of the sugar mills
- Promotion of sustainable consumption of bagasse (renewable sugar mill waste) by supporting sugar mills in the adoption of
 - Energy Efficient Technologies (technical innovations)
 - Resource efficient (resource efficiency) technologies through technology standardization
- Enabling access to finance
- Mobilizing of relevant public sector authorities for the formulation of a conducive regulatory regime for promotion of R&EE in the sugar sector.

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IREET Project



Project Partners

1. Iqbal Hamid Trust (IHT) Pakistan
2. Collaborating Center for Sustainable Consumption & Production (CSCP) Germany
3. World Alliance for Thai De-centralized Energy (WADE), Thai

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Project Rationale

Project Components

Output

Result

Regulatory Component

Establishment of a Conducive Regulatory Framework

Revision of the National Energy Conservation Policy to include R&EE initiatives in the sugar sector

Conducive regulatory regime which will attract Sugar Mills to invest in R&EE technologies

Financial Component

Improved Access to Finance for SMEs

- Improved capacity of FIs to assess financial viability of R&EE Projects
- Launch of SBP R&EE Financing Scheme and its dissemination

- 5 FIs offering financing for R&EE Technology,
- Business cases for 70 Sugar Mills
- Financial Closure of 10 R&EE Project

Awareness & Capacity Building Component

Enhanced Awareness & Capacity of Sugar Sector, Solution/Service Providers & Farmers

- 70 Detailed Energy Audit Reports/ Business cases
- 70 Carbon Foot Print Reports
- Trainings of 5 Service Providers
- LCA Report
- 30 Sugar Mills trained on STSs
- Trainings of 5 Solution Providers
- Case studies for 3 pilot R&EE projects

- Enhanced Awareness and Capacity of Sugar Sector, Solution Providers, Service Providers and Farmers
- Increase uptake of R&EE Technologies, resulting in improved Socio-economic and environmental scenario

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Component 1: Establishment of a Conducive Regulatory Framework

Activities

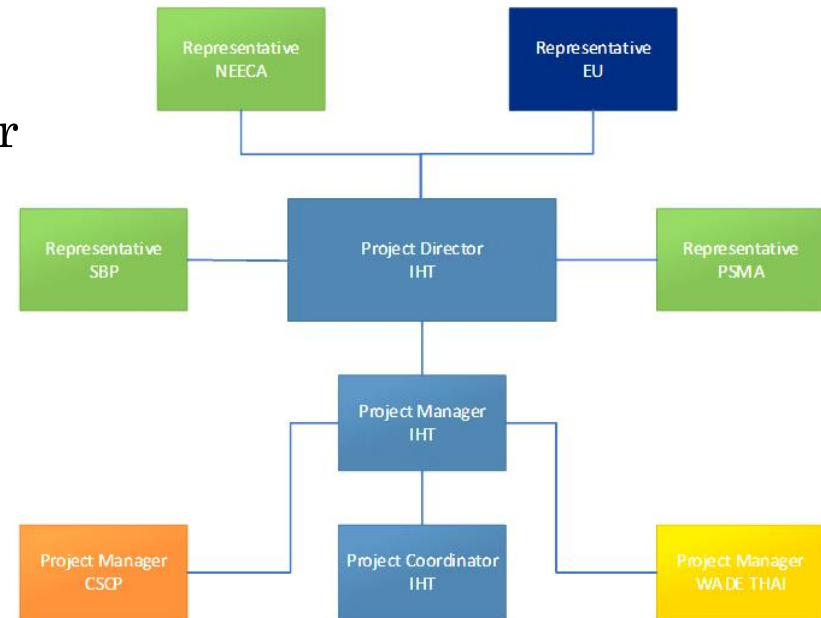
1. Launch of the Action - Marketing of the Action in the Sugar Sector, FIs and Regulators
2. Establishment of Multi-Stakeholder Platform (MSP) for promotion of R&EE based projects in the sugar sector
3. Orientation of NEECA on regional best practices of R&EE measures in sugar production and their implementation
4. Assist NEECA in the revision of the National Energy Conservation Policy to include R&EE initiatives in the sugar sector
5. Conduct policy advocacy among sugar sector stakeholders and NEECA by carrying out awareness campaigns on the adoption and implementation of the revised energy conservation policy

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Component 1: Establishment of a Conducive Regulatory Framework

Outputs:

- MSP (Multi Stakeholder Platform) for promotion of R&EE comprises:
 1. European Union
 2. State Bank of Pakistan
 3. Pakistan Sugar Mills Association
 4. IHT Pakistan
 5. Wade Thai
 6. CSCP
 7. National Energy Efficiency- & Conservation Authority
- Revised National Energy Conservation Policy and its dissemination
- Baseline study of existing institutional and regulatory framework report



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Activities

- Review of regional and international Clean Financing Instruments (CFIs)/schemes for R&EE projects
- Working with SBP for development of financing & credit guarantee schemes for R&EE projects
- Training of 5 major FIs in Pakistan on carrying out risk assessment of R&EE projects
- Development of business cases for adoption of R&EE equipment for 70 sugar mills
- Facilitating financial closure for 10 R&EE projects

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Component 2: Improved Access to Finance for SMEs

Outputs

- Launch of SBP R&EE Financing Scheme and its dissemination
- Financial Institutions are able to undertake assessment of R&EE measures in the sugar sector
- Facilitating increased uptake of R&EE measures

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Activities

- Establishment of a National Support Cell (NSC) at PSMA, offering technical, financial and regulatory assistance to its members
- Detailed energy audits of 70 Sugar Mills to ascertain their R&EE saving potential, including assessment of carbon footprint and its reduction
- In-depth energy audits for retrofitting of low-pressure boilers
- In-house trainings and capacity building of R&EE solution providers to develop standardized R&EE solutions for sugar mills
- Creating B2B linkages between local and international R&EE solution providers
- Development of standardised technical specifications (STSs) based on regional best practices for R&EE equipment design and operation

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Activities

- Development of case studies for 3 pilot R&EE projects implemented by sugar mills to show case their benefits
- Training of technical staff of sugar mills on technology selection based on standardised design
- Capacity building of service providers on regional best practices for undertaking energy audits of sugar mills
- Awareness raising of sugar mills on carbon footprint labels for promotion of low carbon trade
- Facilitate sustained supply of sugarcane through establishment of contracts between sugar mills and farmers

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Outputs:

- 70 Energy audit reports/Business cases
- Trainings of 5 Service Providers
- Life Cycle Assessment Report of Sugar production
- 70 Carbon Foot Print reports
- Trainings of 5 Solution Providers
- 30 Sugar Mills trained on Standardized Technical Specifications
- 3 Case Studies on pilot R&EE Project
- Sample sugarcane supply contracts between sugar mills and farmers

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Thank you

