

Energy Efficiency and Conservation Promotion Financing Project



SREDA
Sustainable and Renewable
Energy Development Authority

EECPFP
Energy Efficiency and
Conservation Promotion
Financing Project

PROJECT FACTSHEET

June 2021

Sustainable and Renewable Energy Development Authority (SREDA)'s "Energy Efficiency & Conservation (EE&C) Master Plan up to 2030" sets a long-term EE&C national target to improve the country's energy intensity (energy consumption per GDP) by 20% by FY 2029-30, in comparison with FY 2013-14. To support the government to attain this goal, in 2016, the Japanese Government provided a concessionary loan of 11,988 million Japanese Yen (equivalent to about USD 100 million) for a period of 40 years under the Loan Agreement No. BD-P90. The Energy Efficiency & Conservation Financing Project (EECPFP) utilises a two-step loan (or financial intermediate lending) instrument as an instrument of policy financing.



NOC Awarding Ceremony

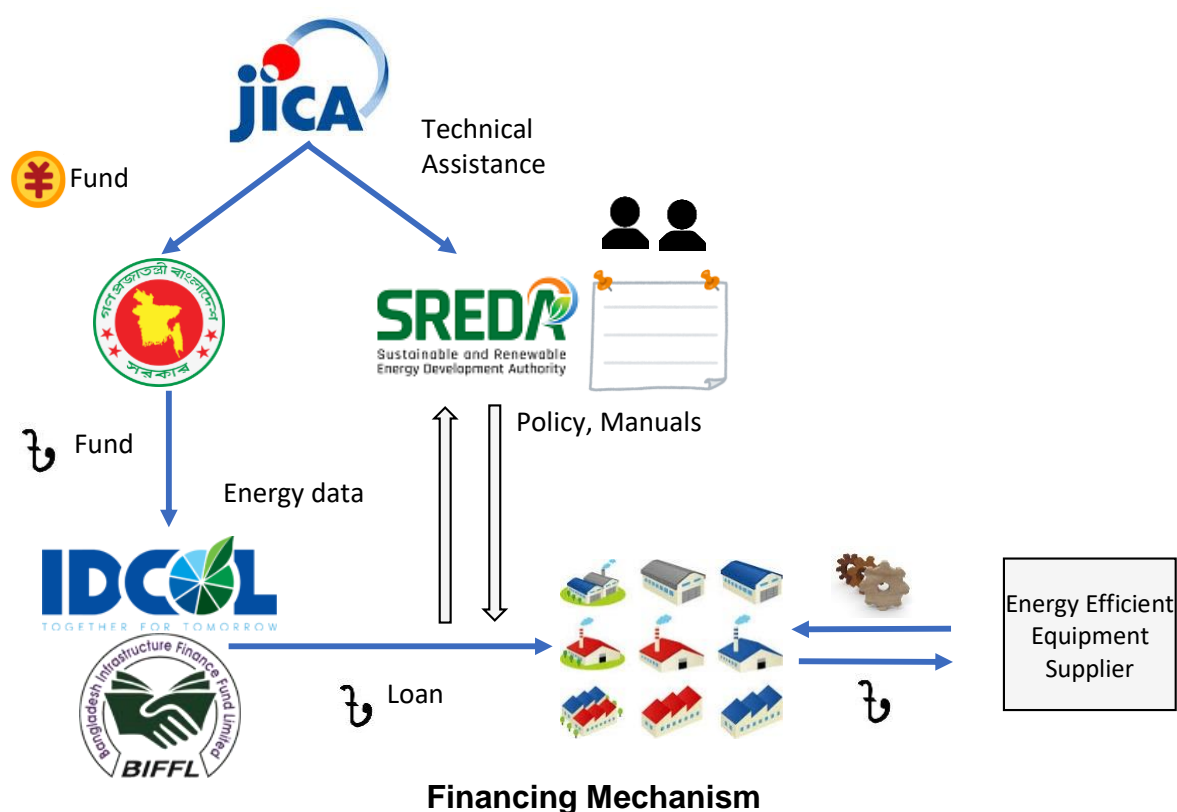
The low interest loan is channelled through two Implementing Financial Institutions (Infrastructure Development Company Limited, IDCOL and Bangladesh Infrastructure Financing Fund Limited, BIFFL), for industries who are introducing energy efficient equipment which are generally more expensive than the conventional ones. Low cost finance of this Project encourages the investors to select energy efficient equipment. SREDA, as the administrative authority for the Project, provides policy and manuals for the operation, and collects data on energy saving achievements.



Project Consultation at SREDA

As of today, 21 companies are awarded the loan, amounting to BDT 12 billion. The borrowers range from textile, RMG, cement, electronics, building and other sectors. With the normal operation of the equipment installed using the loan, total annual energy saving is calculated as approximately 40 ktoe or 140 GWh.

There are many more companies who have expressed their keen interest to be using the Project fund. By utilising the entire budget for the Project, it is expected to contribute to creating an energy saving potential to save more than double of the amount that has been achieved so far.

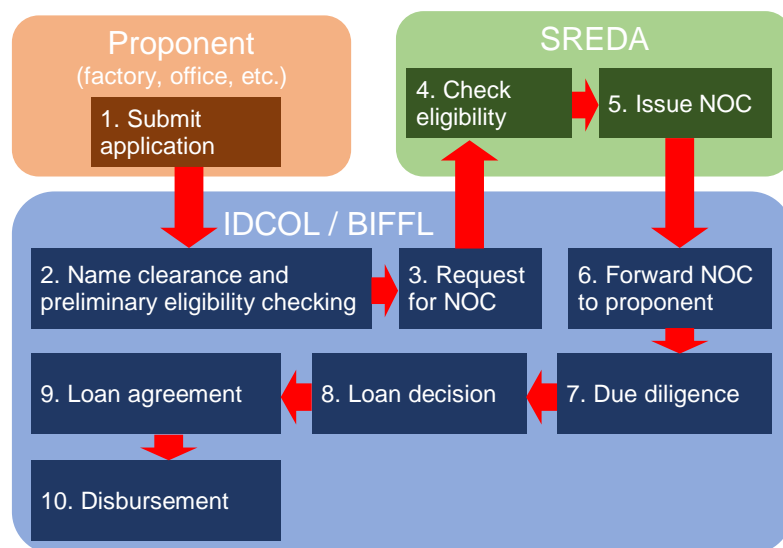


■ Project Data

Project title	Energy Efficiency and Conservation Promotion Financing Project (জ্বালানি দক্ষতা ও সংরক্ষণ বৃদ্ধি কার্যক্রমে অর্থায়ন প্রকল্প)
Objectives and Targets of the project	<ul style="list-style-type: none"> Conducting Energy efficiency sub-projects (industries) Perusing Existing sub-projects monitoring Capacity enhancement on Energy Efficiency and Conservation (EE&C) Raising Public awareness on the significance of EE&C.
Project duration	July 2018 to June 2022
Fund availability	Phase 1: from 2016 to 2022 Phase 2: from 2019 to 2025
Project components	Component I Industry / commercial sector Component II Building sector Component III Residential sector
Budget	<p>Phase 1: JPY 11,988 million (0.01% interest rate, 40 years' tenure with 10 years' grace period) + GoB portion of BDT 231 million</p> <p>Phase 2: JPY 20,076 million (0.90% interest rate, 30 years' tenure with 10 years' grace period) + GoB portion to be later determined</p>

■ Project Financing Mechanism

SREDA is responsible for technical aspects while IDCOL and BIFFL take care of the financial process. Industries who are interested in getting the Project loan consults with IDCOL or BIFFL, who will share technical information with SREDA, who checks the technical eligibility and issues a NOC (no objection certificate) for the lending procedure.



■ Eligible Equipment

Below, there are some examples of equipment already introduced using the Project loan. There are many other selections of eligible equipment for the Project loan. A complete list of the eligible equipment is available from SREDA (website), IDCOL and BIFFL.

- Once-through boiler
- Air conditioner (centrifugal chiller, absorption chiller, VRF, etc.)
- Air-jet loom
- Spinning machine (balloon-controlled winder, air-jet spinning, etc.)
- Direct drive sewing machine
- Air compressor (centrifugal compressor, variable speed, etc.)
- Vertical roller cement mill
- Heat reflective glass
- Lift (permanent magnet-driven)
- LED light

■ Project Activities

Energy saving is not the only outcome from the Project. The Project also contributes to awareness-raising for the promotion of energy efficiency, capacity development in governmental and business sectors. Strengthening energy related data management function at SREDA is one of the key objectives. For these purposes, trainings, energy audits, on-site surveys, and seminars, are being conducted under the Project.

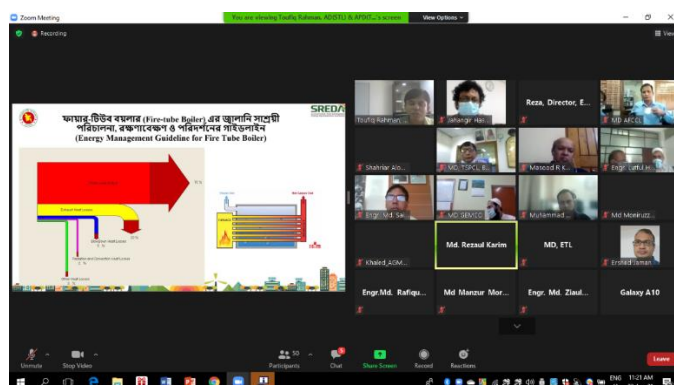


Stakeholders' Meeting with Industries

A workshop titled “National Energy Balance: Bangladesh Perspective” on the overall state of the energy sector had been organized on June 8, 2021 at Grand Ball Room, Hotel Intercontinental, Dhaka. Mr. Nasrul Hamid, MP, Honourable State Minister, Ministry of Power, Energy and Mineral Resources was present as the Chief Guest. Mr. Md. Habibur Rahman, Secretary, Ministry of Power, Energy and Mineral Resources, A B M Azad ndc, Chairman (Secretary), Bangladesh Petroleum Corporation and Mr. Satyajit Karmaker, Chairman (Secretary), Bangladesh Energy & Power Research Council joined as Special Guests. The workshop was chaired by Mr. Mohammad Alauddin, Chairman (Additional Secretary), SREDA. The keynote presenter was Mr. Yoshihiko KATO, PMP, Team Leader, EECFPF PI Consultant Team, SREDA.



Workshop on National Energy Balance



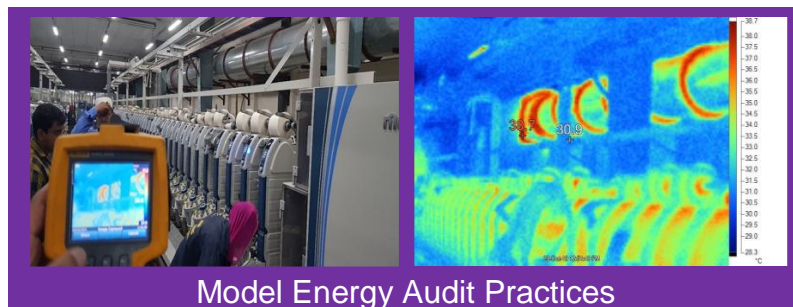
EECFPF, besides the above SREDA has been conducting many training programs, seminars and workshops even on this COVID constrain situation. Followings are some of them done up to now:

- Standards and labelling
- Power System Master Plan.
- Boiler Energy Management



SREDA endeavours to further enhance the eligibility of the Project loan to accommodate more energy saving opportunities in various sectors. Having identified the need to include more eligible equipment, SREDA consults with the Project technical advisory committee and reflects the revision on the eligible equipment list for the Project.

Monitoring, verifying and reporting the energy saving effect is also an essential part of the Project activities. SREDA, on the occasion of on-site inspections, offers advices to further improve energy efficiency.



Model Energy Audit Practices



Loan Agreement Conclusion

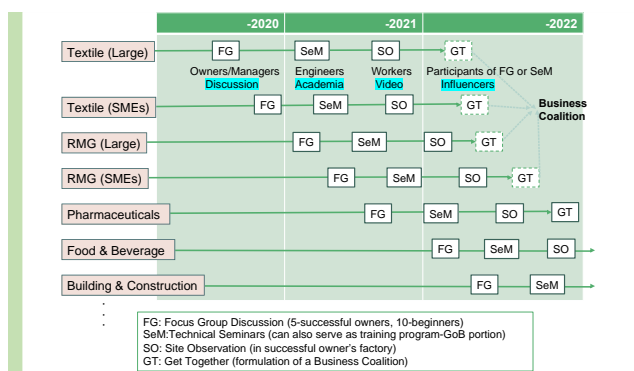
EECPFP is being implemented in close collaborations among the government, financial institutions, business sector and the international development partners. SREDA, through implementation of the Project, is becoming the hub of all EE&C promotion activities, conducted by various entities.

Technical, financial and managerial trainings for EE&C promotion at the industries are being conducted under SREDA's initiatives. Experts including university professors and technical consultants offer presentations and moderate workshops. Attendants are the factory managers, investment planners, environmental officers from the practical business management and operation level at production sites.

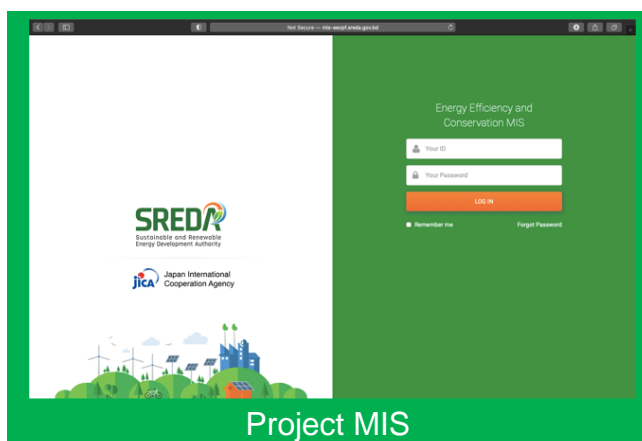


Technical Training

The Project has an extensive private sector engagement programme which aims to promote proactive energy efficiency measures among the industries. It follows a step-by-step process to identify and involve the leaders who will champion the need and benefit of becoming energy efficient.



■ ICT-based Business Process Management and Data Analysis



Project MIS

The Project is implemented by following the policies and rules stipulated in the set of business process manuals. Prepared by SREDA. Each process of the Project is conducted on a cloud-based workflow management ICT system called the Project management information system (MIS), which was developed with cooperation from JICA. The MIS is shared among SREDA, IDCOL, BIFFL and the loan

borrowers on a user- friendly internet browser interface. The use of MIS contributes to business process standardisation and improving accuracy, and enables on-time monitoring of the Project progress.

Another featured ICT system for the Project is the data analysis and statistics handling (DASH) function. This system, linked to MIS, manages the data energy conservation data obtained from the loan borrowers. National energy balance (supply, conversion and demand) data is also analysed.

Month	Operation Hours	Production Volume (GJ)	Production (GJ)	Electricity Consuming (MW)	Gas Consumption (m3)	Energy Source Volume (GJ)
Jul, 2016	624.00	487,318.00	Other	1,967,318.00		
Aug, 2016	744.00	583,575.00	Other	2,343,849.00		
Sep, 2016	600.00	488,000.00	Other	1,880,619.00		
Oct, 2016	744.00	580,537.00	Other	2,253,083.00		
Nov, 2016	720.00	555,600.00	Other	2,173,161.00		
Dec, 2016	744.00	586,954.00	Other	2,097,222.00		
Total	5,400.00	6,540,974.00		24,673,225.00	0.00	0.00

DASH Database Screen

■ Physical Progress (up to December 2020)

The project has achieved the following major progress up to now:

- Develop & implement Eligible Equipment List;
- Develop Business Process Manual;
- Conduct Energy Auditing in different Factories;
- Raising Awareness Issues (including Print & Media Advertisements etc.);
- Develop Central Database for Energy Monitoring and Reporting;
- Issuing NOC to the industries against the loan application;
- Activities on Capacity Enhancement (Training, Workshop, Seminar etc.);
- Develop Social and Environmental Reporting System;
- Progress Reporting (Monthly, Quarterly, Annual etc.);
- Develop and upload the project website.

■ Project Implementation Unit (SREDA)

The Seventh Five Year Plan (December 2015) stipulates SREDA's mandate to contribute to demand side energy management through the provision of low interest loan is clearly mentioned. To this end, the Project Implementation Unit (PIU), comprised of the SREDA's officials in the Energy Efficiency & Conservation Wing, directs the implementation of EECFPF.

		
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■ Access to Project Loan

Interested companies are advised to consult with IDCOL / BIFFL, who are the one-stop service partners for accessing the loan fund. Applicants will be requested to consult with either of the financial institutions and to submit the following application documents:

- Financial Pre-screening Application Forms
- Technical Pre-screening Application Forms (with catalogues, certificates and other technical information of energy efficient equipment)
- Financial Statements for the last 3 years
- Other documents required by IDCOL/BIFFL

<p>IDCOL</p> <p>Industrial & Energy Efficiency Finance (IEEF)</p> <p>industrial_ee@idcol.org</p> <p>PABX: 880-2-9102171-8, Ext-171</p> <p>UTC Building (Level-16), 8 Panthapath, Kawran Bazar, Dhaka 1215.</p> <p>http://idcol.org/home/equipment</p>	<p>BIFFL</p> <p>Project Implementation Unit, EECFPF</p> <p>nadim@biffl.org.bd</p> <p>Phone: 8801844-221660</p> <p>Borak Unique Heights, Level-3,117 Kazi Nazrul Islam Avenue, Eskaton Garden, Dhaka 1217.</p> <p>https://biffl.org.bd/eeclloan/</p>
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■ Project Implementation Consultant Team

Technical assistance portion of EECFPF is entrusted to Mitsubishi Research Institute. The team, comprised of international and national experts, assists SREDA in identifying further energy efficient technologies, monitoring energy saving effects achieved by sub-projects, managing data and raising awareness to promote EE&C.

International team members

					
E1 Team Leader /Project Management	E2 Technical Leader / Chief Project Engineer	E3 Industry Sector Expert	E4 Investment & Finance (EEC technology marketing)	E5 Energy Audit	E6 Industry Sector Expert (energy supply to Industry)
Yoshihiko KATO	Yasushi IIDA	Kimio YOSHIDA	Ulysses COULMAS	Yasuhiro SAKAMOTO	Masaaki EBINA

					
E7 Investment and Financial Expert	E8 Investment & Finance (Appraisal and Monitoring)	E9 Capacity Development	E10 Energy Audit (Energy Audit Advisor)	E11 Capacity Development (Business process improvement & documentations)	
Takeshi KIKUKAWA	Takamichi IDE	Mari IWATA	Norio FUKUSHIMA	Tomoe SHIMADA	

National team members

					
L12 Project Administrator	L13 Information Management	L14 Information Management (operation & database management)	L15 Energy Audit	L16 Energy Audit (Analysis and reporting)	L17 Energy Audit (Monitoring rules)
Jahangir Hasan Talukder	Mahady Hasan	Md. Ismail Hossen	Ershed Jaman Khan	Zakir Hossain	Masoodur Rahman Khan

					
L18 Environment and Social Considerations	L19 Public Relations	L20 Technical Advisor	L21 Financial Expert		
Dr. Kazi Md. Noor Newaz	Arun Karmaker	Shah Zulfikar Haider	Md. Skeikh Shahriar		