Joint Crediting Mechanism in Bangladesh

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07 DECEMBER 2025

Outline of Presentation

- Joint Crediting Mechanism (JCM)
  - JCM Joint Committee
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Joint Crediting Mechanism (JCM)

Ministry of Environment, Forest and Climate Change (MoEFCC), Bangladesh and Ministry of the Environment, Japan signed the MoU to promote Joint Crediting Mechanism (JCM) on 19 March 2013.

The then Secretary, MoEFCC and Japanese Ambassador in Bangladesh signed the MoU

JCM Joint Committee

- Bangladesh & Japan have formed a 13 member JCM Joint Committee
  - 2 Co-Chairs (one from each country)
  - 6 members from Bangladesh side and 7 members from Japanese side

- Formed Secretariat in both the countries
  - DoE provides secretarial services to Bangladesh side

Activities to Promote JCM in Bangladesh

- Organize two Workshops in each financial year to promote JCM
- Conduct Consultation Meetings with stakeholders
- Organized workshops with top tier associations -
  - ✓ Federation of Bangladesh Chambers of Commerce & Industries (FBCCI)
  - ✓ Dhaka Chamber of Commerce & Industry (DCCI)
  - ✓ Chittagong Chamber of Commerce & Industry (CCCI)
  - ✓ Bangladesh Garment Manufacturers and Exporters Association (BGMEA)
  - ✓ Japan-Bangladesh Chamber of Commerce & Industry (JBCCI)

Completed JCM Model Projects in Bangladesh

BD 001: Energy Saving for Air Conditioning & Facility Cooling by High Efficiency Centrifugal Chiller (in Sugar Mill)

Project category	**Energy efficiency improvement**
Technology	High-efficiency centrifugal chillers with ECONOMIZER, refrigerant SUB-COOLER and high efficiency compressor
Estimated energy saving	398.1 MWh/year
Project site	City Sugar Industries Ltd, Narayanganj
Project Participants	City Sugar Industries Ltd (BD) Ebara Refrigeration Equipment & Systems Co., Ltd. (Japan)

Chiller

Cooling Tower

Completed JCM Model Projects in Bangladesh

BD 002: Installation of High Efficiency Centrifugal Chiller for Air Conditioning System in Clothing Tag Factory

Proj. category	Energy efficiency improvement
Technology	High-efficiency centrifugal chillers
Project site	Next Accessories Ltd., Narayanganj
Project Participants	Next Accessories Ltd.(BD) Nippon Koei Co., Ltd. (Focal Point); Ebara Refrigeration Equipment & Systems Co., Ltd (Japan)

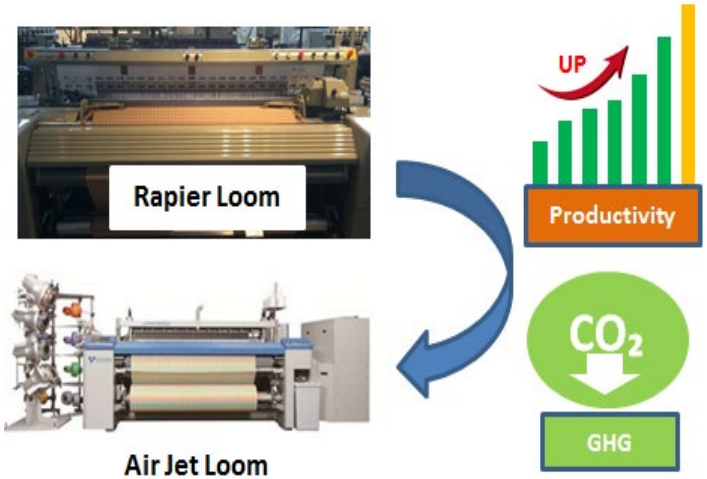
Chiller

Cooling Tower

Completed JCM Model Projects in Bangladesh

BD 003: Installation of High Efficiency Loom at Weaving Factory

Proj. category	Energy efficiency improvement
Technology	Energy efficient Air Jet Loom, which will replace rapier looms
Estimated energy saving	2265 MWh/year
Project site	Hamid Fabrics Limited, Dhaka
Project Participants	Hamid Fabrics Limited (BD) Toyota Tsusho Corporation (Jp)



Completed JCM Model Projects in Bangladesh

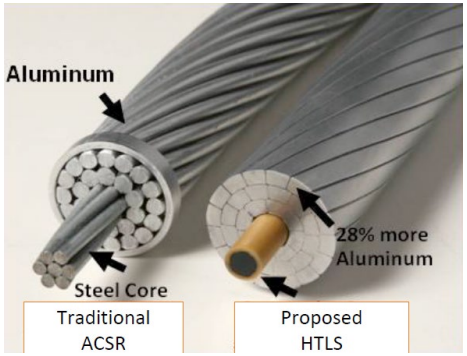
BD 004: Introduction of PV-diesel Hybrid System at Fastening Manufacturing Plant

Project category	Renewable energy
Technology	PV-diesel Hybrid System
Estimated energy saving	498 MWh/year
Project site	YKK Bangladesh Pte Ltd, DEPZ, Ashulia, Dhaka
Project Participants	YKK Bangladesh Pte Ltd (BD) YKK Corporation (Jap)

Ongoing Japan Fund for JCM (JFJCM)Projects

Southwest Transmission Grid Expansion Project

Project category	**Energy efficient transmission lines**
Technology	High-temperature low-sag (HTLS) conductors
Project site	Between Gopalganj and Barisal, Bangladesh
Project Participants	Power Grid Company of Bangladesh Ltd. (PGCB) with the assistance of ADB
Emission reductions	23000 tCO2/year (estimate)
JFJCM	• JFJCM provides grant for incremental cost of advanced low-carbon technologies • Grant: $7 million
Current status	• On-going • Contract of financing 10/09/2018
Commissioning Date	• December 2022



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JCM Model Projects at a Glance

SL.	Name of the project	Expected Emission Reductions (tCO_2/year)	Expected operational lifetime	Possible Total Credits (tCO_2)
BD001	Energy saving for air conditioning & facility cooling by high-efficiency centrifugal chiller	107	10 years	1070
BD004	Installation of energy efficient Solar-Diesel Hybrid System	226	9 years	2034
BD003	Energy saving by installation of High-efficiency Loom at Weaving Factory	437	7 years	3059
BD002	Installation of High Efficiency Centrifugal Chiller for Air Conditioning System in Clothing Tag Factory	578	7 years	4046
new	Southwest Transmission Grid Expansion Project	23,000 (estimated)	10 years (assumed)	230000
Total				240209 (=0.2 $MtCO_2$)

Future JCM/A6 projects from Japanese Companies

- Mitsui & Co. Ltd., Japan and Bangladesh Bondhu Foundation – Methane Emission Reduction by Water Management in Rice Paddy Fields (AWD)
  - potential to reduce emissions by 250,000 ton CO2eq per year.
- We are also expecting investment from other Japanese companies
  - Mitsubishi - AWD
  - Sumitomo - AWD
  - Tokyo Gas – Gas Leakage project

Status on Article 6 Implementation in Bangladesh

Article 6 Readiness Programs (supported by Japan)

- Paris Agreement Article 6 Implementation Partnership (A6IP): Towards high integrity carbon markets - supporting capacity building initiatives on -
- ITMOs Authorization,
- Tracking and
- Reporting to UNFCCC.

- IGES Mutual Learning Program
- Capacity building on Article 6 Reporting

Article 6 Readiness Programs (supported by WB)

- World Bank's Partnership for Market Implementation (PMI) program to carry out readiness support activities -
- Establish arrangements for engagement with international carbon markets including capacity building for prospective developers
- Support to develop economy-wide MRV and registry system
- Support readiness for carbon pricing instruments

- Carbon Initiative for Development (Ci-Dev) and Standardized Crediting Framework (SCF)
- Building technical capacity in the country through "learning by doing"
- Pilot crediting activity for transactions of the mitigation outcomes from Bangladesh - "Installation of Solar Home Systems (SHS)" program of IDCOL.

Article 6 Institutional Arrangement

- The Ministry of Environment, Forest and Climate Change (MoEFCC) is the Focal Point on behalf of the Government of Bangladesh.
- Government has issued a Gazette Notification on the Bangladesh Article 6 Designated National Authority (A6 DNA) formation on 27 June 2024.
- The DNA consists of 03 following body:
- A6 DNA Governing Board
- A6 DNA Technical Committee (TC)
- A6 DNA Secretariate

Bangladesh Article 6 DNA Structure
Art. 6 DNA Governing Board

A6 Designated National Authority (DNA)		
A6 DNA Governing Board		
1.	Secretary, Ministry of Environment, Forest and Climate Change	Chair
2.	Representative, Planning Commission, Ministry of Planning	Member
3.	Representative, Economic Relations Division, Ministry of Finance	Member
4.	Representative, Ministry of Foreign Affairs	Member
5.	Representatives, relevant line ministries related to projects (for example, Power Division, Energy & Mineral Resources Division, Road Transport and Highways Division, Ministry of Railways, Ministry of Shipping, Local Government Division, Ministry of Industries, Ministry of Agriculture, etc.)	Member
6.	Director General, Department of Environment	Member
7.	Joint / Deputy Secretary, Climate Change Wing, MoEFCC	Member Secretary

Key Functions of Governing Board

- Approve rules, methodologies, templates, tools
- Decide on whether to approve projects and issue HCA
- Decide on whether to issue, authorize and transfer ITMOs and A6.4ER
- Decides on corresponding adjustments to avoide double counting
- Supervise and give guidance to the A6 DNA Secretariat

Bangladesh Article 6 DNA structure
Art. 6 Technical Committee

A6 Designated National Authority (DNA)		
A6 Technical Committee		
1.	Director General, Department of Environment (DoE)	Chair
2.	Joint/Deputy Secretary, Climate Change Wing, MoEFCC	Member
3.	Representative, Bangladesh University of Engineering and Technology	Member
4.	Representative, University of Dhaka	Member
5.	Representatives, relevant line agencies/departments related to projects (for example, PDB, SREDA, BRTA, DTCA, BFD, DPHE, LGED, DAE, City Corporations, etc., and individual Carbon Credit Experts)	Member
6.	Representative, Chambers of Commerce & Industry (FBCCI)	Member
7.	Director (Climate Change and International Convention), DoE	Member Secretary

Key Functions of A6 Technical Committee

- Review proposed rules, methodologies, templates, tools
- Review and recommend to the GB on approval projects and issue HCA
- Assess the impact of issuance, authorization and transfer ITMOs and A6.4ER

Climate Change & Int'l Convention Section of the Department of Environment will assist the DNA as Secretariat of it

Bangladesh Article 6 DNA Structure
Art. 6 DNA Secretariat

A6 Designated National Authority (DNA)

A6 DNA Secretariat

Key Functions of the DNA Secretariat

- Provide secretarial support to the Governing Board and the Technical Committee.
- Receive authorization, issuance and transfer request from Article 6 activity/project proponents
- Conduct completeness check based approved rules and guidelines.
- Issuance of HCA, Article 6 credits, authorization, and transfer of ITMOs and A6.4ER after approval of the Governing Board
- Maintain the Article 6 Registry System
- Maintaing list of eligible verifiers based on approved rules

Progress on Article 6 Implementation

- So far, A6 DNA has taken the following decisions -

1. Transition of 11 CDM projects to Article 6.4 has been approved
2. Article 6 Readiness Roadmap for Bangladesh has been approved
3. The DNA has approved Standardized Crediting Framework (SCF) and crediting methodology of Solar Home System under the Ci-Dev/SCF.
4. Issuance of non-binding No-Objection Letter for nine (09) new projects.

Progress on A6 Implementation (continued)

- The DG, DoE, on behalf of the A6 DNA Secretariat, has signed the Host Country Agreement (HCA) with the World Bank as trustee of the carbon fund of the Ci-Dev on 05 November 2025;
  - Under the ERPA WB will purchase 1.1 million tons of credits worth US$ 16 million (2021 -2024);
- Draft Carbon Market Framework endorsed by A6 Technical Committee;
- Draft Carbon Market Framework shared at a side event during COP 30 in Belem;
- Carbon Market Framework is expected to be approved by the A6 Governing Board by December 2025.

Progress on Article 6 Implementation (other countries)

- ATEC Australia – Electric Cooking Program in Bangladesh
  - potential to reduce emissions by 1.16 million t CO2eq per year.
- EWC, South Korea – Smart IoT-electric induction Cookstoves in Bangladesh –
  - potential to reduce emissions by 354,000 tCO2eq per year.
- Grit C Co Ltd, South Korea – Pilot project on non-fired brick.
- Eco-eye, Korea: Improved Cook stoves and Forestry sector project;

Progress on A6 Implementation

- Glory and Tech – Water Purification Technology
- Thanks Carbon, South Korea – Alternate Wet and Drying (AWD) method in the rice agriculture sector.
- KECC – Waste to Energy (CCC, Narayanganj CC & Gazipur CC)
- IBK Securities (for financial support)
- IWM, Bangladesh – 4 projects on AWD, Waste and NbS.

Signing of MoU to promote mitigation projects in Bangladesh

- Ministry of Environment, Forest and Climate Change (MoEFCC), Bangladesh and Ministry of Trade, Industry and Energy (MoTIE), Korea has signed an MoU on 25th June 2024.
  - Formed joint Working Groups;

THANK YOU.