BANGLADESH
First Biennial Update Report to the UNFCCC

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19 June 2025
FSV18 Workshop at SB62, Bonn, Germany

National Circumstance

Geography

- Dominated by the Ganges–Brahmaputra–Meghna delta, the world's largest.
- The country has three main physiographic regions:
  1) Floodplains (80%);
  2) Uplifted regions;
  3) Hill regions

Key Climate Vulnerabilities

- Floods, cyclones, sea level rise, salinity, drought, and others
- Ranked 7th in Global Climate Risk Index (CRI) 2021

Population
Over 165 Million (2022)
Density- 119/km² (2022)

Area
147,570 km² (56.977 mile²)

Urbanization
Urban population:
~31.49% (2022);

Climate

- Average temperature ranges between 15°C and 34°C, with a rising trend—0.53 °C from 2001–2010 and 1.06°C from 2011–2019
- Mean annual rainfall is ~2,243.91 mm, with 70% falling during monsoon.

Economy

- Developing market economy; 37th largest globally (nominal)
- Per capita GDP growth: 6.64% (2018–19), 2.29% (2019–20), 5.88% (2020–21)

Institutional Arrangement

➢ **National Focal Ministry:** Ministry of Environment, Forest and Climate Change (MoEFCC)

➢ **Technical Focal Agency:** Department of Environment (DoE)

National MRV Steering/Advisory Committee
(set-up at Ministry of Environment, Forest & Climate Change)

| Chaired by Secretary, MoEFCC | Representatives of relevant lines ministries/agencies | Supported by climate experts academia |

MRV Management and Coordination
(set-up at Department of Environment)

| MRV Coordinator | MRV Administrator | QA/QC Coordinator |

MRV Sub-Coordinators (GHG Inventory, Adaptation, Mitigation, Finance Experts)

| GHG Inventory Compilers | Sectoral Climate Action Monitoring Experts | Climate Vulnerability and adaptation Experts | Climate Finance Experts |

**Data Providing Agencies**

| GHG Inventory Activity Data | Climate Related Project Level Data | Project Impact/ Extreme Weather Monitoring Data | National and Sub-national Statistics |

National GHG Inventory (2013-2019)

- **Sectors Covered:** Energy, IPPU, AFOLU, Waste.
- **Total Emissions (2019)**: 213.19 Mt CO_2eq — 40% increase from 2012.
- **Per Capita Emissions (2019)**: 1.29 tCO_2eq
- **Sectoral Emissions (2019):**
  - Energy: 115.26 Mt CO_2eq (54.06%)
  - IPPU: 4.26 Mt CO_2eq (1.998%)
  - AFOLU: 72.64 Mt CO_2eq (34.07%)
  - Waste: 21.04 Mt CO_2eq (9.86%)
- **Notable Improvements:**
  - Inclusion of new sub-sectors: fugitive emissions, F-gases, steel, glass, lubricants.
  - Use of IPCC 2006 Guidelines
  - Country-specific emission factors for forestry.
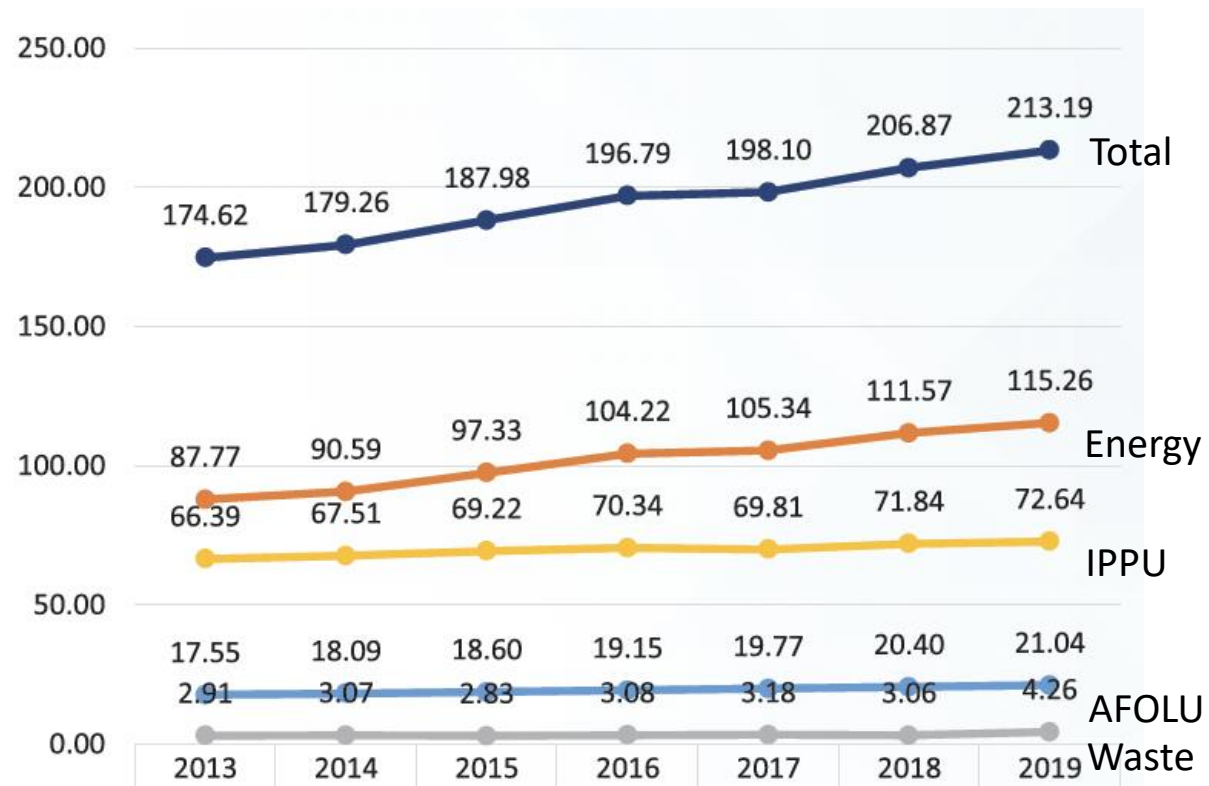
Mitigation Actions

- **NDC Mitigation Targets (By 2030)**
  - Unconditional Target: 6.73% reduction (27.56 Mt CO_2eq)
  - Conditional Target: Additional 15.12% (61.91 Mt CO_2eq)
  - Total Reduction Target: 21.85% (89.47 Mt CO_2eq) from BAU scenario
  - More than 95% of the emission reduction targets is from energy sectors.
- **Energy Sector Actions**
  - Installed over 6 million solar home systems
  - Established 10 solar parks, 28 solar mini-grids,
  - 2829 solar irrigation pumps, 1885 net metering rooftop solar, 28 solar drinking water systems and 14 solar charging stations.
  - Improved energy efficiency in industries (LEDs, motors)
  - Introduced electric vehicles and efficient public transport
  - Disseminated Improved Cookstoves (ICS)
- **CDM Projects**
  - 21 CDM projects, achieved 18.99 MtCO2eq certified emission reductions in total
  - 5 JCM projects, 0.024 MtCO2eq per year.

FTC Support Needs and Received

Support Needs (NDC)

Mitigation Sector	Unconditional (Billion USD)	Conditional (Billion USD)
Energy (RE, EE, Industry, Transport)	30.88	137.49
AFOLU	0.77	2.51
Waste	0.61	3.76
Total	**32.26**	**143.73**

Support Needs (NAP)

Sector	Billion USD
Water Resources	120
Urban Areas	39
DRR	28
Agriculture, Fisheries and Biodiversity	39
Others	4
Total	**230**

Support Received

Name of the Fund	No. of Project	Amount of Fund (million USD)		
		Grant	Loan	Co-finance
Green Climate Fund (GCF)	05	101.14	250.00	156.66
Least Developed Countries Fund (LDCF)	07	34.41	-	187.94
Adaptation Fund (AF)	01	9.99	-	-
Global Environment Facility (GEF)	08	24.66	-	402.62

Barriers, Challenges, and Needs
Challenges

❑ **Data & Institutional Gaps**

- Fragmented and inconsistent data across agencies, and data unavailability at the sub-sector level
- Absence of official agreement between DoE and external data providers

❑ **Financial Limitations**

- High investment costs for low-carbon tech
- **Limited access to international climate finance due to complex procedures and capacity constraints**

Sector-Wise Needs

❑ **Energy**

- **Scale up of REs and deployment of EVs**
- **Industrial energy efficiency improvements**
- Investment in modern clean cooking solutions

❑ **IPPU**

- **Technology for Clinker substitution**
- Refrigerant management system

❑ **AFOLU**

- **Enhanced Forest monitoring**
- Climate-smart agriculture, organic fertilizers
- Regular Carbon accounting for soil/LULC

❑ **Waste**

- Integrated waste management resource recover
- **Waste-to-energy, biogas, composting**

Transition to Enhanced Transparency Framework

- **Development of National MRV System**
  - **A centralized MRV system has ben developed. It will support: (a) GHG inventory reporting; (b) Tracking NDC implementation; (c) Monitoring climate finance flows; (d) Institutional coordination and stakeholder engagement.**
- **Institutional Mechanisms**
  - **Hosted by the Department of Environment, Ministry of Environment, Forest and Climate Change**
  - **Core Sectoral Working Groups (CSWG) to ensure technical accuracy and sectoral ownership.**
  - Coordination between ministries, divisions, and agencies has improved.
- **Use of IPCC 2006 Guidelines and its Refinements 2019**
  - GHG inventory preparation following updated international guidelines, compatibility with ETF standards.
- **Capacity Building Initiatives**
  - Capacity-building Initiative for Transparency (CBIT) for institutional and technical capacity building to meet ETF requirements.
  - Ongoing training and technical support for sectoral experts.
  - Use of IPCC software and emissions factor guidance for accurate reporting.
- **Integration of Finance and Adaptation Tracking**
  - Initiatives to capture adaptation progress and financial inputs from national budgets, development partners, and climate funds.

Thank you