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**The NDC 3.0 should be More  
Ambitious for a Greener  
Bangladesh**

# Beyond the Blueprint

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**Beyond the Blueprint:** The NDC 3.0 should be More Ambitious for a Greener Bangladesh

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# Acronyms

AFOLU	Agriculture, Forestry, and Other Land Use
AWD	Alternate Wetting and Drying
BAU	Business-as-Usual
BCCSAP	Bangladesh Climate Change Strategy and Action Plan
BCPP	Bangladesh Climate Prosperity Plan
BDP	Bangladesh Delta Plan 2100
BEP	Bangladesh Environment Partnership
BEV	Battery Electric Vehicle
BRT	Bus Rapid Transit
CCUS	Carbon Capture, Utilisation, and Storage
CBDR-RC	Common But Differentiated Responsibilities and Respective Capabilities
CLEAN	Coastal Livelihood and Environmental Action Network
CO <sub>2</sub> e	Carbon Dioxide Equivalent
COP	Conference of the Parties
CSO	Civil Society Organisation
DNA	Designated National Authority
ETF	Enhanced Transparency Framework
EV	Electric Vehicle
F-gases	Fluorinated Gases
GDP	Gross Domestic Product
GEDSI	Gender, Equality, Disability, and Social Inclusion
GHG	Greenhouse Gas
GOB	Government of Bangladesh
GST	Global Stocktake
HFCs	Hydrofluorocarbons
ICE	Internal Combustion Engine
IEPMP	Integrated Energy and Power Master Plan
IMF	International Monetary Fund
INDC	Intended Nationally Determined Contributions
IPPU	Industrial Processes and Product Use
L&D	Loss and Damage

LCA	Life Cycle Assessments
LDC	Least Developed Country
LNG	Liquefied Natural Gas
MEPS	Minimum Energy Performance Standards
MOEFCC	Ministry of Environment, Forest and Climate Change
MRT	Mass Rapid Transit
MRV	Measurement, Reporting, and Verification
NAP	National Adaptation Plan
NDC	Nationally Determined Contributions
NECR	Net Effective Carbon Rate
NPP	Nuclear Power Plant
PHEV	Plug-in Hybrid Electric Vehicle
RE	Renewable Energy
REP	Renewable Energy Policy
SDGs	Sustainable Development Goals
UNFCCC	United Nations Framework Convention on Climate Change
WTE	Waste-to-Energy

# Key Findings

*The Government of Bangladesh submitted its third Nationally Determined Contributions (NDC 3.0) to the UNFCCC Process on 29 September 2025. While it shows notable institutional advancements in policy coherence and social equity, its quantitative impact is limited by conservative mitigation targets, over-reliance on foreign funding, and the adoption of high-risk, unproven technologies.*

## Participation

The NDC 3.0 formulation lacked transparency and inclusive participation. Despite CSOs advocated for greater ambition since early 2025, MOEFCC claimed they had conducted a few consultations since July 2026, but excluded CSOs from technical discussions. A validation workshop on 21 September 2025 presented only a draft summary, preventing substantive stakeholder input before the NDC 3.0 was submitted to the UNFCCC. This flawed process compromises the legitimacy and ambition of the commitments.

## Policy and Institutional Strengths

*The NDC 3.0 structurally anchors climate action within national development priorities. The key strengths of the NDC 3.0 include:*

### 1. Integrated Policy Framework

NDC 3.0 aligns directly with the National Adaptation Plan (NAP) by incorporating its key interventions. It also extends the mitigation timeline to 2035, facilitating long-term strategic planning.

### 2. Just Transition and Equity

The NDC establishes a progressive Just Transition framework that prioritises the reskilling of fossil fuel workers. It explicitly integrates Gender, Equality, Disability, and Social Inclusion (GEDSI) through a rights-based approach, ensuring equitable benefits for vulnerable populations.

### 3. Governance Commitment

The NDC 3.0 formalises governance by establishing an Advisory Committee. It also commits to developing a robust National Measurement, Reporting, and Verification (MRV) system that is consistent with the Paris Agreement's Enhanced Transparency Framework (ETF).

## Mitigation Shortcomings

*Despite institutional advancements, the core mitigation ambition remains conservative and exhibits quantitative stagnation:*

### 1. Conservative Reduction Targets

The 2035 conditional GHG reduction target is 84.97 million tons of CO<sub>2</sub>e, representing a 20.31% reduction below the BAU scenario. This target is lower than the previous NDC target for 2030, which aimed to reduce emissions by 89.47 Mt CO<sub>2</sub>e (21.85% below BAU scenario).

### 2. Limited RE Ambition

The NDC 3.0 sets a conditional Renewable Energy target of 25% of power generation by 2035, equating to 11.2 Gigawatt (GW). This objective is at odds with the more ambitious BCCP, which aims for 40% Renewable Energy by 2041. 11.2 GW might be 25% of the installed capacity, not generation. Achieving the 25% generation share requires 35.51 GW, indicating a serious capacity gap.

### 3. Underestimated Domestic Potential

The NDC overlooks the considerable potential of decentralised RE sources. These include distributed rooftop solar (10 GW+), agrivoltaics (20%–35.0% of the 2030 target), floatovoltaics, and community grids.

### 4. Ignored Potential Sectors

The Industrial Process and Product Use (IPPU) and Waste sectors have a zero unconditional reduction commitment. However, critical high-impact actions, such as reducing fugitive methane in Agriculture and gas sector are 90% conditional on external support, which reduces domestic accountability.

## Policy Gaps and Financial Risks

*The NDC 3.0 is plagued by significant structural and financial vulnerabilities, stemming from both domestic policy shortcomings and its reliance on external factors:*

### 1. Fossil Fuel Phase-out Gap

The commitment to 'transitioning away from fossil fuels' is undermined by the absence of a concrete, legislated phase-out schedule for existing fossil fuel infrastructure, which risks a long-term 'lock-in' effect. Furthermore, the transport sector's EV goals face challenges due to high import duties, limited charging infrastructure, and bureaucratic hurdles.

### 2. Absence of Domestic Policy Instruments

A significant gap exists in the country's domestic policy regarding GHG emissions, with no tracking of land-use change and no carbon pricing mechanisms applied to any emissions. Additionally, crucial binding sectoral emission standards, like MEPS for the power, industry, and vehicle sectors, are largely absent.

### 3. Overreliance on External Factors

The country's macroeconomic stability could be at risk due to a critical USD 90.23 billion conditional finance gap. The absence of clear financing modalities, such as grants versus debt, or reparations, and the absence of guardrails of climate finance, increases the likelihood of financial strain and a debt trap for this vulnerable nation.

### 4. Misleading Agricultural Emission Reduction

Without any explanation, the NDC 3.0 states that non-energy emissions from the agricultural Sector will be reduced from 42.9 Mt in 2022 to 38.7 Mt in 2035. It is misleading to suggest that 4.25 million tons of emissions will be reduced without any action.

## Risks of False Solutions

*The NDC 3.0 faces significant risks due to the integration of expensive and high-risk technologies, which are often referred to as 'False Solutions':*

### 1. Carbon Capture and Storage

In LDCs such as Bangladesh, implementing CCS in the IPPU poses several challenges. These include high cost, unproven viability, a lack of regulatory expertise, and the risk of continued reliance on fossil fuels.

### 2. Ammonia and Hydrogen

Relying on imported ammonia for co-firing and hydrogen from various pathways presents considerable cost and technical challenges. Ammonia offers minimal decarbonisation and depends on unstable supply chains. Hydrogen often diverts existing green energy and incurs high costs for safety.

### 3. Waste-to-Energy

The incineration process releases toxic emissions, including dioxins, furans, heavy metals and hazardous ash, which contribute to air pollution and pose public health risks. It also discourages recycling and waste reduction by creating demand for more waste.

### 4. Nuclear Energy

The nuclear power project poses substantial geopolitical and financial risks due to its heavy reliance on foreign debt, which accounts for 90% of the budget. It creates a significant safety and economic burden, also.

## Key Recommendations

*To align the NDC 3.0 with the 1.5°C pathway and mitigate systemic risks, we urge several policy adjustments:*

### 1. Increase Renewable Energy Ambition

Increase the conditional renewable

energy (RE) targets to achieve 25% of the generation capacity. Additionally, mandate a clear deployment roadmap that specifically excludes high-carbon energy carriers, such as imported ammonia.

### 2. Avoid Climate Debt

Advocate for developed nations to provide climate action support primarily through grants, reparations, or compensation, consistent with climate justice principles, rather than utilising debt instruments for conditional climate initiatives.

### 3. Establish Domestic Market

Introduce an incremental sectoral Carbon Tax to generate revenue (up to 1% of GDP) and incentivise low-carbon practices domestically.

### 4. Promote Electrification

Reducing the use of combustion engines is key to reducing carbon emissions. To this end, reduce import duties and taxes on electric vehicles to 25% of those on internal combustion engine (ICE) vehicles.

### 5. Enforce Standards and Efficiency

Immediately mandate and enforce sectoral Minimum Energy Performance Standards (MEPS) and stringent emission limits across industry, power, and transport to curb demand and mitigate public health crises.

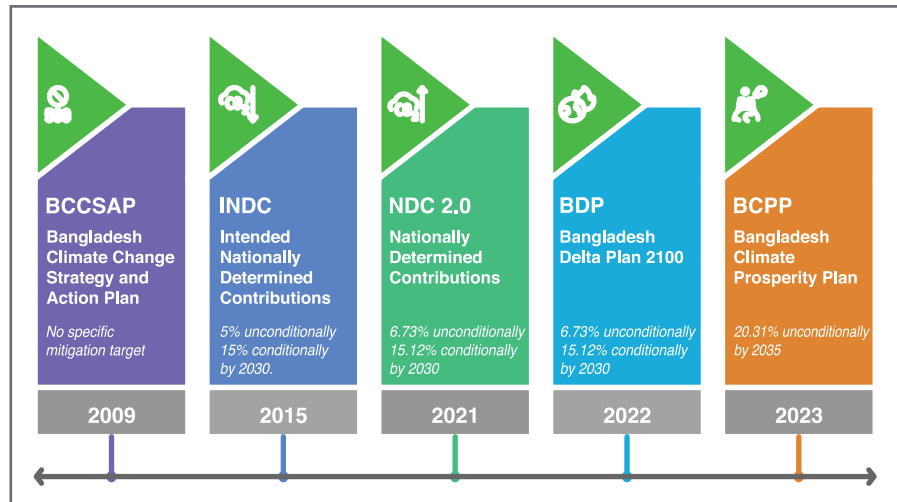
### 6. Reduce International Overreliance

Prioritise essential and cost-effective domestic mitigation efforts, such as reducing fugitive methane emissions, by implementing mandatory domestic regulations rather than relying on unstable international carbon markets.

### 7. Strengthen Non-energy Regulation

Introduce binding targets for reducing embodied carbon in construction materials and mandate aggressive electrification goals for national rail and inland water freight transport.

# Chapter 1



## Introduction

Bangladesh confronts a severe challenge: extreme climate vulnerability coupled with urgent development needs. Its geographical location renders it highly susceptible to the impacts of climate change, including rising sea levels, cyclones, saltwater intrusion, frequent floods, droughts, and increasing temperatures.

These factors directly imperil critical sectors like agriculture, fisheries, water resources, health, and urban infrastructure, thereby jeopardising socioeconomic progress<sup>1</sup>. Consequently, Bangladesh must reconcile its rapid development, driven by industrialisation, urbanisation, and escalating energy demands, with a climate-resilient, low-carbon strategy, aligning with the Sustainable Development Goals (SDGs) and the Paris Agreement.

To address these existing challenges, Bangladesh has integrated climate action into its national policy framework. The Third Nationally Determined Contributions (NDC 3.0) builds upon the long-term vision established by key policy documents, including the Bangladesh Climate Change Strategy and Action Plan 2009 (BCCSAP)<sup>2</sup>, the National Adaptation Plan 2023 (NAP)<sup>3</sup>, the

1. Rojas, D. (2025). [How the Climate Crisis Is Impacting Bangladesh](#). The Climate Reality Project: 1 January 2025
2. MOEF (2009). [Bangladesh Climate Change Strategy and Action Plan \(BCCSAP\) 2009](#). Ministry of Environment and Forest (MOEF): September 2009
3. MOEFCC (2022). [National Adaptation Plan of Bangladesh \(2023-2050\)](#). Ministry of Environment, Forest and Climate Change (MOEFCC): October 2022

Bangladesh Delta Plan 2100 (BDP), and the Bangladesh Climate Prosperity Plan 2022 (BCPP)<sup>4</sup>.

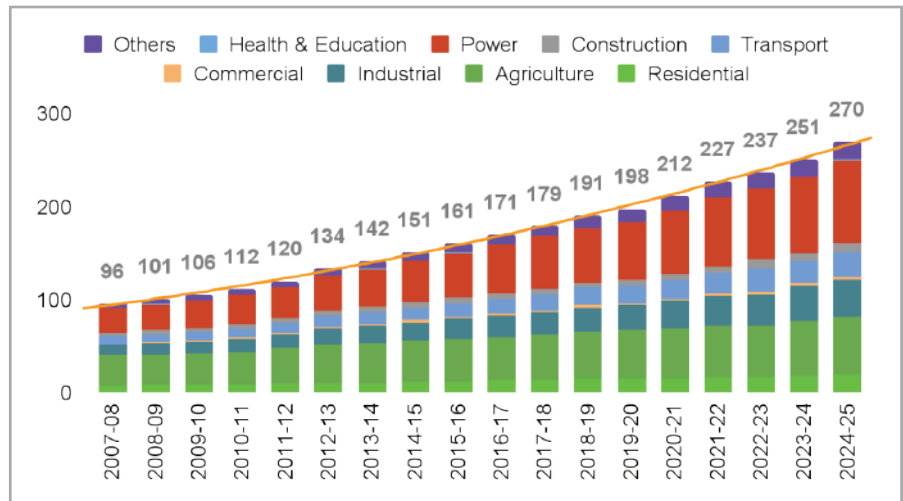
This strategy adopts a two-pronged approach: unconditional targets are financed by domestic resources, while conditional targets rely on international assistance.

## 1.1 The Evolution of Ambition

The initial commitment, the 2015 Intended Nationally Determined Contributions (INDC), targeted the Power, Industry, and Transport sectors. It aimed for a modest 5% unconditional and an additional 10% conditional reduction from a Business-as-Usual (BAU) scenario by 2030, using 2011 as the base year<sup>5</sup>.

In 2020 and 2021, the Interim and Updated NDC (NDC 2.0) included the Energy, Industrial Processes and Product Use (IPPU), Agriculture, Forestry, and Other Land Use (AFOLU), and Waste sectors

**Figure 1: GHG Emissions in Bangladesh by Sector (million tons)**



Source: Bangladesh Second National Communication to the UNFCCC, Our World in Data and Updates on the GHG Inventory of National Communications

(Municipal Solid Waste and Wastewater)<sup>6</sup>, with 2012 established as the new base year. Quantitatively, NDC 2.0 increased the unconditional target to a 6.73% reduction and the conditional target to an additional 15.12% reduction, totalling an 89.47 million tons of CO<sub>2</sub>e reduction (21.85%) by 2030<sup>7</sup>.

NDC 3.0 (2025) extends the target timeframe to 2035 and adopts 2022 as the new base year for emissions inventory. While this document demonstrates robust institutional rigour,

incorporating concepts such as the Just Transition and the Enhanced Transparency Framework (ETF) reveals a concerning stagnation in overall ambition, especially when compared to the rapid increases achieved in the preceding cycle<sup>8</sup>. Interestingly, emissions from the cement and steel industries, as well as emissions from Fluorinated Gases (F-gases), have been excluded.

## 1.2 NDC Formulation Process

In line with the Paris Agreement, all member nations are mandated to submit an updated Nationally Determined Contribution (NDC) every five years. The anticipated NDC 3.0, aiming for the global target of 1.5 degrees, follows the results of the first Global Stocktake (GST),

4. MOEFCC (2023). *Bangladesh Climate Prosperity Plan (BCPP) 2022-2050*. Ministry of Environment, Forest and Climate Change (MOEFCC): February 2023

5. MOEF (2015). *Intended Nationally Determined Contributions (INDC)*. Ministry of Environment and Forest (MOEF): September 2015

6. MOEFCC (2020). *Nationally Determined Contributions (Interim)*. Ministry of Environment, Forest and Climate Change (MOEFCC): November 2020

7. MOEFCC (2021). *Nationally Determined Contributions (NDCs) 2021: Bangladesh*. Ministry of Environment, Forest and Climate Change (MOEFCC): 26 August 2021

8. MOEFCC (2025a). *Bangladesh's Third Nationally Determined Contributions (NDC 3.0): Draft Final*. Ministry of Environment, Forest and Climate Change (MOEFCC): September 2025

which confirmed that the world is not on track to meet the long-term temperature goal.

The Government of Bangladesh (GOB), specifically the Ministry of Environment, Forest and Climate Change (MOEFCC), had ample time, particularly after COP28, to engage all relevant stakeholders in drafting NDC 3.0.

Expectations for a robust submission were heightened with the new interim government, led by Nobel laureate Dr Muhammad Yunus, taking power in August 2024, given his advocacy for 'three zeros': Zero Poverty, Zero Unemployment, and Zero Net Emissions.

Civil Society Organisations (CSOs) began advocating for an ambitious NDC during the Bangladesh Energy Prosperity (BEP) Conference in December 2024 and publicly in February 2025<sup>9</sup>. This advocacy was crucial as NDC 3.0 was scheduled for

formulation and submission to the UNFCCC process by September 2025. Despite this urgency, the MOEFCC only initiated its consultation process in July 2025. To date, while 14 consultations on various sectors and sub-sectors have been conducted, CSOs have not been included<sup>10</sup>.

The MOEFCC organised a validation workshop with broader stakeholders on September 21, 2025. During this workshop, the ministry presented the summary of the draft NDC without providing stakeholders the opportunity to submit their opinions on the document.

Subsequently, without any meaningful participation of CSOs, the GOB submitted NDC 3.0 to the UNFCCC process on September 29, 2025<sup>11</sup>.

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<sup>9</sup>. DT (2025). [Bangladeshi youth declare 2025 as Year of People's NDC](#). Dhaka Tribune (DT): 1 January 2025

<sup>10</sup>. MOEFCC (2025b). Presentation: Formulation of Third NDC 3.0 of Bangladesh. Ministry of Environment, Forest and Climate Change (MOEFCC): 21 September 2025

<sup>11</sup>. UNFCCC (2025). [Bangladesh's Third Nationally Determined Contributions](#). United Nations Framework Convention on Climate Change (UNFCCC): 29 September 2025

# Chapter 2



## Policy Integration & Gaps

The NDC 3.0 is aligned with the National Adaptation Plan (NAP) and integrated Just Transition principles. However, it is hampered by several policy shortcomings. Key deficiencies include a lack of carbon pricing (0% of GHG emissions are subject to a positive Net Effective Carbon Rate), ambiguous renewable energy targets (25% by 2035 in the NDC versus 40% by 2041 in the BCPP), and an over-reliance on international mechanisms, such as external finance under 'Article 6' for 70% of crucial fugitive methane reduction.

### 2.1 Progress in Policy Architecture

Bangladesh's NDC 3.0 showcases notable qualitative and institutional advancements, particularly in prioritising climate action as a matter of social and economic equity. However, it still faces quantitative limitations in its mitigation targets.

#### a) Enhanced Policy Coherence

NDC 3.0 extends its mitigation timeline to 2035, which is crucial for achieving structural changes in energy and industry to meet the 1.5°C pathways, as recommended by the first Global Stocktake. It integrates mitigation with national adaptation priorities by incorporating 65 NAP interventions to strengthen

resilience. The NDC Advisory Committee enhances accountability, and NDC 3.0 commits to a robust National Measurement, Reporting, and Verification (MRV) system, aligning with the Paris Agreement's Enhanced Transparency Framework.

## b) Just Transition as a Core Strategy

The NDC 3.0 integrates a Just Transition framework into climate policy, focusing on people-centred development, decent work, equity, and inclusion, and adhering to a 'do-no-harm' principle. It addresses social risks, such as job losses and land-use conflicts, through specific actions in priority sectors (skills mapping, concessional finance, and formalising informal workers), and institutionalises social dialogue. This approach frames climate action as a green development opportunity, ensuring social stability and inclusive growth while countering potential opposition to structural changes<sup>12</sup>.

12. Khatun, F. (2025). [Just transition is key to Bangladesh's pledge to cut emissions](#). The Daily Star: 23 September 2025

13. BCCT (2024). [Bangladesh Climate Change and Gender Action Plan 2024](#). Bangladesh Climate Change Trust (BCCT), Ministry of Environment, Forest and Climate Change (BCCSAP): March 2024



*Barapukuria Coal Power Plant, one of the most inefficient coal power plants in Bangladesh, supposed to be phased-out by January 2031. However, the government has not taken any public decision on the retirement of this power plant.*

## c) GEDSI and Human Rights Mainstreaming

Bangladesh's NDC 3.0 integrates Gender, Equality, Disability, and Social Inclusion (GEDSI) in line with its Climate Change Gender Action Plan (CCGAP)<sup>13</sup>.

This commitment is reflected in sectoral actions, such as promoting women and youth entrepreneurship in clean energy, implementing universal design in public transport, and improving working conditions for women and migrants in the informal waste sector.

NDC 3.0 also adopts a rights-based framework, recognising climate change as a threat to human rights and ensuring the protection of, participation in, and equitable access to benefits for vulnerable populations in climate policy.

## 2.2 Structural Policy Gaps

Although taken a positive move in some policy aspects, the NDC 3.0 suffers from a fundamental structural flaw: it relies heavily on unpredictable international systems, particularly climate finance and carbon market mechanisms. This reliance is compounded by a clear lack of strong, mandatory domestic policy tools essential for encouraging and enforcing cost-effective mitigation measures.

### a) No Domestic Carbon Pricing

Bangladesh currently lacks a carbon pricing mechanism, without any carbon tax in place. It means there's no domestic price signal to encourage major emitters to reduce their carbon footprint. Despite consistent recommendations from

organisations like the IMF and World Bank for a carbon tax<sup>14</sup>, which could generate significant revenue (up to 1% of GDP) and fund climate initiatives, the GOB has not implemented such a policy<sup>15</sup>. This inaction implies that the burden of climate mitigation falls on public spending or external financing, effectively subsidising high-carbon activities.

### b) Lack of Fossil Fuels phase-out targets

NDC 3.0 suffers from structural flaws, notably the absence of a clear timeline for phasing out fossil fuels, which creates investor risk for long-term grid planning and development. Ambiguity in disaggregating renewable energy sources and a preference for complex, imported energy solutions indicate a low priority for domestic policy.

Policymakers perceive domestic development challenges (land acquisition, grid integration) as more daunting than the risks posed by expensive imported energy, thus de-prioritising a rapid, distributed domestic energy transition.

<sup>14</sup>. WB (2018). [Policy Note on the Options for a carbon tax in Bangladesh](#). The World Bank (WB): 1 August 2018

<sup>15</sup>. IMF (2022). [Bangladesh: Selected Issues](#). International Monetary Fund (IMF): 7 March 2022

**Table 1: Carbon Intensity Reduction Target of Different Countries**

Country	2022 Carbon Intensity (g/kWh)	2030 Target (g/kWh)	2035 Target (g/kWh)
South Africa	896	500	200
Indonesia	760	450	250
India	713	400	250
Philippines	691	500	350
Malaysia	660	420	250
Vietnam	650	350	150
Sri Lanka	608	200	30
Cambodia	550	400	280
China	540	515	380
Japan	485	250	120
Thailand	460	300	120
South Korea	411	165	90
Pakistan	400	200	80
Germany	380	50	---
United States	369	120	25
United Kingdom	207	50	10
European Union	207	100	8
Brazil	104	50	15
Nepal	15	5	3

*Source: Analysis based on the Nationally Determined Contributions, formally adopted targets and other submissions to the multilateral processes.*

### c) Lack of Emission Standards

Bangladesh's NDC 3.0 faces a major hurdle due to the lack of mandatory, stringent emission and energy-efficiency standards across key sectors and products. While discussions exist for appliance labelling and building energy audits, legally binding Minimum Energy Performance Standards (MEPS) for industrial equipment, vehicles, and household goods are largely absent.

This absence allows inefficient, high-emission products to persist, causing environmental harm. Globally, mandatory appliance standards, such as China's air conditioner MEPS, are projected to reduce CO<sub>2</sub>e emissions by 2,322 million tons by 2030, thereby lowering demand and mitigating GHG emissions.

These standards are crucial for Bangladesh, given its high CO<sub>2</sub>e emission of 634 kg CO<sub>2</sub>e per MWh in the power sector.

#### d) Overreliance on the Global Carbon Market

Bangladesh's NDC 3.0 relies heavily on the international carbon market, specifically the Paris Agreement, to achieve significant non-CO2 mitigation, with 70% of planned methane emission reductions linked to these

mechanisms. The NDC 3.0 is committed to preparing to participate as a seller of high-integrity carbon credits by establishing its DNA governance structure, Carbon Market Framework, and National Registry. However, this strategy carries a risk: over-reliance on unpredictable

international market mechanisms could undermine domestic regulation and lead to lost opportunities for critical and cost-effective methane reduction if the carbon market experiences instability, regulatory hurdles, or insufficient demand<sup>16</sup>.

**Table 2: Challenges of the NDC 3.0 Carbon Mechanisms**

Policy Area	NDC Position	Challenges
Domestic Carbon Pricing (Carbon Tax)	Zero formal carbon pricing mechanism implemented [0% Net Effective Carbon Rate (NECR)]	Absence of domestic price signal; subsidises high-carbon activity; ignores revenue potential (1% GDP).
Mitigation of Fugitive Emissions	70% reduction conditional on international trading under the Paris Agreement.	Direct substitution of domestic regulatory enforcement with volatile market mechanisms carries a high implementation risk.
Renewable Energy	25% target by 2035 (conditional); mentions controversial IEPMP, but ignores BCPP.	Conflicting targets; regulatory gaps deter foreign direct investment.
False Solutions	Inclusion of CCUS, Hydrogen and Ammonia in planning under conditional targets.	Risks locking in high-cost, high-carbon dependence and delaying an authentic clean transition.

#### e) Ignored Sectors

NDC 3.0 addresses all economic sectors but lacks specific, binding targets for key high-growth emission sources. For instance, Bangladesh's rapid urbanisation and infrastructure development are increasing demand for construction materials like cement and steel. While NDC acknowledges green building codes and non-fired brick technologies, it omits quantifiable targets to reduce embodied carbon in these materials or to mandate energy retrofits in existing buildings.

Similarly, in the transportation sector, mitigation efforts are primarily focused on urban passenger transport. However, NDC offers limited specific and ambitious plans for decarbonising freight transport, expanding rail electrification beyond initial segments, or greening inland waterways, all of which are crucial for goods movement in the delta region.

#### f) Lack of Financing Modalities

The financial framework poses substantial long-term risks due to a significant

lack of clarity on the financing modalities for the \$90.23 billion conditional requirement. Although the NDC characterises conditional finance as an issue of 'carbon justice,' there are inadequate definitions differentiating between grants, loans, and compensation<sup>17</sup>. A heavy reliance on international support escalates the risk of financial strain. Excessive dependence on loans, even those with low interest, can intensify financial pressure and worsen debt vulnerabilities for a climate-indebted nation such as Bangladesh<sup>18</sup>.

# Chapter 3



Photo: The Conscious Explorer

## Mitigation Targets

The mitigation component of NDC 3.0 lacks ambition and violates the Paris Agreement's progression principle (Article 4.3) by setting a lower GHG reduction target for 2035 than the 2030 target in the previous NDC, suggesting a regression in climate commitment.

This approach, heavily reliant on speculative mechanisms like 'Article 6' for critical efforts such as fugitive methane reduction, undermines the required robust, nationally driven action and jeopardises the 1.5°C goal.

### 3.1 Quantitative Stagnation

NDC 3.0 demonstrates progress in geographical reach and institutional frameworks. Despite an anticipated rise in BAU emissions driven by economic growth, the core quantitative emissions-reduction target has remained static or even declined slightly. Specifically, BAU emissions are projected to increase from 409.41 million tons of CO<sub>2</sub>e in 2030, according to NDC 2.0, to 418.40 million tons of CO<sub>2</sub>e in 2035, according to NDC 3.0.

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16. Alam, S. (2025). [Readiness is Key to Bangladesh's Carbon Market Prospect](#). Institute for Energy Economics and Financial Analysis (IEEFA): 23 January 2025
  17. Chowdhury, F.S., Chowdhury, S.S. & Morshed, K. (2024). [The Rooppur Nuclear Power Plant's Role in Bangladesh's Economic Development](#). Social Science and Humanities Journal: August 2024
  18. TBS (2025a). [Bangladesh among most climate-indebted countries; CDRI warns of 'debt trap'](#). The Business Standard (TBS): 20 September 2025

**Table 3: Comparative GHG Mitigation Targets**

Parameters	NDC 2021 (Updated)	NDC 3.0 (Submitted)	Remarks
Base Year	2012	2022	A period of 18 years
Target Year	2030	2035	A period of 13 years
Base Year Emission (Mt)	169.05	252.04	49% increase in 10 years
BAU Emissions (target year)	409.41	418.40	Increased projected growth
Unconditional Reduction (Mt)	27.56	26.75	Significantly decreased
Unconditional Reduction (%)	6.73%	6.39%	Lag of Reduction Ambition
Conditional Reduction (Mt)	61.91	58.23	Significantly decreased
Conditional Reduction (%)	15.12%	13.92%	Lag of Reduction Ambition
<b>Total Reduction (Mt)</b>	<b>89.47</b>	<b>84.97</b>	<b>Quantitative stagnation</b>

The 2035 reduction target in NDC 3.0 is 84.97 Mt CO<sub>2</sub>e, down from the earlier NDC's target of 89.47 Mt CO<sub>2</sub>e for 2030. It translates to a reduced projected percentage reduction below Business as Usual

(BAU), dropping from 21.85% to 20.31%. This quantitative step backwards suggests that, despite improvements in policy planning, such as the inclusion of Just Transition and GEDSI, the GOB appears cautious

about committing to a more ambitious economy-wide emissions-reduction pathway, given its interest in increasing fossil fuel consumption.

### 3.2 Paris Alignment

The marginal decrease in mitigation ambition fails to meet the core principle of 'progression' and 'highest possible ambition' required for successive NDCs under the Paris Agreement<sup>19</sup>. For a climate-vulnerable Least Developed Country (LDC) like Bangladesh, the principle of Common But Differentiated Responsibilities and Respective Capabilities (CBDR-RC) requires developed nations to provide substantial support to unlock higher conditional ambition<sup>20</sup>. However, maintaining a conservative domestic trajectory suggests that,



even with expected conditional support, the collective effort may still fall short of the emissions levels required to align Bangladesh's domestic pathway with the global

temperature goal. This structural caution indicates a lack of confidence in the domestic decarbonisation ambitions and international support mechanisms to close the ambition gap.

**Table 4: Comparative Sectoral Emissions (in million tons)**

Parameters	Base Year Emission (2022)	BAU Emission (2035)	Unconditional Reduction (Mt)	Unconditional Reduction (%)	Conditional Reduction (Mt)	Conditional Reduction (%)
<b>Energy</b>	<b>123.01</b>	<b>264</b>	<b>22.9</b>	<b>8.67%</b>	<b>46.94</b>	<b>17.78%</b>
Power	42.53	61.66	6.14	9.95%	11.48	18.61%
Transport	18.74	30	2.32	7.74%	4.21	14.03%
IPPU (Manufacturing)	23.83	108.82	10.04	9.22%	17.17	15.78%
Construction (Brick Kilns)	7.51	25.59	2.56	9.99%	4.3	16.79%
Households	14.1	18.87	1.15	6.11%	2.21	11.71%
Commercial	1.74	0.83	0.04	4.48%	0.08	9.94%
Agriculture	4.56	8.43	0.66	7.81%	1.55	18.44%
Fugitive	10	9.8	—	—	5.94	60.62%
<b>Non-energy</b>	<b>129.03</b>	<b>154.4</b>	<b>3.84</b>	<b>2.49%</b>	<b>11.29</b>	<b>9.8%</b>
IPPU (Manufacturing)	6.73	8.3	—	—	0.64	7.71%
Agriculture	42.94	38.69	1.19	3.08%	2.73	7.06%
Livestock	46.29	53.57	1.18	2.2%	3.63	6.78%
Forestry & Other Land Use	6.12	18.63	1.47	7.89%	2.51	13.47%
Solid Waste & Wastewater	26.95	35.21	—	—	1.78	—
<b>Total</b>	<b>252.04</b>	<b>418.4</b>	<b>26.74</b>	<b>6.39%</b>	<b>58.23</b>	<b>20.31%</b>

### 3.3 Conservative Sectoral Targets

The overall mitigation architecture of the NDC 3.0 is undermined by a cautious approach to sectoral ambition, particularly in high-impact areas. For instance, the plan for the IPPU and Waste sectors exhibits a critical lack of domestic commitment, setting zero unconditional reduction targets and instead making nearly all mitigation actions entirely conditional on external finance.

This strategy, alongside the conservative targets in Transport and the low relative contribution of

Forestry measures, suggests a reluctance to implement mandatory, domestically driven policies.

The reliance on uncertain international support to address fundamental issues such as fugitive methane emissions or waste management indicates a significant gap between institutional aspirations and practical, high-impact domestic regulatory enforcement.

#### a) Transport

Bangladesh's transport sector, a major economic driver and contributor to pollution, aims to reduce CO<sub>2</sub>e emissions by 6.53 Mt by 2035 through unconditional (7.7%) and conditional (14%) targets, including promoting public transport and electric vehicles (EVs). However, EV penetration targets (25% for buses and 30% for

<sup>19</sup>. C2ES (2024). *Discussion paper: Enhancing Action & International Cooperation for Early Warning Systems*. Center for Climate and Energy Solutions (C2ES): 16 October 2024

<sup>20</sup>. IP5NDC (2025). *What is Bangladesh's pathway to limit global warming to 1.5°C?*. 1.5°C National Pathway Explorer (IP5NDC): 29 January 2025

passenger vehicles in Dhaka by 2035) are conservative compared to the goal of achieving 50% EV access by 2050, as targeted by the Integrated Energy and Power Master Plan (IEPMP)<sup>21</sup>.

The country's current goods movement is inefficient, with the NDC not sufficiently prioritising more efficient rail and inland water freight. Significant domestic hurdles, including high import duties (89%), a lack of tax benefits, slow registration processes, and insufficient charging infrastructure, hinder the implementation of e-mobility.

The NDC 3.0 also lacks strategies for charging, battery recycling, and addressing fiscal challenges, making the transition dependent on uncertain external financing.

## b) Industries

The Industrial Processes and Product Use (IPPU) sector targets a conditional reduction of 0.64 Mt CO<sub>2</sub>e (7.71% below BAU) by 2035, with an unconditional target of zero reduction, and links mitigation to external finance and technology.

This strategy relies on CCUS in new ammonia fertiliser plants and the phasing down Hydrofluorocarbons (HFCs). However, the plan is



*Locally made Electric Three-wheeler (ETW) is a strong driver of rural mobility and economy. Photo: Rumi Enterprise*

flawed due to its low ambition and reliance on CCUS, which is widely regarded as a 'false solution' because of its high costs, technological challenges, and the risk of perpetuating fossil fuel dependence rather than promoting zero-carbon alternatives<sup>22</sup>.

## c) Forestry and Other Land Use

By 2035, the Forestry and Other Land Use (FLU) sub-sector aims to reduce emissions by 3.98 Mt CO<sub>2</sub>e (21.36% of BAU) through the restoration of 230,000 hectares of deforested areas and 100,000 hectares of coastal afforestation.

Despite this, the sub-sector's overall impact is limited due to its small contribution in the base year.

A major concern is that 70-80% of these vital efforts rely on international finance, making domestic climate resilience vulnerable to funding availability.

## d) Waste Management

The NDC target in the waste sector, the least ambitious among all industries, aims for a 1.78 Mt CO<sub>2</sub>e reduction (5.1% of BAU) by 2035, solely dependent on external funding.

Conditional measures include material recovery and wastewater treatment, while unconditional efforts involve four WTE power plants or landfill gas recovery.

The lack of an unconditional commitment, low ambition, insufficient domestic

21. Power Division (2023). *Integrated Energy and Power Master Plan (IEPMP)*. Power Division, Ministry of Power, Energy and Mineral Resources (MOPEMR): July 2023

22. Kulichenko, N. & Ereira, E. (2012). *Carbon Capture and Storage in Developing Countries*. The World Bank (WB): February 2012

political will for methane control, and the potential risks associated with WTE technologies, which are often referred to as a 'False Solution', are included.

**e) Agriculture**

In the base year of 2022, agriculture and livestock contributed 37.83% of total greenhouse gas (GHG) emissions. The NDC 3.0 policy aims to reduce these emissions by 8.73 Mt CO<sub>2</sub>e by 2035, with specific targets for agriculture (10.13% reduction) and livestock (8.98% reduction), primarily through reductions in methane emissions.

Key strategies of the NDC include Alternate Wetting and Drying (AWD) for Boro rice, improved feed for 1.5 million cows, and enhanced manure management.

The NDC 3.0 stated that non-energy agricultural emissions will be reduced from 42.94 million tons to 38.69 million tons in the BAU scenario. Interestingly, target set for unconditional emissions reduction target without identifying any action.

These targets are conservative, and a significant portion (90%) of high-impact actions depend on international support, which could jeopardise domestically achievable strategies.

**Image 4: A Solar Irrigation Pump in Kushtia, Bangladesh**



*Photo: Mongabay | May 2024*

*The conversion of 12.19 million diesel-run pumps to solar irrigation pumps (SIP) can reduce 5-8 million tons of emissions from the agriculture sector.*

**3.4 Conservative Energy Transition**

Decarbonising the energy sector is an obvious choice for Bangladesh to achieve its NDC 3.0 goals, as it's the leading contributor to current and projected emissions. However, the renewable energy targets within NDC 3.0 are conservative and inconsistent with other national policy documents, indicating a quantitative ambition gap.

To meet a projected peak hour demand of 26,277 MW by 2035 with a 25% renewable share, approximately 35,509 MW of renewable energy supply would be needed.

The current NDC 3.0 commitment represents less than one-third of this technical requirement, indicating a lack of ambition to align with a 1.5°C pathway.

**a) Conditional RE Targets**

Bangladesh's NDC 3.0 sets a conservative target of 25% renewable energy in power generation by 2035, aiming for an installed capacity of 11,200 MW. This target falls short of the country's own ambitions outlined in the IEPMP and MCPP, as well as the REP 2025's unconditional target of 20% by 2030<sup>23</sup>.

**b) Underexplored RE Potential**

The NDC 3.0 mitigation strategy is flawed because it underestimates the potential of distributed and non-conventional technologies. Instead of prioritising cost-effective, climate-resilient alternatives, it focuses on complex, centralised projects.

Key overlooked opportunities include:

### **i) Rooftop Solar**

Rooftop solar systems are among the most readily available and cost-effective solutions for increasing renewable energy capacity in Bangladesh, particularly in urban and industrial areas where land is scarce.

This decentralised solar installations, especially on industrial and commercial rooftops, can provide immediate, cost-competitive power generation, reducing the need for expensive grid upgrades and fostering local climate resilience, thereby unlocking a potential.

### **ii) Agrivoltaics**

Agrivoltaics (AV) offers a crucial solution to Bangladesh's dual challenges of land scarcity and energy demand by integrating solar power generation with agricultural production. This co-location improves land-use efficiency, allowing farmers to continue cultivating while generating clean electricity, thereby securing both food and energy supplies.

By developing AV on around 6.50 thousand hectares, Bangladesh could meet a substantial portion of its clean energy targets, potentially achieving 5% to



*Cooperative-based agrivoltaics on the vegetable farms may reduce emissions from the power sector, while increasing food security and ensuring economic development of the farmers.*

35% of the 2030 renewable energy goal.

Beyond land efficiency, the shading provided by solar panels can reduce water use in agriculture and protect crops from extreme heat, providing a stable income stream for local communities.

### **iii) Floatovoltaics**

Floatovoltaics (FPV), which involves deploying solar panels on water bodies, presents a significant and underexploited opportunity for Bangladesh, a country abundant in wetlands, reservoirs, and water bodies adjacent to infrastructure, such as vacant land near rail lines.

By utilising bodies of water, FPV mitigates competition for arable land and simultaneously reduces

water evaporation and improves solar panel efficiency through the cooling effect of the water. With the potential to contribute up to 13% of the country's total electricity generation.

### **iv) Distributed Energy**

The NDC 3.0's emphasis on centralised 'Solar Parks' is overlooking the vital role of distributed and cooperative-based renewable energy in Bangladesh.

For a climate-vulnerable nation, community-led, off-grid solutions offer superior energy access and local economic resilience, especially in remote regions.

<sup>23</sup>. Moazzem, K.G., Preoty, H.M., Jebunnesa & Shamim, M.H. (2025). *NDC 3.0 for the Power Sector: Is Bangladesh Setting 'Ambitious' Targets?*. Centre for Policy Dialogue (CPD): 24 August 2025

# Chapter 4



## Fossil Fuel Dilemma

NDC 3.0 highlights the urgent need for a 'just, orderly, and equitable' economy-wide shift away from fossil fuels. This transition is critical, given that the energy sector accounted for 48.8% of the country's total GHG emissions in 2022, primarily due to the burning of coal, fossil gas, and petroleum. The ongoing dependence on these fuels presents a multifaceted challenge, encompassing economic, social, environmental, and climate-related risks. Even then, the NDC does not have a clear position on phasing out fossil fuels.

### 4.1 Energy Transition Gaps

- a) **Coal:** The NDC commits a gradual reduction in fossil fuel reliance and calls for skills mapping in coal and gas plants, as well as the mining sector, to prepare workers for the energy transition. However, there is no cutoff date for coal.
- b) **Fossil Gas:** NDC 3.0 mandates a significant 70% reduction in non-CO<sub>2</sub> emissions from gas leakage (fugitive). This high-impact action is explicitly conditional upon international carbon trading mechanisms, which jeopardise firm actions.
- c) **Petroleum:** Mitigation actions include a conditional target to replace 90% of liquid fuel power plants with cleaner alternatives, such as battery storage. Of this, 80% depends on international support.

Despite these policy statements, the absence of a firm, legislated retirement schedule for existing coal and gas infrastructure risks creating a long-term 'lock-in' effect. It could delay investments in greener, domestic energy and undermine energy independence.

## 4.2 Economic and Geopolitical Impacts

The heavy dependence on imported coal, petroleum, and fossil gas (especially LNG) strains its foreign currency reserves and leaves the national budget and utility sector vulnerable to the volatility of international energy markets.

This financial pressure is evident in the per-unit cost of imported LNG, which is approximately 24 times higher than that of domestic gas production, creating an extreme and unsustainable financial burden for the country.

## 4.3 Public Health Crisis

The burning of fossil fuels is the primary cause of a severe air pollution crisis, which poses a chronic threat to public health. Air pollution reduces the average life expectancy in Bangladesh by nearly 7 years.

This pollution is responsible for approximately 74,000 deaths each year. Among these, ischemic heart disease (29,920) and stroke (23,075) cause significant deaths in the country.

Environmental analyses indicate that adhering to



*Imported LNG, along with the FSRU, created a economic and geopolitical threat for Bangladesh. Source: Energy & Power Magazine*

strict air quality guidelines could prevent over 81,282 premature deaths annually in Bangladesh.

## 4.4 Environment and Livelihoods

Coal-fired power generation causes localised ecological damage and disrupts livelihoods.

Untreated wastewater and thermal effluent discharge harm aquatic life, particularly the economically important Hilsa fish, directly threatening communities that depend on fisheries and agriculture.

Life Cycle Assessments (LCA) of imported LNG reveal that its overall environmental emissions profile is not significantly better than that of other fossil fuels.

Despite the NDC 3.0 targeting a 70% conditional reduction in fugitive methane emissions, it does not commit to phasing out fossil gas, potentially missing a crucial and cost-effective climate opportunity.



# Illusion of Decarbonisation

The NDC 3.0 includes mitigation measures that rely on capital-intensive, high-risk technologies. These technologies are often viewed by climate science and finance experts as 'False Solutions' because they could lead to Bangladesh's long-term dependence, increased financial debt, and a delay in achieving decarbonisation goals.

## 5.1 Carbon Capture and Storage

NDC 3.0 suggests using Carbon Capture, Utilisation, and Storage (CCUS) for new ammonia fertiliser plants in the IPPU sector. However, CCUS is expensive and energy-intensive, making it unfeasible for Bangladesh due to a lack of storage geology and regulatory expertise<sup>24</sup>. It also prolongs the use of high-carbon assets rather than promoting zero-carbon processes, potentially committing Bangladesh to costly, long-term maintenance and structural changes in the manufacturing sector<sup>25</sup>.

## 5.2 Waste-to-Energy

The unconditional plan for the waste sector in the NDC 3.0 includes establishing four landfill gas recovery systems or Waste-to-Energy (WTE) plants. While WTE is promoted for its

<sup>24</sup>. Kulichenko & Ereira (2012). *ibid*.

<sup>25</sup>. JHT (2025). [Video: the insanity of the Carbon Capture Deception](#). YouTube: 17 March 2025

dual benefits of electricity generation and landfill reduction, waste incineration carries significant environmental risks.

For instance, a 42.5 MW WTE plant in Dhaka has significant potential to cause negative ecological and social impacts. Given that municipal solid waste is up to 70% organic, relying on incineration could pose challenges, including long-term management of toxic ash and localised air quality issues.

These issues could negate the benefits of methane reduction and create new public health concerns.

### 5.3 Liquid Hydrogen

NDC 3.0's exploration of hydrogen as a solution to the energy transition is problematic, as the technology faces significant challenges regardless of production method.

Hydrogen's low volumetric energy density necessitates high energy input for compression and liquefaction, reducing efficiency. Its small, flammable molecular structure creates safety and containment issues during storage and transport.

In power generation, the combustion of hydrogen or its blending with fossil gas

can result in six times as much nitrogen oxide pollution as fossil fuels.

Green hydrogen, specifically, often relies on grid power for electrolysis, increasing its carbon intensity and diverting RE from more efficient direct uses. These issues classify hydrogen as a 'false solution'.

### 5.4 Ammonia Cofiring

NDC 3.0's consideration of co-firing ammonia in coal-based power plants as a low-carbon alternative faces significant challenges for achieving deep decarbonisation<sup>26</sup>.

This approach is problematic for several reasons: it offers only marginal emission reductions because it still requires continued coal use; ammonia production currently relies heavily on fossil fuels, leading to high upstream emissions<sup>27</sup>; and the reliance on imports creates supply chain vulnerabilities and high procurement costs.

Furthermore, analysts have

cautioned against the economic non-viability of such expensive technologies<sup>28</sup>.

### 5.5 Large Hydropower

The NDC 3.0 relies on large hydropower, including regional expansion and imports, to provide a low-carbon baseload. Large-scale hydropower projects often lead to the displacement of local communities, significant biodiversity loss, and regional economic disruption<sup>29</sup>.

These negative impacts disproportionately affect vulnerable groups like indigenous communities in river basins and floodplains. Additionally, South Asian hydropower projects are becoming increasingly vulnerable to the effects of climate change, including extreme rainfall, altered seasonal flows, and glacial melt.

These factors can trigger landslides and dam failures, jeopardising the long-term reliability and viability of these assets.

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<sup>26</sup>. HCU (2024). [Energy Scenario of Bangladesh 2022-2023](#). Hydrocarbon Unit (HCU), Power Division, Ministry of Power, Energy and Mineral Resources (MOPEMR): February 2024

<sup>27</sup>. Kennedy, S., Tao, J. & Lee, J.Y. (2023). [Japan's toxic narrative on ammonia](#). Transition Zero: 13 April 2023

<sup>28</sup>. JACSES (2023). [JICA-supported Energy Master Plan in Bangladesh, soaked in fossil fuels and not aligned with the Paris Agreement](#). Japan Center for Sustainable Environment and Society (JACSES): September 2023

<sup>29</sup>. Moazzem et al. (2025). *ibid*.

## 5.6 Nuclear Power

The Rooppur Nuclear Power Plant, with a capacity of 2.4 GW, aims to provide low-carbon power but poses significant long-term risks to LDCs, such as Bangladesh. These risks include high operational safety hazards, complex

radioactive waste disposal, substantial decommissioning costs, and limited technical and financial capacity<sup>30</sup>.

Additionally, the project's financing, which is heavily reliant on foreign debt, creates geopolitical and

economic vulnerabilities, potentially leading to long-term dependency, debt burdens, and external influence on energy policy, thereby hindering the development of domestic green energy alternatives<sup>31</sup>.

**Table 5: Challenges of the Proposed False Solutions**

Technology	NDC 3.0 Position	Challenges
<b>Ammonia</b>	Exploration of imports and piloting in coal plants.	Flawed decarbonization approach, low-intensity carbon cuts, risk of dependence on high-carbon grey and blue ammonia.
<b>CCUS</b>	Conditional implementation in new ammonia fertiliser plants.	High costs, technology immaturity in the LDC context, false economy, and perpetuation of fossil fuels.
<b>Hydrogen</b>	Exploration and import of Green Hydrogen for fuel switching and emerging mobility.	Low energy density requires high compression energy, as well as high safety and flammability risks (leakage, embrittlement), increased NOx pollution when burned, and increased grid reliance, which in turn increases carbon intensity.
<b>Large Hydropower</b>	Projected to reach 3,567 MW by 2040, primarily through regional expansion and imports.	Risk of community displacement, loss of biodiversity, and economic disruption for local and indigenous groups. High vulnerability to climate shocks (landslides, glacial melt).
<b>Nuclear Power</b>	Rooppur NPP is expected to contribute low-carbon baseload power.	Significant financial debt, high operational safety and waste risks, long-term geopolitical dependency, and macroeconomic debt burden.
<b>Waste-to-Energy</b>	Establishment of 4 WTE plants or landfill gas recovery systems (unconditional action).	High environmental and social risk. Potential air and ash pollution from incineration, despite high organic waste content.

<sup>30</sup>. Badal, U.A. (2024). [The transition to nuclear energy in Bangladesh: The interplay between climate-related urgency and geopolitical factors](#). Stosunki Międzynarodowe: September 2024

<sup>31</sup>. Chowdhury et al. (2024). *ibid*.

# Chapter 6



## Financial Challenges

Profound financial vulnerabilities largely undercut the aspirational elements of Bangladesh's NDC 3.0. The comprehensive set of conditional mitigation and adaptation actions, designed to meet the nation's highest possible climate commitment, relies on securing a massive injection of external funds.

This dependency, coupled with a lack of defined financing modalities (grants vs loans), introduces a critical risk of financial instability. Without clear terms of support and robust domestic policy instruments to generate internal climate finance, the country is exposed to a long-term climate debt trap, potentially jeopardising the very resilience the NDC aims to build.

### 6.1 Massive Investment Gap

The estimated investment required for implementing the NDC 3.0 mitigation measures from 2026 to 2035 amounts to 116.18 billion<sup>32</sup>. The majority of this cost is attributable to conditional measures.

Approximately 78% of the total financial need, or 90.23 billion, is contingent on external finance, technology transfer, and capacity building. The document projects a substantial annual funding gap of 8 billion (89%) to meet these conditional commitments, as the current average yearly international climate finance for mitigation is considerably insufficient. This gap highlights that achieving the enhanced conditional ambition is a very challenging task.

**Table 6: Financial Requirements and Conditionalities (USD billion)**

Sector	Unconditional Investment	Conditional Investment	Total Required Investment	Share of Conditional Investment
Energy	25.07	80.89	105.96	76.3%
IPPU	—	0.10	0.10	100%
AFOLU	0.88	6.00	6.88	87.2%
Waste	—	3.24	3.24	100%
<b>Total</b>	<b>25.95</b>	<b>90.23</b>	<b>116.18</b>	<b>77.7%</b>

## 6.2 Conditional Finance

NDC 3.0 frames climate finance as 'carbon justice', a concept that positions that developed nations owe resources to developing countries due to their historical emissions, which have increased climate vulnerability.

Specifically, it commits 100% of Loss and Damage (L&D) actions to conditional finance, directly calling on polluting countries to provide support in accordance with the Paris Agreement.

While this financial framework makes a strong statement about global equity, it carries substantial risk. If these funds are primarily loans rather than grants, Bangladesh could face a climate debt cycle, which would hinder its resilience and growth<sup>33</sup>.

**Table 7: Sustainable and Green Financing Schemes of the Bangladesh Bank**

Name of the Scheme	Starting Year	Fund Size (USD million)	Eligible Sectors
Refinance Scheme for Environment-friendly Initiatives	August 2009	81.7	Initiatives as per the Bangladesh Bank's Green Product List, including Renewable Energy
Shariah-based Refinancing Scheme for Green Initiatives	June 2014	10.2	Initiatives as per the Bangladesh Bank's Green Product List, including Renewable Energy
Green Transformation Fund (GTF)	January 2016 to December 2022	843.2	Manufacturers of green and export-oriented products
Technology Development and Upgradation Fund	January 2021	81.7	100% export-oriented industries in 35 industrial sectors
Export Facilitation Pre-finance Fund	January 2023	817.1	100% export-oriented industries in 35 industrial sectors
<b>Total</b>		<b>1,834</b>	

<sup>32</sup>. TBS (2025b). Bangladesh requires \$116.8b to cut 84.92m tonnes of CO2 emissions. The Business Standard (TBS): 24 September 2025

<sup>33</sup>. TBS (2025a). *ibid.*

# Chapter 7



## Recommendations

NDC 3.0 paradoxically combines significant qualitative progress, like integrating social equity (e.g., Just Transition, GEDSI) and robust monitoring (ETF), with conservative quantitative commitments. The 2035 CO<sub>2</sub>e reduction target (84.97 Mt) is lower than NDC 2.0's 2030 target (89.47 Mt), showing a lack of ambition. A key problem is its reliance on expensive and risky 'false solutions' and international carbon markets, exacerbated by the absence of domestic carbon pricing, resulting in a substantial conditional financial need of \$90.23 billion.

### 7.1 A Unified, High-ambition Renewable Energy Roadmap

The renewable energy target should be revised upward and consistently aligned with the higher ambitions stated in other national plans. This revised roadmap must include a legally binding schedule for the retirement or repurposing of fossil fuel assets and explicitly exclude financial support for high-carbon energy carriers, such as imported ammonia, to restore investor confidence and accelerate the shift toward domestic utility-scale solar and wind deployment.

### 7.2 Mandate Sectoral Emission and Efficiency Standards

GOB must immediately implement and enforce mandatory Minimum Energy Performance Standards

(MEPS) and strict emission limits across all sectors that consume and produce energy. It includes legally binding MEPS for industrial processes, appliances, and consumer goods. Additionally, robust, legally mandated emission limits are crucial for the transport and power sectors to mitigate public health crises and encourage the adoption of green alternatives.

### 7.3 Promote Electrification in the Transport Sector

To curb carbon emissions, mitigate climate change, and reduce air pollution, a rapid transition to sustainable transportation is vital.

Therefore, the government should substantially reduce import duties and taxes on electric vehicles (EVs), including Battery Electric Vehicles (BEVs) and Plug-in Hybrid Electric Vehicles (PHEVs), proposing a cut to 25% of the current rates for ICE vehicles.



### 7.4 Deny Debt for Conditional Climate Actions

To align with the CBDR-RC and climate justice principles, international climate finance for Bangladesh should prioritise grants, reparations, or compensation over loans. Relying on debt for NDC implementation risks undermining Bangladesh's macroeconomic stability, potentially creating a debt trap. Therefore, non-debt financial instruments are crucial for climate action.

### 7.5 Implement Domestic Carbon Pricing

To kickstart domestic mitigation efforts and reduce dependency on unpredictable international funding, the GOB should promptly implement a revenue-generating carbon pricing mechanism. It could take the form of a carbon tax. Initial piloting should focus on sectors with low resistance, such as high-polluting industries or urban transportation. This measure is vital for establishing a clear domestic mitigation signal, generating significant local revenue, and funding unconditional domestic mitigation actions.

### 7.6 Derisk International Dependence and Methane Mitigation

Reliance on international carbon trading needs significant restructuring. Domestically fundable mitigation measures should be supported by national

policies or mandatory regulations, rather than being dependent on volatile markets.

Revenue from international carbon mechanisms should be allocated exclusively and strategically to fund additional mitigation efforts or to support the co-benefits of adaptation and a just transition.

This strategy will protect vital mitigation efforts from potential market failures.

## **7.7 Strengthen Embodied Carbon and Freight Regulation**

The Bangladesh National Building Code (BNBC) should implement binding targets and enhanced regulations to specifically reduce the embodied carbon in high-growth construction materials, such as cement and steel, and in infrastructure projects.

Simultaneously, the transport sector requires a more robust mitigation strategy, including aggressive, quantifiable targets for the electrification and efficiency improvements in domestic freight, rail, and inland maritime transport.



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