

*Assessing the Alignment of  
National Determined Contributions (NDC)  
and National Adaptation Plan (NAP)  
with the Outcomes of the First Global Stocktake (GST1)  
under the Paris Agreement:  
A Case Study of Timor-Leste*

Discussion Paper  
January 2025



iGST Southeast Asia Hub Partners:

**Authors:**

National Eco-Security System for Timor-Leste (NESS-TL): Deonísio Barreto Viana Rangel,  
João Ratão Magno, Mario Marques Cabral  
Institute for Global Environmental Strategies (IGES): Akibi Tsukui, Kei Kurushima, Chisa Umemiya

Corresponding author: Akibi Tsukui ([tsukui@iges.or.jp](mailto:tsukui@iges.or.jp))

**Author contributions:**

NESS-TL: Writing - Original Draft (Overview of Timor-Leste's Climate Policy, Results of the Assessment),  
Formal analysis, Investigation, Writing - Review & Editing (Key findings, Policy Recommendations, Summary)  
IGES: Conceptualization, Methodology, Assistance with Analysis, Writing - Original Draft (Introduction,  
Methodology, Key Findings, Policy Recommendations, Summary), Writing - Review & Editing, Resources,  
Supervision

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The Institute for Global Environmental Strategies (IGES)  
2108-11 Kamiyamaguchi, Hayama, Kanagawa, Japan  
[www.iges.or.jp/en](http://www.iges.or.jp/en)

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This assessment, titled “NDC/NAP Assessment Research: Timor-Leste’s NDC/NAP Assessment in the Follow-up of the GST1”, was undertaken by a joint research team comprising the National Eco-Security System for Timor-Leste (NESS-TL) and IGES. The preliminary findings were presented at the workshop “Translating the Outcomes of the GST into Regional and National Contexts,” held in Manila, the Philippines, on 16–17 October 2024. The research team extends its gratitude to the workshop participants for their valuable insights and constructive feedback, which have significantly enhanced the assessment.

This assessment also provided a unique opportunity to engage early-career researchers in Timor-Leste. Inclusivity, including youth engagement, was a key aspect of the first GST process. We believe this project contributes to ongoing efforts to collaborate with young professionals, ensuring diverse perspectives are considered and represented in the post-GST period.

# Table of Contents

<b>1. Summary</b>	<b>2</b>
<b>2. Background and Objectives</b>	<b>3</b>
<b>3. Overview of the Timor-Leste's Climate Policy</b>	<b>4</b>
3.1 Nationally Determined Contribution (NDC)	4
3.2 National Adaptation Plan (NAP)	4
<b>4. Methodology</b>	<b>6</b>
<b>5. Results of the assessment</b>	<b>7</b>
5.1 Mitigation Overview	7
5.2 Energy	8
5.3 Transport	12
5.4 Forests	12
5.5 Adaptation	13
<b>6. Key findings</b>	<b>17</b>
6.1 Mitigation	17
6.2 Adaptation	18
<b>7. Policy Recommendations</b>	<b>19</b>
<b>8. Way forward</b>	<b>20</b>
<b>References</b>	<b>21</b>

# 1

## Summary

This assessment explored the extent to which Timor-Leste's nationally determined contribution (NDC) and national adaptation plan (NAP) align with the outcomes of the first GST, using a systematic review based on a structured checklist. The alignment between the NDC and GST outcomes on mitigation was limited, as Timor-Leste's NDC focuses on four commitment areas rather than emission reduction targets, which do not align well with the sector-based targets, signals and approaches agreed upon. In contrast, the NAP aligns well with the key agreements and recommendations of the GST outcomes on adaptation, as most of the outcomes were highlighted in the NAP, which shows the effectiveness of the plans and approaches.

Being informed by the outcomes of the GST, to enhance NDC and NAP, the NDC could address gaps in coverage and commitment areas by introducing and finalising sectoral policies and setting specific targets for emissions reductions across sectors, supporting effective and transparent implementation. Additionally, for adaptation, it is important to be aware of and include terms that are used in the GST outcomes to promote cooperation between countries, while at the same time working to align with the NAP process and the Global Goal on Adaptation (GGA). Furthermore, it is important to integrate climate resilience and action into Timor-Leste's major economic sectors, strengthen monitoring and evaluation processes, and foster youth and community engagement in climate policy and action.

# 2

## *Background and Objectives*

The global stocktake (GST) is a key review mechanism under the Paris Agreement, conducted every five years to assess collective progress towards its goals. The outcome of the GST shall inform Parties in updating and enhancing, in a nationally determined manner, their actions and support, as well as in enhancing international cooperation for climate action (Paris Agreement, 2015).

The first GST began in 2021 at the 26th Conference of Parties (COP26) and concluded in 2023 at COP28 with the adoption of a comprehensive decision. This decision provides an overview of progress, challenges and opportunities across key areas such as mitigation, adaptation, finance, and loss and damage. Notably, it includes significant agreements in the energy sector, such as tripling renewable energy capacity globally and doubling the global average annual rate of energy efficiency improvements by 2030, alongside transitioning away from fossil fuels (UNFCCC, 2024).

While countries are required to update their next round of nationally determined contributions (NDCs) with the GST outcomes in mind, there is no formal guidance on how to translate the global assessment results into national contexts. It is left to each country to determine how to reflect and integrate these findings into their updated NDCs. This paper examines the extent to which Timor-Leste's current NDC and National Adaptation Plan (NAP) align with the GST outcomes, using Timor-Leste as a case study. The analysis aims to identify areas for improvement in Timor-Leste's next round of NDCs and NAP, while also serving as an example of how the GST outcomes can be localised.

The paper is organised as follows: Chapter 3 provides an overview of Timor-Leste's climate policy, with a focus on the NDC and NAP. Chapter 4 outlines the methodology used in the assessment. Chapter 5 presents the results of the assessment, with key findings discussed in Chapter 6. Chapter 7 offers policy recommendations based on the assessment outcomes, and Chapter 8 concludes with the way forward.

# 3

## *Overview of the Timor-Leste's Climate Policy*

### **3.1 *Nationally Determined Contribution (NDC)***

The Democratic Republic of Timor-Leste communicated its Intended Nationally Determined Contribution (INDC)/first NDC to the UNFCCC on 16 August 2017 (Government of Timor-Leste, 2017). On 8 November 2022, Timor-Leste submitted its updated NDC for the 2022–2030 period with financial and technical support from the European Union (EU) to finalise the revision (Government of Timor-Leste, 2022).

The updated NDC does not include a quantified emission reduction target but instead focuses on directions and policies across four commitment areas: 1) climate risk governance, 2) nature-positive growth and transition, 3) low-carbon development, and 4) adaptation and resilience building. The NDC is economy-wide, with a target year of 2030, covering the energy, agriculture, land use, land-use change and forestry (LULUCF), and waste sectors. While the reference year is 2010, a new reference level will be established once the greenhouse gas (GHG) inventory is formally developed.

The updated NDC also incorporates the NAP and demonstrates the country's further commitment to its operationalisation and implementation. This reflects the country's high priorities on climate change adaptation and efforts to minimise loss and damage.

### **3.2 *National Adaptation Plan (NAP)***

Timor-Leste is committed to the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement and follows the key decisions made at the Conference of the Parties. Timor-Leste submitted its first NAP to the UNFCCC on 31 March, 2021. There are six key components of the NAP identified in Table 1 (Government of Timor-Leste, 2021).

**Table 1:** Key aspects of the Timor-Leste NAP

Key components	Description
Climate Vulnerability and Risk Assessments	Includes detailed assessments of the country's vulnerability to climate change and the associated risks. This helps identify priority areas for adaptation.
Adaptation Strategies and Actions	Outlines specific strategies and actions to enhance resilience in various sectors such as agriculture, water resources, health, and infrastructure.
Community-Based Adaptation	Emphasises the involvement of local communities in the adaptation process to ensure that adaptation measures are culturally appropriate and practical at the grassroots level.
Capacity Building and Institutional Strengthening	Includes initiatives to build the capacity of local institutions and stakeholders to effectively implement and monitor adaptation measures.
Funding and Resource Mobilisation	Includes strategies for securing funding and resources for adaptation projects.
Monitoring and Evaluation	Includes a framework for monitoring and evaluating the effectiveness of adaptation measures, allowing for adjustments and improvements over time.

With the above key components in Timor-Leste’s NAP, the plan also emphasises the importance of integrating climate change adaptation into sectoral policies, programmes and plans with specific focus areas, including the following seven sectors. These efforts are part of a broader strategy to ensure that Timor-Leste can effectively respond to the challenges posed by climate change while contributing to sustainable development and peacebuilding.





# 4

## Methodology

To assess the alignment between Timor-Leste's NDC and NAP with the outcomes of the first Global Stocktake, a systematic review using a structured checklist was conducted. To do this, an assessment checklist for scoring was developed in an Excel file (IGES, forthcoming). The checklist was developed based on key agreements and recommendations drawn from Decision 1/CMA.5 with additional context provided by reports from international organisations such as the International Energy Agency. Good practices were sourced from summary reports and synthesis reports of technical dialogues. The checklist was designed to include target-setting and thematic questions on mitigation and adaptation as well as sector-specific questions on mitigation. Table 2 outlines the number of questions for each thematic area and sector.

**Table 2: Number of Questions for each thematic area and sector**

Thematic Area	Sector	Number of questions
<b>Mitigation</b>	Overview	3
	Energy	22
	Transport	2
	Forests	2
<b>Adaptation</b>		10

A three-point scoring system was used to capture the degree of alignment for each policy document with the checklist's criteria. Each item was scored as described in Table 3.

**Table 3: Three-Point Scoring System**

<b>Yes</b>	This score was assigned when the question item was met, and specific examples of relevant strategies, initiatives or plans were clearly identified in the document.
<b>Partially Yes</b>	<p>This score was used:</p> <ul style="list-style-type: none"> <li>When the question item was mentioned in a general sense such as through direction or goal but without detailed examples of strategies, initiatives or plans.</li> <li>When information is partially provided in the policy document: For example, for adaptation, "Do the adaptation documents include information on enhancing adaptive capacity, strengthening resilience, and reducing vulnerability?" If the policy document provides one or two of the three elements but not all of the three, the score is "Partially yes".</li> </ul>
<b>No</b>	This score was applied when the question item was not addressed in the document.

It is important to note that the quantitative targets set in the GST outcomes are global in nature. The checklist does not prejudge or define the country's direction or approach to these goals. Rather, it serves as a tool to review the goals agreed upon in the GST and assess what relevant goals, policies and activities are being prepared or are already in place in Timor-Leste.

# 5

## Results of the assessment

### 5.1 Mitigation Overview

#### 5.1.1 Greenhouse Gases

Item	NDC
Does the NDC cover all greenhouse gases (*carbon dioxide (CO <sub>2</sub> ), methane (CH <sub>4</sub> ), nitrous oxide (N <sub>2</sub> O), and fluorinated gases - hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF <sub>6</sub> ), and nitrogen trifluoride (NF <sub>3</sub> )?	No

Timor-Leste's NDC covers Carbon Dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), and Nitrous Oxide (N<sub>2</sub>O).

#### 5.1.2 Sectors

Item	NDC
Does the NDC cover all sectors (*energy, Industrial Processes and Product Use (IPPU), agriculture, Land Use, Land-Use Change and Forestry (LULUCF), and waste)?	No

Timor-Leste's NDC covers the energy, agriculture, Land Use, Land-Use Change and Forestry, and waste sectors.

#### 5.1.3 Target

Item	NDC
Does the NDC set an absolute emission reduction target?	No

Timor-Leste's NDC for 2022-2030 does not specify an absolute emission reduction target. Instead, the NDC sets four commitment areas: climate risk governance, nature-positive growth and transition, low carbon development, and climate change adaptation and resilience building.

## 5.2 Energy

### 5.2.1 Renewable energy

#### 5.2.1.1. Tripling renewable energy

Item	NDC
Does the NDC include any information aligned with and/or contributing to tripling global renewable energy capacity by 2030?	No

Timor-Leste's NDC outlines efforts to enhance its renewable energy capacity; however, it does not explicitly align with the global target of tripling capacity by 2030. Although specific quantitative targets are lacking, Timor-Leste recognises the importance of global action in combating climate change and supports the leadership shown by Small Island Developing States (SIDS) in renewable energy.

#### 5.2.1.2. General renewable energy

Item	NDC
Does the NDC include any information on renewables (e.g. domestic policies, targets, measures and activities)?	Yes

Timor-Leste's NDC includes both conditional and unconditional commitments related to renewable energy. For its unconditional commitment, Timor-Leste has prepared a renewable energy decree-law. Conditional commitments for scaling up renewable energy technologies include investment in renewable energy solutions, biofuels and biomass potential, and biogas and sustainable livestock management.

#### 5.2.1.3. Targets

Item	NDC
Does the NDC define targets of renewables?	No

### 5.2.2 Energy efficiency

#### 5.2.2.1. Doubling energy efficiency

Item	NDC
Does the NDC include any information aligned with and/or contributing to doubling the global average annual rate of energy efficiency improvements by 2030?	Partially Yes

Timor-Leste's NDC does not explicitly align with the global target of doubling the average annual rate of energy efficiency improvements by 2030. However, it includes a conditional commitment to enable cost-effective energy efficiency improvements. These include the enforcement of product efficiency standards, energy-efficient building designs, new fuel standards, and stricter regulation of industrial processes.

**5.2.2.2. General Energy Efficiency**

Item	NDC
Does the NDC include any information on general energy efficiency policies?	No

The Timor-Leste Updated NDC 2022-2030 does not explicitly mention general energy efficiency policies. However, it emphasises renewable energy as a key mitigation strategy, aiming for a global transformation toward clean energy.

**5.2.2.3. Switching to efficient fuels**

Item	NDC
Does the NDC include any information on switching to more efficient fuels?	Partially Yes

The NDC mentions switching to more efficient fuels, but no details are provided. Although Timor-Leste's NDC does not explicitly mention 'fuel-switching,' it briefly touches on the use of efficient cookstoves as an alternative to fossil fuels.

**5.2.2.4. Technical Efficiency**

Item	NDC
Does the NDC include any information on improving technical efficiency?	Partially Yes

The NDC mentions improving technical efficiency, but no details are provided. While the NDC does not explicitly mention technical efficiency, it recognises several areas where technical efficiency needs to be improved. These include energy-efficient building design, fuel-efficient vehicles and product efficiency standards.

**5.2.2.5. Efficient Energy and Material Use**

Item	NDC
Does the NDC include any information on using energy and materials more efficiently to avoid demand?	No

The NDC does not specifically address using energy and materials more efficiently to avoid demand. However, it is possible that some aspects of this are indirectly addressed through other activities mentioned in the NDC.

## 5.2.3 Net Zero Emission Energy Systems

**5.2.3.1. Efforts towards Net Zero Emission Energy Systems**

Item	NDC
Does the NDC include any information on accelerating efforts towards net zero emission energy systems?	No

While the NDC includes information on renewable energy, it does not mention a net zero emission energy system.

### 5.2.3.2. Use of Zero and Low Carbon Fuels

Item	NDC
Does the NDC include any information on the use of zero and low carbon fuels?	No

## 5.2.4 Non-CO<sub>2</sub> emissions

### 5.2.4.1. Methane (CH<sub>4</sub>)

Item	NDC
Does the NDC include any information on reducing methane (CH <sub>4</sub> ) emissions?	Partially Yes

Although the NDC covers CH<sub>4</sub>, it does not provide detailed information.

### 5.2.4.2. Timelines for CH<sub>4</sub>

Item	NDC
Does the NDC set specific timelines for reducing methane emissions?	No

Although the NDC covers CH<sub>4</sub>, it does not provide detailed information.

### 5.2.4.3. Nitrous Oxide (N<sub>2</sub>O)

Item	NDC
Does the NDC include any information on reducing nitrous oxide (N <sub>2</sub> O) emissions?	Partially Yes

### 5.2.4.4. Timelines for N<sub>2</sub>O

Item	NDC
Does the NDC set specific timelines for reducing N <sub>2</sub> O emissions?	No

### 5.2.4.5. Hydrofluorocarbons (HFCs)

Item	NDC
Does the NDC include any information on reducing hydrofluorocarbons (HFCs) emissions?	Partially Yes

The NDC includes an unconditional commitment to ratify the Kigali Amendment to the Montreal Protocol. Timor-Leste also aims to develop an HFC Phase-out Management Plan that expands the scope of its NDC to include activities required for an economy-wide phase-out of HFCs, which will require technical and financial support.

**5.2.4.6. Timelines for HFCs**

Item	NDC
Does the NDC set specific timelines for reducing HFCs emissions?	No

**5.2.4.7. PFCs**

Item	NDC
Does the NDC include any information on reducing perfluorocarbon (PFCs) emissions?	No

**5.2.4.8. Timelines for PFCs**

Item	NDC
Does the NDC set specific timelines for reducing PFCs emissions?	No

**5.2.4.9. SF<sub>6</sub>**

Item	NDC
Does the NDC include any information on reducing sulphur hexafluoride (SF <sub>6</sub> ) emissions?	No

**5.2.4.10. Timelines for SF<sub>6</sub>**

Item	NDC
Does the NDC set specific timelines for reducing SF <sub>6</sub> emissions?	No

**5.2.4.11. Nitrogen Trifluoride (NF<sub>3</sub>)**

Item	NDC
Does the NDC include any information on reducing nitrogen trifluoride (NF <sub>3</sub> ) emissions?	No

**5.2.4.12. Timelines for NF<sub>3</sub>**

Item	NDC
Does the NDC set specific timelines for reducing trifluoride (NF <sub>3</sub> ) emissions?	No

## 5.3 Transport

### 5.3.1 Transport Sector

Item	NDC
Does the national climate policy include any information on reducing emissions from the transport sector?	Partially Yes

The NDC includes a conditional target of developing a transport master plan. The plan aims to build sector resilience and reduce emissions derived from the transport sector.

### 5.3.2 Targets

Item	NDC
Does the national climate policy define qualitative targets for the transport sector?	No

## 5.4 Forests

### 5.4.1 Deforestation and forest degradation

Item	NDC
Does the NDC include any information on halting and reversing deforestation and forest degradation?	Yes

The NDC provides information on halting and reversing deforestation and forest degradation, including details on national policies, projects and conditional commitments. Key points include:

- 1) National Forest Policy (2017 Revision):** Establishes the foundation for sustainable management of forest resources and watersheds.
- 2) GCF Project:** The Community-based Landscape Management for Enhanced Climate Resilience and Reduction of Deforestation in Critical Wetlands project aims to reduce deforestation by promoting sustainable natural resource management, enhancing food and water security, reducing disaster risks, and increasing carbon sequestration.
- 3) Conditional Commitments:**
  - a) **Sustainable Forest Management:** Focuses on reducing deforestation and forest degradation through community-based management and capacity building.
  - b) **Reforestation and Afforestation:** Aims to restore degraded lands and increase forest cover for better carbon sequestration.
- 4) Carbon Sink Enhancement:** Targets planting, growing and monitoring up to one million trees annually, along with establishing a national tracking system. Efforts include protecting coastal and marine ecosystems, particularly mangroves, contingent on climate financing and technical assistance.

### 5.4.2 Timelines

Item	NDC
Does the NDC set specific timelines for these goals?	No

## 5.5 Adaptation

### 5.5.1 Enhancing adaptive capacity, resilience and reducing vulnerability

Item	NAP
Does the NAP or other adaptation document include information on enhancing adaptive capacity, strengthening resilience and reducing vulnerability?	Yes

The National Adaptation Plan (NAP) of Timor-Leste includes comprehensive information on enhancing adaptive capacity, strengthening resilience and reducing vulnerability. Specifically, the objective of the NAP is identified as “to reduce vulnerability to the impacts of climate change, by building adaptive capacity and resilience”, where specific actions are identified to achieve the objective.

### 5.5.2 The Critical Role of Monitoring and Evaluation in Adaptation

Item	NAP
Does the NAP or other adaptation document include information on monitoring and evaluation?	Yes

The NAP includes comprehensive information on the Monitoring, Evaluation, Reporting and Learning (MERL) framework. This framework is designed to track the progress and effectiveness of adaptation actions, ensuring that the objectives of the NAP are met. Key elements include:

- 1) Monitoring:** Regular collection and analysis of data to track the implementation of adaptation actions. This includes setting up indicators to measure progress and identifying any deviations from planned activities.
- 2) Evaluation:** Periodic assessment of the outcomes and impacts of adaptation actions. This helps in understanding the effectiveness of the strategies and making necessary adjustments.
- 3) Reporting:** Systematic documentation and communication of progress, challenges and lessons learned. This ensures transparency and accountability in the implementation process.
- 4) Learning:** Continuous learning from the implementation process to improve future adaptation planning and actions. This involves sharing best practices and lessons learned with stakeholders.



### 5.5.3 User-driven Climate Services to Boost Adaptation

Item	NAP
Does the NAP or other adaptation document include information on user-driven climate services systems, including early warning systems?	Yes

The NAP outlines several measures for user-driven climate service systems. Key measures include:

- 1) Development of Climate Information Systems:** Establishing systems to collect, analyse and disseminate climate data to support decision-making at all levels.
- 2) Community-Based Early Warning Systems:** Implementing early warning systems that are tailored to the needs of local communities, ensuring timely and accurate information dissemination.
- 3) Capacity Building and Training:** Providing training programmes for local communities and stakeholders to enhance their understanding and use of climate information.
- 4) Integration with Local Knowledge:** Combining scientific climate data with traditional knowledge to create more effective and culturally relevant adaptation strategies.
- 5) Public Awareness Campaigns:** Conducting campaigns to raise awareness about climate change impacts and the importance of using climate services for adaptation.

### 5.5.4 Urgent, Country-driven Adaptation Based on National Circumstances

Item	NAP
Does the NAP or other adaptation document include information on urgent, incremental, transformational and country-driven adaptation?	Partially Yes

The NAP includes information on three of the four elements but does not include information on country-driven adaptation. The three elements are as follows:

- 1) Urgent Adaptation Actions:** The NAP outlines near-term programmes and actions that need immediate attention to address climate risks.
- 2) Incremental Adaptation Actions:** The NAP also includes plans for incremental adaptation, focusing on gradual improvements and adjustments to existing systems and practices.
- 3) Transformational Adaptation Actions:** Some sections in the NAP discuss transformational adaptation, which involves significant changes to systems and structures to enhance resilience.

### 5.5.5 Transboundary Risks

Item	NAP
Does the NAP or other adaptation document include information on transboundary risks?	Yes

The NAP addresses transboundary risks and includes measures related to knowledge-sharing and international cooperation. These measures are part of Timor-Leste's broader strategy to enhance resilience and adapt to climate change, recognising the importance of regional collaboration and shared knowledge. The key points include:

- 1) **Knowledge-sharing and international cooperation:** The NAP mentions measures on knowledge-sharing and international cooperation to address impacts from transboundary risks.
- 2) **Specific actions on knowledge-sharing and international cooperation:** The NAP also describes specific actions on knowledge-sharing and international cooperation to address impacts from transboundary risks.

### 5.5.6 Long-term Planning and Swift Adaptation Implementation by 2025

#### 5.5.6.1. Long-term Planning

Item	NAP
Does the NAP or other adaptation document include information on long-term planning?	Yes

The NAP includes detailed information on long-term planning. The key points include:

- 1) **Plans for Long-Term Adaptation Planning:** The NAP outlines a comprehensive framework for long-term adaptation planning, emphasising the integration of climate resilience into national development strategies.
- 2) **Specific Action Plans for Long-Term Adaptation Planning:** The NAP describes specific action plans for long-term adaptation, including sector-specific strategies and priority programmes aimed at enhancing resilience across various sectors.
- 3) **Financing for Long-Term Adaptation Planning:** The NAP also addresses financing mechanisms for long-term adaptation, highlighting the need for sustainable funding sources and international support to implement these plans effectively.

#### 5.5.6.2. Timelines

Item	NAP
Does the NAP or other adaptation document set specific timelines for implementing adaptation actions?	Yes

The NAP includes specific timelines for implementing adaptation actions. The implementation plan covers near-term (2020-2022), medium-term (2023-2025) and long-term (2026-2030) actions.

### 5.5.7 Adaptation Cycle

Item	NAP
Does the NAP or other adaptation document include information on an adaptation cycle?	No

While the NAP does not explicitly mention the specific term "adaptation cycle", it outlines various aspects related to adaptation. The key points include:

- 1) **Adaptation Measures:** The NAP includes adaptation measures, although they are not explicitly organised into a formal "cycle".
- 2) **Targets:** It sets targets for adaptation, but not necessarily tied to specific steps in a cycle.
- 3) **Actions:** The NAP describes actions related to adaptation, considering the country's context.
- 4) **Plans:** The NAP outlines plans for adaptation, emphasising alignment with existing frameworks.

### 5.5.8 Integrated, Multi-sectoral Solutions for Sustainable Adaptation

Item	NAP
Does the NAP or other adaptation document include information on nature conservation, including land use, sustainable agriculture, resilient food systems, nature-based solutions, ecosystem-based approaches, mountain ecosystems, coastal ecosystems, etc.?	Yes

The NAP process recognises Ecosystem-based Adaptation (EbA) as a foundational element for climate adaptation, disaster risk reduction and long-term well-being. The NAP embraces EbA, which falls under the broader concept of Nature-based Solutions (NbS). The NAP also outlines practical actions related to EbA, but it is also essential to explore specific documents for detailed information on nature conservation, including mountain and coastal ecosystems. In summary, while the NAP emphasises EbA, exploring the NBSAP and other relevant documents will provide deeper insights into nature conservation efforts in Timor-Leste.

### 5.5.9 Targets

Item	NAP
Does the NAP or other adaptation document include actions related to the following targets?	Yes

The NAP addresses climate risks and builds climate resilience focusing on the specific target:

- 1) Water Resilience and Reducing Water-Induced Disasters:** The NAP includes actions related to water management, enhancing water availability, and addressing water-induced disasters.
- 2) Climate-Resilient Food and Agriculture System:** The NAP emphasises sustainable agriculture, resilient crop varieties and adaptive practices for food security.
- 3) Climate-Resilient Health System:** The NAP outlines strategies to strengthen health systems, improve disease surveillance, and enhance community resilience to climate-related health risks.
- 4) Ecosystem-Based Adaptation and Nature-Based Solutions:** The NAP recognises the importance of ecosystems in adaptation, including afforestation, reforestation and sustainable land management.
- 5) Resilience of Infrastructure and Human Settlements:** Actions include resilient infrastructure planning, disaster risk reduction and urban development strategies.
- 6) Poverty Eradication and Adaptive Social Protection:** The NAP integrates poverty reduction efforts with climate adaptation, ensuring vulnerable populations are supported.
- 7) Protection of Cultural Heritage from Climate-Related Risks:** While not explicitly mentioned, preserving cultural heritage is essential for resilience and adaptation.

# 6

## Key findings

### 6.1 Mitigation

The checklist results for mitigation are illustrated in Figure 1. Overall, alignment with the NDC and sector-based targets, signals and approaches was limited. For “Mitigation\_Overview”, all responses were marked as “No”. This result reflects that while the GST outcomes encourage countries to develop NDCs with economy-wide emission reduction targets, covering all greenhouse gases, sectors and categories, Timor-Leste’s NDC only includes Carbon Dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), and Nitrous Oxide (N<sub>2</sub>O). It focuses on four sectors - energy, agriculture, Land Use, Land-Use Change, and Forestry (LULUCF), and waste sectors. Furthermore, Timor-Leste’s NDC does not set absolute emission reduction targets but emphasises policy directions and commitments across specific areas.

On the “Energy” checklist, one question was marked as “Yes.” This referred to whether the NDC includes information on renewables, such as domestic policies, targets, measures and activities. Timor-Leste’s NDC provides comprehensive information on renewable energy, outlining conditional commitments such as scaling up renewable energy technologies (including biofuels, biomass and biogas potential) and sustainable livestock management. It also includes unconditional commitments, such as preparing a renewable energy decree law. Six questions were marked as “Partially Yes,” including three related to energy efficiency. While the NDC does not specify energy efficiency targets or regulations,

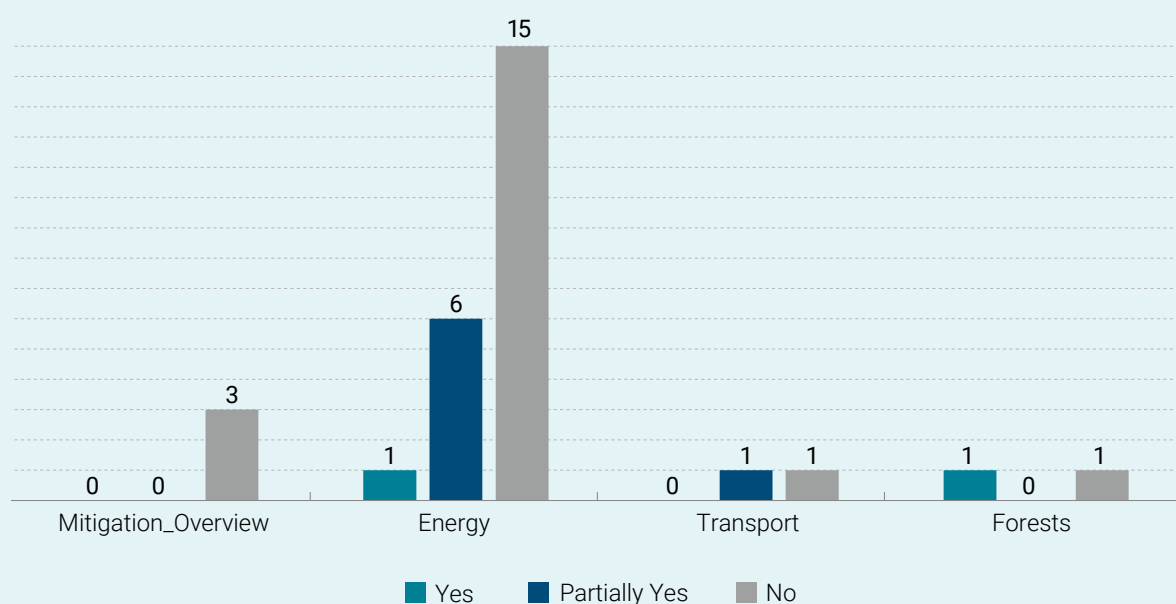


Figure 1: Summary of Mitigation Checklist Results by Sector

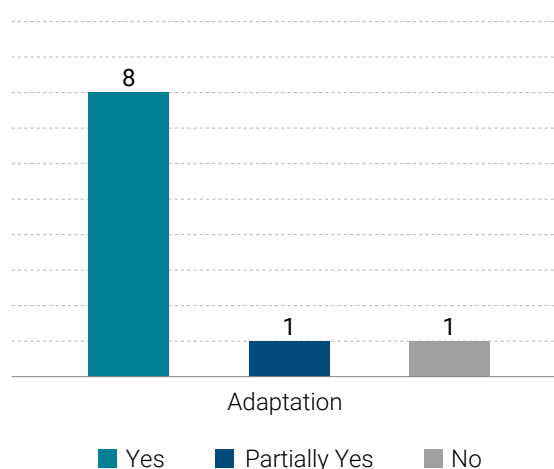
it outlines a conditional commitment to enabling cost-effective energy efficiency improvements and activities such as the use of efficient cook stoves, energy-efficient building design, fuel-efficient vehicles and product efficiency standards. The remaining three “Partially Yes” responses pertain to non-CO<sub>2</sub> emissions reductions. Although the NDC addresses CH<sub>4</sub> and N<sub>2</sub>O, it lacks detailed measures and approaches for achieving these reductions.

For the “Transport” checklist, one question was marked as “Partially Yes” and another as “No.” The “Partially Yes” response related to whether the NDC includes information on reducing emissions from the transport sector. The NDC sets a conditional target of developing a transport master plan aimed at building sectoral resilience and reducing transport-related emissions; however, the details are limited. The “No” response was for the question regarding qualitative targets for the transport sector, as the NDC does not specify such targets.

For the “Forests” checklist, one question was marked as “Yes,” addressing whether the NDC includes information on halting and reversing deforestation and forest degradation. The NDC provides detailed information on domestic policies, projects and commitments related to the forest sector. However, the absence of timelines for these activities resulted in a “No” response to the question on defining specific timelines for forest-related actions.

## 6.2 Adaptation

The results of the NAP checklist indicated that, overall, Timor-Leste's NAP aligns well with the key agreements and recommendations stemming from the GST (Figure 2). For the question marked with “Partially Yes” responses (Does the NAP or other adaptation document include information on urgent, incremental, transformational, and country-driven adaptation?), the absence of explicit reference to country-driven adaptation was noted. However, this omission does not significantly impact the overall content or effectiveness of the NAP as it highlights the capacity building, funding and resource mobilisation, monitoring and evaluation and other important components that are required for country-driven adaptation.



**Figure 2: Summary of Adaptation Checklist Results**

The only “No” response in the NAP checklist was for the question: Does the NAP or other adaptation document include information on the adaptation cycle? However, the four essential components of the cycle—assessment of climate change risks, planning for adaptation, implementation of adaptation measures, and monitoring and evaluation—are addressed individually in the NAP. It is important to emphasise that these elements should not be treated as standalone actions but as interconnected components of a continuous cycle. Overall, the NAP for Timor-Leste demonstrated that it aligned with global stocktake outcomes. Still, the question remains as to whether the outcomes were useful and concrete for the government of Timor-Leste in updating and implementing their NAP.

## Policy Recommendations

Based on the assessment, this section outlines recommendations for updating and implementing Timor-Leste's NDC and NAP, highlighting areas of mitigation and adaptation where policies and actions can be strengthened to align with the outcomes of the GST.

**Strengthen NDC by addressing gaps in coverage and commitment areas:** Timor-Leste's NDC includes three gases (CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O) and four sectors (energy, agriculture, LULUCF and waste), but lacks measurable targets, timelines and clear links between four commitment areas (climate risk governance, nature-positive growth and transition, low carbon development, climate change adaptation and resilience building) and implementation strategies. While global standards may not fully align with Timor-Leste's context as a Least Developed Country, addressing these gaps through, for example, introducing and finalising sectoral policies and setting specific targets for emissions reductions across sectors will support effective and transparent NDC implementation.

**Align implementation with Timor-Leste's sectoral priorities to connect the plan with tangible adaptation actions:** Timor-Leste is one of the vulnerable countries to climate change, and focusing on key sectors such as agriculture, water resources and nature-based solutions will better ensure that their measures address these vulnerabilities. Connecting national strategies with sector-specific needs ensures that adaptation efforts are effective, locally relevant, and contribute to sustainable outcomes. Timor-Leste's NAP clearly outlines the national strategy and priority sectors, making it essential to determine effective approaches for implementation.

**Integrate climate resilience into main economic sectors:** Timor-Leste's primary economic sectors, including agriculture, fisheries, marine tourism, and oil and gas, are vital for the country's development. Emerging issues, such as carbon storage, also require urgent attention. Integrating the concept of climate resilience into these sectors is essential to promote sustainable resource utilisation and ensure long-term benefits for future generations.

**Strengthen monitoring and evaluation of NDC and NAP implementation:** While the NDC and NAP outline Timor-Leste's priorities and strategies, the methods for monitoring and evaluating their implementation remain unclear. The country is expected to submit a Biennial Transparency Report (BTR) to track progress and achievements under the NDC. To enhance transparency and accountability, it is crucial to develop robust monitoring and evaluation frameworks, identify gaps in current processes, and clearly communicate the assessment results. This will provide a solid foundation for tracking progress and refining strategies to achieve national climate goals.

# 8

## *Way forward*

Going forward, we aim to engage in dialogue with the Government of Timor-Leste to present the assessment results, highlighting areas for further enhancement to align with the outcomes of the first GST. This includes discussions on the need for additional consideration of climate resilience in sectors such as agriculture, fisheries, marine tourism, carbon storage, and oil and gas, while showcasing youth- and community-led activities that contribute to national adaptation and mitigation efforts.

Many climate actions in Timor-Leste are implemented at the grassroots level through community-based and youth-led initiatives. However, these efforts face challenges, including limited awareness among local people of policy processes and the absence of effective monitoring and evaluation mechanisms. The Government prioritises increasing efforts that focus more on political processes, leaving youth and communities insufficiently informed about their significance. Bridging these gaps is crucial for the successful implementation of the NDC and NAP. Empowering youth and communities with knowledge, tools and resources will not only enhance their engagement but also improve the effectiveness and inclusivity of climate action across the country.

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