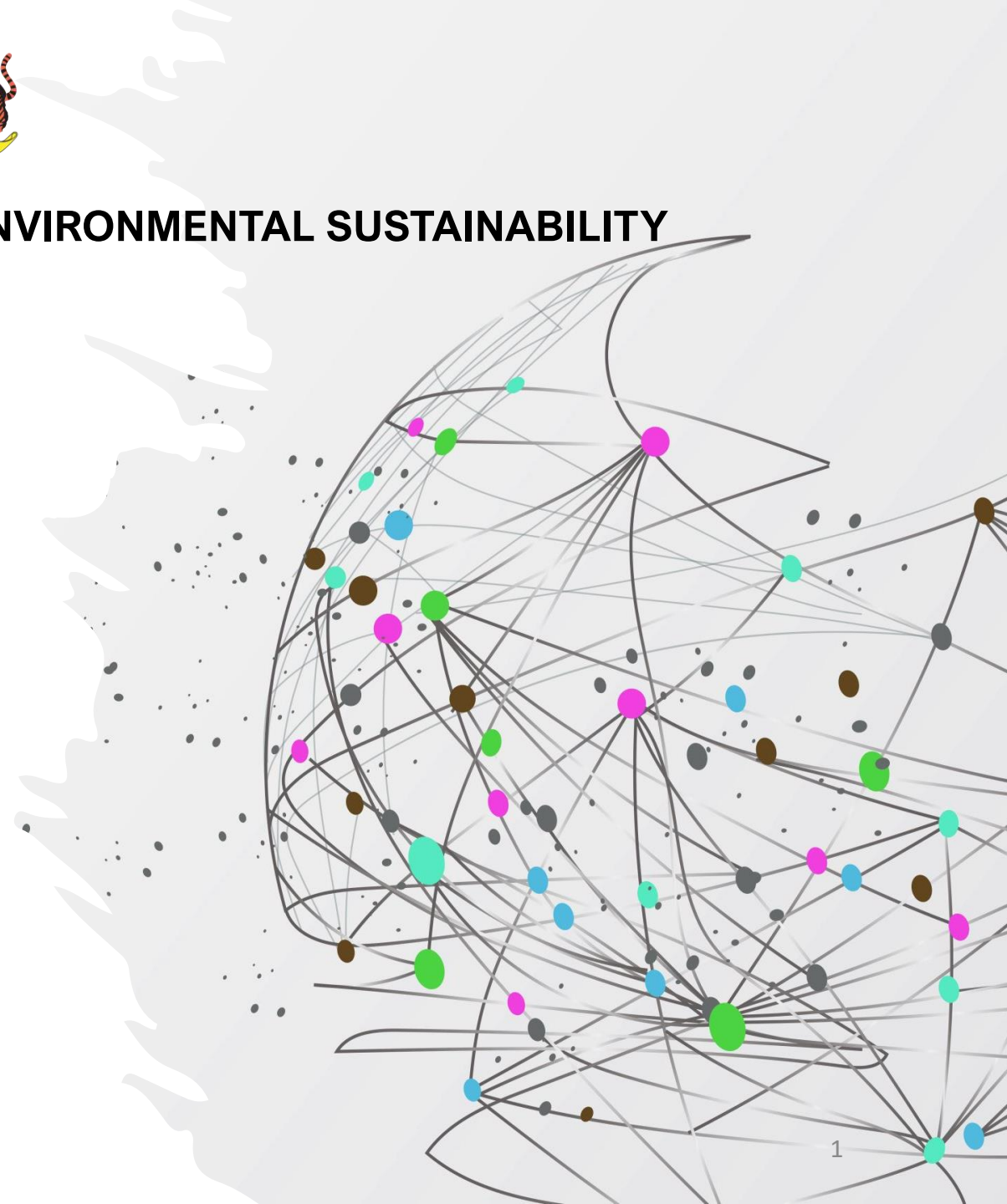




**MINISTRY OF NATURAL RESOURCES & ENVIRONMENTAL SUSTAINABILITY  
(NRES)**

# **MALAYSIA'S CLIMATE CHANGE POLICIES & THE 4<sup>TH</sup> BIENNIAL UPDATE REPORT TO UNFCCC**



# Malaysia: National Circumstances

## Population

32.5 mil (2019)

## Economy

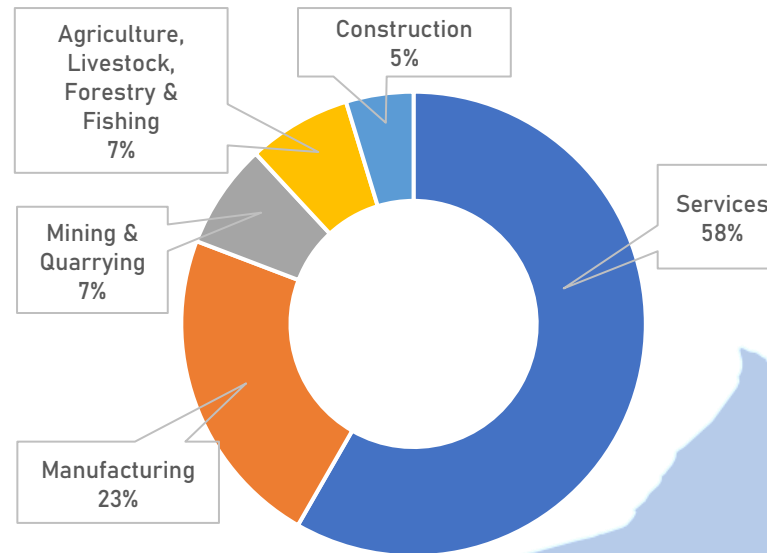
GDP growth from RM729.9 bil (2005) to RM1,424.3 billion (2019) based on constant prices of year 2015

## Climate

Equatorial with uniform daily variation of temperatures (26 – 28°C)

## Area

330,241 km<sup>2</sup> with 54.9 % estimated forest cover (2019)



## Urbanization Rate

76.2% (2019)

## Region

Southeast Asia

## Geography

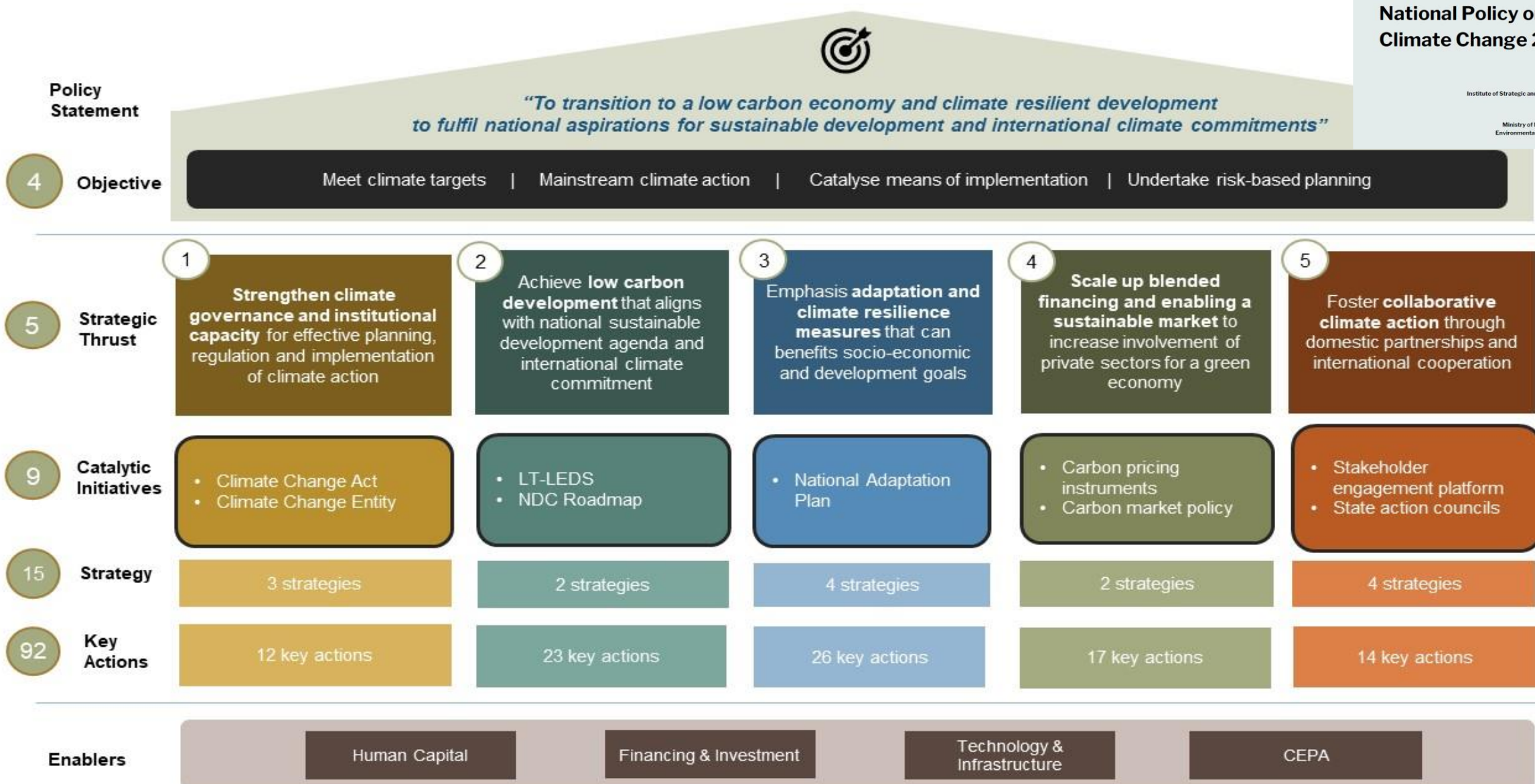
Ranges from coastal plains to mountainous terrains

# National Policy on Climate Change 2.0



## National Policy on Climate Change 2.0

Prepared by the  
Institute of Strategic and International Studies  
(ISIS) Malaysia  
for the  
Ministry of Natural Resources and  
Environmental Sustainability (NRES)



# Climate Change Governance in Malaysia

## Malaysia Climate Change Action Council (MTPIN)

**Meetings:** at least 1 times a year

**Focus:** sets policy direction for climate change issues (mitigation and adaptation) and the green growth

**Chaired by** YAB Prime Minister

**Members:** Ministers (federal), Chief Ministers (states)



## National Decarbonization Committee (under MTPIN)

**Established during** MTPIN 1/2024 (June 2024)

**Focus:** Decarbonization policies and strategies for key sectors

**Chaired by** Minister of NRES

**Members:** Federal Ministries, States Government



## National Steering Committee on Climate Change (NSCCC)

**Meetings:** at least 1 times a year

**Focus:** develop climate change policies and action plans and coordinating national obligations under UNFCCC

**Chaired by** Secretary General of NRES

**Members:** Federal Ministries, NGOs

# Climate Change Governance: Role of NRES



**Lead for  
climate finance  
& green  
incentives**



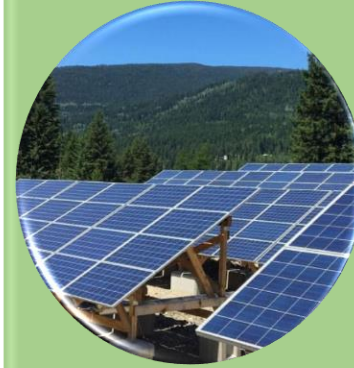
**Lead for  
climate change  
negotiations &  
national  
positions**



**National focal  
point on  
climate change  
& green  
technology**



**Lead  
coordinator for  
UNFCCC  
obligations  
(NDC &  
national  
reports)**



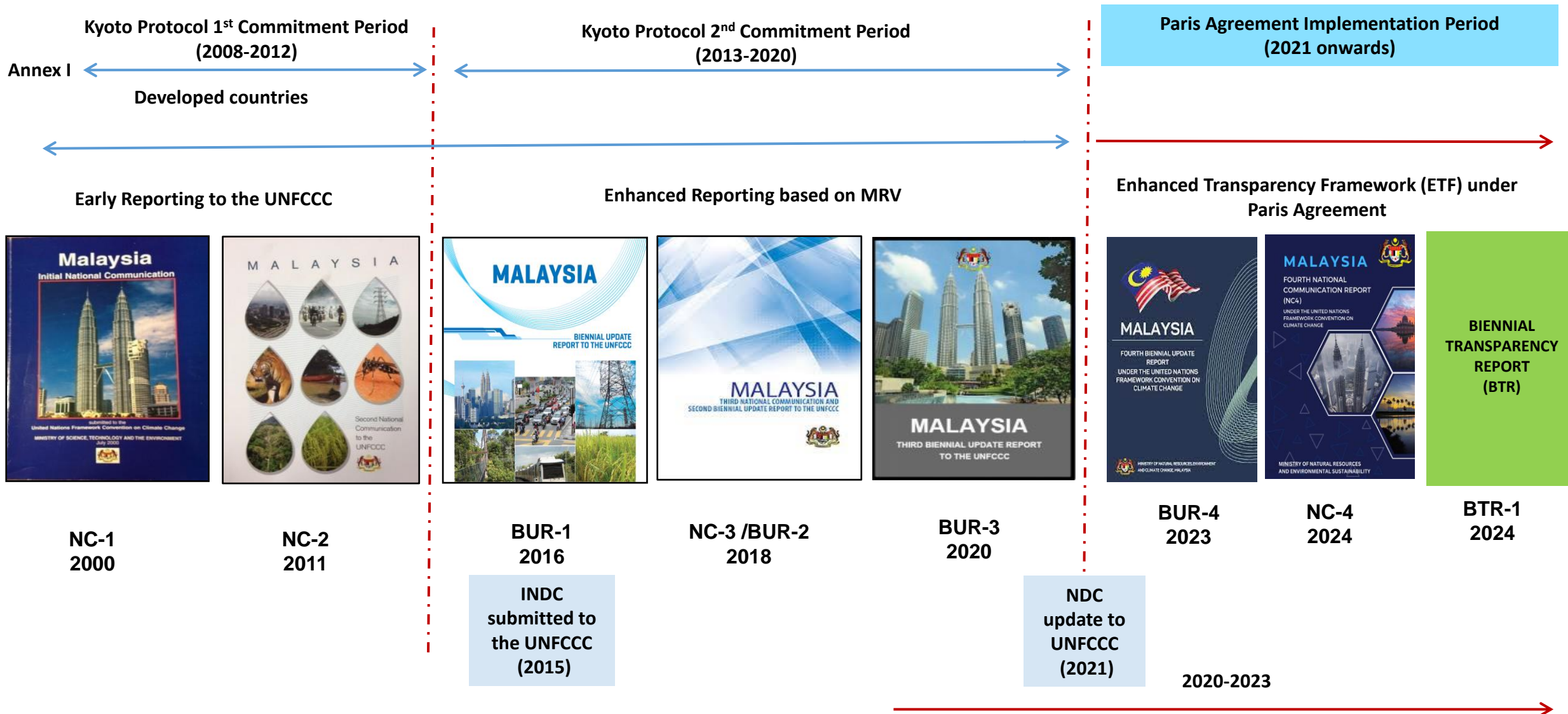
**National  
coordinator for  
mitigation &  
adaptation  
actions**



**Secretariat of  
MyCAC &  
NSCCC**



# Malaysia's Reporting Obligation Under UNFCCC

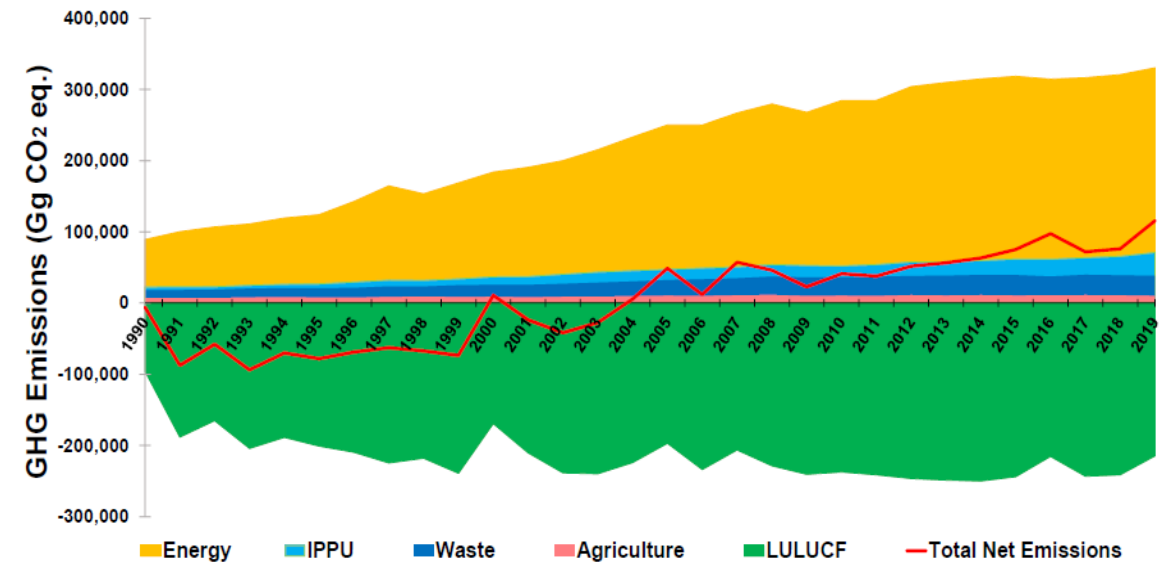


Source: Malaysia's NC and BUR reports to the UNFCCC, 2000 - 2024

Timeline for Malaysia to enhance its capacity to fulfill the reporting obligation under the Paris Agreement (in particular BTR)

# Malaysia: GHG Inventory

	2005 (Gg CO <sub>2</sub> eq)	2019 (Gg CO <sub>2</sub> eq)	% Increase
Energy	202,676.41	259,326.11	28%
IPPU	15,101.6	32,853.80	118%
AFOLU- Agriculture	10,265.04	9,921.71	-3%
AFOLU- LULUCF	-197,076.76	-214,714.54	9%
Waste	22,000.75	28,256.59	28%
Total (excluding LULUCF)	250,043.80	330,358.21	32%
Total (including LULUCF)	52,967.03	115,643.68	118%



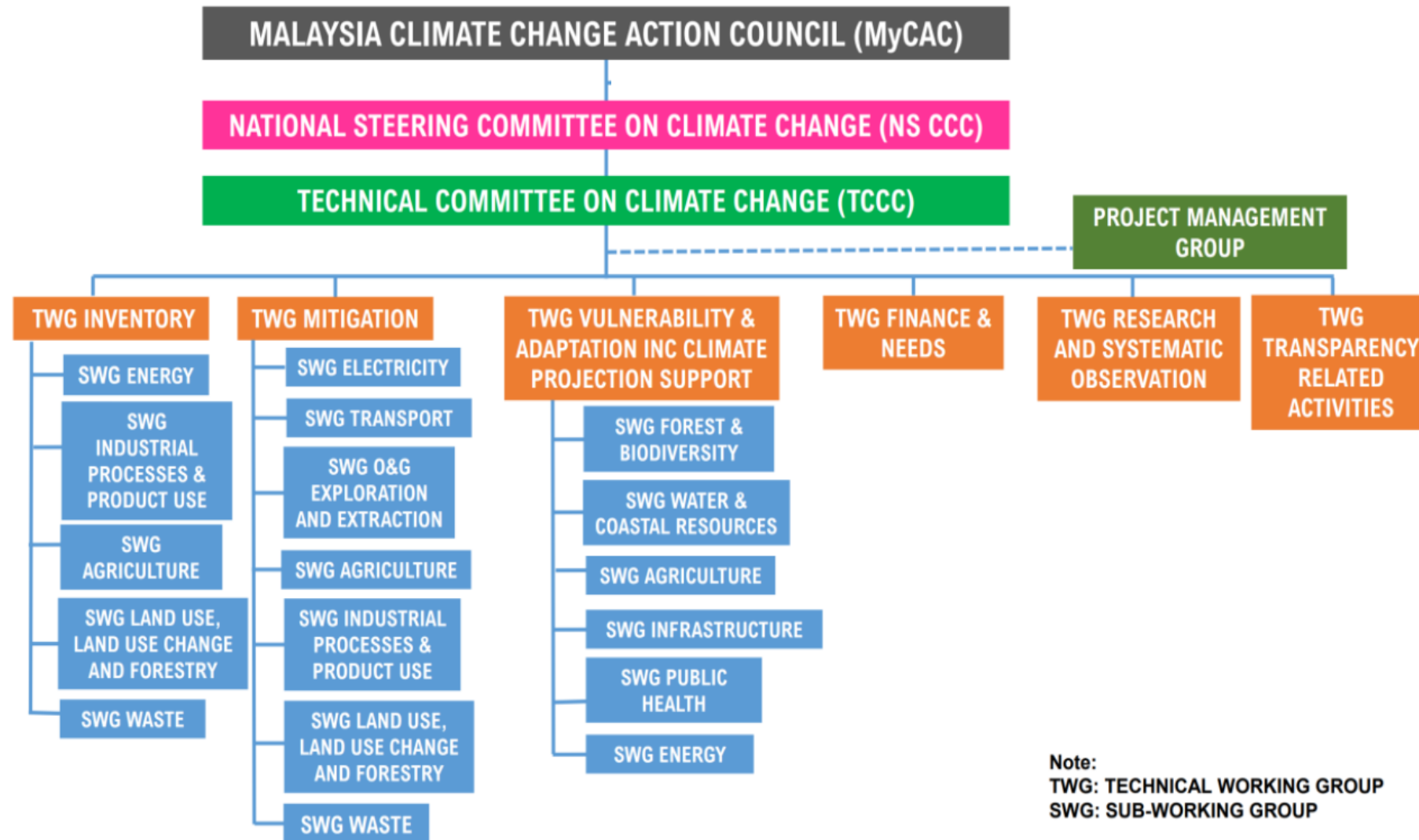
## Main drivers of current emissions

- Increased metal industry plant

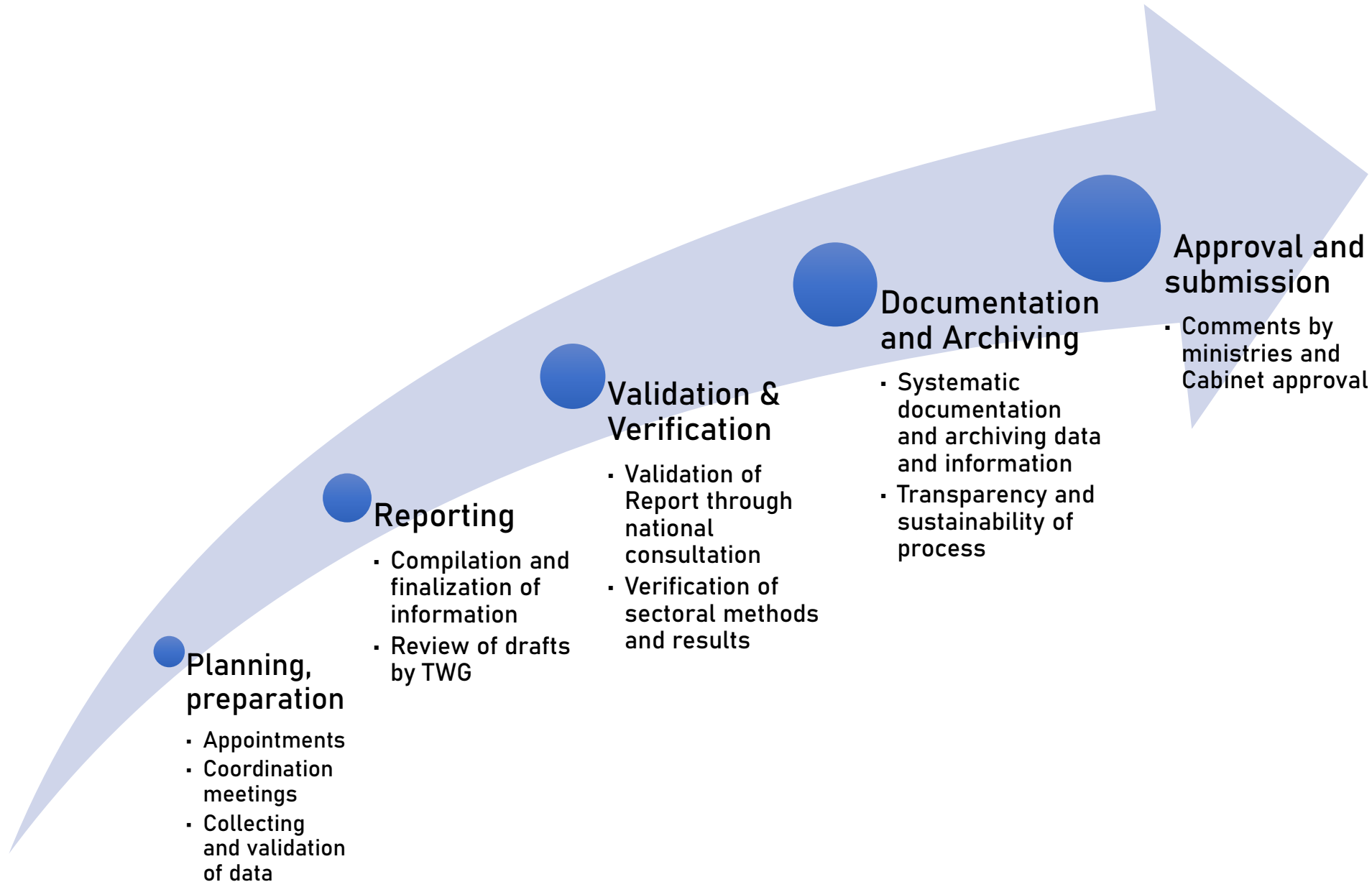
## Improvement:

- Reporting period: X-3
- Completeness of categories of emissions

# Malaysia: Institutional Arrangements for Reporting



# Malaysia: Domestic MRV



## Malaysia: Mitigation Actions and Effects

- NDC: Greenhouse gas intensity (GHG emissions per GDP)
- Mitigation actions are primarily in the energy and LULUCF sectors
  - Increased share of Renewable Energy in the energy mix
  - Improved energy efficiency
  - Enhancing conservation efforts and implementation of Sustainable forest management
  - Increased recycling rates
- Improvement: Addition of mitigation actions from the IPPU and Agriculture sector
- CDM Projects:

TOTAL  
EMISSIONS  
REDUCTIONS  
ACHIEVED WITH  
LULUCF:  
48,040.54 Gg  
CO<sub>2</sub> eq.)

No of Projects	Emissions Reduction (mil tonnes CO <sub>2</sub> eq)	Total CER issues	Estimated Investments (mil USD)
149	55,214,626.91	13,777,247.00	453.26

# Malaysia's Nationally Determined Contributions (NDC)

EMISSIONS INTENSITY 2005  
(baseline)



EMISSIONS INTENSITY 2030  
(TARGET)

**TARGET:** To reduce economy-wide carbon intensity (against GDP) of **45% in 2030** compared to **2005** level.

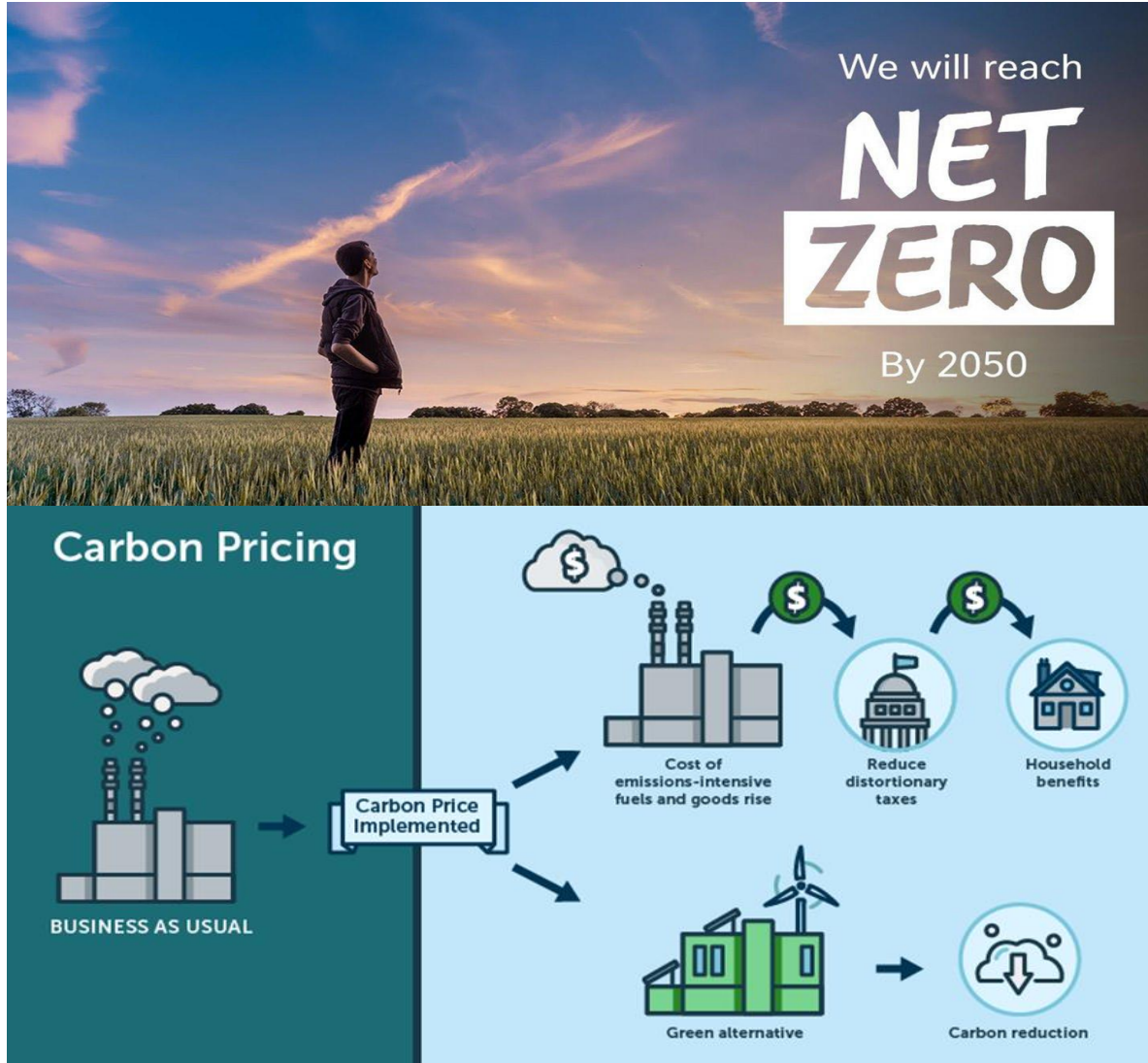
The updated NDC (2021) is **more ambitious** from the earlier submission:

- a) The 45% of carbon intensity reduction is **unconditional**;
- b) This target is an **increase of 10%** from the earlier submission; and
- c) The **GHG coverage is expanded from three (3) to seven (7)**: Carbon dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), Nitrous oxide (N<sub>2</sub>O), Hydrofluorocarbons (HFCs), Perfluorocarbon (PFCs), Sulphur hexafluoride (SF<sub>6</sub>) and Nitrogen trifluoride (NF<sub>3</sub>).

Currently NRES is finalizing **NDC Roadmap and Action Plan** to guide the implementation of Malaysia NDC (expected end 2024)

NRES implementing **NDC revision process to set a new target with end year of 2035**

# Malaysia's Long-Term Development Aspiration



**In 2021 Malaysia announced its aspiration to achieve net-zero GHG emissions at 2050 the earliest**

**Role of private sector transformation (ESG approach) and carbon pricing to support decarbonization of economy**

**Development of Malaysia's LT-LEDS – to obtain Cabinet approval**

**Latest development – MyCAC 1/2024 agreed with Malaysia's aspiration to achieve net-zero GHG emissions in 2050**

# Long-Term Planning and Strategy for Decarbonization



## NDC Roadmap and Action Plan (NDC RAP)

- Key document to guide Malaysia's NDC implementation until 2030
- Detailed implementation plan (mitigation actions/ potential mitigation) for key sectors
- Sectoral contribution towards NDC target 2030
- Scenario development and modelling – pathways and scenarios toward decarbonization by sectors and gases



## Long-Term Low Emissions and Development Strategies (LT-LEDS)

- Key document to highlight long-term strategies to achieve net-zero GHG emissions aspiration (beyond 2030 and until 2050)
- Scenario development and modelling – pathways and scenarios toward decarbonization by sectors
- Future strategies to peak and reduce GHG emissions to meet net-zero GHG

# National Climate Change Act (RUUPIN)

## Current Status

- **Stakeholders engagement (federal and states and later on private sector and NGOs)**
- **Initial drafting (incorporating the views from stakeholders)**

## Initial Thoughts On Key Provisions

- **Act to regulate GHG emissions and removals in Malaysia (all 7 type of GHGs) including carbon dioxide (CO<sub>2</sub>)**
- **Role of minister on setting national GHG emissions reduction target and national carbon budget/ decarbonization plan**
- **Entity to govern / implement the act**
- **Funds to support climate actions at domestic level**
- **Compliance and voluntary mechanisms to support emissions reduction efforts**
- **Reporting of climate change impacts**
- **Adaptation plans**

# Malaysia's National Adaptation Plan (MyNAP)

**Goal:** Increase the country's ability to mainstream adaptation actions through national development policies and strategies to build the resilience of vulnerable sectors and communities

**Status:** Malaysia submitted proposal to GCF through GIZ for Malaysia's NAP Development



**Adaptation planning governance and institutional coordination strengthened**

Whole of nation approach

Addressing institutional gaps

MyNAP integration



**Evidence basis used to design adaptation solutions for maximum impact**

Risk & vulnerability mapping

Decisions based on risk

Identify vulnerable areas



**Private sector engagement in adaptation catalysed**

Access to risk data

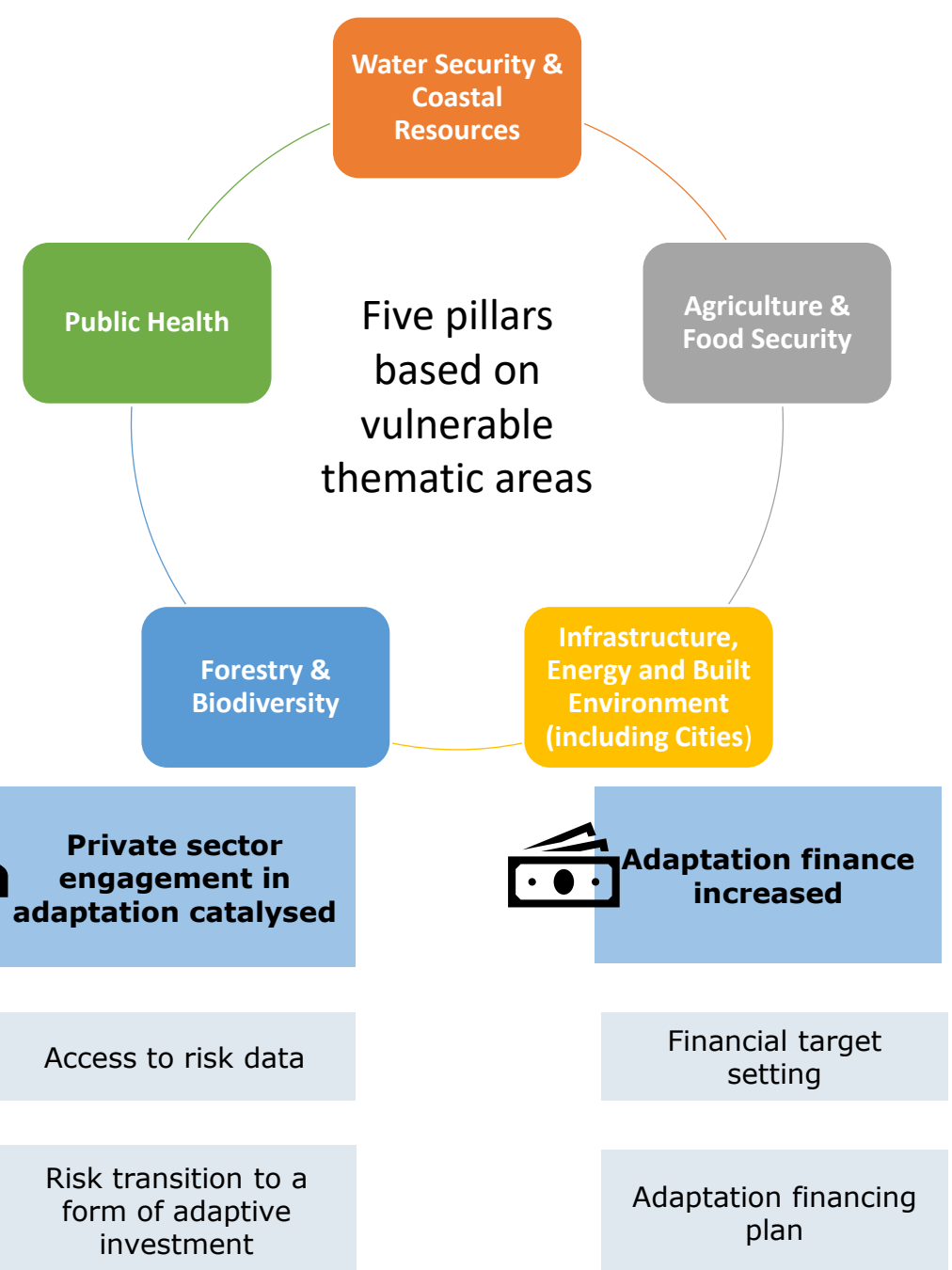
Risk transition to a form of adaptive investment



**Adaptation finance increased**

Financial target setting

Adaptation financing plan



# Carbon Market Development in Malaysia

- Cabinet of Ministers on 17<sup>th</sup> September 2021 agreed with to develop national carbon pricing policy including the development of emissions trading system (ETS)
- Mandate to Bursa Malaysia to develop voluntary carbon market (VCM) trading platform (Bursa Carbon Exchange – BCX) which is developed and launched on 9<sup>th</sup> December 2022
- Government developed the National Guidance on VCM for Forestry Sector (2020) and National Guidance on VCM (2021) which covering non-forestry sectors
- Currently NRES is developing national policy on carbon market in line with the principles and requirements under the Article 6 of the Paris Agreement



**BURSA MALAYSIA**  
Launches  
**Bursa Carbon Exchange**  
Friday, 9 December 2022

Launch of  
Malaysia's Voluntary Carbon Market Exchange  
**Keynote Address**

**YB Tuan Nik Nazmi Nik Ahmad**  
*Minister of Natural Resources,  
Environment and Climate Change of Malaysia*

Friday, 9 December 2022



MINISTRY OF ENVIRONMENT & WATER

National Guidance on  
Voluntary Carbon Market Mechanisms

# Carbon Pricing Development in Malaysia

- Carbon pricing (emissions trading scheme (ETS) and carbon tax) is a popular instrument to support decarbonization and green economy transition
- Malaysia with the support from The World Bank Group (WBG) currently undertaking feasibility study on carbon pricing mechanisms under the Partnership for Market Implementation (PMI) program
- Malaysia PMI will be implemented from 2023 – 2025
- CPIs covered under this study – carbon tax and emissions trading system (ETS):
  - i. Impact analysis and policy design;
  - ii. MRV and registry development;
  - iii. Domestic crediting scheme;
  - iv. Capacity building and engagements.



# FTC SUPPORT RECEIVED



## Global Environment Fund (GEF)

- Support received to develop institutional and technical capacity on reporting obligations to the UNFCCC as well as implementation of mitigation actions.
- Funding received to build-up technical and technological capacities of mitigation projects for the following sectors:
  - i. Transport
  - ii. Energy
  - iii. Forestry (peatland)
  - iv. Low Carbon Cities
  - v. Community Empowerment Projects



## Green Climate Fund (GCF)

- Malaysia has received readiness support to enhance its implementation framework to access results-based payment.
- Malaysia is also in the process of applying for funding to support the development of a comprehensive National Adaptation Plan (NAP).



## Adaptation Fund (AF)

- Approved project : USD10 million for "Nature-based Climate Adaptation Programme for the Urban Areas of Penang Island"



## Multilateral & Bilateral Funding and Support from Various Sources

- UK : MIGHT, Innovate-UK; Germany; Japan: National Institute for Environmental Studies (Annual workshop on GHG inventories);
- Training Sessions : UNFCCC, CGE, IPCC ASEAN, ADB, GCF, JICA, GIZ, ECBI

# SUMMARY & WAY FORWARD

Revise and communicate new NDC in 2025 (before 10 February 2025)

Obtain Cabinet approval for NDC RAP and LTLEDS

Finalize the National Policy on Climate Change 2.0

Complete the drafting process of the National Climate Change Act (RUUPIN)

Finalize the National Policy on Carbon Market Mechanisms

Prepare and communicate Malaysia's first BTR (before 31 December 2024)

Ensure policy alignment with other policies and initiatives  
(NETR, NIMP, LT-LEDS, NDC, CCUS, carbon pricing, carbon market, etc.)