2050 NETZERO

Taiwan's New Carbon Reduction Targets Phase 3 Greenhouse Gas Regulatory Goals

2050 NETZERO



Setting New National Carbon Reduction Targets

2025.1.23 Third Meeting of the National Climate Change Committee

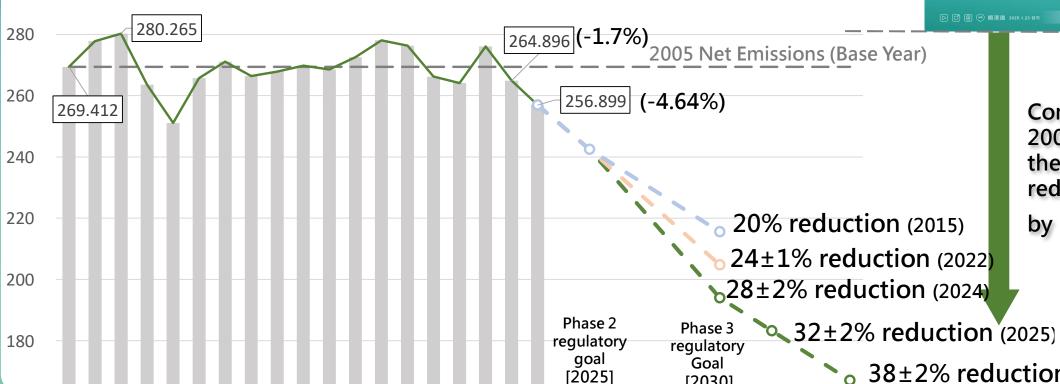
2023 greenhouse gas emissions reduced by 4.64%

(compared to 2005)

Actively implemented to demonstrate commitment and responsibility to the world

[2030]

Unit: Million Metric Tons CO₂e



✓ 2035年減量38±2% ✓ 2032年減量32±2%

國家氣候學得到領委員會

Compared to the 2007 peak, the new target can reduce emissions by 43-47%

o 38±2% reduction (2025)

The Executive Yuan approved the Phase 3 Periodic Regulatory Goals on May 6, 2025



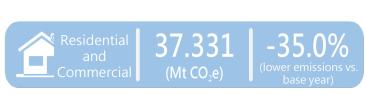
- ◆ On Feb. 16 and Mar. 10, 2024, the Ministry of Environment held two meetings of the "Technical Advisory Panel Composed of Scholars and Experts" to provide technical advice on the estimation of greenhouse gas emission trends and reduction scenario analyses.
- ◆ On Feb. 2, 2025, a **public hearing** was held, inviting civil society groups, youth, students, corporations, members of the statutory Technical Advisory Panel, and experts on human rights and gender equality to provide their input.
- ◆May 6, 2025: Approved by the Executive Yuan
 - ✓ By 2030, the national net GHG emissions: shall be reduced by
 28% ± 2% compared to the
 2005 base year (198.980~188.225 MtCO₂e)
 - ✓ 2030 periodic regulatory goals for electricity emission factors:

 O.319 kg CO₂e / kWh

Phase 3 (2030) Periodic Regulatory Goals by Major Sectors













Taiwan's Comprehensive Carbon Reduction Action Plan

National Vision

Green Growth and 2050 Net-Zero Transition

Five Key Strategies of the National Project of Hope

Build a smart green energy strategy Promote the dual-axis transformation of industries in both digital and green aspects

Shape a net-zero sustainable green lifestyle

The government is the key support for the net-zero transition

Just transition that leaves no one behind

Action Plan Re-optimize

Six Major Sector Carbon Reduction Flagship Projects New flagship projects added to enhance carbon reduction efforts

Build a foundation

12 Key Strategies

Rolling adjustment to ensure autonomous carbon reduction

Six Key Innovative Mechanisms

Technological Innovation

Financial Support

Carbon Pricing Regulatory Adjustment Green Collar Talent Community Driven

Comprehensive Carbon Reduction Action Plan



Top-Down Approach:

Carbon reduction flagship projects added in 6 major sectors to enhance reduction efforts



Energy Sector

- Accelerate renewable energy-Solar power
- Accelerate renewable energy-Offshore wind power
- Breakthrough in renewable energy-Geothermal
- Breakthrough in renewable energy-Small hydro
- Technological energy storage
- Methane Pyrolysis
- Hydrogen (including ammonia)
 supply chain
- Carbon capture, utilization, and storage (ccus)



Manufacturing Sector

- Industrial Self-regulated Emission Reduction
- Deep energy saving –manufacturing sector
- State-owned enterprise carbon reduction – China Steel Corporation
- State-owned enterprise carbon reduction -CPC Corporation, Taiwan



Transport Sector

- Commercial Vehicle Electrification and Decarbonization
- Sustainable Aviation Fuel (SAF)



Residential and Commercial Sector

- Net-zero buildings
- Deep energy saving-Residential and Commercial Sector



Agricultural Sector

- Agricultural ecological resilience and carbon sinks
- Low-carbon sustainable agriculture



Environmental Sector

- Resource recycling
- Net-zero sustainable green living

Ensure Stable Implementation of the Carbon Pricing Mechanism and its Alignment With International Frameworks



The Carbon Fee System Starts in 2025

→ Focus on Reduction of Emissions: Realizing the Principle of Carbon Pricing

Through self-determined reduction plans and preferential fee rates, businesses are guided to cut emissions. Approximately 252 companies are subject to carbon fees, with a potential reduction of up to 37 million metric tons of CO₂e by 2030 — equivalent to 14% of 2005 emissions.

Align with International Carbon Pricing Mechanisms to Drive Green Growth

- → On April 24, 17 enterprises joined with the Ministry of Economic Affairs, National Science and Technology Council, Financial Supervisory Commission, and the Taiwan Carbon Credit Exchange to form the Green Growth League.
- → Piloting the early-stage Emissions Trading Scheme (ETS) to establish a "dual-track" carbon pricing mechanism alongside the existing carbon fee system.

Approaches in Accordance with International Tariff Uncertainty

Application period for self-determined reduction plans extended by 2 months for enterprises to retain eligibility for preferential rates.

Register by End of June; Submit Technical Data by End of August

Submit the application by the end of June 2025, in accordance with regulations. the preferential rate.

Considering the heightened uncertainty due to U.S. tariff policy, the government has agreed to allow The 2025 carbon fee rate will be eligible for enterprises to complete the application form by the end of June and submit the full project proposal by the end of August.



Enterprises with high carbon leakage risk will receive an 80% discount on chargeable emissions in the early stage of implementation.

Framework for Identifying High Carbon Leakage Risk

Level 1: Sector-based Identification

In reference to international practices, the assessment considers both the emission intensity of each sector and its level of trade exposure.

Valid through 2030 upon review

Level 2: Assessment of International Competitiveness

Enterprises meeting specific conditions—such as experiencing negative gross profit in a given year due to sudden trade or economic disruptions; having carbon fees that account for a significant share of gross profit; or facing the risk of international product dumping—may also be classified as high carbon leakage risk entities.

Annual Application—Valid for That Year upon Review

Green Growth Fund Launched







Project Title

National Development Fund of Executive Yuan: Enhanced Investment in Green Growth and Net-zero industries



Implementation

The Ministry of Environment



Scale and Timeline

10-year implementation | NT\$10 Billion Total Budget -

Phased execution: 7 years of active investment, followed by 3

years for portfolio exit and remaining asset management



Target Sector

The investee enterprises shall be domestic companies engaged in emerging net-zero and sustainability businesses, or foreign enterprises operating in Taiwan.

Expected Benefits



Deepening Four Major Transitions

Energy TransitionMore Diverse

Industry TransitionMore Innovative

Lifestyle TransitionMore Low-Carbon

Social Transition > More Resilient

Driving Green Growth



By 2030



Power emission factor will decrease from 0.490 kg $\rm CO_2e/kWh$ in 2023 to 0.319 kg $\rm CO_2e/kWh$ in 2030

Air pollution will be reduced by 40% compared to 2019

Increasing Energy Self-Sufficiency

Dependence on imported energy will decreased from 96.2% in 2023 to 90% in 2030.

Creating a Green Economy

Government budget input will:

- Exceed NT\$1 trillion
- **Drive NT\$5 trillion** in private sector investment
- Train 80,000 green-collar talents



Thank You Your suggestions are welcomed