Net-Zero Pathway: Taiwan's Comprehensive Carbon Reduction Action Plan

National Development Council

January 23, 2025

Outline

I. Introduction

Process of Promoting 2050 Net-Zero

To implement President Lai's "National Project of Hope" and its five key strategies for green growth and net-zero transition by 2050, while aligning with international commitments in setting Taiwan's Nationally Determined Contributions (NDC) targets, the administration has formulated the "Taiwan's Comprehensive Carbon Reduction Action Plan" to steadily and pragmatically achieve the 2050 net-zero goal.

2021 4/22 — Net-Zero Goal

Presidential Declaration

2050 net-zero transition is Taiwan's goal

2022 3/30 — Net-Zero Pathway

Government Announcement

Taiwan's Pathway to Net-Zero Emissions in 2050

2022 12/28 — Key Strategies

Government Announcement

Phased goals and 12 key strategies for net-zero transition.

2023 2/15 — Legal Framework

Presidential Announcement

The Climate Change Response Act integrates the 2050 net-zero emissions target into the legal framework

2024 5/20 — National Project of Hope

Presidential Declaration

The five strategies for the 2050 net-zero transition

2024 6/19 — Climate Governance

Presidential Establishment

The National Climate Change Committee

2025 1/23 — New Carbon Reduction Targets

Government Announcement

Taiwan's Comprehensive Carbon Reduction Action Plan.

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

Add new flagship projects to enhance carbon reduction efforts

Build a foundation

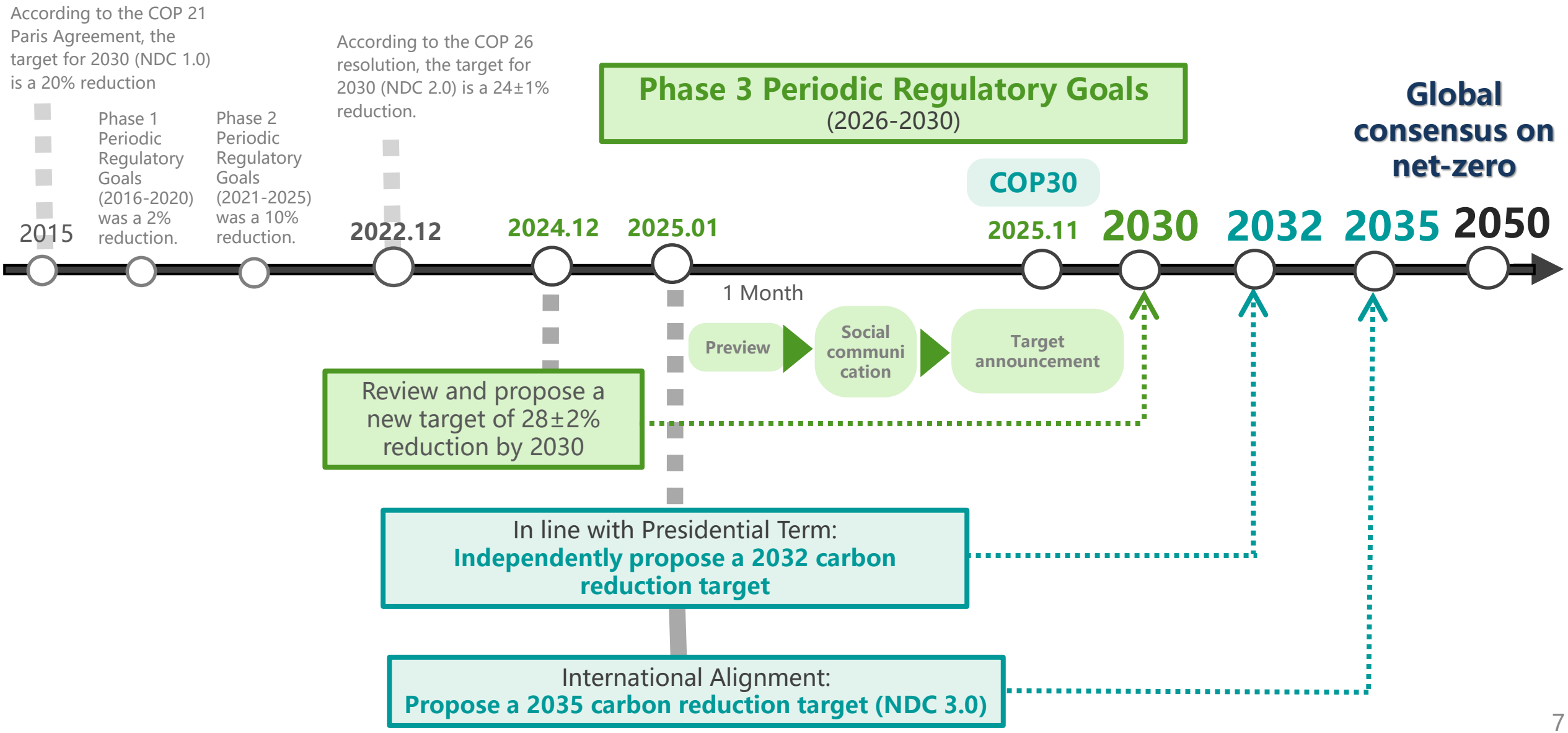
Rolling adjustment to ensure autonomous carbon reduction

Six Key Innovative Mechanisms

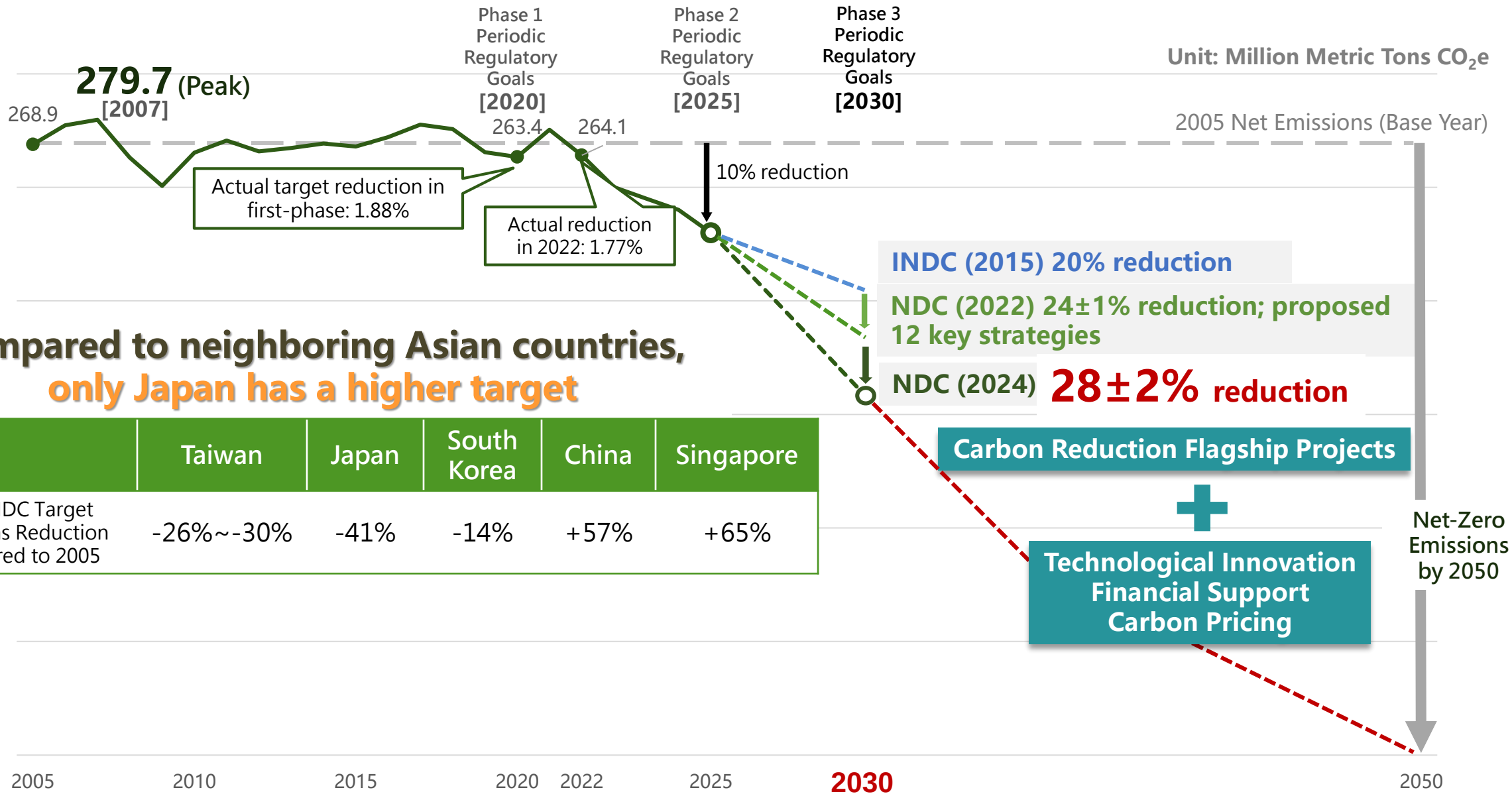
- Technological Innovation
- Financial Support
- Carbon Pricing
- Regulatory Adjustment
- Green Collar Talent
- Community Driven

II. Greenhouse Gas Reduction Targets

Setting New Carbon Reduction Target



Setting Phase 3 Periodic Regulatory Goals



Compared to neighboring Asian countries, only Japan has a higher target

	Taiwan	Japan	South Korea	China	Singapore
2030 NDC Target Emissions Reduction Compared to 2005	-26%~-30%	-41%	-14%	+57%	+65%

III. Carbon Reduction Action Plan

Comprehensive Carbon Reduction Action Plan

Top-Down Approach:
Add 20 carbon reduction flagship projects in 6 major sectors to enhance the reduction efforts

Energy Sector
Ministry of Economic Affairs

- Accelerate renewable energy: Solar power 【MOEA】
- Accelerate renewable energy: Offshore wind power 【MOEA】
- Breakthrough in renewable energy: Geothermal 【MOEA】
- Breakthrough in renewable energy: Small hydro 【MOEA】
- Technological energy storage 【MOEA】
- Methane Pyrolysis 【MOEA】
- Hydrogen (including ammonia) supply chain 【NDC】
- Carbon capture, utilization, and storage (CCUS) 【MOENV】

Manufacturing Sector
Ministry of Economic Affairs

- Industry self-reduction 【MOEA】
- Deep energy saving – manufacturing sector【MOEA】
- State-owned enterprise carbon reduction – China Steel Corporation 【MOEA】
- State-owned enterprise carbon reduction – CPC Corporation, Taiwan 【MOEA】

Residential and Commercial Sector
Ministry of the Interior

- Net-zero buildings【MOI】
- Deep energy saving-Residential and Commercial Sector【MOEA】

Transportation Sector
Ministry of Transportation and Communications

- Electrification and decarbonization of commercial vehicles【MOTC】
- Sustainable aviation fuel【MOTC】

Agricultural Sector
Ministry of Agriculture

- Agricultural ecological resilience and carbon sinks【MOA】
- Low-carbon sustainable agriculture 【MOA】

Environmental Sector
Ministry of Environment

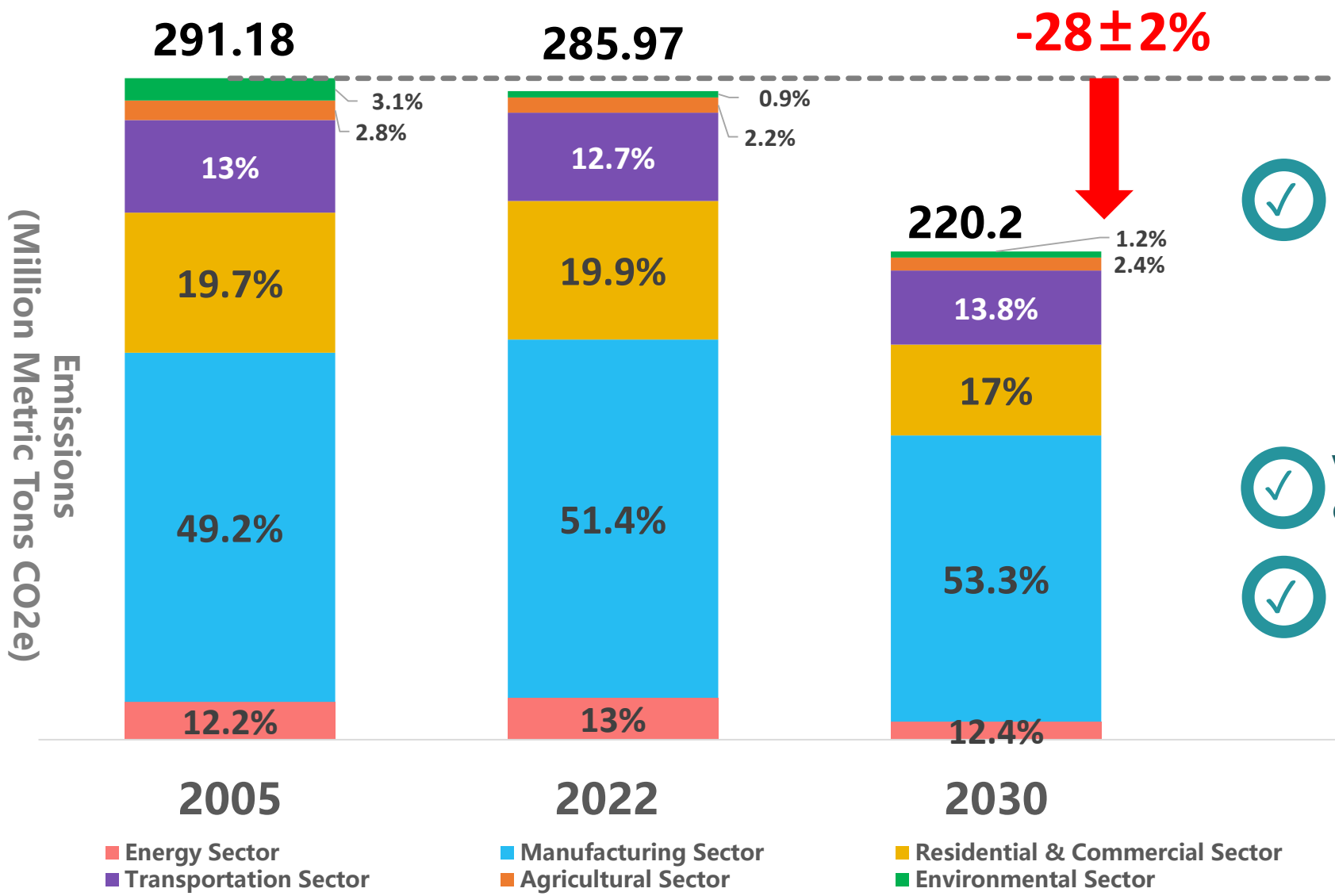
- Resource circulation 【MOENV】
- Net-zero sustainable green living 【MOENV】

* The environmental sector flagship plan supports carbon reduction in manufacturing, residential and commercial, transportation, and agriculture sectors.

Bottom-Up Approach:

Rolling adjustments of 12 key strategies, proposing departmental autonomous carbon reduction plans(total of 80 plans)

Overall Carbon Reduction Targets for the Six Major Sectors



Assigning carbon reduction responsibilities to the six major sectors

- Optimizing sector carbon reductions from the bottom up
- Designating flagship carbon reduction plans from the top down

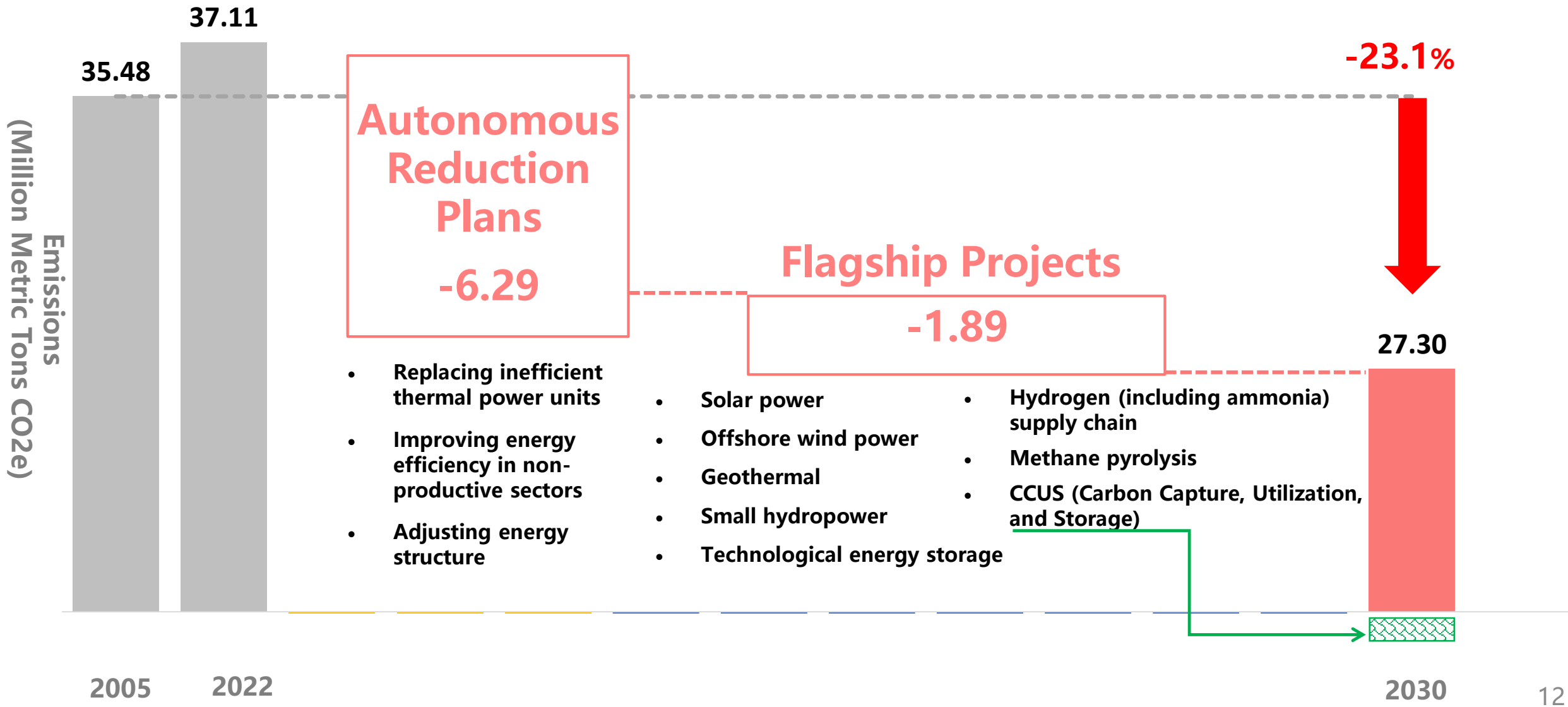
Verifying and stacking the new carbon reduction target for 2030

Institutional innovation (carbon pricing)

Note: The 2030 carbon reduction target is calculated based on a 27% reduction.

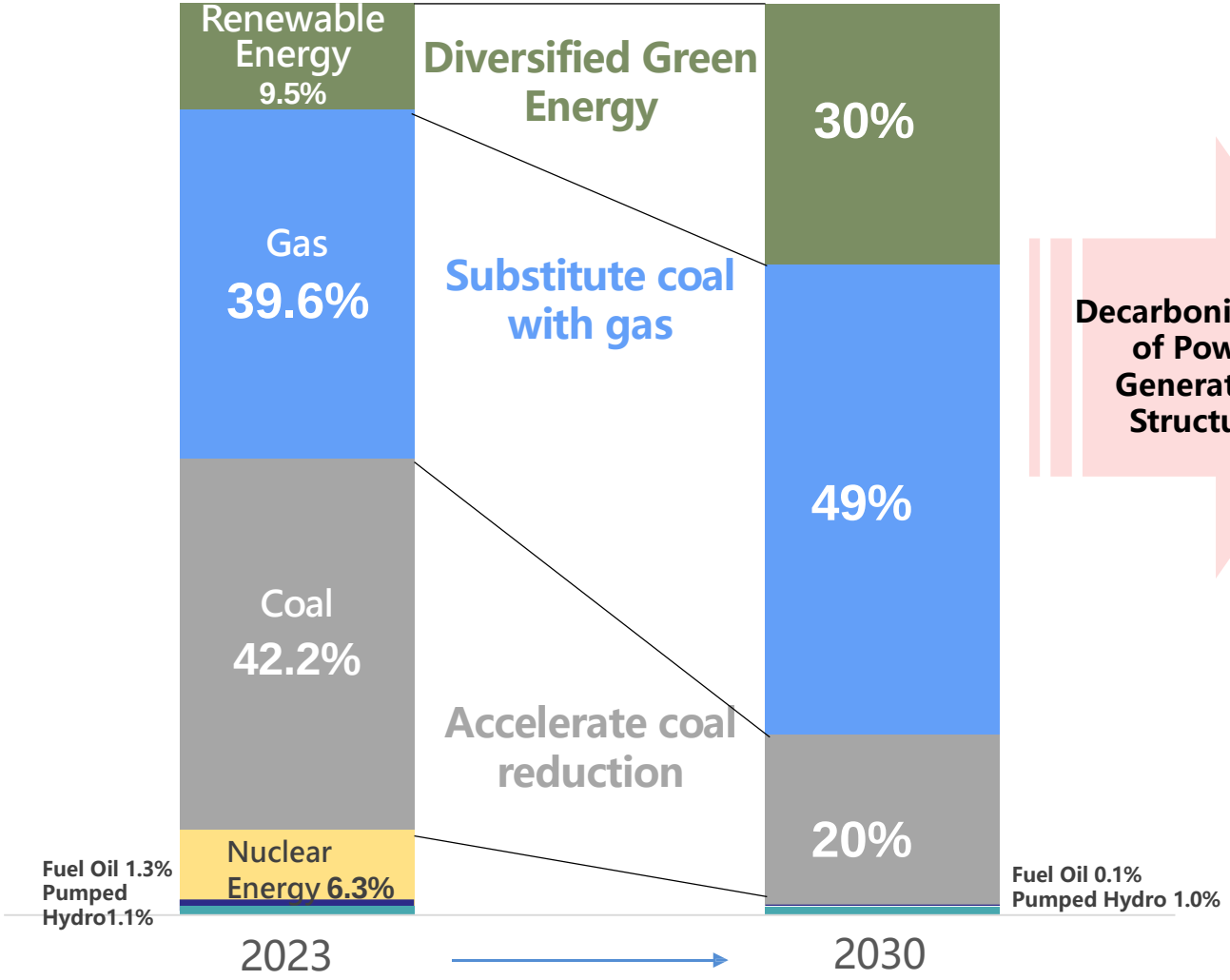
Energy Sector Carbon Reduction Actions (1/4)

2030 Carbon Reduction Target: 8.18 Million Metric Tons CO_2e

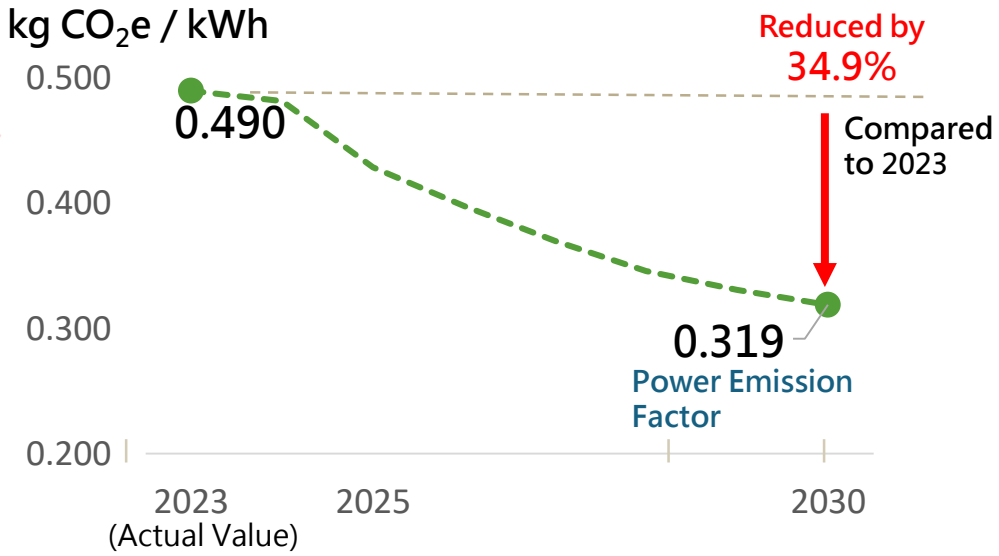


Energy Sector Carbon Reduction Actions (2/4)

■ The power emission factor will decrease to 0.319 kg CO_2e / kWh by 2030



Decarbonization of Power Generation Structure



Note: Power emission factor = (Emission from power generation by integrated power companies, private power plants, and cogeneration plants —power emission borne by line loss) / Total electricity sales volume.

Energy Sector Carbon Reduction Actions (3/4)

Flagship Projects

Accelerating Renewable Energy

Solar Photovoltaics

- **Setup space**: Incentives for small rooftops, mandatory installation for new buildings
- **Energy Efficiency Improvement**: Replace old photovoltaic panels with high-efficiency ones in existing areas
- **Process Reform**: Promote public-to-public coordination mechanisms, establish guidance and communication platforms for installation applications

Offshore Wind Power

- **Zonal Development**: Continue to promote block development
- **Sea Area inventory**: inventory potential new sea areas
- **Funding Introduction**: Guide private sector investment in development

Breakthroughs in Renewable Energy

Geothermal

- **Capacity Enhancement**: State-owned enterprises take the lead in introducing drilling equipment
- **International Cooperation**: Expand deep geothermal drilling projects
- **Process Optimization**: Public-to-public model, coordinate consultations with indigenous people

Small Hydropower

- **Expand Project Sources**: Investigate and assess potential project sites
- **Increase Incentives**: Review feed-in tariffs and develop incentive mechanisms
- **Process Optimization**: Public-to-public promotion, integrate land recruitment

Deploying Emerging Technologies

Technological Energy Storage

- **User Storage**: Introduce "behind-the-meter" energy storage time-of-use electricity pricing, promote joint demonstration zones outside factories
- **Expand Subsidies**: Increase subsidies for fuel cell installations

Energy Sector Carbon Reduction Actions (4/4)

Flagship Projects

Deploying Emerging Technologies

Hydrogen (including Ammonia) Supply Chain

- **Hydrogen Applications**: Expand the use of hydrogen/ammonia power generation technology and fuel cell establishment
- **Infrastructure**: Expand the establishment of hydrogen refueling stations and liquid ammonia storage tank infrastructure.
- **Hydrogen Supply**: Prioritize low-carbon ammonia imports and develop domestic hydrogen production technologies.

Decarbonized Hydrogen Fuel

- **Test Sites**: Establish co-firing hydrogen power generation test sites.
- **Expanded Development**: Gradually scale up natural gas decarbonization hydrogen production.

Carbon Capture, Utilization, and Storage (CCUS)

- **Technology Promotion**: Develop efficient and low-cost carbon capture technologies and promote integrated steel and chemical production.
- **Establishment of Test Sites**: Establish carbon sequestration test and commercialization sites.

Autonomous Reduction Plans

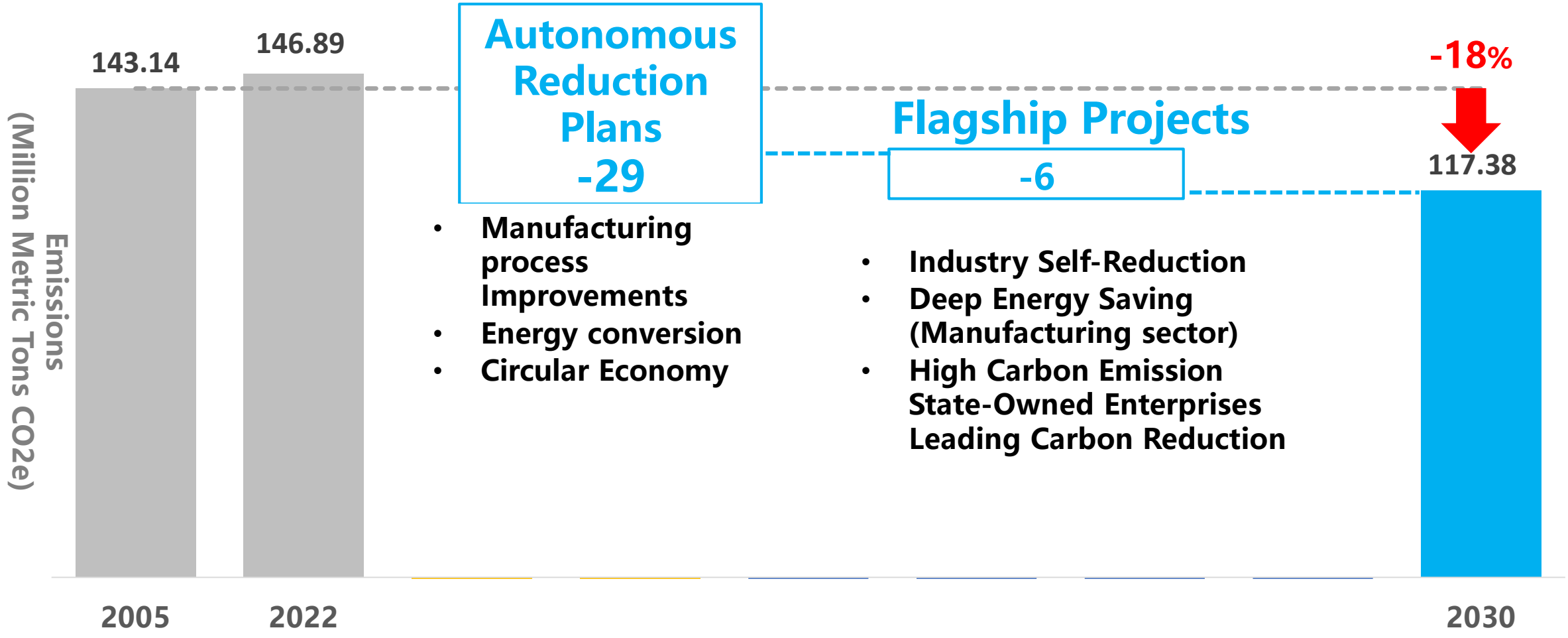
Eliminating Low-Efficiency Thermal Units
Replace outdated units with newer units for power generation by 2030.

Improving Energy Efficiency in Non-Production Sectors
Evaluate the replacement of air conditioning equipment older than 9 years and prioritize the adoption of high-efficiency, variable-frequency units.

Adjusting Energy Structure
Expand renewable energy and build a low-carbon energy supply system.

Manufacturing Sector Carbon Reduction Actions(1/2)

■ 2030 Carbon Reduction Target: 25.77 Million Metric Tons CO_2e



Manufacturing Sector Carbon Reduction Actions(2/2)

經濟部

Flagship Projects

Industry Self-Reduction of Emissions

- Assisting the top 500 emission source manufacturers in implementing self-reduction of carbon emissions
  - Experts visit factories and introduce carbon reduction measures
- Assisting 140,000 small and medium-sized manufacturers in low-carbon transition
  - Reducing carbon emissions in supply chains with large companies leading the way, supported by government resources

Deep Energy Saving-
Manufacturing Sector

- Providing 3 major guarantees to enhance ESCO service capacity
  - Ten billion NT$ project loan guarantees, insurance claims to reduce risks, matching investments with ESCO
- Implementing energy-saving measures in 3 stages
  - Establishing an ESCO execution model (18 companies) → Public enterprises leading the way (379 companies) → Expanding to private enterprises (3,018 companies)

High Carbon Emission State-owned Enterprises Leading Carbon Reduction

- **China Steel Carbon Reduction**
  - Improving energy efficiency
  - Using low-carbon raw materials in blast furnaces
  - Increasing use of scrap steel and reducing use of molten iron
  - Using carbon-free fuel in industrial furnaces
- **CPC Corporation Carbon Reduction**
  - Adjusting refining production models
  - Using renewable energy
  - Using low-carbon raw materials
  - Improving energy efficiency

Autonomous Reduction Plans

Process Improvement

- Providing system optimization technical services
- Introducing energy management monitoring systems
- Promoting green factory certifications

Energy Transformation

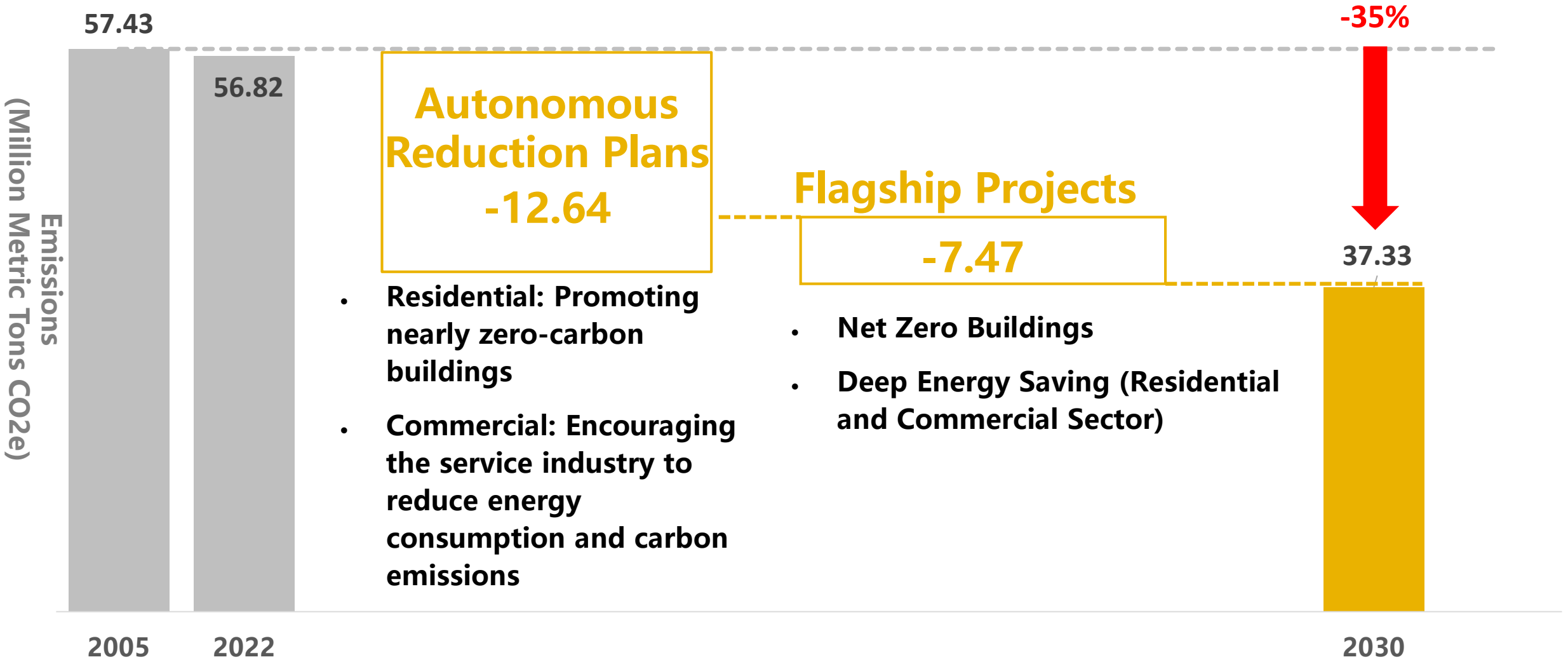
- Promoting low-carbon production
- Matching supply and demand for biomass fuels
- Expanding the use of green electricity in industries

Circular Economy

- Integrating regional energy resources
- Investing in innovative technology research and development
- Recycling and reusing waste resources

Residential and Commercial Sector Carbon Reduction Actions (1/2)

■ 2030 Carbon Reduction Target: 20.1 Million Metric Tons of CO_2e



- **Residential: Promoting nearly zero-carbon buildings**
- **Commercial: Encouraging the service industry to reduce energy consumption and carbon emissions**

- **Net Zero Buildings**
- **Deep Energy Saving (Residential and Commercial Sector)**

Residential and Commercial Sector Carbon Reduction Actions (2/2)

Flagship Projects

Net Zero Buildings

- Low-carbon and net zero for old homes and social housing
- Expanding building energy efficiency improvements
- Smart net zero dual-axis transformation

Existing Buildings

Demonstration subsidies for building energy efficiency improvements

Government Demonstration

- Public existing buildings and national park buildings

Private Sector Participation

- Expanding participation from the real estate industry, cooperatives, security industry,

New Buildings

Amendment and implementation of building regulations

- Revising energy-saving design standards (building energy efficiency)
- Developing mandatory solar photovoltaic regulations

Innovative Technologies

Introducing low-carbon construction methods, digital net-zero applications

Deep Energy Saving (Residential and Commercial Sector)

- Providing incentives for energy saving and carbon reduction
- Encouraging self-reduction of carbon emissions
- Mandatory regulatory measures
- Equipment efficiency improvement and energy-saving promotion

Residential

First encourage the replacement of old equipment to improve energy efficiency standards

- Continuing to promote old appliance replacement (by 2026), refunding reduced goods tax (by 2030)
- Increasing minimum energy efficiency for refrigerators and air conditioners to the current level 3 standard (by 2030)

Commercial

Large users leading the way + introducing energy-saving services

- Introducing ESCO energy-saving plans, equipment replacement subsidies
- Raising the energy-saving target for large energy users (1% → 1.5%)
- Encouraging industry self-actions (guidance and training, fuel conversion, etc.)

Autonomous Reduction Plans

Residential Sector: Promoting Nearly Zero-Carbon Buildings

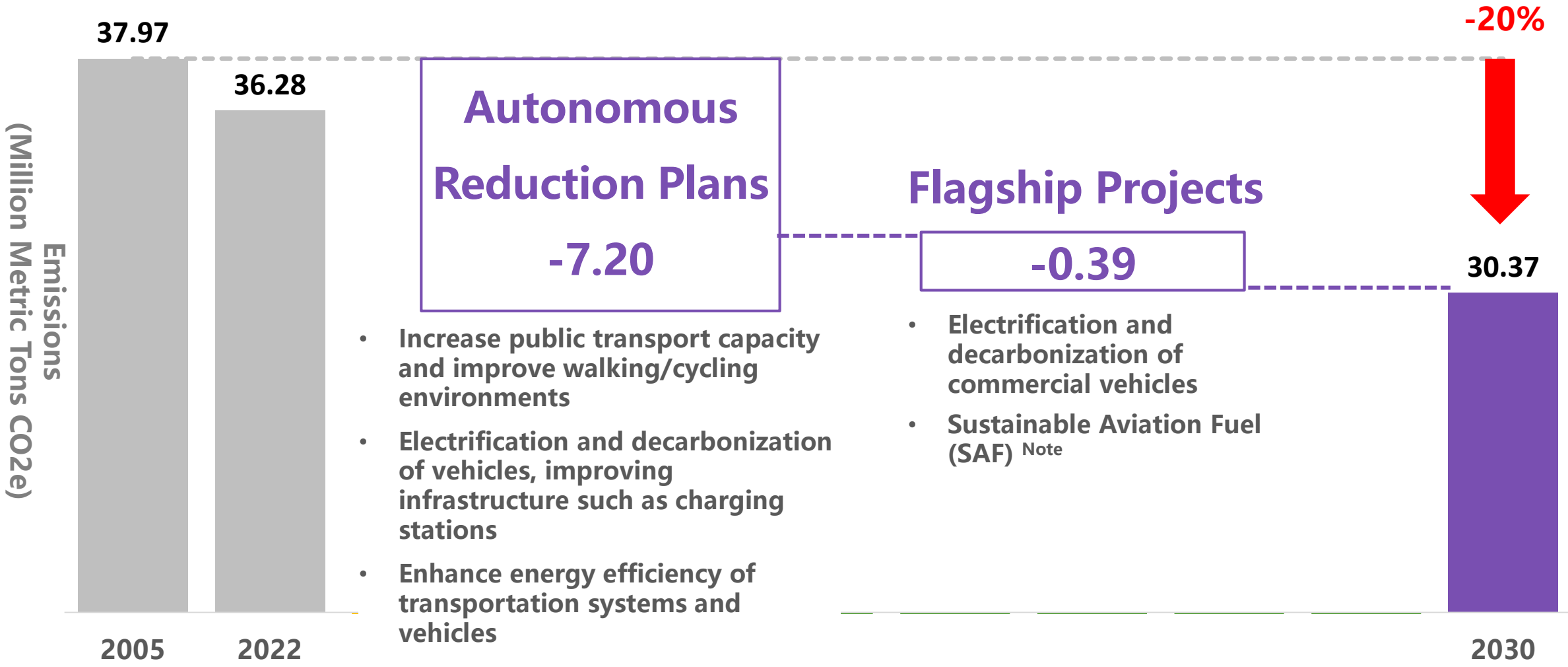
- ☑ Promoting green buildings
- ☑ Assessing nearly zero-carbon buildings
- ☑ Promoting renewable energy
- ☑ Developing a building energy efficiency labeling system
- ☑ Managing carbon reduction in existing buildings

Commercial Sector: Encouraging Energy-saving and Carbon Reduction in the Service Industry

- ☑ Mandatory control measures for the service industry
- ☑ Providing incentives for the service industry to reduce energy consumption and carbon emissions
- ☑ Encouraging self-reduction of carbon emissions in the service industry

Transportation Sector Carbon Reduction Actions (1/2)

■ 2030 Carbon Reduction Target: 7.59 Million Metric Tons of CO_2e



Note: International aviation carbon reduction is not part of the NDC scope and is not included.

Transportation Sector Carbon Reduction Actions (2/2)

經濟部

Flagship Projects

Electrification and Decarbonization of Commercial Vehicles

		2024.11		2030
Electric light trucks	Penetration Rate	0.05%	Demonstration in 2026, expansion starting in 2028	5%
Electric heavy trucks	Vehicle numbers	7 vehicle	Demonstration projects from 2028-2030	600 vehicle
Electric taxis	Penetration Rate	1.8%	Gradual increase in penetration rate	50%
Hydrogen fuel cell buses	Vehicle numbers	-	Pilot operation starting in 2024, subsidies of 10-20 million NTD per vehicle	35 vehicle

Sustainable Aviation Fuel (SAF)

SAF Work Platform

User end

- Add SAF flights at Taoyuan, Songshan, and Kaohsiung airports in 2025
- At least 5% SAF usage by national airlines by 2030

Supply end

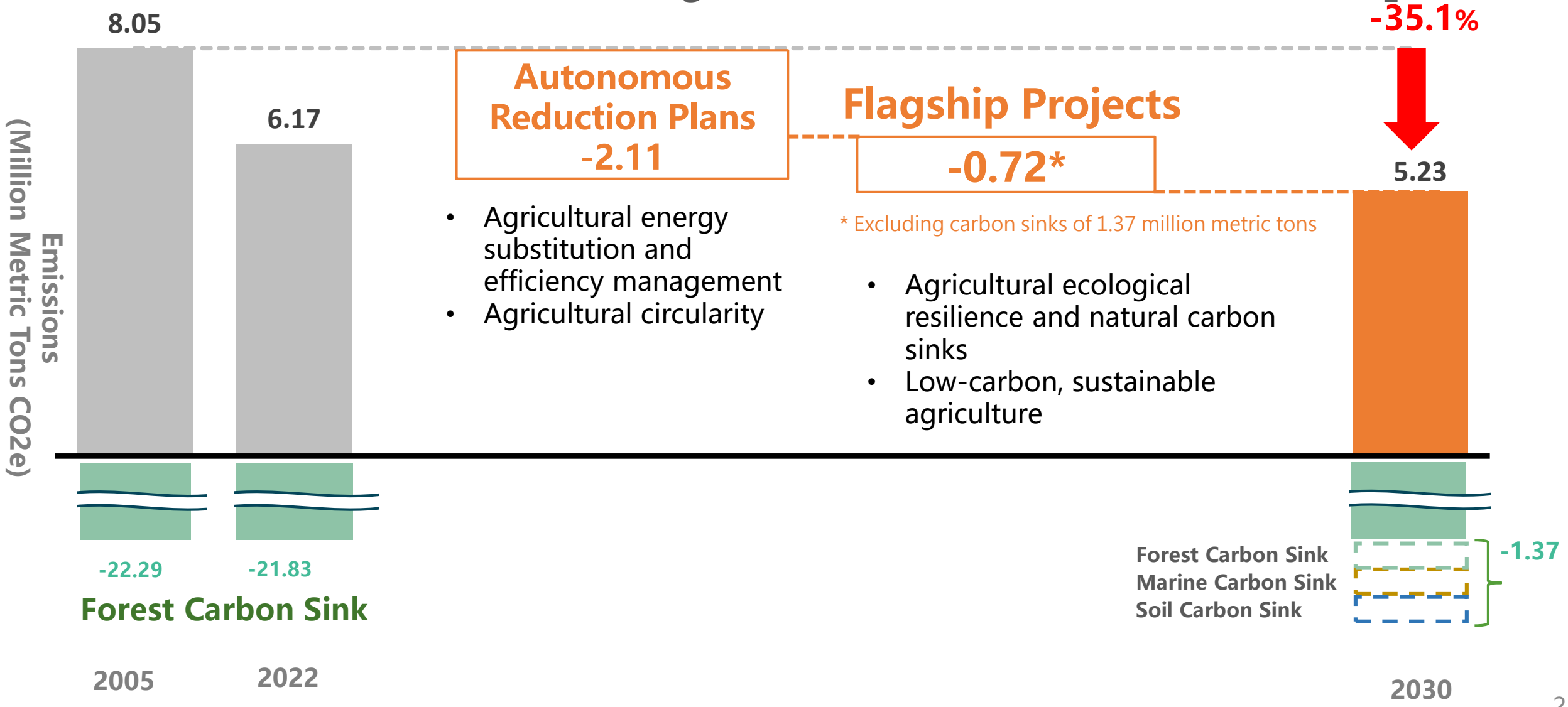
- Develop SAF sources in 2025, open up imports of waste edible oil and ban exports
- By 2030, establish mandatory regulations for fuel suppliers to provide fuel containing SAF

Autonomous Reduction Plans

- **Increasing public transport capacity and improving walking/cycling environments**
  - Enhance public transport service systems
  - Offer ticket discounts
- **Promoting electrification and decarbonization of vehicles, and improving infrastructure such as charging stations**
  - Promote electrification of city buses, cars, and motorcycles, and provide complete environmental use measures
- **Improving energy efficiency of transportation systems and vehicles**
  - Develop intelligent transport systems, vehicle energy efficiency and energy-saving tire management, optimize clean vehicles, and promote onshore power plans

Agricultural Sector Carbon Reduction Actions(1/2)

■ 2030 Carbon Reduction Target: 2.82 Million Metric Tons of CO_2e



Agricultural Sector Carbon Reduction Actions(2/2)

Agricultural Ecological Resilience and Natural Carbon Sinks

Low-Carbon Sustainable Agriculture

Flagship Projects

Agricultural Ecological Resilience

- Enhance agricultural climate risk management capability
- Explore diverse agricultural patterns under climate change

Forest Carbon Sink

- Increase forest area and forest management

Marine Carbon Sink

- Restore and manage seagrass beds, mangroves, wetlands, and salt marshes

Soil Carbon Sink

- Adjust crop cultivation patterns and apply soil biological resources

Rice Field Reduction

- Intermittent irrigation and drainage in rice paddies, precision fertilization techniques

Energy Efficiency Management

- Purchasing of deep-sea fishing boats, energy-saving facilities at livestock farms

Low-Carbon Circulation

- High feed efficiency, low-carbon emissions in aquaculture production, utilization of residual resources for energy, feed, materials, and fertilizers

Energy Substitution

- Electrification of agricultural machinery

Autonomous Carbon Reduction

Carbon Self-Reduction Agricultural Energy Substitution and Effectiveness Management

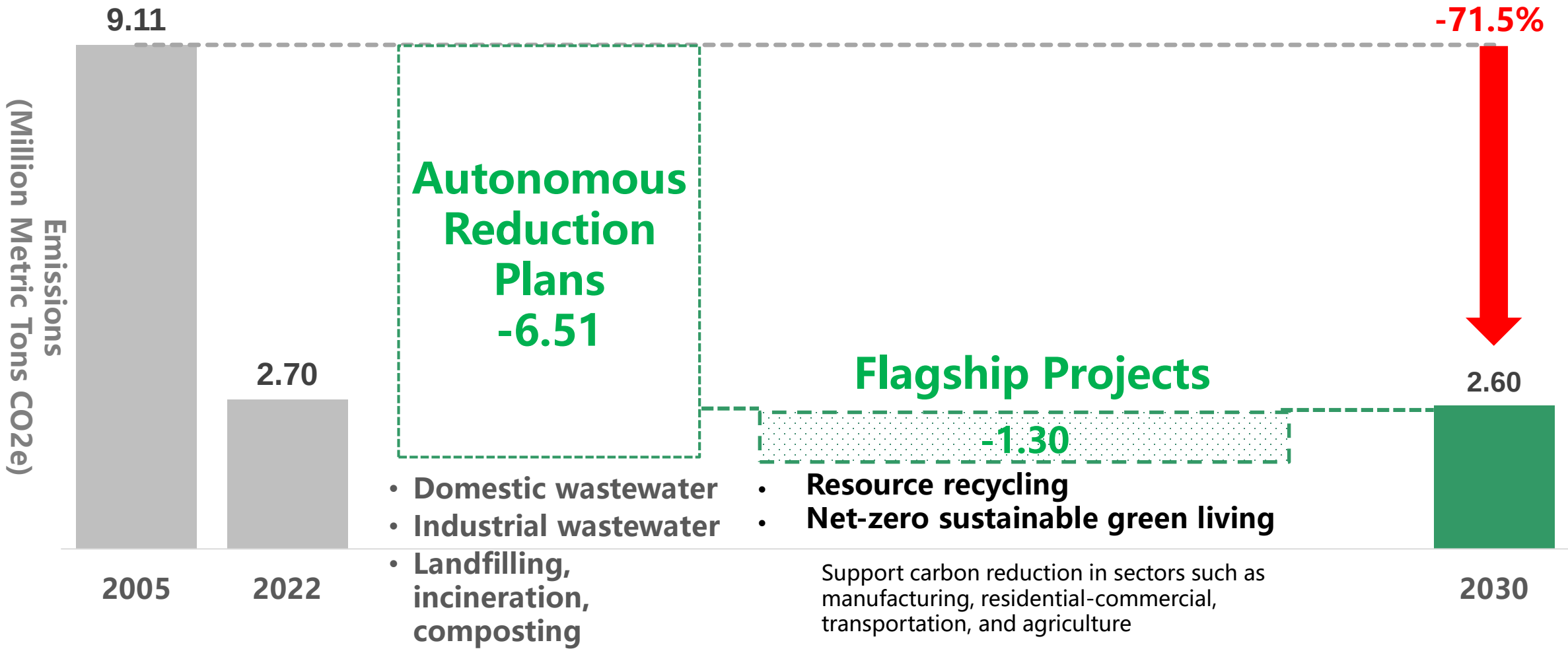
- Coastal fishing boat acquisition and handling, rewarding fishing moratoria•
- Promote energy-saving water pumps, set up rice husk furnaces

Agricultural Circulation

- Reuse of livestock biogas
- Irrigation with pig manure and urine

Environmental Sector Carbon Reduction Actions(1/2)

■ 2030 Carbon Reduction Target: 6.51 million metric tons CO_2e



Environmental Sector Carbon Reduction Actions(2/2)

Flagship Projects

Resource Recycling

Enhancing the recycling and utilization of carbon emissions at the end of the cycle, and supporting carbon reduction in other sectors.

- **Resource Recycling**
  Climate Circulation Technology Park, 8+N Resource Recycling Alliance, fully electric resource recovery vehicles.
- **Public Incineration Plants**
  Install low-temperature power generation and improve power generation facilities, install carbon capture and carbon reduction facilities.
- **Pollution Control and Energy Efficiency Upgrades for Carbon Reduction**
  Replace existing equipment with high-efficiency energy-saving equipment, build recycling systems, install energy-saving lighting.
- **Livestock Industry**
  Biogas recovery for power generation, subsidies for wastewater energy-saving and energy creation.

Net-Zero Sustainable Green Living

Driving industry carbon reduction transition through changes in behavior and consumption patterns

- **Environmental Labels and Green Procurement**
  Subsidies for businesses to apply for labels, expand government green procurement.
- **Existing Residential Insulation Improvement**
  Subsidies for building insulation improvements, prioritize the use of domestically produced green building materials.
- **Low-Carbon Transition of Eco-friendly Restaurants**
  Promote zero-waste, low-carbon diets, reduce single-use dining utensils.
- **Support for Carbon Reduction Innovative Living**
  Guide behavior change through eco-friendly point collection.
- **Green Living Pilot Area Construction**
  Collaborate with local governments to create low-carbon residential and commercial spaces.
- **Low-Carbon Sustainable Community Certification and Resilient Home Construction**
  Assist villages and communities apply for low-carbon sustainable home certification, create local distinctive low-carbon lifestyles, train community green-collar talent

Autonomous Reduction Plans

Domestic Wastewater

- Increase domestic wastewater treatment rates.
- Build sustainable and smart sewer systems.

Industrial Wastewater

- Promote methane recovery facilities for wastewater treatment.
- Develop a biogas power generation industry chain, improve river environmental quality.

Landfilling, Incineration, Composting

- Diversify waste treatment, reduce waste and increase recycling, apply resource recycling carbon reduction technologies.

IV. Innovative Mechanisms

Six Major Innovation Mechanisms

2050 Net-Zero Transition

The Climate Change and Net-Zero Emissions Transition Task Force of the National Council for Sustainable Development

The Public Sector Chief Sustainability Officer Alliance

Public-Private Partnership

Government Leadership

- Technological Innovation
- Financial Support
- Carbon Pricing
- Regulatory Adjustment
- Green Collar Talent
- Community Driven

Technological Innovation

Three Key Strategies of Net-Zero Technology Deployment

Energy Transition Technology

- Sustainable Low-Carbon Hydrogen Energy
- Hybrid Offshore Energy
- Forward-Looking Deep Geothermal Power Generation

Decarbonized Industry Construction

- Carbon Capture and Social Governance Integration
- Biomass Sustainable Energy Resource Utilization
- Resource Recycling and Green Design
- Industrial Equipment Integration and AIoT Innovation for Energy Saving

Net-Zero Infrastructure

- Net-Zero Smart Grid
- Basic Infrastructure and Built Environment

Forward-Looking Technology R&D Field Trial

Ministry Carbon Reduction Flagship Projects

經濟部

- Methane pyrolysis
- Deep Energy Saving
- Small Hydropower
- Technology-Based Energy Storage
- Geothermal

環境部

- Carbon Capture and Storage
- Resource Circulation
- Carbon Pricing and International Cooperation

National Development Council

Hydrogen (including Ammonia) Supply Chain

Aviation Fuel (SAF) and Transportation Carbon Reduction

Financial Support

Green Finance 3.0 — Green and Transition Finance Action Plan

- Releasing the second edition of the "**Sustainable Activity Determination Guidelines**," expanding the applicable industry scope (e.g., chemicals, steel, semiconductors, etc.).
- Announcing the "**Transition Plan Suggested Coverage**," to assist enterprises in orderly transition, and serve as the basis for discussions in the financial industry.

- Guiding the financial industry to inventory and disclose information on their own carbon emissions (Scope 3) and those of their investment and financing portfolios.

- Prioritizing including **corporate self-determined reduction plans, voluntary emission reduction and offset programs** in investment and financing decision-making.

- Directing funds toward **green and sustainable development fields, issue sustainable development bonds**, green securities products, and support green growth.

Expanding ESCO Assistance

- Expanding the scale of ESCO credit guarantees, strengthen credit guarantee and insurance systems to reduce commercial risks.

Carbon Pricing

In line with international advanced practices, promoting carbon pricing in Taiwan

- **Implement carbon fees first, with preferential rates to encourage substantial reductions, alongside voluntary emission reduction mechanisms for issuing reduction quotas and other diverse reduction mechanisms.**
- **The carbon fee system will reduce 37 million metric tons of CO2e by 2030, approximately 14% of the emissions level in 2005.**

2025
The carbon fee system underway

Mandatory — Carbon Fee System
Voluntary — Carbon Reduction: Issuance of carbon credits

2026
The EU CBAM (Carbon Border Adjustment Mechanism) officially implemented.

Free allocation of allowance will gradually be phased out.

2027~2028
Cap-and-Trade and Emission Trading Systems

In 2026, Taiwan will pilot the emission trading system (TW ETS)

Plan long-term carbon pricing mechanisms

- Mandatory — Cap-and-Trade and Emission Trading System (ETS)
- Mandatory — Carbon Fee System
- Voluntary — Voluntary Carbon Reduction: Issuance of carbon credits

Regulatory Adjustment

New or revised net-zero related regulations: 11 laws and **24 regulations/orders** (or administrative rules)

Climate Legal Framework

In February 2023, the **Climate Change Response Act** was promulgated, and the **carbon fee regulations** were completed, along with **12 other priority sub-laws**.

Mature Green Energy

- The Electricity Act
- Energy Administration Act
- Standards for the installation of photovoltaic solar power equipment in buildings

Forward-Looking Green Energy

- Renewable Energy Development Act
- Regulations for the management of CO2 capture and storage

Low-Carbon Transition

- Statute for Industrial Innovation
- Circular Economy Promotion Act
- Waste Disposal Act

Lifestyle Transformation

- Urban Planning Act
- Regulations on the Management of Apartment Buildings
- Sewerage Act
- National Park Act
- New Building Energy Conservation Standards

Green Finance

- Securities and Exchange Act
- Financial Reporting Standards for Securities Firms/Futures Brokers/Insurance Industry
- Guidelines for the annual reports of banks/publicly listed companies/financial holding companies/finance companies on required provisions.

Green Collar Talent

Create green job opportunities | **Assist affected groups with employment**

Assess labor demand

Estimate green collar talent employment trends

Identify skills needed for green collar talent

Promote supply and demand matching

Green collar talent information platform

Green collar job vacancy matching

Expand talent development

Public-private partnership talent development

Talent development rewards and subsidies

- Vehicle maintenance personnel — MOTC
- Ecological carbon sink personnel — MOA
- Employed workers — MOEA
- Students — MOE
- Financial personnel — FSC
- Employed workers Unemployed individuals — MOL
- Construction management personnel National Parks — MOI
- Maritime personnel — OAC
- Environmental personnel Inspection personnel Green collar youth — MOENV

Attracting global talent, with an expected cultivation of **80,000** green-collar talents by 2030.

Community Driven

Energy Independence and System Resilience

Build energy resilient communities

Community energy self-sufficiency

Circular Economy and Regional Revitalization

High-value local material circulation

Low-carbon, sustainable circular environments

Local Carbon Reduction and Carbon Sink Benefits

Local carbon reduction national movement

Diverse carbon sink benefits everywhere

Sustainable Production and Livelihood Support

Fair distribution of local production and sales

Sustainable livelihood support cases

Talent Transition and Community Networks

Social co-creation and resource integration

Diverse transformation of green collar talent

Just Transition that Leaves No One Behind

National Project of Hope

Ensuring opportunities for individual, industry, and group development

Transforming climate change into an opportunity for regional development

In-depth Identification of Stakeholders and Key Issues

Data-driven Governance

Local Social Communication

- **Labor Market (Changes in Employment Structure)**
- **Industry Development (Adaptation to Net Zero Policies)**
- **Livelihood Care (Energy Vulnerability Assessment)**
- **Regional Balance (Spatial Development Strategies)**

Policy Support

Employment Guidance

- Framework Guidelines for Labor Issues
- Various ministries promoting job training and employment guidance measures

Financial Support

- Green and Transition Finance
- Green Growth Fund
- Greenhouse Gas Management Fund

Industry Assistance

- Net Zero Transition for High Carbon Emission Industries and SMEs
- Matching Supply and Demand for Green Talent

Social Safety

- Design Guidelines for Supporting Disadvantaged Groups
- Ensuring Fair Development Opportunities for Indigenous People, Women, and Other Groups

V. Financial Planning

Financial Planning

Government Funding Investment

Driving Private Sector Investment

Expanding Net Zero Carbon Emission Budget

Increasing Government Green Spending

Strengthening Government Incentive Measures

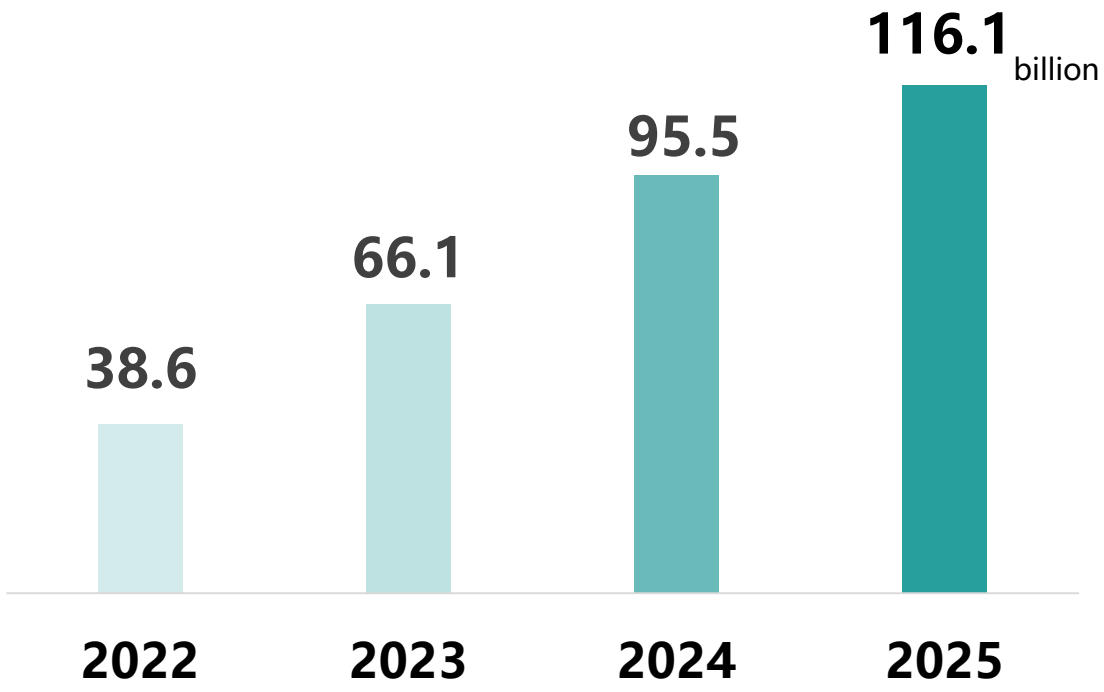
Promoting Green and Transition Finance

Net-Zero Carbon Emission Budget Planning

By 2030, government budget investment will exceed NT$1 trillion

- The budget for the 12 key strategic action plans for net-zero transition will increase year by year, reaching NT$116.1 billion by 2025.
- An additional NT$231.023 billion budget for the six major sectors' carbon reduction flagship projects.

12 key strategic action plan budgets



Energy	86.451 billion 2024~2030
Manufacturing	50.020 billion 2026~2030
Residential and Commercial	19.200 billion 2026~2030
Transportation	41.188 billion 2025~2030
Agricultural	7.785 billion 2026~2030
Environmental	26.379 billion 2024~2030

Expand Government Green Spending

Green Budget Spending

Develop Net Zero Green Guideline Principles

1. Public Infrastructure 2. Social Development
3. Technological Development 4. Non-planned

Public Construction

- By 2030, public construction green funding will reach NT$160 billion
- Public construction will account for 20%

Establish 7 categories of "Carbon Reduction Operational Reference Guidelines" (for construction, water conservancy, soil and water conservation, national highways, provincial roads, railroads, and sewers)

Government Procurement

- By 2030, total green procurement (public and private) will reach NT$165 billion
- The government business expense share and the amount managed by the private sector will increase by 10% annually

Amend the "Government Green Procurement Performance Evaluation Method" to implement the "Government Priority Procurement of Environmentally Protective Products"

Green Growth Fund + Carbon Fees

Green Growth Fund

Total funding of NT$10 billion, strengthening investment in net-zero sustainable emerging industries, guiding private sector investment

The maximum investment amount per single enterprise is NT$150 million

Domestic enterprises + foreign enterprises operating in Taiwan

Greenhouse Gas Management Fund

- Carbon fee revenue will be included in the GHG Management Fund and will be prioritized for GHG reduction work, subsidies, and rewards for businesses investing in GHG reduction technology, climate change adaptation, etc.

Note: Green funding refers to expenses for green construction methods, green materials, green energy, green environment, etc.

Guide Private Sector Investment

Strengthen Government Incentive Measures

Trillion NT Dollar Investment National Development Plan

Establish public-private partnership platforms to guide private participation in green energy and other public infrastructure

National Credit Guarantee Mechanism

Increase the guarantee ratio to 80%, providing NT$90 billion in guarantee capacity to promote green energy and other major infrastructure projects

ESCO Performance Credit Guarantee

Increase the guarantee ratio to 95%, providing NT$10 billion in guarantee capacity, expanding the depth of energy-saving capabilities

Tax Incentives: Amend Article 10-1 of the Statute for Industrial Innovation

Increase the investment expenditure cap to NT$2 billion, and include energy-saving and carbon-reduction projects in the scope of applicability

Green and Transition Finance Action Plan

Local Banks' Loans to Green Industries

Loan balance reaches NT$3 trillion (as of November 2024)

Issuance of Sustainable Development Bonds

Cumulative issuance reaches NT$688.5 billion (as of January 20, 2025)

Insurance Industry Investment in Green Energy

Investment amount: NT$160.5 billion (as of November 2024)

By 2030, green investment and financing will exceed NT$5 trillion

VI. Expected Benefits

Expected Benefits

Deepening Four Major Transitions

- Energy Transition More Diverse
- Industry Transition More Innovative
- Lifestyle Transition More Low-Carbon
- Social Transition More Resilient

Driving Green Growth

By 2030

Providing Low-Carbon Energy

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

Air pollution will be reduced by 40% compared to 2019

Increasing Energy Self-Sufficiency

Dependence on imported energy will decrease from 96.2% in 2025 to 90%

Creating a Green Economy

Government budget input will exceed NT$1 trillion

Drive NT$5 trillion in private sector investment

80,000 green-collar talents trained

Thank you