



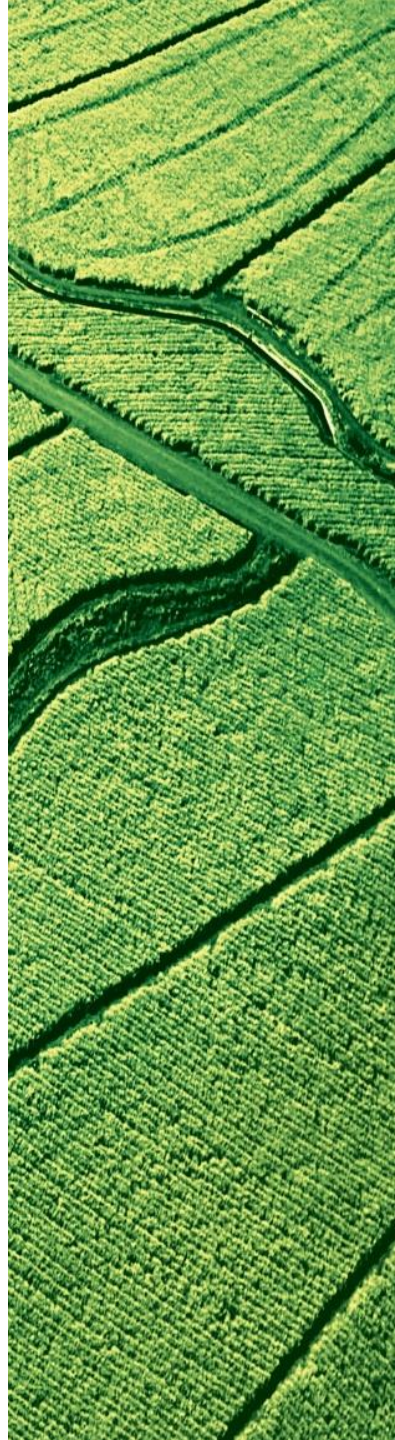
The 63<sup>rd</sup> Meeting of the APEC Expert Group on Energy Efficiency  
& Conservation (EGEE&C 63)

# Economy Update in Chinese Taipei

06 - 07 Nov. 2024

Directed:  經濟部能源署  
Energy Administration,  
Ministry of Economic Affairs

Administrated:  ITRI  
Industrial Technology  
Research Institute



# Background

## International Net Zero Trend



Energy efficiency is called the “first fuel” in clean energy transitions



Must double the global average annual rate of energy efficiency improvements from around 2% to over 4% every year until 2030.

2021  
Announcing Net Zero Goal

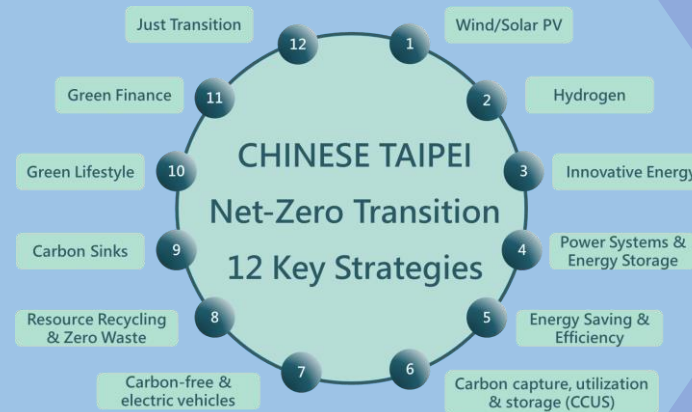
Net-Zero Transition

“2050 Net-Zero Transition” is the goal of Chinese Taipei as well as a global consensus.

2022-2023  
Announcing Net Zero Pathway

Path & Strategy

Announces Net-Zero Transformation Path and 12 Key Strategies.


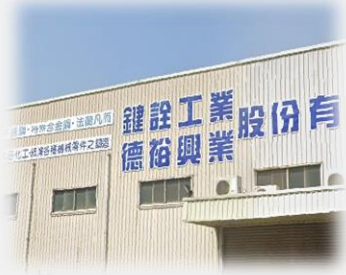




2024  
Secondary energy transition

Topic

- Diversified Green Energy Development
- **Deep energy saving**

# The Promoting Way for Various Types of Users

Type	Large energy users (Contract Capacity > 800kW) 4,900 units	Medium energy users (Contract Capacity 100~800kW) 19,900 units	Small energy users (Contract Capacity < 100kW) 1.33 million units	Residential energy users 13.57 million units
				
Characteristics	<b>Complex and diverse equipment, less units</b> (Chilling water & air pressure system)	<b>Large quantity of equipment, but type less</b> (Lighting, Air-conditioning, Refrigeration and Freezers)	<b>Less quantity of equipment; many units</b> (Air Conditioner & Refrigerator)	
	<b>Usage</b> 15.76 billion kWh <b>Load</b> 24.48 GW	<b>1.95 billion kWh</b> <b>3.17 GW</b>	<b>2.88 billion kWh</b> <b>5.24 GW</b>	<b>5.17 billion kWh</b> <b>9.40 GW</b>
Way	<b>Offer tax incentives</b>	<b>Diagnostic &amp; Counseling + ESCO</b>		<b>Subsidy</b>

# Promotion (Large energy users )

Driver

Push

- Regulatory Requirements
- Electricity price adjustment

Pull

- Investment Tax Credit
- Subsidy

Practice

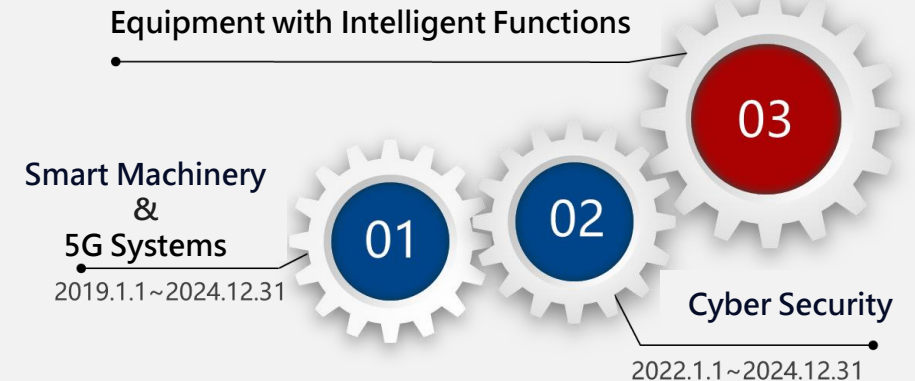
## 1. Enhancing the energy saving goal

- Increase the target for large users by up to 6% over four years.

Contract Capacity	Num	Usage (100 kwh)	Saving goal
801~10,000 kW	4,577	340	1.0%
≥ 10,001 kW	320	1,236	1.5%

## 2. Expanding the Investment Tax Credit

Amended Statute for Industrial Innovation Article10-1



# Promotion (Medium and small energy users )

## Issues

It is not easy for the government and corporations alone to fully promote


- Lack of professionals to assess energy saving practices
- Amount of equipment, but few types
- As many as 1.35 million SMEs

## Foster ESCO

### Promotion Policy of ESCO

- Service Group assists in the development of potential users by providing energy saving consultation and diagnosis.
- Introduction of National Development Fund and bank capital to invest in ESCO.
- Subsidizing Programs and Integrated Equipment Improvements

# Promotion (Residential energy users )



## Replacement of old air-conditioners and refrigerators

### High percentage of electricity consumption

Residential electricity consumption accounts for 20% of all electricity consumption, with air-conditioners and refrigerators accounting for 40%.

### Lot of old units

There are still 7.3 million old air-conditioners and refrigerators before the implementation of energy efficiency labels in 2010.

### High potential for energy saving

Switching to Class 1 units , can save more than 50% of electricity usage

## Encouraging the replacement of old appliances

- Replacement subsidy \$3,000 per unit
- Reduced Commodity Tax Amount \$2,000 per unit

### Current Program (2023~2024)

- Replacing 1.7 million units in 2023
- Replacing 860,000 units in 2024

### Extension Program (2025~2026)

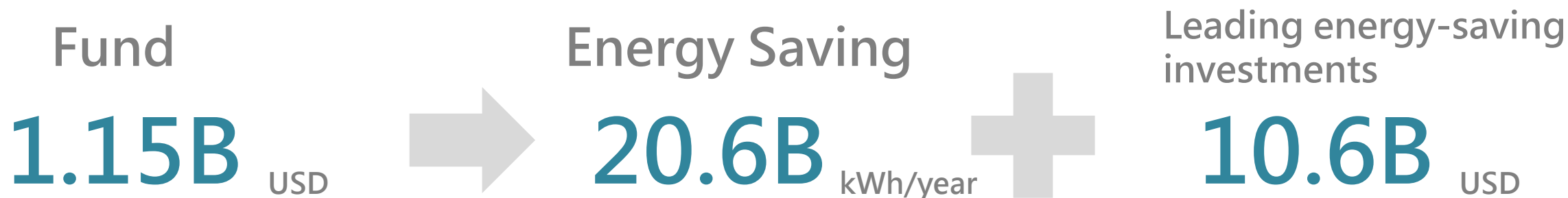
- Planning allocation of US\$4.23 billion to subsidize 4.08 million units

## Overall Goal

- Replacing 7.3 million old units in 4 years
- Saving 4.4 billion kWh of electricity annually



# Expected Results



## Program Goal

Total 20.6 billion kWh of electricity saved in 4 years (2024~2027)

## Strategies

## Expansion of practices

Energy users

Large

- 1% power saving target for large users
- Industry Process Improvement

Medium and small

- Enhanced Equipment Efficiency Management
- Energy Saving Requirements for the Service Sector

Residential

- Benchmark for improving the efficiency of home appliances

ALL

- Best practices sharing
- Energy saving in buildings
- Local participation

- Enhancing the goal of energy saving
- Expanding the **Investment Tax Credit**
- Expanded promotion of **ESCO** to help small and medium Energy users
- Residential Appliances Retirement and **Replacement Allowance**
- Installation of energy storage equipment to **transfer peak electricity** consumption



**Thank you for your  
time and attention.**





# 補充敘述(內參)

# Promoting Deep Energy Saving (2024-2027)

## Background

- In line with the global push toward net-zero carbon emissions to combat climate change, Chinese Taipei pledged in 2021 to achieve net-zero status by 2050. The government followed up in 2022 by issuing 12 key strategies for the transition to net zero, including one strategy to proactively expand energy saving efforts--  
Encouraging companies to invest in low-carbon processes, and facilitating industry and lifestyle transformations.

# Three main measures

## ① Large energy users (Contract Capacity > 800kW):

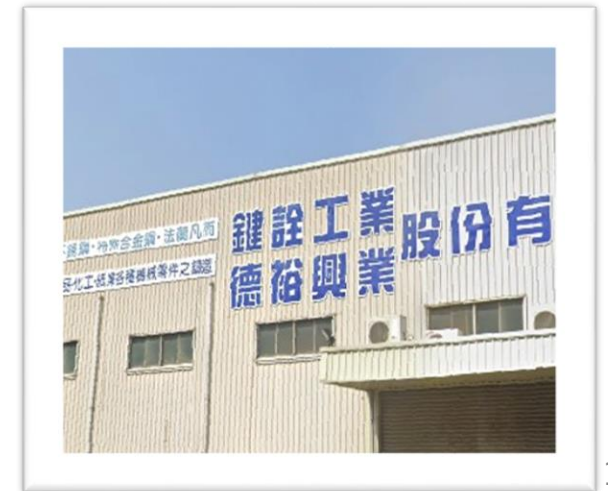
- Through regulatory requirements, raise the annual energy-saving target from 1% to 1.5% for large energy users that reserve a capacity of 10,000 kilowatts (kW) or more. Foster collaboration between large manufacturers and smaller firms along the supply chain to improve energy-saving processes. Offer tax incentives for investing in energy saving, thus encouraging lower energy consumption.
- Complex and diverse equipment, small number of (e.g., process, chilling water system, air pressure system, etc.)



# Three main measures

## ② Medium and small energy users (Contract Capacity 100~800kW):

- Help **energy service companies (ESCOs)** provide businesses with specialized assistance in implementing suitable cost-effective means to save electricity and reduce carbon emissions. Expand ESCO service capacity by injecting funds from financial institutions, backed by a government credit guarantee program for ESCO industry loans.



# Three main measures

- ③ Residential energy users (Contract Capacity < 100kW):
  - Continue to promote a **subsidy program** that encourages people to replace old home appliances by purchasing new ones that meet Chinese Taipei's highest energy efficiency labeling standards.

# Net-Zero Transition-12 Key Strategies

