



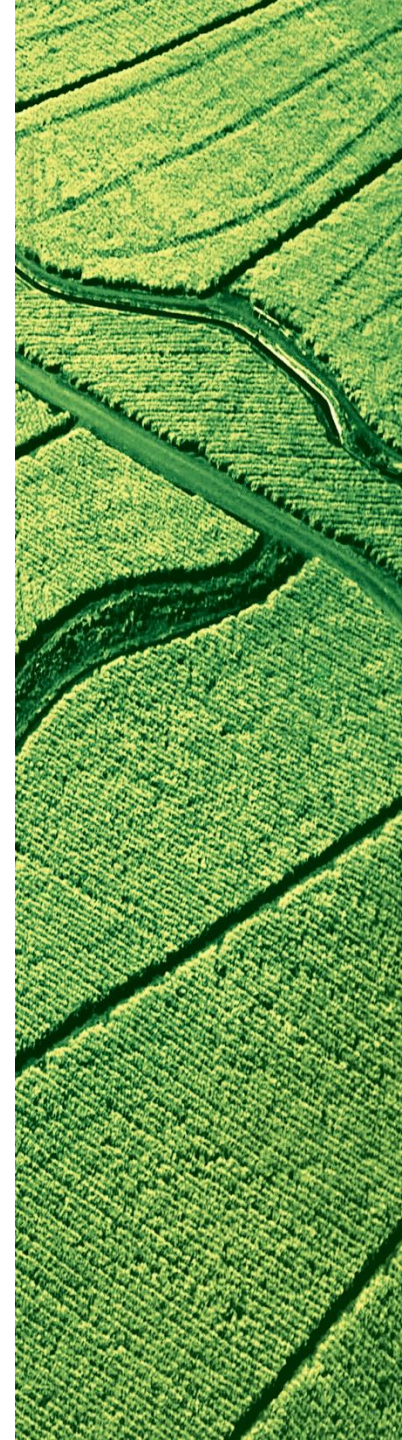
The 60<sup>th</sup> Meeting of the APEC Expert Group on  
Energy Efficiency & Conservation (EGEE&C 60)

# Economy Update in Chinese Taipei

March 16 , 2023

Directed:  經濟部能源局  
Bureau of Energy,  
Ministry of Economic Affairs

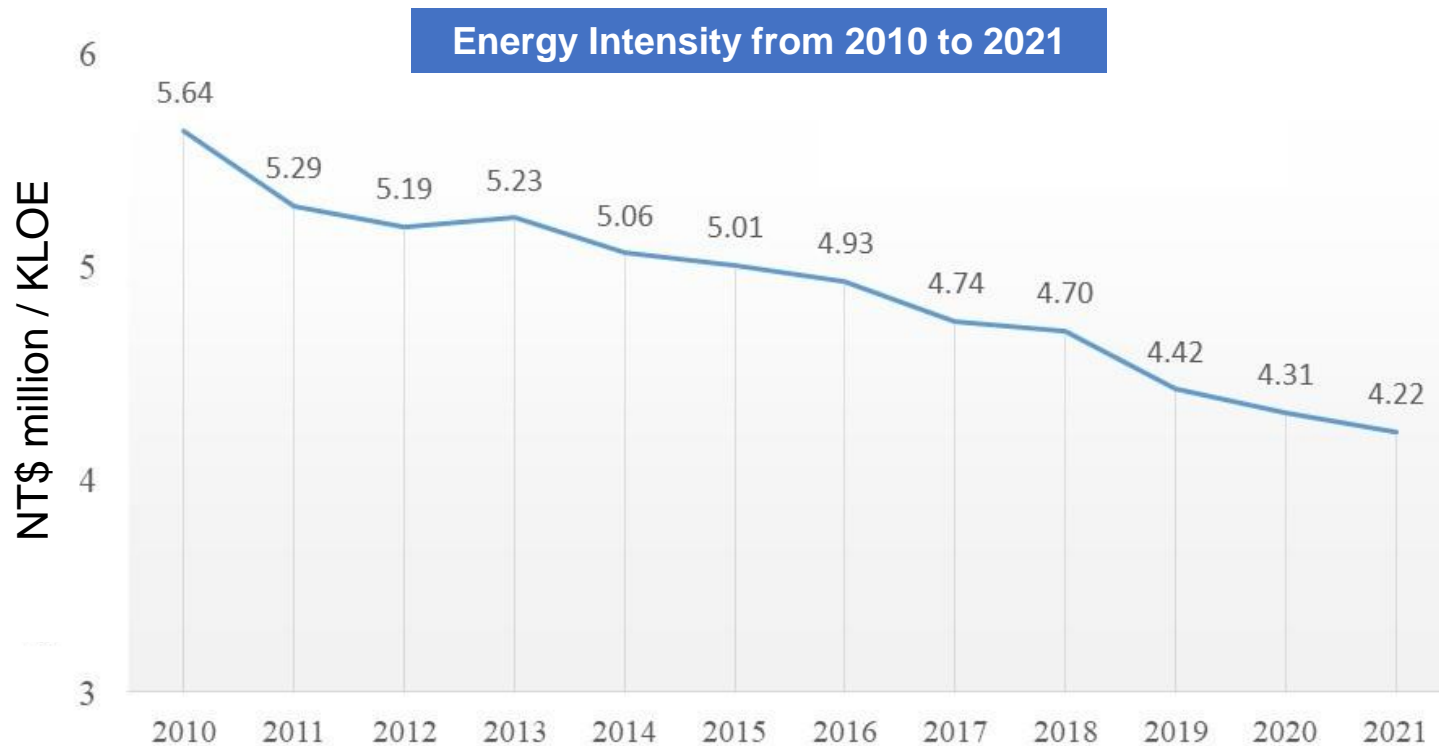
Administrated:  ITRI  
Industrial Technology  
Research Institute



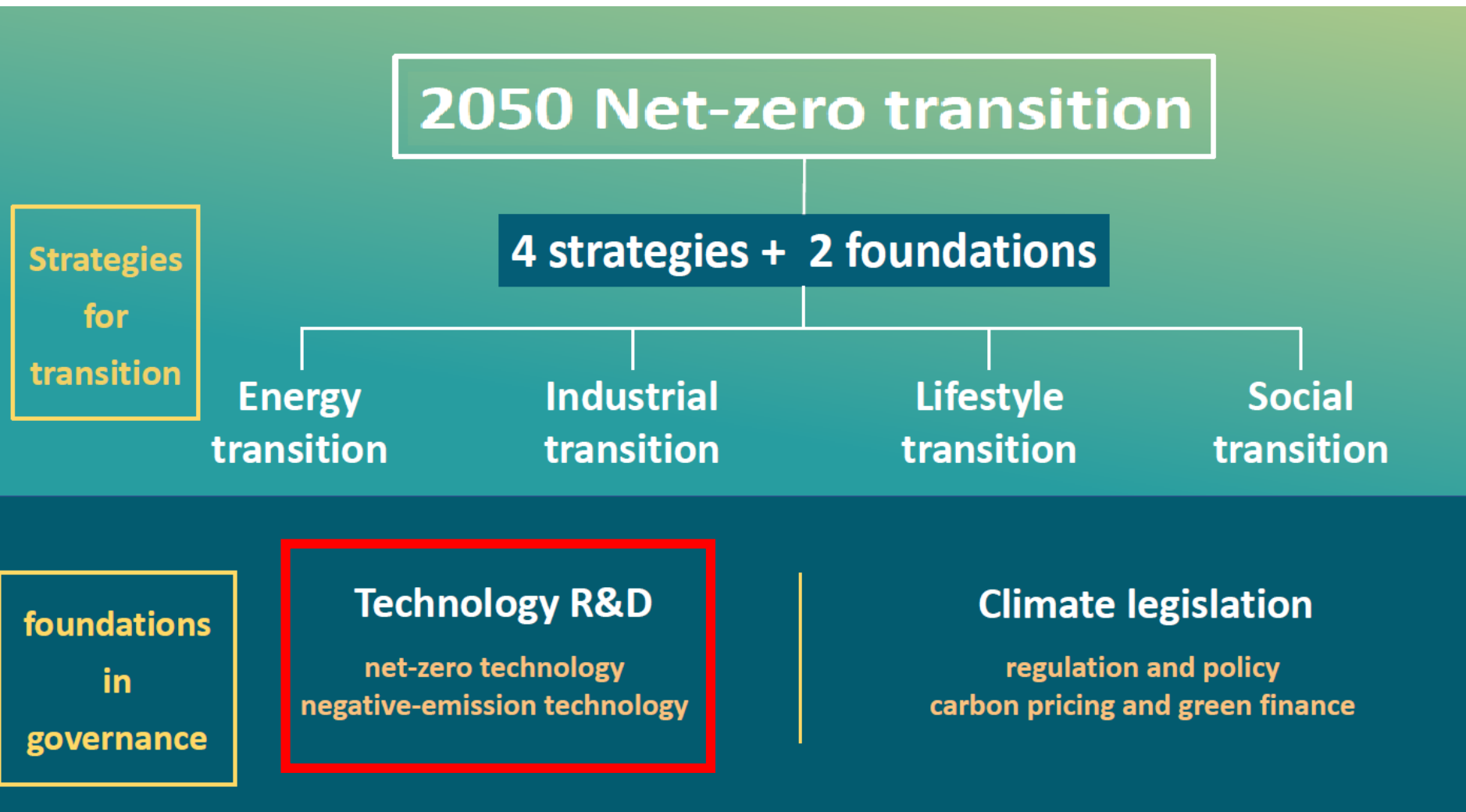
# Energy Conservation Goal

Policy goals of Average Energy Intensity and Electricity Intensity improvement from 2017 to 2025:

- Energy Intensity : **-2.4%** annually
- Electricity Intensity : **-2%** annually



# Pathway to Net Zero Emissions in 2050



# Actions Toward Net-Zero Transition

Improve Energy efficiency in Four areas

Industry  
Business  
Buildings  
Transportation



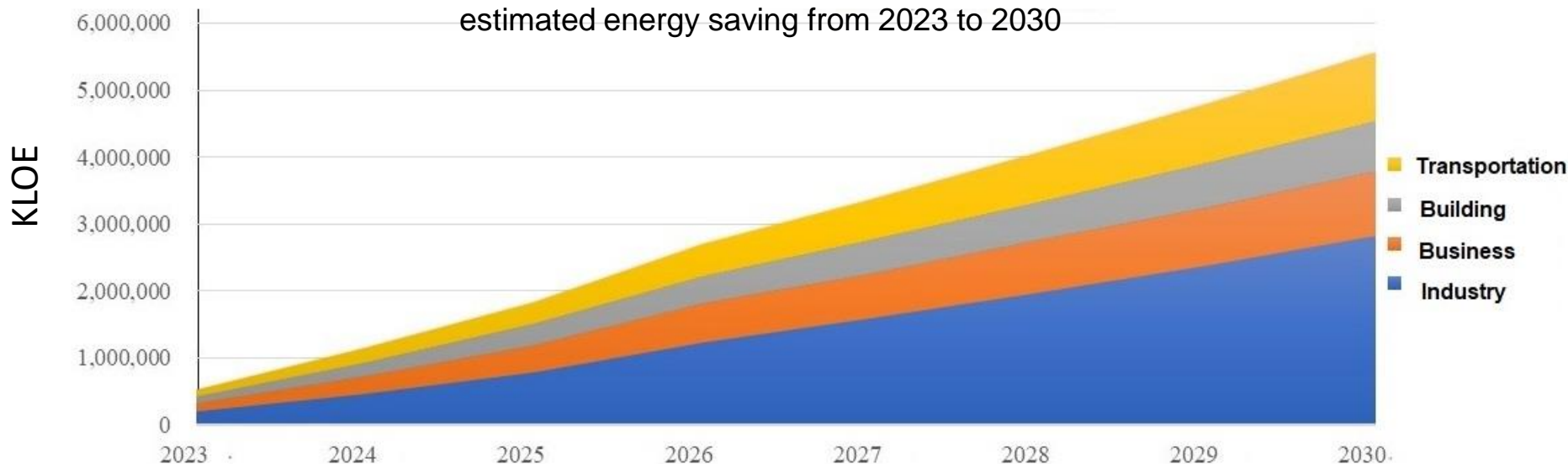
In Two phases

**2023 - 2030**

implementing practical existing technologies and laying out technical innovation

**2031 - 2050**

expanding the application of innovative technologies





# Energy efficiency standards update

# Mandatory & Voluntary Policy

**Three principal policies** to promote energy efficiency management for equipment and apparatuses

## Voluntary Policy

### Energy Conservation Labeling



**52** Items

**>10,000** Products

**95.9%** Household Electricity Consumption in Summer

 Promoting Date: Dec, 2001

## Mandatory Policy

### Energy Efficiency Grading Labeling (EEL)



**18** Items

**> 49,000** Products

**84.0%** Household Electricity Consumption in Summer

 Promoting Date: Dec, 1981

### Minimum Energy Performance Standard (MEPS)

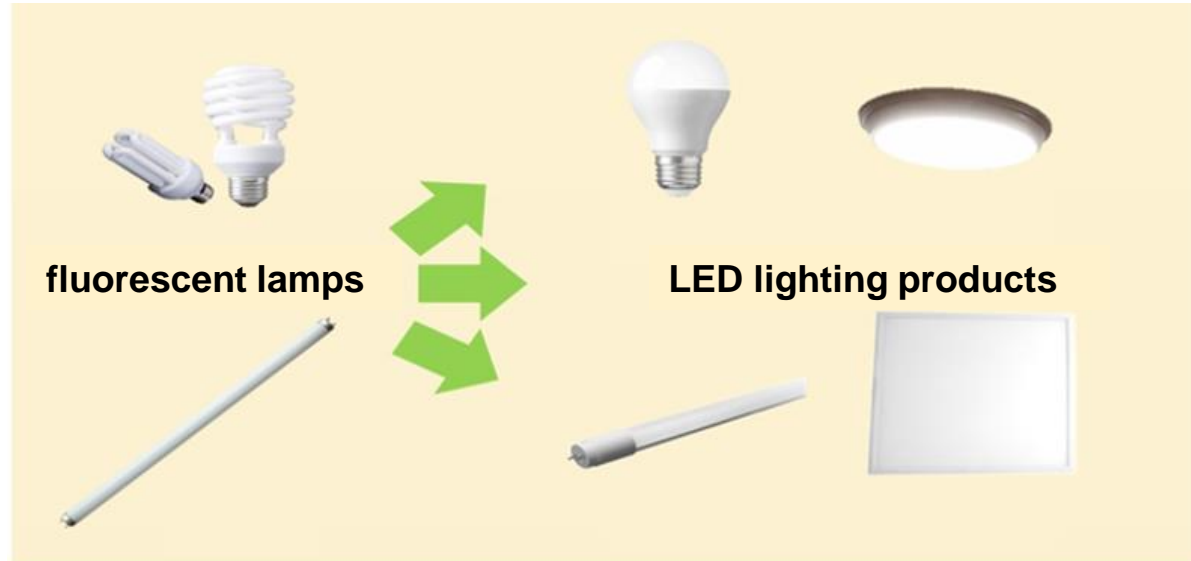
**32** Items

**84.9%** Household Electricity Consumption in Summer

 Promoting Date : July, 2010

# New MEPS for Fluorescent Light Sources

- Amendment date: **Sep. 26<sup>th</sup> 2022**
- Effective date: **July 1<sup>st</sup> 2024** (*Fit 2025 Net Zero policy*)
- Test standards:
  1. Fluorescent lamps (CNS 691)
  2. Compact fluorescent lamps (CNS 14576)
  3. Self-ballasted fluorescent lamps (CNS 14125)
- Energy efficiency improves **11%~80%**
- An estimated **140 million kWh** of electricity will be saved each year

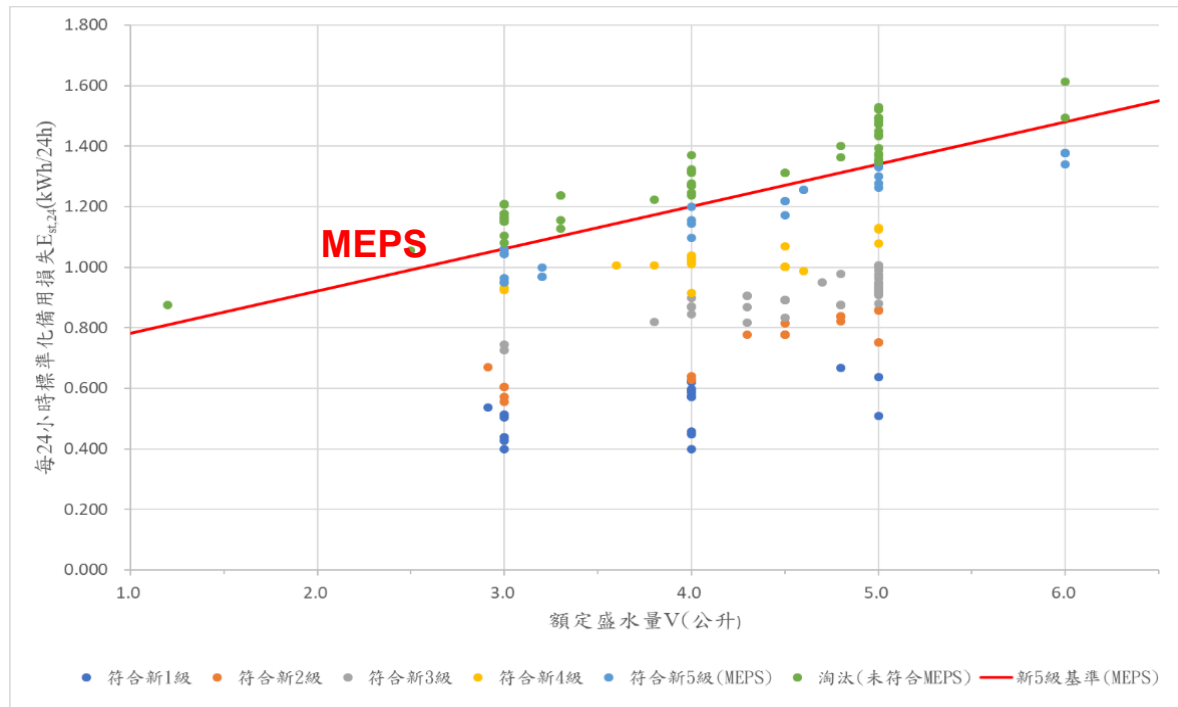


# New MEPS for Electric Pots

- Amendment notice date: **Nov. 17<sup>th</sup> 2022**
- Effective date: **July 1<sup>st</sup> 2025** (Fit 2025 Net Zero policy)
- Test standard: **CNS 12625**
- Energy efficiency improves **12.5%**
- An estimated **8.9 million kWh** of electricity will be saved each year



Rated Water Capacity, V (Liters, L)	MEPS (kWh/24h)
All models	$0.140V + 0.641$



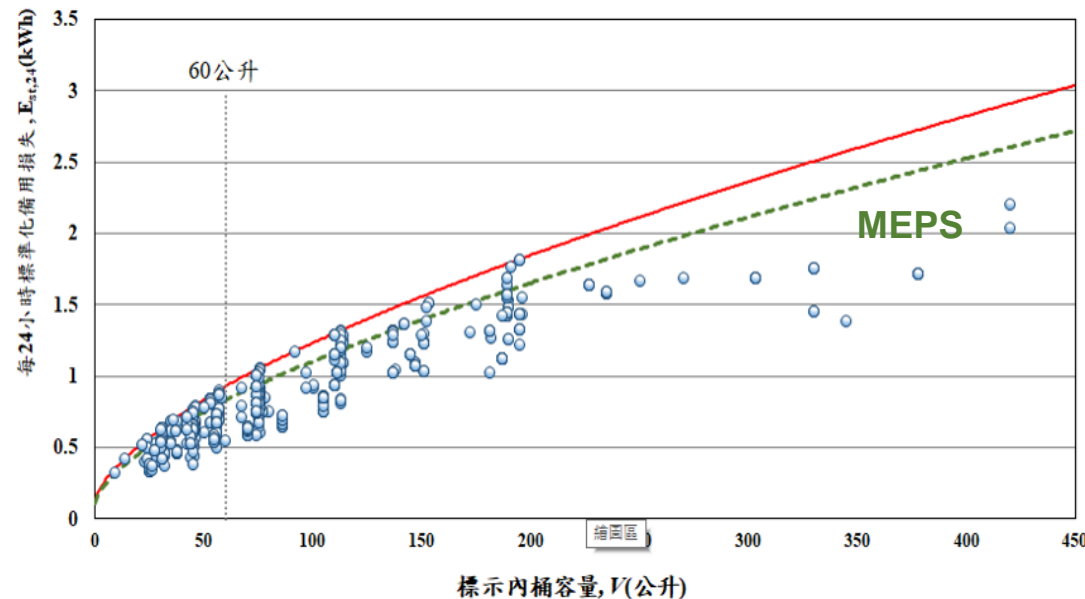


# New MEPS for Electric Storage Tank Water Heaters

- Amendment notice date: **Dec. 9<sup>th</sup> 2022**
- Effective date: **July 1<sup>st</sup> 2025** (Fit 2025 Net Zero policy)
- Test standard: CNS 11010
- Energy efficiency improves **10.5%**
- An estimated **1.4 million kWh** of electricity will be saved each year



Rated Capacity of inner tank, V (Liters, L)	MEPS (kWh)
$V < 60$ Liters	$0.1105 + 0.0470 \times V^{2/3}$
$V \geq 60$ Liters	$0.17 + 0.0434 \times V^{2/3}$



# Conclusion

- Under the framework of **2050 Net-Zero Emission pathway**, the **Actions Towards Net-Zero Transition** is proposed in the end of 2021. The main target of the plan is to **maximize energy efficiency**
- To attain the target, we recently updating several residential major appliances' energy efficiency (**Fluorescent Light Sources, Electric Pots and Electric Storage Tank Water Heaters**) to phase out inefficient products
- At the same time, we are continuously committing to new technologies R&D to assist industrial innovation
- Chinese Taipei have been working hard to plan and implement more energy saving strategies to carry out **Net-Zero Emission in 2050**. We look forward to enhancing **cooperation with APEC member economies** and move toward a net-zero energy future

**Thank You**