

## 6.2 Reducing Use of Energy and Resources

### 6.2.1 Fuel Usage Management

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In order to be environmentally friendly, Taipower has chosen to use fuels with low-ash, low-sulfur, and low-nitrogen content. The Company's policy seeks to stabilize the use of coal, and gradually shift from coal to gas. Taipower will also continue to build and upgrade gas-fired units and related facilities to minimize pollutant emissions from thermal power generation.

#### Taipower's Use of Fuels from 2020 to 2022

	2020	2021	2022
Gas (millions of cubic meters)	15,075	15,846	16,395
Coal (millions of tons)	26.937	28.295	28.115
Fuel oil (thousands of kiloliters)	758	961	861
Nuclear fuel (tens of thousands of pounds)	155.5	128.66	115.83

To reduce emissions in line with regulatory requirements, power plants need to add environmental protection equipment and facilities. The coal used must be high in calorific value, low in ash, and low in sulfur content. Since the properties of coal vary from mine to mine and country to country, power plants use blending methods to meet a power plant's requirements for coal ash, calorific value, and sulfur. Taipower has added additional quality requirements for its coal procurement. For example, the Company has decided to reduce the ash content of its Indonesian coal from 11% to 8% and sulfur from 1.1% to 0.9%. It has also decided to reduce the ash content of its Australian coal from 14-15% to 10%. Further restrictions on mercury content have been imposed, too. While Taipower exercises strict control of emissions from downstream power plants in its supply chain, the Company works even harder to deliver on its environmental commitments in upstream areas of its supply chain.

### 6.2.2 Enhancing the Energy Efficiency of Taipower's Operations

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In 2022, Taipower continued to give impetus to power-saving in conjunction with the Executive Yuan's Electricity Efficiency Management Plan for Government Agencies and Schools by setting a goal of zero growth in annual power consumption compared to the previous year. Moreover, in accordance with the Ministry of Economic Affairs' Water Saving Normalization Action Plan, Taipower promoted water conservation. The General Management Office will coordinate these efforts while other branches and power plants will be driven through promotions to implement various measures that constitute a comprehensive energy-saving and carbon-reduction scheme. Taipower will also track its energy consumption (water, power, fuel, paper) on a monthly basis and conduct annual assessments to select units with excellent performance.



#### Taipower's Non-Productive Power Consumption from 2020 to 2022

	2020	2021	2022
Consumption (GWh)	118.1	112.9	118.3
Calculation Scope (The percentage of total Taipower employees that fall within the scope of efforts)	100%	100%	100%



#### Taipower's Non-Productive Water Consumption from 2020 to 2022

	2020	2021	2022
Consumption (Tons)	1,328,077	1,236,818	1,287,862
Calculation Scope (The number, by percentage, of Taipower employees that fall within the scope of efforts)	100%	100%	100%



#### Taipower's Total Resource Recycled for Non-productive Business Activities from 2020 to 2022

	2020	2021	2022
Consumption (Tons)	39,159.93	54,156.12	33,591.68
Calculation Scope (The number, by percentage, of Taipower employees that fall within the scope of efforts)	100%	100%	100%

Note: 1. The statistical result for resources recycled from the Taipower headquarters building

2. Recycled resource include: Paper, iron and aluminum cans, other metal products, plastic containers, glass containers, etc.

## Results of Non-Productive Resource Management



### Water-savings

- Prioritizing the use of equipment with water efficiency labels was the first priority along with the effective use of rainwater resources (for toilet flushing, watering plants) to reduce tap water consumption.
- In line with the Water Saving Normalization Action Plan, Taipower actively promoted the installation of water-saving equipment and the replacement of old, water-consuming equipment in offices, at construction sites, and in employee dormitories.
- Promote water-saving measures at each unit through water-saving advocacy, water management, pipeline facility leak inspection, and rainwater reclamation and reuse.



### Power-savings

- Prioritizing the purchase of appliances with an energy-saving labels or in the first or second class of energy efficiency.
- Establish an energy management system to monitor and analyze electricity consumption data. Identify improvement items and plan solutions to improve energy efficiency.
- In cooperation with the Electricity Efficiency Management Plan for Government Agencies and Schools, Taipower actively promoted the replacement of old energy-consuming equipment (air conditioners, lamps, etc.) in each unit to enhance electricity efficiency.
- Indoor temperatures were kept between 26-28°C in each office and circulating fans were used to increase comfort levels while reducing the use of air conditioning
- The elevators in each building adopt an energy-saving operation and control mode, and some of the elevators are deactivated during off-peak hours, after work and on holidays.
- Energy-consuming equipment and business machines were operated in all offices in an energy-saving manner; for example, the power supply for water dispensers was turned off automatically during off-hours and on regular holidays to save standby power.



### Fuel-savings

- Promoted ride-sharing measures in vehicle dispatching and reinforced vehicle maintenance and inspection to reduce fuel consumption.
- Drew up a budget to accelerate the replacement of old fuel-consuming vehicles and made good use of electric vehicles.
- Fuel consumption in the past three years: In 2021, due to the impact of the epidemic, the usage rate of public vehicles was reduced, so the fuel consumption in 2022 was slightly higher than in 2021 by 340 liters. Despite this, fuel consumption in 2022 was 5,196 liters lower than in 2020.



### Paper-savings

- Continued to implement paper-reduction measures such as the electronic exchange of official documents and online approvals, with performance reaching 70% and 85%, respectively.
- Advocated for employee use of double-sided printing to save 2.82 million sheets of paper.

Taipower in collaboration with IKEA, has adopted the "rental instead of purchase" circular furniture model to transform employee restaurants. This effort was officially launched in 2022. By implementing the rental model, Taipower aims to reduce the costs associated with purchasing, maintaining, and disposing of furniture. It is estimated that this initiative will reduce approximately 6 tons of furniture waste, which is equivalent to a reduction of about 20 tons of carbon emissions. This reduction is equivalent to the carbon absorption of 2,000 trees in one year. Over the 6-year project period, the furniture will be recycled and refurbished by IKEA, allowing used furniture to have an extended lifespan and creating value in the circular economy. This collaboration marks the first instance of a state-owned enterprise adopting such an approach.