

# Taipower's Value Chain and Operational Elements

## Mission, Vision and Core Values



### Mission

To supply stable power for the needs of diverse social developments with an ecofriendly approach at a reasonable cost



### Vision

To transform into a prestigious and trustworthy world-class power utility group



### Core Values

Integrity, Care, Service, Growth

## ESG

### Sustainable Development Profiles

#### Governance

Provider of Sustainable Power



Leader of Smart Grid Development



Provider of Services for Smart Living



#### Environment

Agent of Environmental Friendliness



#### Society

Practitioner of Corporate Social Responsibilities



## Resource Input

### Financial Capital

- **Capital:** NT\$330 billion
- **Total Expenditures:** NT\$955 billion

### Equipment Capital

- **Power plants in operation:** 23 (Taipower owned)
- **Total installed capacity of thermal power plants:** 26,340 MW
- **Total installed capacity of nuclear power plants:** 2,890 MW
- **Total installed capacity of renewable energy power plants:** 2,510 MW
- **Installed capacity of pumped-storage hydroelectricity:** 2,600 MW
- **Installed capacity of purchased thermal power plants:** 8,330 MW
- **Installed capacity of purchased renewable energy:** 11,070 MW

### Natural Capital

Natural Gas	16,395 million cubic meters	Capital expenditure on environmental protection was approximately NT\$5.3 billion in 2022, while the recurrent environmental protection expenditure was NT\$3.3 billion
Coal	28,115 million metric tons	
Fuel Oil	861 thousand kiloliters	

Actual value in 2022.

### Human Resources Capital

- **Total number of employees:** 28,079
- **Number of contracted workers:** 1,128

### R&D Capital

- **Number of research projects for the year:** 492
- **R&D expenditures for 2022:** NT\$5.2 billion (Consisting of NT\$4.7 billion in expenditures and NT\$0.5 billion in capital expenditures)

### Social Capital

- **Number of users:** 14.93 million
- **Power supply partners:** 11 Independent Power Producers (IPPs), 47 cogeneration power providers and 50,980 contracts for renewable energy (including solar power, wind power, hydro power and others)
- **Power development promotion and assistance fund:** NT\$3.035 billion
- **Capacity of demand response:** 2,620 MW

## Power Generation → Transmission and Distribution → Electricity Retailing

### Power Generation

#### Taipower's electricity generation in 2022

Thermal power generation	156.0 billion kWh
Renewable energy	6.3 billion kWh
Pumped-storage hydroelectricity	3.1 billion kWh
Nuclear power	22.9 billion kWh

#### Electricity purchased from external sources in 2022

Privately-owned thermal power plants	42.7 billion kWh
Cogeneration	3.4 billion kWh
Renewable energy	15.3 billion kWh

### Transmission and Distribution

- **Total length of power transmission lines:** 18,032.1 circuit kilometers (Including overhead power lines and underground cables)
- **Total length of distribution lines:** 410,071 circuit kilometers
- **Number of substations:** 621

### Electricity Retailing

#### Percentage of electricity used (sold) by user type

User type	Percentage	User power supply
Industry	57%	135.7 billion kWh
Residential	20%	48.1 billion kWh
Commercial	15%	35.4 billion kWh
Others	8%	17.6 billion kWh

**Total sold:** 236.8 billion kWh

## Outputs

- **Earnings before tax:** NT\$227.047 billion
- **Electricity fee income:** NT\$645.1 billion
- **Net amount of generated and purchased power:** 250.7 billion kWh
  - Power generated: 188.3 billion kWh
  - Power purchased: 62.5 billion kWh
- **Facility utilization rate:** 79.1%
- **Line loss rate:** 3.82%
- **Greenhouse gas emissions:**
  - 98,480 kt CO<sub>2</sub>e
- **Air pollution emissions:** (kg / GWh)
  - Particulate pollutants emitted: 5
  - Sulfur oxide emissions: 84
  - Nitrogen oxide emissions: 169
- **Number of new employees:** 2,028
- **Total number of participants in education and training:** 91,043
- **Incidents of work-related injury:** 7
- **Ratio of work-rated injuries:** 0.031%
- **Number of research reports:** 206
- **Number of papers published:** 115
- **Number of patents/intellectual property cases:**
  - 96 in the Republic of China
  - 2 in the United States
  - 1 in Japan
- **Customer satisfaction rate:** 95.1 percent