2024
Sustainability Report

台灣電力公司
Taiwan Power Company

Momentum Begins with Motion
Green Energy Drives Tomorrow

The cover image features wind turbines and circular rotation as core visual elements, symbolizing the steady momentum of renewable energy development and conveying a dynamic, forward-moving rhythm. The color palette blends Radiant Yellow and Energy Green, embodying Taipower's commitment to technological innovation and smart energy integration into everyday life.

Together, these elements depict a sustainable vision for a net-zero future-where every beam of light in our lives is powered by intelligent, clean energy in motion.

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About this Report

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This is the 19th annual Sustainability Report published by Taiwan Power Company (hereinafter referred to as Taipower or the Company). The content has been compiled based on data and information submitted by departments across the Company. The Report is prepared in accordance with the Global Reporting Initiative (GRI) Sustainability Reporting Standards and the Sustainability Accounting Standards Board (SASB) Standards, and is further aligned with the disclosure framework of the Task Force on Climate-related Financial Disclosures (TCFD). A limited assurance of selected key performance indicators has been conducted in accordance with ISAE 3000 by Crowe Taiwan CPAs. The final version was approved by relevant department heads, the President, and the Chairman prior to publication.

Taipower remains committed to transparent communication with stakeholders. This Report incorporates the Company's five core themes of sustainability into each chapter to reflect its ongoing role in promoting sustainable power development. These five themes are: Provider of Sustainable Power, Leader of Smart Grid Development, Provider of Services for Smart Living, Agent of Environmental Friendliness, and Practitioner of Corporate Social Responsibilities.

Contact Taipower

Taipower has established a dedicated Sustainability Section on its official website to share performance results and related updates on key sustainability topics. A stakeholder questionnaire is also available to facilitate open and ongoing communication. The Sustainability Report is available in both Chinese and English for download. In addition, the "Information Disclosure" section of the official website is regularly updated with data on the Company's business, environmental, and social performance.We sincerely welcome your comments and suggestions. Your valuable feedback will help us improve future reports, including the next edition planned for release in 2026.

Taiwan Power Company

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Taiwan Power Company's Sustainability Section

Annual Sustainability Reports

Reporting Period

The reporting period covers January 1 to December 31, 2024. To enhance information completeness and year-to-year comparability, some historical data and information up to 2025 are also included. Any deviations from the reporting period are clearly noted in the text.

Scope of the Report

This Report focuses on Taipower's operations within Taiwan and does not cover subsidiaries or investee companies. The scope of the data includes Taipower's performance and initiatives in the areas of corporate operations, environmental sustainability, and social responsibility.

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Statement from the Chairman 2-22

As climate change intensifies and the global energy transition accelerates, Taiwan's power sector is undergoing a pivotal transformation. At the heart of the nation's power supply, Taipower is entrusted with not only maintaining energy stability and resilience, but also playing a vital role in advancing the net-zero transition. In 2024, Taipower actively adjusted its strategies and actions to align with a holistic vision for sustainable development. Through cross-departmental collaboration and policy coordination, the Company is working to strike a balance between reliable power supply and long-term sustainability, reaffirming its role as a central energy hub that supports industrial upgrading, climate governance, ecological protection, and social well-being.

Driving the Energy Transition Through Innovation and Collaboration

Responding to the global imperative for carbon reduction, Taipower continues to promote the development of renewable energy, energy storage, and smart grids. In 2024, the Company completed the Yilan (Dongshan) Energy Storage System to enhance grid stability in northeastern Taiwan and launched the Longtan Energy Storage System to further expand capacity. The integration of AI and digital management tools has improved grid flexibility in managing the intermittency of renewables. The commissioning of Units 8 and 9 at the Datan Power Plant has also enhanced system capacity, in line with the national policy of "Increasing Gas, Reducing Coal."

Taipower has made significant progress in frontier technologies, including plans for an Ammonia Blending Demonstration Project at the Dalin Power Plant targeting over 5% ammonia co-firing by 2030. The Company also initiated a partnership with the Electric Power Research Institute (EPRI) to collaborate on net-zero strategies, energy hub planning, and carbon capture demonstrations. To expand green electricity access, Taipower launched a small-scale green power sales program in 2024, incorporating offshore wind power for the first time and enabling broader participation among small and medium-sized enterprises. The Company continues to support grid infrastructure for renewable integration and EV charging facilities while developing advanced management systems to better monitor distributed energy resources.

Reinforcing Grid Resilience and Enhancing Power Reliability

In 2024, Taipower faced multiple natural disasters, including the April 3 Hualien Earthquake, which triggered generator trips at the Heping and Taichung Power Plants and effected over 370,000 users. Typhoons Gaemi, Khanun, and Koinu also impacted power supply in various regions, particularly in remote areas. Taipower's efficient emergency response mechanisms enabled rapid mobilization and repairs, restoring power swiftly and earning public recognition.

To enhance grid resilience, the Company has advanced its NT$564.5 billion Grid Resilience Enhancement Program, encompassing three core pillars and ten strategic actions. As of December 2024, 98 out of 331 planned projects have been completed, with 59 more scheduled for completion in 2025. Taipower has also accelerated its smart grid deployment by adopting the IEC 61850 digital substation standard, aiming to upgrade 185 substations by 2030 and construct 75 new stations by 2033. These efforts are expected to reduce outage duration (SAIDI) and frequency (SAIFI).

Taipower is actively participating in the development of the electricity trading market to improve supply flexibility. By the end of 2024, 102 participants had joined the trading platform, with a total capacity of 1.79 million kW-equivalent to three coal-fired units. On offshore islands, Taipower is moving forward with the installation of Units 3 and 4 on Green Island to improve supply stability and reduce restoration time after disasters, underscoring the dual goals of energy equity and resilient infrastructure.

Safeguarding the Environment and Advancing Sustainability

In 2024, under the theme of "Seeing Taipower – Embracing Ecology," the Company conducted a comprehensive biodiversity survey across its facilities and highlighted conservation efforts at eight power plants for ten flagship species. Through initiatives such as low-carbon cycling tours and hydropower/geothermal exploration activities, Taipower promoted environmental education and raised public awareness of energy transformation and ecological sustainability. Collaborations with local schools also fostered early engagement with environmental issues among younger generations.

Moreover, Taipower has strengthened its pollution prevention and control. In 2024, the Taichung Power Plant launched new air pollution control projects, enhancing NOx removal, dust collection, and desulfurization systems-all of which already outperformed regulatory standards. Thermal plants have also implemented water reuse systems to reduce consumption and used hydrodynamic modeling to optimize discharge systems and minimize marine impact. The adoption of high-efficiency combined-cycle gas turbines continues to reduce carbon emissions while improving dispatch flexibility and overall environmental performance.

Embracing Challenges to Build a Sustainable Future

Sustainability is not achieved through infrastructure and technology alone-it requires broad societal understanding and participation. Taipower actively engages stakeholders by promoting energy education, talent development, and energy literacy through collaboration with communities, schools, and environmental organizations. Internally, the Company continues to strengthen its sustainability capacity through talent cultivation, knowledge transfer, and organizational resilience. These efforts are complemented by initiatives in green finance, asset optimization, and risk management, laying a solid foundation for long-term business sustainability.

In advancing energy infrastructure, environmental protection, and social inclusion, every step Taipower takes is a step toward a resilient and sustainable Taiwan. The Company is committed to fulfilling its dual mission of ensuring a stable power supply while leading the transition to net-zero emissions-guiding Taiwan toward a low-carbon, inclusive, and sustainable energy future.

Chairman
Tseng,Wen-Sheng

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台灣電力公司
Taiwan Power Company

Taipower's Value Chain and Operational Elements

Mission, Vision and Core Values → ESG → Sustainable Development Profiles → Resource Input → Power Generation → Transmission and Distribution → Electricity Retailing → Outputs

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

Governance

Environment

Society

Sustainable Development Profiles

Provider of Sustainable Power

Leader of Smart Grid Development

Provider of Services for Smart Living

Agent of Environmental Friendliness

Practitioner of Corporate Social Responsibilities

Resource Input

Financial Capital

- **Capital:**NT$580 billion
- **Total expenditures:** NT$912.5 billion

Equipment Capital

- **Power plants in operation:** 22 (Taipower owned)
- **Total installed capacity of thermal power plants:**26,145 MW
- **Total installed capacity of nuclear power plants:**951 MW
- **Total installed capacity of renewable energy power plants:** 2,557 MW
- **Installed capacity of pumped-storage hydroelectric facilities:** 2,602 MW
- **Installed capacity of purchased thermal power plants:** 7,798 MW
- **Installed capacity of purchased renewable energy:**17,687 MW

Fuel Capital

Natural Gas	16,750 million cubic meters
Coal	24.563 million metric tons
Fuel Oil	928 thousand kiloliters

Actual value in 2024

Capital expenditure on environmental protection	NT$5.107 billion
Recurrent expenditure on environmental protection	NT$3.204 billion

Human Resources Capital

- **Total number of employees:** 29,139
- **Number of contracted workers:**1,152

R&D Capital

- **Number of research projects for the year:** 485
- **R&D expenditures for 2024:** NT$6.03 billion
  (Consisting of NT$4.86 billion in expenditures and NT$1.17 billion in capital expenditures)

Social Capital

- **Number of users:**15.35 million
- **Power development promotion and assistance fund:**NT$2.994 billion
- **Capacity of demand response:** 3,010 MW
- **Power supply partners:**
  - -11 Independent Power Producers (IPPs)
  - -49 cogeneration power providers
  - -66,480 contracts for renewable energy
    (including solar power, wind power, hydro power and others)

Power Generation

- **Taipower's Electricity Generation in 2024**

Thermal power generation	152.4 billion kWh
Renewable energy	4.88 billion kWh
Pumped-storage hydroelectricity	3.07 billion kWh
Nuclear power	11.73 billion kWh

- **Electricity Purchased from External Sources in 2024**

Privately-owned thermal power plants	48 billion kWh
Cogeneration	5.92 billion kWh
Renewable energy	25.13 billion kWh

Transmission and Distribution

- **Total length of power transmission lines:** 18,466.4 circuit kilometers (Including overhead power lines and underground cables)
- **Total length of distribution lines:** 434,463 circuit kilometers
- **Number of substations:**622

Electricity Retailing

Electricity Use by User Type:

Total sold: 239.1 billion kWh

Electricity Used (%)	Electricity Used (Billions of KWh)
Industry 56%	133.3
Residential 21%	50.6
Commercial 15%	36.9
Others 8%	18.2

Outputs

- **Earnings before tax:** NT$41.1 billion
- **Electricity fee income:** NT$832.6 billion
- **Net amount of generated and purchased power:** 251.4 billion kWh
  - -Power generated: 172.1 billion kWh
  - -Power purchased: 79.4 billion kWh
- **Facility utilization rate:**71.7%
- **Line loss rate:**2.93%
- **Greenhouse gas emissions:** 91.45 million tons CO_2e
- **Air pollution emissions: (kg/GWh)**
  - -Particulate matter emissions (PM) :6
  - -Sulfur oxide emissions (SOx) :66
  - -Nitrogen oxide emissions (NOx) :144
- **Number of new employees:**2,507
- **Total number of participants in education and training:**107,857
- **Number of research reports:**210
- **Number of papers published:**100
- **Number of patents/intellectual property cases:**
  - -126 in the Republic of China
  - -4 in the Unit ed States
  - -2 in Japan
- **Customer satisfaction rate:** 96.8 percent

Taipower Sustainable Development Plan

Provider of Sustainable Power, Leader of Smart Grid Development, Provider of Services for Smart Living, Agent of Environmental Friendliness, and Practitioner of Corporate Social Responsibility. These visions are aligned with both the United Nations Sustainable Development Goals (UN SDGs) and the Taiwan Sustainable Development Goals (T-SDGs).
To operationalize this framework, the Company has defined ten strategic pathways and conducts an annual rolling review of its five-year business strategy. This process leads to the formulation of Taipower's overarching strategies, action plans, and concrete initiatives. These core tasks form the foundation of the Company's sustainable development efforts and are integrated into its goal-setting and evaluation systems, enabling effective implementation through a structured Plan-Do-Check-Act (PDCA) cycle.To guide its future development, Taipower has formulated a Sustainable Development Plan centered on five major sustainability dimensions:

Development Profiles	Expanding the Pathway	Action Plans	Measurement Indicators	2024 Performance	2030 Targets	Related SDGs	Related T-SDGs
Provider of Sustainable Power	Promoting Gas Expansion and Coal Reduction	Promote low-carbon energy through gas-fired power generation to ensure a stable electricity supply.	Cumulative installed capacity of gas-fired power units.[1]	13,953MW	25,924MW		
		Improve the efficiency of conventional thermal power units to enhance environmental quality through circular utilization and reduced fossil fuel consumption.	Average efficiency of Taipower-owned thermal power units (excluding purchased power).	42.22%	Higher than 47%.		
		Promote carbon-free fuel co-firing plans and introduce Carbon Fixation Technologies to reduce carbon emissions while ensuring a stable power supply.	Introduce ammonia co-firing technology.	1.Completed a feasibility study with Mitsubishi on over 5% ammoni a co-firing at the Linkou Power Plant. 2.Signed a memorandum of technical cooperation with IHI and Sumitomo Corporation for over 5% ammonia co-firing demonstration at the Dalin Power Plant.	One unit at the Linkou Power Plant successfully completed a 5% ammonia co-firing demonstration.		
			Introduce hydrogen co-firing technology.	1.Prepared for resubmission of workplace hazard review application at the Hsinta Power Plant to expand test scale. 2.Completed hydrogen unloading station pipeline and valve improvements by December 2024.	A future increase in the hydrogen co-firing ratio will be evaluated based on domestic hydrogen production capacity and related transmission and storage technologies	3 GOOD HEALTH AND WELL-BEING	**T-SDG7:** Ensure access to affordable, reliable, sustainable and modern energy for all.
			Push forward the construction of pilot fields for carbon capture and storage.	Completed geological drilling and surveying at the Taichung Power Plant Carbon Reduction Technology Park for the small-scale carbon capture test facility. A detailed design and construction license application are scheduled for completion in 2025.	4,000 tons of CO_2 to be injected and monitored at the carbon capture demonstration site.	7 AFFORDABLE AND CLEAN ENERGY	
		Mitigate the impact of climate change on power supply through adaptation.	Improve the ability to respond to extreme weather.	Implemented the "Transmission and Distribution System and Renewable Energy Parallel Adaptation Plan" and developed auxiliary tools for strategic adaptation planning. These tools enable each unit to select suitable adaptation measures based on climate risk assessment results and conduct rolling reviews to strengthen adaptive capacity.	Formulated system-level strategic plans to complete adaptation action plans for power facilities (excluding offshore islands).	13 CLIMATE ACTION	**T-SDG13:** Take urgent action to combat climate change and its impacts.
	Developing Renewable Energy	Promote renewable energy power generation plans and expand the development of zero-carbon energy.	Total accumulated installed capacity of Taiwan Power Company. Grid connection capacity of the Taipower system.	Accumulated capacity:2,650 MW.[2] Grid-connected capacity: 20,426 MW.[3]	Target: 4,522.3 MW. Target: 41,718 MW.		
		While ensuring a stable power supply, increase the proportion of clean energy (renewables and gas) generation in the Taipower system.	The proportion of clean fuel (renewables and gas) generation.[4]	2024 generation mix: 33.4% coal (incl. 2.3% coal in cogeneration), 47.3% gas, 4.7% nuclear, 11.9% renewables, 2.7% other (fuel oil and pumped storage).	2030 target:20% coal, 50% gas, 30% renewables.		
		To reduce energy supply chain risks and ensure long-term power stability, and increase the share of self-produced energy (renewables) within the system.	The proportion of power generated from renewable energy in the Taipower system.	Current: 11.9% (~30 billion kWh).	Target:24.1% (~68 billion kWh).		

Development Profiles	Expanding the Pathway	Action Plans	Measurement Indicators	2024 Performance	2030 Targets	Related SDGs	Related T-SDGs
Leader of Smart Grid Development	Enhancing Grid Resilience	Establish a smart grid to improve power supply quality and operational efficiency.	A reduction in the line loss rate.	The system-wide line loss rate was 2.93% in 2024.	Conduct annual rolling reviews of the system-wide line loss rate (Refer to the T-SDGs target of 4.21%).	7, 9	**T-SDG 7:** Ensure access to affordable, reliable, sustainable and modern energy for all. **T-SDG 8:** Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all.
		Strengthen information security,build a cloud data center, and improve backbone/regional fiber optic communications capabilities.	Information security protection.	Completed intrusion detection system (IDS) deployment at 10 distribution dispatch centers, now under by monitoringTaipower's SOC Center.	Continuously enhance overall cybersecurity protection for the smart grid.		
			Cloud data center construction.	On September 13, 2024, the Changhua Cloud Data Center construction contract was awarded.	Complete construction of Taichung Cloud Data Center with a capacity of 2,000 server cabinets.		
		Promote applications of big data and AI on O&M data from the transmission system to reduce outage durations.	National power outage time (SAIDI value).	SAIDI reached 15.831 minutes/household/year in 2024.	Reduce SAIDI to 15.5 minutes/household/year.		
		Promote smart grid development through the construction of IEC 61850 - compliant digital substations.	Construction IEC of 61850 smart substations.	As of 2024, 83 substations had been completed (including 59 extra-high, primary, and distribution substations and 24 secondary substations).	Conduct rolling reviews based on actual construction progress.		
		Consolidate ICT and smart management systems, optimize transmission and substation asset management systems, and establish predictive maintenance capabilities.	Ongoing optimization of transmission and substation asset management systems.	1.Integrated transformer gas monitoring with the substation asset system. 2.Continued performance optimization of transmission asset management systems.	Integrate and strengthen transmission and substation equipment management to implement Condition-Based Maintenance (CBM) and enhance accident prevention capabilities.		
	Expanding Energy Storage Applications	Increase the quantity of energy storage equipment built on company-owned sites and expand the qualified capacity of energy storage ancillary services.	Qualified capacity of energy storage services on Taipower-owned sites.	1. Self-built 60 MW: (1) The Dongshan Substation Energy Storage System 2. Ancillary Services: 1,260.3 MW: (1) Bilateral contracts: 13 MW. (2) Qualified trading capacity: 1,247.3 MW.	The capacity of energy storage will be increased in line with improvements in performance and economic viability. Taipower will implement rolling reviews based on generation-load scenarios and system flexibility requirements.		

Development Profiles	Expanding the Pathway	Action Plans	Measurement Indicators	2024 Performance	2030 Targets	Related SDGs	Related T-SDGs
Provider of Services for Smart Living	Implementing Digital Transformation	Plan the IP for the entire fiber optics communication system in Taiwan to increase bandwidth and enhance reliability.	Establishment of an ultra-high-speed round-island optical cable communication management system.	Installed communication equipment at 8 substations and service offices to meet site-specific demands; expanded communication cards for the ultra-high-speed IP fiber optic system to improve bandwidth and reliability.	Establish a communication network system for next-generation communication technology.	9	**T-SDG 8:** Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all. **T-SDG 12:** Ensure sustainable consumption and production patterns.
		Popularize low-voltage AMI smart meter infrastructure.	Deployment of smart meters.	A cumulative total of 3.403 million smart meters were installed.	Complete the deployment of a total of 6 million smart meters after a continuous review of deployment benefits.	12	

Development Profiles	Expanding the Pathway	Action Plans	Measurement Indicators	2024 Performance	2030 Targets	Related SDGs	Related T-SDGs
Provider of Services for Smart Living	Refinement of Customer Services	Provide users with value-added service applications.	Taipower app users.	2.08 million users.	1.5 million users.	 	**T-SDG8:** Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all. **T-SDG 12:** Ensure sustainable consumption and production patterns.
			The number of transactions via new technology payment channels for each period.	1.84 million transactions / period.	Reach 1.5 million transactions each period.		
			Cloud-based services.	1.8 million users / year.	300,000 cloud payment receipts per year.		
			Advanced value-added services on the high-voltage user service portal.	One additional advanced service ("Rate Simulation for Various Tariff Schemes") completed; a total of 7 services launched since 2020.	Add at least 6 more advanced value-added services.		
			Number of visits to the Power Consumption Examination Center's website.	Approximately 260,000 visitors.	310,000 visitors.		
			Household access to electricity services.	100% of eligible applicants received electricity services (excluding legal restrictions).	Maintain a 100% electricity service application fulfillment rate.		
		Assist in the promotion of energy management systems (xEMS).	Complete the revision of regulations and establish operating procedures to facilitate joint promotion of energy management services with energy management companies.	Joint promotion of energy management systems with four partner companies.	Energy management services have been widely adopted, encouraging user participation in Automatic Demand Response (ADR) to reduce peak demand, ease supply pressure, support power supply-demand balance, and align with government net-zero policies through continued promotion of energy-saving services.		

Development Profiles	Expanding the Pathway	Action Plans	Measurement Indicators	2024 Performance	2030 Targets	Related SDGs	Related T-SDGs
Agent of Environmental Friendliness	Enhancing Climate Change Adaptation	Improve mitigation and adaptation capabilities.	Net decrease of emission intensity at thermal power generating units (Greenhouse Gas Emissions) from 2016 levels.	Decreased by 11.7%.	Decreased by 20%.	   	**T-SDG 12:** Ensure sustainable consumption and production patterns. **T-SDG 13:** Take urgent action to combat climate change and its impacts. **T-SDG 14 :** Conserve and sustainably use the marine ecosystems to prevent the degradation of marine environment. **T-SDG 15** Conserve and sustainably use terrestrial ecosystems to ensure the persistence of biodiversity and prevent land degradation.
			Climate adaptation actions.	Completed climate impact identification and risk assessment for transmission systems and renewable energy.	Complete the Company's overall climate risk assessment report and communications.		
	Creating a Circular Business Model	Establish a circular business model.	Proportion of wastewater recycled at thermal power plants.	73%	85%		
			Five circular economy business models.	Completed planning for the use of micro-surface asphalt concrete for road paving.	Completion of Circular Economy Highlight Demonstration Projects.		
		Restore marine ecosystems and clean coastal environments.	Marine ecological restoration, conservation, and the development of marine pastures.	Completed evaluation report for Phase 2 of an offshore wind marine pasture.	Complete construction of one marine pasture near a power plant to support marine ecological restoration.		
		Restore the ecological balance in the vicinity of power facilities and maintain environmental preservation.	Ecological integration plans for power facilities.	Completed studies including fish passage modeling for the Dajia River Power Plant, ecological corridor training, and upstream/ downstream habitat surveys around the Tianlun Dam.	Complete at least 5 ecological integration projects around power facilities to promote environmental restoration and preservation.		

Development Profiles	Expanding the Pathway	Action Plans	Measurement Indicators	2024 Performance	2030 Targets	Related SDGs	Related T-SDGs
Practitioner of Corporate Social Responsibility	Building a Happy Electricity Industry	Improve occupational safety.	Employee injury rates.	0.13	≦ 0.1		**T-SDG 1:** Strengthen social care services and economic security for the disadvantaged.
			Contract worker injury rates.	0.38	≦ 0.18		
		Establish a happy workplace culture	Maintain a healthy employee turnover rate (excluding retirements, dismissals, terminations, layoffs, deaths, and unpaid leaves).	A turnover rate of 1.31%	Turnover rate ≦ 3%.		
			Rate of participation in Employee' Heart-to-Heart assistance programs (81 in total).	Implemented 25 assistance programs (with 30.86% participation).	Participation rate ≧ 30%.		
	Deepening Social Participation	Deepen social care activities.	Cumulative investment and number of people reached by social care activities.	Annual investment of NT$503.04 million, reaching 57,000 people.	Cumulative investment of NT$6.6 billion, benefiting 800,000 people.	1 NO POVERTY	**T-SDG4:** Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
			Cumulative investment in electricity discounts for disadvantaged groups; number of beneficiary households.	Annual investment of NT$109.1 million, benefiting 174,000 households.	Cumulative investment of NT$960 million, benefiting 1.76 million households.		
			Cumulative investment in the Power Development and Assistance Fund and number of beneficiary townships/districts.	Investment of NT$2,993.76 million, covering 126 townships/districts.	Cumulative investment of NT$27.5 billion, covering 1,100 townships/districts.	4 QUALITY EDUCATION	
		Disseminate accurate energy information.	Cumulative number of people reached by diversified energy education.	Over 670,000 people reached this year.	Cumulative number of participants: 6.6 million.	8 DECENT WORK AND ECONOMIC GROWTH	**T-SDG 8:** Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all.
			Cumulative number of people reached by online promotions.	Over 50.12 million people reached this year.	Cumulative reach: 231 million times.		
		Promote the preservation and activation of cultural assets connected to the electricity industry.	Tracing the historical development of the electricity industry.	A total of 400 cultural artifacts were cataloged during the year, and 16 oral history interviews have been conducted to date.	Inventory 2,400 artifacts and complete 72 oral history interviews.	11 SUSTAINABLE CITIES AND COMMUNITIES	**T-SDG 11:** Make cities and human settlements inclusive, safe, resilient and sustainable.
			Organize diversified cultural asset promotion activities.	1.One cultural route planned along the Xindian River Hydropower Industry Path 2.8themed walking tours held at the Kueishan Power Plant.	Organize at least 25 promotional events, including cultural exhibitions, forums, and publication-sharing sessions.		
			Promote shared access and exchange of electricity-related cultural assets.	1.Over 42,000 visits to the electricity heritage digital archive website. 2. Hosted an industrial heritage network forum in October 2024 with officials from the Bureau of Cultural Heritage, Taisugar, and Taiwan Water Corp.	1. Achieve over 360,000 cumulative visits to the electricity cultural archivewebsite. 2.Hold at least 6 exchange and observation events on electricity heritagepreservation.		

Note: 1.Refers to the installed capacity of Taipower-owned gas-fired units, excluding Independent Power Producer (IPP) capacity.
2.The installed capacity of Taipower-owned renewable energy includes equity-method investments: approximately 1,826.22 MW of hydro, 499.39 MW of wind (including 60.15 MW from investments), 323.54 MW of solar (including 32.80 MW from investments), and 0.84 MW of geothermal power.
3.Excludes capacity redirected for direct power supply; in 2024, approximately 3,067 MW was supplied directly to industrial users.
4.In accordance with National Sustainable Development Goal 7 (Indicator 7.1.2); this excludes direct power supply. Approximately 3 billion kWh was redirected in 2024.
5.In line with the targets set by the Climate Change Response Committee.

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Taipower's Sustainability Performance and Alignment with the SDGs

Environmental Performance Highlights

Wind power generation: **947.0** million kWh, equivalent to supplying **263,000** households

Solar power generation: **404.2** million kWh, equivalent to supplying **112,000** households

Environmental capital expenditures: approximately NT$**5.107** billion

environmental O&M expenses: approximately NT$**3.204** billion

6 fish fry release events held in cooperation between thermal power plants and offshore wind farms, totaling **1.33** million released fish

Coal ash reuse rate **97.2** %

desulfurization gypsum reuse rate **100** %

Wastewater recycling rate at thermal power plants **73** %

1. Air pollutant emission intensity reduced by **71.9** % in 2024 compared to 2016; net GHG emission intensity of thermal units reduced by **11.7**% compared to 2016.
2. Gross thermal efficiency of all thermal power plants improved from **46.63** % in 2023 to **47.37** % in 2024.
3. Voluntary and environmentally Voluntary Load Reductions conducted **1,727** times to safeguard air quality.

Bat migration corridors and nest boxes installed, achieving a **95**% occupancy rate and attracting over **1,700** bats.

"One Plant, One Feature" initiative implemented to create eco-friendly power plants and promote the OECM (Other Effective Area-Based Conservation Measures) approach.

Governance and Economic Performance Highlights

Nationwide electricity access rate reached **100** %

The energy-saving service team visited **4,190** users, identifying a potential saving of approximately **108.77** million kWh.

A total of **98** projects under the "Grid Resilience Enhancement Program" were completed, with an overall progress rate of **29.61** %.

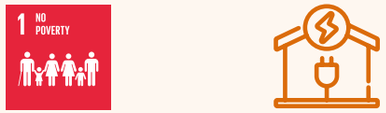
1. Over **3.403** million smart meters (AMI) installed, covering **81.52** % of total national electricity consumption.
2. In 2024, **106** km of fiber-optic cables were laid, **61** transmission equipment units were installed, and **1,982** communication circuits were provided.
3. **66** % of main feeder line faults restored within **5** minutes via automated feeder systems.

In 2024, **12** employee integrity awareness sessions held with around **1,218** participants; **309** anti-corruption promotion events conducted, reaching **6,889** participants.

Received the Platinum Award for Sustainability Reporting, Outstanding Corporate Sustainability Award, and Creative Communication Leadership Award at the 2024 Taiwan Corporate Sustainability Awards(TCSAs)

Taipower's Sustainability Performance and Alignment with the SDGs

Social Performance Highlights



NT$**4.44** billion in electricity discounts provided to eligible users in accordance with regulations in 2024.
NT$**530** million invested in social care initiatives.
NT$**100** million in electricity subsidies granted to disadvantaged groups.

Cumulative investment of NT$**2.994** billion in the Power Development and Assistance Fund.

A total of **67** sites staffed with contracted physicians offering health services.

The Taipower Video Channel surpassed **3** million cumulative YouTube views in 2024; the Taipower Facebook page has over **260,000** followers with annual reach exceeding **45** million.

There have been over **330,000** visitors to the D/S ONE"Power Imagination Base,"which received the LINE Biz-Solutions Award for "Best ESG Contribution of the Year."

The gender pay ratio, based on employees holding equivalent positions and job grades, is **1:1** for both general staff and management-level personnel.

A total of **108,000** participants in Taipower training programs
28,000 in safety and health training
and **36,000** participants in contractor safety promotion sessions.

99.8 % of employees were covered under collective agreements in 2024.

Approximately **4,600** community engagement cases handled in 2024, with around NT$**100** million contributed in community donations.

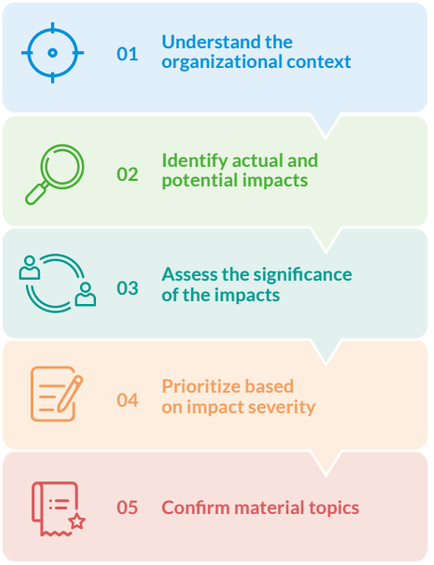
Organized **12** "Care Train" events, **12** "Power Sports Camps," and **3** "Taipower Cup" tournaments as part of public welfare promotion activities

Analysis of Material Topics and Communication with Stakeholders 3-1 3-2 3-3

Analysis of Material Topics

Taipower's 2024 materiality analysis was conducted in accordance with the GRI Universal Standards 2021 and the AccountAbility AA1000 Stakeholder Engagement Standard (AA1000 SES). The process also incorporated international sustainability trends, including recent and prior-year sustainability reports from major global power utilities, as well as the updated Industry Materiality Map issued by the Sustainability Accounting Standards Board (SASB). Relevant topics across the power, solar power, wind power, and biomass fuel industries were integrated into the issue selection process.
A total of 19 sustainability issues were initially identified. Taipower then applied the Double Materiality principle introduced by the European Union, evaluating both actual and potential, as well as positive and negative, impacts. Through this process, 13 material topics were ultimately confirmed as the Company's key focus areas for sustainability management.
For 2024,Taipower has identified four new material topics:Digital Applications and Information Security, Operational and Financial Performance, Environmental Impact Management, and Human Rights, Diversity, and Inclusion. The inclusion of these topics highlights Taipower's growing emphasis on sound corporate governance and long-term environmental sustainability.

Material Topics Analysis



Identifying Stakeholders

Stakeholder Group	Coverage
Board of Directors	Board Members
Shareholders	All shareholders
Employees	Employees and the Labor Union
Partners	Contractors, Independent Power Producers (IPPs), Suppliers, Technical Exchange Partners
Government Agencies / Authorities	The Ministry of Economic Affairs, Energy Administration, State-owned Enterprises Commission, Ministry of Environment, Nuclear Safety Commission, Legislative Yuan, Local Governments
Elected Representatives	Legislators, Local Representatives
Media	Print, Broadcast, and Online Media
Civil Organizations	Environmental NGOs, Industry Associations, Academic Institutions
Customers	Residential and Large Electricity Users
Local Residents / General Public	Residents Near Facilities, the General Public

1. Understanding Organizational Context

Identifying Stakeholders

Taipower is committed to establishing mechanisms for mutual trust and effective communication with its stakeholders. In accordance with the five principles of the AA1000 Stakeholder Engagement Standard (2015), the Company conducted surveys across its business units to identify stakeholder categories relevant to each aspect of its operations. This process resulted in the identification of ten key stakeholder groups and ensured comprehensive stakeholder coverage across different domains. Taipower conducts a review of its stakeholder categories annually and makes adjustments where necessary.

Identifying Sustainability Issues

In response to the growing challenges posed by climate change-particularly those related to Taiwan's energy transition, the development of renewable energy, and the path toward net-zero emissions- Taipower examined the sustainability policies of major international power companies and benchmarked against relevant domestic practices. Drawing on global sustainability trends and sectoral relevance, the Company identified a set of 19 sustainability topics suitable to its operations. These topics were selected through internal analysis, benchmarking, and cross-functional discussions to lay the groundwork for materiality assessment and sustainability planning.

2. Identify Actual and Potential Impacts

Degree of External Impact

To understand stakeholder perspectives on Taipower's sustainability issues, the Company distributed questionnaires and invited stakeholders to assess the level of concern they placed on each topic. In 2024, a total of 578 stakeholders participated in the assessment. The breakdown is as follows: including employees (328 responses), general and large-scale customers (151), shareholders (10), Suppliers and contractors (partners) (51), and Government agencies, competent authorities, elected representatives, media, and NGOs (16), as well as local communities (22).

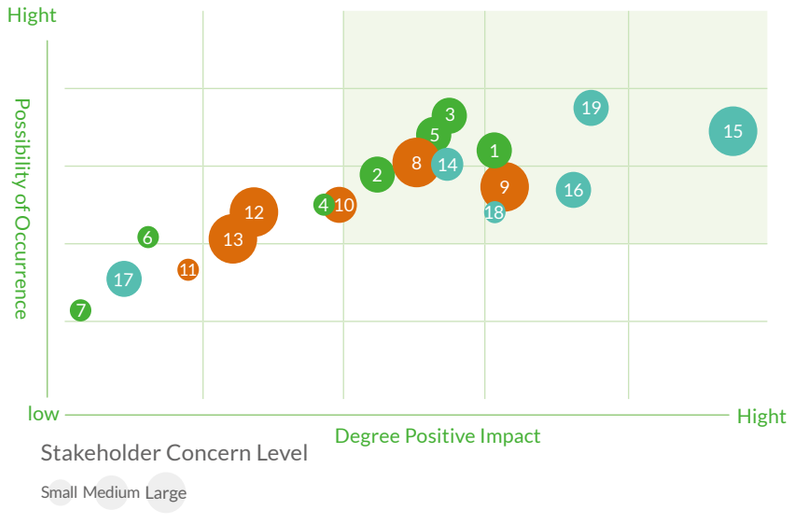
Impact on the Company's Operations

Taipower conducted a comprehensive review of its business activities and relationships to identify actual and potential impacts-both positive and negative-on the economy, environment, and people (including human rights). Actual impacts refer to those that have already occurred, while potential impacts are those that may occur in the future. In consultation with external experts, Taipower identified 19 positive and 19 negative impacts across its material topics.

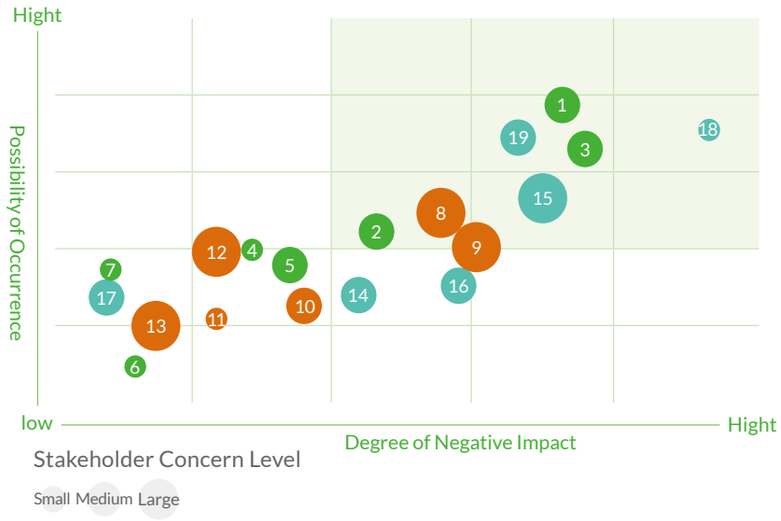
3. Assess the Significance of Impacts

A total of 41 Taipower senior executives evaluated the organizational impact of key material topics, considering factors such as revenue growth, customer satisfaction, employee engagement, and operational risks. Each topic was assessed using a materiality matrix, with the X-axis representing the level of impact and the Y-axis indicating frequency or likelihood of occurrence. Based on the combined X and Y values, a materiality score was calculated for each topic, forming the basis for the final Material Topics Matrix.

Positive Impact and Occurrence Possibility Matrix



Negative Impact and Occurrence Possibility Matrix



1 Implementing Net-Zero Strategies in Response to Climate Change
2 Environmental Impact Management
3 Renewable Energy Development and Low-Carbon Gas-Fired Power Generation
4 Demand-Side Management and Energy Conservation
5 Energy Efficiency
6 Ecological friendliness and biodiversity
7 Circular Economy
8 Worker Health and Safety
9 Safety Management and Crisis Response
10 Talent Management and Development
11 Community Care and Social Prosperity
12 Accessibility and Affordability of Electricity
13 Human Rights, Diversity, and Inclusion
14 Corporate Governance and Sustainable Management
15 Stability and Reliability of Power Supply
16 Digital Applications and Information Security
17 Sustainable Supply chain
18 Operational and Financial Performance
19 Power Plant Renewal and Decommissioning

Material Topics with Significant Positive Impacts

E Environmental

Renewable Energy Development and Low-Carbon Gas-Fired Power Generation, Implementing Net-Zero Strategies in Response to Climate Change, Energy Efficiency and Environmental Impact Management.

S Social

Safety Management and Crisis Response, Worker Health and Safety, Talent Management and Development.

G Governance and Economics

Stability and Reliability of the Power Supply, Power Plant Renewal and Decommissioning, Digital Applications and Information Security, Corporate Governance and Sustainable Management, Operational and Financial Performance.

Material Topics with Significant Negative Impacts

E Environmental

Implementing Net-Zero Strategies in Response to Climate Change, Renewable Energy Development and Low-Carbon Gas-Fired Power Generation, Environmental Impact Management.

S Social

Worker Health and Safety, Safety Management and Crisis Response.

G Governance and Economics

Operational and Financial Performance, Power Plant Renewal and Decommissioning, Stability and Reliability of Power Supply.

4. Prioritizing Significant Impacts

Taipower's materiality assessment process evaluates each sustainability issue across three key dimensions:stakeholder concern, impact on business operations, and impact on sustainable development. Based on the results of the materiality matrix evaluated by management, the Company determined the relative materiality of each issue.
Given Taipower's extensive operations across Taiwan, and to mitigate the risk of analytical bias due to differences in stakeholder response volume, the Company integrated stakeholder concern levels across categories and considered average increases in attention from the previous year. As a result, "Human Rights, Diversity, and Inclusion" was added as a new material topic in 2024.
Ultimately, 13 material topics were identified for disclosure in this report. The Sustainable Development Committee reviewed the identification process to ensure alignment with the principles of sustainability context and completeness of disclosure.

5. Confirmation of Material Topics

Taipower's Sustainable Development Committee isheaded by the Chairman and attended by all Vice Presidents, along with senior chief engineers and management specialists. Independent directors and external experts are invited to participate.
The Committee reviews and provides feedback on the sustainability plans and material topics proposed by the Sustainability Task Force, and formulates corresponding management policies.
The progress of the Committee's initiatives is reported annually to the Board of Directors. In the case of material risk events or policy changes, impact assessments and response measures are promptly submitted to the Board through special reports.

Material Topic Management

Governance and Economics

Material Topic	Materiality to Operations	Description of Impact (⊕ Positive Impact ⊖ Negative Impact)	Value Chain Impact Boundary: Within Taipower	Customer	Partners	Other Social Relationships	GRI Standards	SASB Disclosure Topic	Management Approach and Corresponding Chapters
Stability and Reliability of Power Supply	Ensures a stable power supply, which supports energy transition and economic resilience.	⊕ Supports economic activities and public services by maintaining a reliable electricity supply. ⊖ Instability may disrupt production and increase costs for users and society.	●	●	●	●	Economic: 203 Indirect economic impact	Grid resilience	2.2.1 A Stable Power Supply and Generation System 2.2.2 A Robust Transmission and Distribution System 2.3.1 Promoting Power Transformation
Power Plant Renewal and Decommissioning	Improves generation efficiency, supports low-carbon goals, and enables land reuse.	⊕ Upgrades aging equipment, introduces cleaner technologies, and promotes redevelopment of decommissioned sites. ⊖ Projects must comply with regulations and may cause temporary environmental or community concerns.	●	●		●	Economic: Indirect economic impact	-	2.2.1 A Stable Power Supply and Generation System 2.2.2 A Robust Transmission and Distribution System
Digital Applications and Information Security	Improves efficiency and sustainability through digital tools and cybersecurity measures.	⊕ Enhances system performance, energy use, and information protection through digital innovation. ⊖ Cybersecurity threats may disrupt systems and damage stakeholder trust.	●	●	●		Economic: Indirect economic impact	-	4.1.1 Smart Grid Action Plan 5.1.1Demand Side Management Measures 5.1.2Accelerating Digital Transformation 5.2 Strengthening Information Security
Corporate Governance and Sustainable Management	Strengthens resilience, ensures compliance, and aligns business with sustainability goals.	⊕ Promotes long-term growth, reinforces ethical operations, and increases stakeholder confidence. ⊖ Weak governance may lead to misconduct, reputational damage, or regulatory issues.	●		●	●	General Disclosures: Governance and compliance with laws and regulations Economic: 203 Indirect economic impact 205 Anti-corruption	-	1.1.2 Operational Performance 1.2.1 Governance Framework 1.2.4 Integrity and Compliance
Operational and Financial Performance	Supports grid investment and power reliability through financial soundness.	⊕ Stable finances enable continuous infrastructure upgrades and operational sustainability. ⊖ Imbalanced pricing or deficits may hinder investments and affect supply reliability.	●	●	●		Economic: 203 Indirect economic impact	-	1.1.2 Operational Performance 1.4.2 Climate Change Risk and Opportunity Management 6.2.2 Employee Rights and Benefits

Material topic management

	Material Topic	Materiality to Operations	Description of Impact: ⊕ Positive Impact	Description of Impact: ⊖ Negative Impact	Value Chain Impact Boundary: Within Taipower	Customer	Partners	Other Social Relationships	GRI Standards	SASB Disclosure Topic	Management Approach and Corresponding Chapters
Environmental	Renewable Energy Development and Low-Carbon Gas-Fired Power Generation	Supports carbon reduction, energy autonomy, and green industry development.	⊕ Increases the share of renewables, drives low-carbon transition, and supports innovation and jobs.	⊖ Intermittency and land requirements may affect grid stability and ecosystems.	●		●	●	Economic: 203 Indirect economic impact Environmental: 305 Emissions	GHG emissions and energy/ resource management	1.3.2 Moving Towards Net-Zero Emissions 2.3.1 Promoting Power Transformation 2.3.2Diversified Development of Renewable Energy and Low-Carbon Gas-Fired Power Generation 3.1.1Environmental Policy and Eco-Friendly Initiatives
	Implementing Net-Zero Strategies in Response to Climate Change	Promotes climate action, innovation, and long-term competitiveness.	⊕ Helps advance green technologies and supply chain resilience.	⊖ May raise costs, affect pricing, and cause stakeholder concerns over land use.	●	●	●	●	Economic: 201 Economic performance Environmental: 305 Emissions	GHG emissions and energy/ resource management	1.3.2 Moving Towards Net-Zero Emissions 1.4.2Climate-Related Risk and Opportunity Management 2.3.2Diversified Development of Renewable Energy and Low-Carbon Gas-Fired Power Generation 3.2.1 GHG Management
	Energy Efficiency	Enhances economic, environmental, and operational performance.	⊕ Reduces costs and emissions by adopting efficient units and systems.	⊖ Aging or low-efficiency equipment may increase emissions and cost risks.	●	●			Economic: 203 Indirect economic impact Environmental: 302 Energy	-	2.2.1 A Stable Power Supply and Generation System 3.1.2 Energy Resource Management 3.2.2 Improving Water Resource Use Efficiency
	Environmental Impact Management	Mitigates pollution, supports biodiversity, and improves corporate image.	⊕ Effective management of waste, air, and water improves green credentials and acceptance.	⊖ Poor control may lead to regulatory issues or public resistance.	●	●	●	●	Economic: 201 Economic performance Environmental: 305 Emissions	GHG emissions and energy/ resource management	1.3.2 Moving Towards Net-Zero Emissions 1.4.3Metrics and Targets 3.1.1Environmental Policy and Eco-Friendly Initiatives 3.2.1 GHG Management 3.2.2 Improving Water Resource Use Efficiency 3.2.3 Waste Management

Material topic management

	Material Topic	Materiality to Operations	Description of Impact (⊕ Positive Impact / ⊖ Negative Impact)	Value Chain Impact Boundary: Within Taipower	Customer	Partners	Other Social Relationships	GRI Standards	SASB Disclosure Topic	Management Approach and Corresponding Chapters
Social	Safety Management and Crisis Response	Ensures power system safety and strengthens emergency preparedness.	⊕ Prevents accidents, protects workers, and ensures infrastructure stability. ⊖ Insufficient preparedness may raise nuclear and operational risks.	●	●	●	●	Economic: 203 Indirect economic impact	Nuclear safety and crisis management	1.2.2 Risk Management 1.2.4 Integrity and Compliance 2.1.2 Increase Adaptive Capabilities 6.3.1 Occupational Safety and Health
	Worker Health and Safety	Protects employee well-being and ensures productive operations.	⊕ Promotes workplace safety, contractor oversight, and positive safety culture. ⊖ Neglecting safety may result in accidents, penalties, or reputational loss.	●			●	Social: 403 Occupational safety and health	Healthy and safe workplace	6.3.1 Occupational Safety and Health 6.3.2 Labor-Management Communication and Collective Bargaining
	Talent Management and Development	Drives organizational capability and sustainable growth.	⊕ Improves skills, loyalty, and morale through training and structured development. ⊖ Inequity or misalignment may reduce engagement and efficiency.	●			●	Social: 401:Employer-employee relations 404:Training and education	-	6.2.1 Talent Management and Development 6.2.2 Employee Rights and Benefits
	Human Rights, Diversity, and Inclusion	Supports fair employment and enhances brand reputation.	⊕ Inclusive policies strengthen human rights commitments and workplace harmony. ⊖ Perceived unfairness may affect morale and expose legal risks.	●		●	●	Social: 405:Diversity and Equal Opportunity 406:Non-discrimination 407:Freedom of Association and Collective Bargaining 409:Freedom of Association and Collective Bargaining	-	6.1.1 Human Rights Policy 6.1.2 Workplace Diversity and Inclusion 6.2.2 Employee Rights and Benefits 6.3.2 Labor-Management Communication and Collective Bargaining

Communication with Stakeholders 2-28 2-29

Stakeholder Communication Performance

Taipower values the voices of its stakeholders and engages with them through multiple communication channels. In addition to gathering feedback on its sustainability efforts, the Company actively incorporates relevant suggestions into its management practices and operational improvements, demonstrating a proactive response to stakeholder expectations. By the end of 2024, Taipower's Sustainability website had received over 770,000 views, reflecting strong public interest in the Company's sustainability performance.

Taiwan Power Company's Sustainability Section

770,000

By the end of 2024, Taipower's Sustainability website had received over 770,000 views

To enhance stakeholder engagement, Taipower participates in major domestic sustainability exhibitions each year. Since 2022, it has actively joined the Asia-Pacific Sustainability Action Expo to showcase its sustainability initiatives and achievements. The 2024 Asia-Pacific Sustainability Action Expo was held from August 8 to 10 at the Taipei World Trade Center. Under the theme "Energy Go! Energy and Ecology in Harmony," Taipower co-exhibited with CPC Corporation, representing the Ministry of Economic Affairs.
The Taipower exhibition focused on the dual themes of energy transition and ecological integration, offering a site-wide "Energy Go" interactive experience. Using Web AR technology, physical displays were seamlessly integrated with digital energy knowledge to help visitors explore seven key themes in energy transformation:wind, solar, geothermal, ocean, hydrogen, storage, and integration. To highlight the coexistence of biodiversity and renewable energy, the booth recreated the bat habitat at the Taixi Wind Farm with native Casuarina trees and bat boxes. The booth also adhered to green exhibition design principles and was honored with the event's Platinum Award for Green Design.

Stakeholder Engagement Performance in 2024

Subject of Communication Net-Zero Emissions

Internal Communication

6 times

To build consensus and enhance employee awareness of net-zero goals and global trends, Taipower organized six training sessions and workshops in 2024. These sessions invited experts to share insights and practical experience, fostering employee participation and dialogue.

External Communication

8 categories (Inter-agency communication, participation in forums, exhibitions)

1. Participated in 10 stakeholder meetings of the Executive Yuan's Climate Change and Net-Zero Transition Task Force.
2. Attended 12 net-zero promotion meetings organized by the Ministry of Economic Affairs.
3. 2024 Net-Zero City Expo
4. 2024 Kaohsiung Smart City Expo
5. 2024 Asia-Pacific Sustainability Action Expo
6. 2024 Taiwan Climate Action Expo
7. Taiwan International Smart Energy Week
8. TASS Asia Sustainable Supply and Circular Economy Exhibition

In accordance with GRI 2-29, Taipower has established regular and institutionalized communication channels and engagement mechanisms with various stakeholder groups, including the Board of Directors, shareholders, employees, government agencies, partners, and customers. The Company gathers stakeholder feedback on material issues through meetings, platforms, and systems, ensures timely responses, and integrates these into its decision-making processes.
For detailed disclosures, please refer to the table on "Stakeholder Engagement Performance in 2024," which outlines the frequency of engagement, practical activities, and concrete actions taken for each stakeholder group.

Stakeholder Engagement Performance in 2024

Stakeholders	Board of Directors	Shareholders	Employees	Partners	Government Agencies/ CompetentAuthorities	Elected Representatives
Topics of Concern	● Stability and Reliability of the Power Supply ● Power Plant Renewal and Decommissioning ● Digital Applications and Information Security ● Renewable Energy Development and Low-Carbon, Gas-Fired Power Generation ● Implementing Net-Zero Strategies in Response to Climate Change ● Energy Efficiency ● Safety Management and Crisis Response ● Worker Health and Safety ● Human Rights, Diversity, and Inclusion	● Stability and Reliability of the PowerSupply ● Energy Efficiency ● Operational and Financial Performance ● Accessibility and Affordability of Electricity	● Stability and Reliability of the Power Supply ● Worker Health and Safety ● Human Rights,Diversity, and Inclusion	● Stability and Reliability of the Power Supply ● Renewable Energy Development and Low-Carbon, Gas-Fired Power Generation ● Energy Efficiency	● Stability and Reliability of the Power Supply ● Renewable Energy Development and Low-Carbon, Gas-Fired Power Generation ● Implementing Net-Zero Strategies in Response to Climate Change	● Stability and Reliability of the Power Supply ● Renewable Energy Development and Low-Carbon Gas-Fired Power Generation ● Implementing Net-Zero Strategies in Response to Climate Change
Frequency and Methods of Engagement	● At least one regular board meeting and functional committee meeting per month ● Standing board meetings held as needed ● At least one audit committee meeting per quarter ● Ongoing training for directors (including independent directors) ● Annual board performanceevaluation	● Annual and extraordinary shareholder meetings ● Taipower's official website and Market Observation Post System (MOPS)	● On-the-job training ● Labor- management meetings ● Communication forums	● Irregular consultation meetings	● Participation in shareholder and board meetings ● Official correspondence ● Project-specific consultation meetings	● Attendance at Legislative Yuan committee meetings ● Participation in coordination meetings and public hearings ● Provision of business-related briefing materials ● Direct visits to legislators
2024 Engagement Performance	● Held 13 board meetings, 7 standing board meetings, and 7 audit committee meetings (including pre-meeting discussions) Held 11 Investment and Business Plan Review Committee meetings and 9 Land Review Committee meetings ● Directors received an average of 9.4 hours of training, exceeding the required minimum ● Completed 2024 board performance evaluation ; results to be submitted to the board and published online by March2025	● The Extraordinary Shareholders' Meeting was held on February 23, 2024, and an Annual Shareholders' Meeting was held on June 21, 2024 ● All related materials were disclosed via the Market Observation Post System (MOPS) and through the "Shareholder Services" section on aipower's official website unde Corporate Governance	● A total of 107,857 participants in internal training, department-organized sessions, and external programs ● Held 12 company-level labor-management meetings	● Initiated preliminary discussions with Independent Power Producers (IPPs) regarding post-contract procurement arrangements	● Regulatory authorities assigned representatives to attend each shareholder meeting ● Important board proposals were submitted to the competent authority in advance each month ● Monthly board meeting minutes were submitted to regulatory authorities	● Senior executives (Vice President and above) attended 54 committee meetings at the Legislative Yuan ● Participated in 997 coordination meetings,hearings,and data exchanges with legislative offices ● Held 88 engagement sessions between senior executives and legislators
Related Measures	● Regularly reported to the Board of Directors on progress highlights ● Conducted timely reporting on projects	● Communicate status with shareholders through the minutes of the regular shareholders' meeting	● Conducted company-level and system-level labor-management forums ● Collected proposals from labor union representatives and branch leaders, which were discussed and implemented through formal meetings	● Continued discussions with IPPs on post-contract matters, including environmental review (EIA/ESA) requirements, equipment upgrades, cost structure, equipment lifespan,and dispatch models	● Participated in meetings and provided feedback in line with government policies	● Arranged executive visits to legislators to explain key initiatives and build trust ● Proactively responded to legislative inquiries and provided formal written responses as required ● Explained operational matters in a clear and respectful manner during hearings to foster constructive dialogue

Stakeholders	The Media	Non-Governmental Organizations	Users	Residents/ The General Public
Topics of Concern	● Stability and Reliability of the Power Supply ● Power Plant Renewal and Decommissioning ● Operational and Financial Performance ● Energy Efficiency	● Stability and Reliability of the Power Supply ● Renewable Energy Development and Low-Carbon, Gas-Fired Power Generation ● Implementing Net-Zero Strategies in Response to Climate Change	● Stability and Reliability of the Power Supply ● Worker Health and Safety ● Circular Economy	● Stability and Reliability of the Power Supply ● Worker Health and Safety ● Accessibility and Affordability of Electricity
Frequency and Methods of Engagement	● Press releases and news coverage ● Public hearings and information briefings ● On-site visits and individual interviews ● Taipower official website and MOPS	● Information briefings and presentations ● Direct visits and project-based interactions ● Participation in external forums and events ● Taipower official website and publications	● A customer feedback mailbox ● Direct customer visits ● Irregular publications and announcements	● The Taipower Facebook fan page ● Official website information disclosure
2024 Engagement Performance	● Issued press releases, real-time statements, and media kits addressing power supply, project development, environmental protection, financial updates, electricity pricing, and emergency incidents ● Released 77 press releases and 111 real-time media responses	● Conducted visits to NGOs based on project needs ● Published the Taipower Monthly periodical on aregular basis ● Shared updates through the official website	● Received and responded to 5,002 customer feedback submissions via the customer mailbox ● Held 1,375 power-saving promotion events, reaching approximately 160,000 participants ● Continued the annual energy-saving campaign for the 12th consecutive year ● The Power-Saving Service Team conducted 4,190 site visits, identifying potential savings of 1.0877 billion kWh	● Taipower's Facebook posts reached over 45million views ● The "Information Disclosure" section of the official website covers sixmajorcategories:powersupplyand demand, operational performance, generation, user information, environmental data, and project updates ● The Sustainability section discloses performance related to corporate sustainability ● The "Corporate Governance" section provides information on governance and integrity practices
Related Measures	● For major business topics and public concerns such as electricity supply, energy policy, finances, and outages, Taipower implemented a spokesperson mechanism and responded through press releases, media statements, and briefings ● Actively supported media coverage of diverse topics to enhance the Company's public image	● Engaged with 96 external organizations, including 24 international and 72 academic groups, to exchange views on energy transition, clean energy technology, sustainability governance, energy economics, and occupational health and safety ● Continued outreach to NGOs to gain insight into public opinion and foster effective stakeholder communication	● Maintained transparency and integrity in communication through regional branches and media channels to share updates on operational, environmental,and social performance ● Regularly held electricity-saving seminars to promote energy-efficient appliances and practices ● Continued public awareness campaigns using educational and interactive formats ● Conducted user visits to evaluate savings potential and promote demand response measures	● Facebook content covers corporate policies,power-saving, electrical safety,energy knowledge,and public service announcements ● Policy communications used visual cards and concise descriptions to addresstopicssuchasgridresilience, pricing mechanisms, fuel switch attheHsieh-hoPowerPlant,typhoon recovery, and net-zero initiatives

● Participation in Industry Associations

Taipower actively participates in a variety of domestic and international associations and organizations covering topics such as nuclear research and development, energy transition, engineering forums, and international exchanges. These engagements aim to strengthen technical cooperation and policy dialogue. In accordance with corporate governance practices, relevant departments regularly review and disclose membership expenditures. In 2024, Taipower's total spending on association memberships exceeded NT$48 million. The main organizations are listed below in descending order by expenditure. Other unlisted entities also represent long-term partners in knowledge sharing and collaboration.

Association / Organization Name	Description of Participation	2024 Fees (NT$ thousands)
World Association of Nuclear Operators – Tokyo Centre (WANO-TC)	International nuclear cooperation and information exchange	15,840
Bloomberg New Energy Finance (BNEF)	Participation in engineering and academic activities	6,695
Pressurized Water Reactor Owners Group (PWROG)	Attendance at international nuclear conferences	6,525
World Association of Nuclear Operators (WANO)	Nuclear information exchange and annual membership fee	4,176
Taiwan Electrical and Electronic Manufacturers' Association	Access to nuclear analysis software and technologies	2,345
Taiwan Electrical and Electronic Manufacturers' Association	Participation in nuclear plant safety meetings	1,205
World Nuclear Association (WNA)	Platform for nuclear research and knowledge integration	1,167
Taiwan Electrical and Electronic Manufacturers' Association	Involvement in international nuclear modular updates	1,126

Annual Recognition and Awards

Sustainable Development

2024 Global Views ESG Awards
Received the Environmental Model Award; the only state-owned enterprise recognized

2024 Asia Responsible Enterprise Awards (AREA)
Won the Investment in People and the Green Leadership Awards

2024 Taiwan Sustainability Action Awards (TSAA)
Received two Silver Awards and one Bronze for SDG projects: Power Literacy Symphony, Micro-Hydropower, and Smart Power for All

2024 Asia-Pacific Sustainability Action Expo
Energy Go! Energy and Ecology in Harmony exhibit won the Green Design Platinum Award

2024 Taiwan Corporate Sustainability Awards (TCSA)
Won the Platinum Award for Sustainability Reporting, Excellence Award, and Creative Communication Leadership Award

9th National Environmental Education Awards
The Dajia River Hydropower Plant received the Excellence Award

Business Management

2024 National Brand Yushan Awards
Won the Outstanding Enterprise Award

2024 1111 Job Bank Happy Enterprise Awards
Won the Gold Award in the manufacturing industry for the fourth consecutive year

Innovation in Engineering

2024 Executive Yuan 24th Public Construction Golden Quality Award & MOEA Construction Quality Excellence Award
The Hsinta Circulating Water Pump and Auxiliary Equipment Installation Project received the Excellence Award

2024 Asian Power Awards
Gold Award – Battery Storage Project of the Year
Gold Award – Nuclear Power Project of the Year
Gold Award – Transmission & Distribution Project of the Year
Taiwan Award – Innovative Power Technology of the Year
Taiwan Award – Smart Grid Project of the Year

2024 Ministry of Labor's Golden Safety Award
The 161kV Songshu–Guangfeng (Hangjie South) Cable Line Civil and M&E Turnkey Project received the Excellence Award in the Public Works category

The Qigu–Southern Taiwan Science Park Section 1 Civil Turnkey Project received the Merit Award in the Public Works category

2024 TIBA Award for Smart Green Buildings and Systems
The Northern Energy Storage Site Urban Renewal Project received the Platinum Award

2024 Taiwan Innotech Expo Invention Competition
Under the theme of Enhancing Grid Resilience and Power Supply Security, Taipower received 1 Platinum, 2 Gold, and 1 Silver Award

2024 Gartner Global Power & Utilities Digital Innovation Award
The Smart Dispatch and Monitoring System for Distributed Resources won the top global honor

Social Co-Prosperity

2024 Sports Activist Awards
Received Gold Awards in the Sponsorship, Long-Term Sponsorship, and Promotion categories

2024 National Talent Development Award
Institution Category: The Power Plant Guardians Training Base received national recognition

2024 Taipei Friendly Parenting Enterprise Award
Taipower was the only state-owned winner, recognized as a Benchmark Enterprise

Cultural Creativity and Design

2024 Pinkoi Design Award – Emerging Brand Category
Three sustainability-themed designs made from retired materials won Earth-Friendly Design Awards for: the Taipower Heating Pad, the Sun Moon Lake Sediment Manhole Coaster, and the Whims E010 Reading Lamp

2024 Golden Pin Design Award
Awarded for the Retired Copper Strip Reproduction Project

Resilience Under Extreme Conditions: Strengthening Grid Reliability

In 2024, Taipower faced a serious test of its power system resilience. Taiwan was struck by a magnitude 7.2 earthquake and three strong typhoons within the same year, challenging the stability of the grid and testing the Company's ability to respond and recover.

April 3 Earthquake:The Strongest Since the 1999 Chi-Chi Earthquake

On April 3, 2024, eastern Taiwan was hit by a magnitude 7.2 earthquake, the strongest since the 1999 Chi-Chi earthquake. The quake caused significant damage to power facilities, including collapsed roads in Hualien and deformed pipelines and generation units. More than 370,000 households lost power, and aftershocks further complicated recovery efforts.

In addition to immediate damage, aftershocks delayed the restoration of the Ho-Ping IPP's Unit 1. Taichung Power Plant's Unit 7 suffered a boiler tube rupture and went offline. On April 15, the Datan Power Plant's Unit 8 and the Mingtan pumped storage units also tripped, pushing reserve capacity to orange alert levels.

Rapid Response and Restoration: Resilience in Action

At the peak of the April 3 earthquake, 3.404 million kW of generation was lost within four minutes. Taipower responded immediately by activating pumped hydro, time-of-use pricing, demand response, and ancillary services. Within 12 minutes, supply increased by 4.306 million kW-successfully maintaining system stability.

More than 6,500 personnel were mobilized for repairs. Over 95% of affected customers had power restored within 4 hours; restoration reached 99.7% within 12 hours.

Following each disaster, Taipower conducted rapid facility inspections, deployed technical experts to power plants and substations, and activated emergency protocols to ensure equipment safety and reliable supply.

Record-Breaking Typhoon Year

2024 marked only the third year in history where Taiwan was struck by three strong typhoons (following 1965 and 2005). Among them, Typhoon Koinu brought the widest wind radius in nearly 30 years-320 km-causing widespread outages. Over 970,000 households lost power, the highest typhoon-related outage in recent years. Strong winds and rain toppled towers, broke transmission lines, and triggered landslides, affecting substations and cable infrastructure.

Post-disaster recovery proved especially difficult. Repair teams worked under hazardous conditions to restore power and ensure reliable electricity for communities.

Damage in Hualien Caused by Typhoon Koinu

Widespread Torrential Rain Across Taiwan Brought by Typhoon Gaemi

2024/07/25	2024/10/03	2024/10/31
Gaemi	Saola	Koinu
Heavy rainfall in central and southern Taiwan significantly increased repair difficulty.	Persistent strong winds and vortex effects caused multiple days of suspended operations	With a storm radius of 320 km, Koinu caused severe damage across multiple regions.

Emergency Backup Units Activated

Dalin Unit 5 placed on standby in advance

Hydropower Scheduling Adjusted

Hydropower and pumped storage units focused on midnight peak generation

Integrating Private Power Resources

Generation Units | Self-Generation Systems | Energy Storage Facilities | Demand Response

Demand-Side Management

Electricity usage guided through pricing signals

Electricity Trading Platform

Private power providers deliver ancillary services

Teamwork and Coordination: United in Restoration

In the face of these major natural disasters, Taipower demonstrated exceptional agility and unity. Employees worked around the clock to repair damage from both earthquakes and typhoons.

During the recovery phase, the Company collaborated closely with local governments, private contractors, and civil organizations to accelerate power restoration. These joint efforts enabled Taiwan to recover supply in record time-showcasing Taipower's robust resilience and efficiency.

Enhancing Grid Resilience Against Climate Disasters

In the face of increasingly frequent extreme weather events worldwide, threats to the power grid continue to grow. Power infrastructure must incorporate both disaster resistance and resilience, requiring proactive measures – from equipment upgrades to transmission line planning – to address potential risks. Taipower continues to implement the Grid Resilience Enhancement Plan, developing distributed networks to deliver local power directly to nearby science parks and industrial zones – reducing transmission loss and improving supply stability.

The Five-Year Distribution System Upgrade Plan further strengthens the grid through overhead line reinforcements, equipment replacements at secondary substations, and undergrounding of disaster-prone lines.

Power Grid Resilience Enhancement Plan

Key Regions (Industrial Focus)			Public and Community Needs	
Science Parks & Industrial Zones	Renewable Energy Hot Zones – Grid Integration	Resilience Measures	Substation Renovation and Reconstruction	Transmission Capacity Expansion
Clustering of Grid-Connected Industrial Hubs (EHV Substations) +21 dedicated transmission lines	Solar: 9 substations, 10 transmission lines, adding +6.5 GW Wind:7 substations, 7 transmission lines, adding +11 GW	+160 MW of in house energy storage capacityProtection relay enhancements to strengthen defense-in-depth Improved regional dispatch capabilities	Moving equipment indoors and multi-purpose utilization	Enhancing cross-regional power transfer capabilit

Five-Year Distribution System Upgrade Plan

Public and Community Needs		
Outage Prevention	Rapid Power Restoration	Equipment Replacement
Infrared inspections, cable testing, and vegetation (tree/ bamboo) trimming	Full automation of main feeder lines, new feeders added, and load adjustments implemented	Upgrading distribution lines and replacing transformers and switches

Facing Challenges with Action and Resilience

Electric utilities are key to achieving national net-zero goals. Taipower has maintained a stable electricity supply through swift action, flexible dispatch, and strong teamwork.

Under the TCFD framework, Taipower's Climate-related Financial Disclosure Task Force continues to assess and disclose risks and opportunities. Looking ahead, the Company will further enhance power system resilience and disaster response capabilities-ensuring Taiwan's energy security in the face of ongoing climate challenge.

台灣電力公司
Taiwan Power Company

01

CHAPTER

Taipower and Sustainability

Suitable for the following stakeholders

Shareholders, Board of Directors, Employees, Partners, Government Agencies, Media, Civil Organizations, Users

Excellent

Received the highest rating ("Excellent") in the 2024 Corporate Governance Evaluation for State-Owned Enterprises by the Ministry of Economic Affairs.

100%

Achieved an average attendance rate of 99% for Board meetings and 100% for Audit Committee meetings in 2024.

Integrity promotion sessions

Held 12 employee integrity promotion sessions and organized 309 anti-corruption publicity activities in 2024.

Taipower aspires to become a world-class power utility group that is both outstanding and trustworthy. Through a robust, sustainable governance framework, the Company continues to enhance its practices across environmental, social, and governance (ESG) dimensions to strengthen long-term corporate resilience.

Throughout the transformation of the electricity industry, Taipower has emphasized active engagement with stakeholders and incorporated stakeholder feedback into operational decision-making to realize the vision of becoming a next-generation power utility. Sound corporate governance and strategic planning serve as the foundation for value creation. The Company continuously strengthens internal audit and control mechanisms, proactively assesses potential risks and opportunities, and ensures stable and sustainable operations. In addition, Taipower promotes sustainable supply chain management by enhancing transparency and deepening cooperation with suppliers.

1.1 Taipower Profile

1.1.1 Taipower Profile 2-1 2-6

Founded on May 1, 1946, Taipower is a state-owned integrated power utility whose business operations include power generation, transmission, distribution, and electricity sales. In accordance with the Electricity Act, Taipower is responsible for ensuring a stable electricity supply. In 2024, revenue from electricity sales accounted for 98% of the Company's total revenue.

As of the end of 2024, the total installed capacity of the Taipower System, including Independent Power Producers (IPPs), reached 57.741 GW, with thermal power as the main source, supplemented by pumped-storage hydro and renewable energy.

Taipower operates 622 substations, with a transmission network totaling 18,466.4 circuit kilometers (including overhead lines and underground cables) and a distribution network totaling 434,463 circuit kilometers across Taiwan.

To align with global sustainability trends and adapt to the evolving electricity market, Taipower launched a structural transformation in 2016 that established four business divisions:Power Generation, Nuclear Power, Transmission System, and Distribution and Service. This structure employs centralized policymaking combined with decentralized management, to improve operational efficiency and management flexibility.

Note: Circuit kilometers = Number of circuits × circuit length (km)

Core Values

To successfully operate in the power industry, Taipower must navigate the energy trilemma of energy security, environmental sustainability, and affordable pricing. In response to global climate change, domestic energy transition, and the gradual liberalization of the electricity market, Taipower revised its mission, vision, and core values in 2015 to guide its strategic direction, reshape employee mindset, and pursue excellence and sustainability as a power utility group.

Mission

To supply stable electricity for the diversified development of society in an environmentally friendly manner and at a reasonable cost.

Vision

To become a prestigious, trustworthy, and world-class power utility group.

Core Values

Integrity, Care, Service, and Growth.

Founded	May 1, 1946
Business Coverage	Taiwan, Penghu, Kinmen, Matsu
Headquarters	Taipei City
Capital	NT$580 billion
Shareholding	98.25% government-owned, 1.75% privately owned
Total Assets	NT$2.7278 trillion
Operating Revenue	NT$849.6 billion
Number of Employees	29,139
Number of Users	15.35 million
Installed Capacity	57.741 GW (of which 32.256 GW are Taipower-owned)
Power Generation and Purchases	251.44 billion kWh

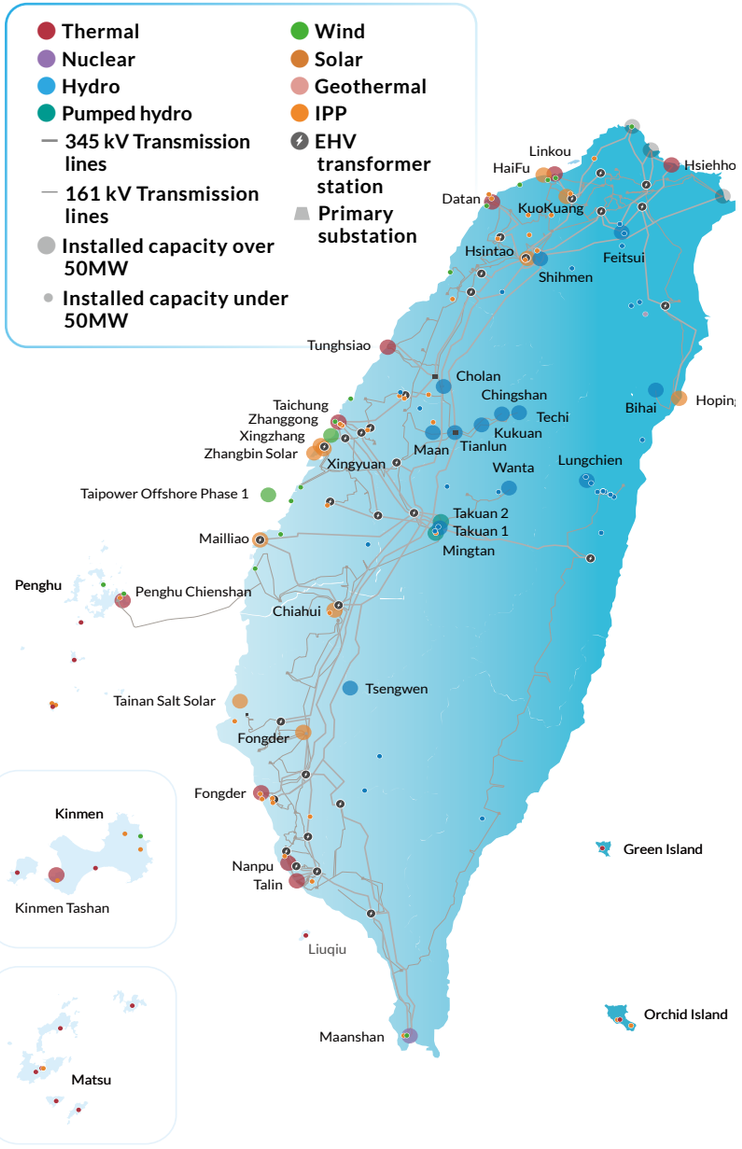
Note: As of December 31, 2024

Management Strategy

Taipower is committed to ensuring a stable power supply, environmental sustainability, and the implementation of national energy policies to support both public welfare and economic development. In response to the Electricity Act and growing demands for green energy, carbon reduction, energy efficiency, and supply reliability, the Company conducts annual reviews of internal operations and external conditions.

Through these reviews, the Company analyzes key factors influencing its operations and develops ten overarching strategies that outline its business direction for the next five years, while also reinforcing scenario assumptions for years six through ten. To translate these strategies into actionable results, the Chief Executives and Vice Presidents of each business unit and system lead the development of action plans and specific measures. Based on these, Taipower establishes corporate goals, aligned with key performance indicators (KPIs), and incorporates them into the Company's management and review systems. These goals are implemented and monitored under a structured Plan-Do-Check-Act (PDCA) cycle, enabling continuous adjustment and improvement as Taipower advances toward sustainable operations.

Taipower's Power Plants and Power Grid



1.1.2 Operational Performance

201-1 203-1 203-2

Material topics: Operational and Financial Performance

Policy	• Ensure a stable power supply while enhancing financial resilience to achieve long-term sustainable development.
Management Approach	• Propose electricity tariff adjustments based on fuel prices and power generation costs. • Develop green electricity trading and carbon credit markets; promote green innovation. • Implement energy-saving and cost-reduction measures to improve equipment efficiency. • Secure adequate funding through diversified financing mechanisms, including green bonds and government subsidies.
Action Plans	• Seek reasonable adjustments to electricity tariffs. • Actively promote business diversification and asset revitalization. • Expand financing channels and lower capital costs.
Actual Performance in 2024	• Pre-tax loss of NT$41.1 billion in 2024 (impacted by policy-related costs totaling NT$85.769 billion). • Raised NT$100.1 billion through a cash capital increase and new share issuance.
Targets for 2030	• To maintain financial sustainability, Taipower is committed to increasing revenue and reducing expenses, securing capital for power infrastructure, and ensuring stable supply. By 2030, the Company aims to improve financial soundness through continued efforts in tariff adjustments, asset utilization, diversified income streams, low-carbon electricity products, optimized fuel procurement, and operational efficiency.

Sustainable Operation Goals and Financial Performance

As a state-owned public utility, Taipower is responsible for ensuring a stable electricity supply while balancing affordability for the public. However, electricity rates have long failed to reflect actual costs, resulting in accumulated losses and an inability to issue dividends. In addition to government capital injections, Taipower has worked to strengthen its operational resilience, enhance debt management, and optimize fuel procurement. The Company also continues to advocate for electricity pricing that better reflects true costs, in an effort to eliminate losses and generate surplus returns for shareholders as soon as possible.

In recent years, Taipower has adopted goal-oriented management and performance review mechanisms to safeguard its financial stability. While continuing to promote renewable energy, carbon reduction, and power supply reliability, the Company actively responds to shifts in power generation and consumption patterns, fuel price fluctuations, and electricity rate uncertainty-as it strives to maintain reasonable tariffs and achieve sustainable operational goals.

Item	2022	2023	2024
Operating Revenue	661,878	780,993	849,644
Operating Costs	906,869	942,704	858,808
Employee Salaries and Benefits	36,305	36,363	38,474
Income Tax Expense	706	(1,425)	102
Net Income (Loss) After Tax	(226,428)	(199,091)	(41,064)
Total Assets	2,325,603	2,565,606	2,727,784
Shareholders' Equity	127,351	134,710	195,877

Unit: NT$ millions

Note :
1.As a state-owned enterprise, Taipower's final accounts are subject to audit by the National Audit Office. Figures for 2024 are based on certified numbers reviewed by external accountants but are pending final audit confirmation.
2. Figures for 2022 and 2023 reflect finalized accounts and may differ from those previously disclosed in the 2023 Sustainability Report due to differing disclosure bases.

Long-Term Financial Planning

Seeking Government Capital Increases or Subsidies

To strengthen its financial position and support infrastructure development, Taipower actively seeks government capital injections through official budget allocations. These funds help enhance the Company's net worth and ensure an adequate internal financing capacity. In 2024, Taipower completed the issuance of NT$100.1 billion in new shares through a cash capital increase. The relevant statutory registration procedures have also been completed.

Diversifying Funding Channels to Reduce Funding Costs

Taipower uses a flexible financing strategy, utilizing various funding channels to secure low-cost capital and raise funds as needed. The Company also seeks government support to reduce financial pressure. In alignment with the Green Finance Action Plan 3.0, which encourages financial institutions to incorporate ESG factors into financing decisions, Taipower continues to actively promote sustainable development and net-zero emissions. The Company's access to funding remains unaffected, and it continues to issue green bonds, expanding issuance volume in line with its green investment initiatives and national green finance policies.

Electricity Tariff Review Mechanism

In accordance with Article 49 of the Electricity Act, the competent authority has defined the tariff calculation formula and adjustment mechanism for public electricity retailers. These regulations were officially announced on November 6, 2017.
Under this mechanism, electricity tariffs are reviewed semi-annually. Taipower prepares a tariff adjustment proposal, which is then reviewed and approved by the Electricity Tariff Review Council. This system allows electricity pricing to reflect international fuel price fluctuations, Taipower's operating performance, and actual operating costs, thereby supporting the goal of fair and reasonable pricing.
A summary of the current pricing formula for public electricity retailers is provided below.

$$\text{The Average Price of Electricity per kWh} = \frac{\text{Expenditure on the Purchase of Electricity (Including Profit)} + \text{Expenditure on Power Transmission and Distribution (Including Profit)} + \text{A Service Fee for Power Sales} + \text{A Reasonable Profit for the Electricity Retailing Utility)}}{\text{Electricity Sold (kWh)}}$$

Electricity tariffs in Taiwan are reviewed twice a year, in principle in April and October. Each adjustment is generally limited to a maximum increase or decrease of 3%, but may be further adjusted when there are significant fluctuations in power supply costs.

2024 Tariff Adjustments

1. March 22, 2024 Decision:The Electricity Tariff Examination Council approved an average tariff increase of 11%, bringing the average price to NT$3.4518/kWh. The adjustment was based on the principles of cost reflection, price stability, energy conservation, and user-payments, and was supported by a NT$100 billion government subsidy. Tariffs for residential users were raised at a lower rate, while industrial users were adjusted by category based on usage volume and business performance. Tariffs were frozen for agriculture, fisheries, schools, and social welfare organizations.
2. September 30, 2024 Decision:The Council approved a second average tariff increase of 8.8%, raising the average rate to NT$3.7556/kWh. None of the tariffs for residential consumption tiers were adjusted. Industrial tariffs were adjusted by user category, with an average increase of 12.1%. Tariffs remained frozen for domestic-demand industries, agriculture, fisheries, schools, and social welfare organizations. To mitigate inflationary pressure, Taiwan is maintaining a gradual tariff adjustment policy to prevent imported inflation. In 2024, Taiwan's Consumer Price Index (CPI) increased by 2.18%, a relatively moderate rate compared to South Korea (2.33%) and the United Kingdom (3.28%). This demonstrates the effectiveness of Taiwan's price stabilization efforts.

Average Electricity Tariffs by User Category

Category of Power Consumption	2022	2023	2024
Residential	2.5571	2.6048	2.7431
Industrial	2.6309	3.1076	3.6243
Commercial	3.2447	3.5015	3.9185
Other	2.8596	3.2364	3.6189

Note:"Other" includes non-commercial usage such as street lighting, schools, and government agencies.

Taipower Absorbed Costs

Unit: NT$ billion

Item	2022	2023	2024	Total
A Costs absorbed to stabilize residential and livelihood electricity prices	1,008	1,001 note	589	2,598
B Other absorbed costs, mainly industrial and commercial sectors	1,799	1,585	11	3,395
A + B Total Costs Absorbed by Taipower	2,807	2,586	600	5,993

Note:In 2023, subsidies totaling NT$100.1 billion were provided to stabilize prices and support residential and disadvantaged users. Of this amount, NT$50 billion was allocated from the government's post-pandemic special budget.

Affordable Clean Energy

Taiwan maintains some of the lowest electricity prices globally-ranking fifth for residential and eighth for industrial users in 2023. While ensuring high-quality and reliable power, Taipower has maintained stable operations and supported the growth of solar and wind industries. These efforts drive energy transition, environmental protection, and improved quality of life, while advancing green energy for long-term sustainability.

Source:Electricity Price Comparison – Electricity Knowledge Portal

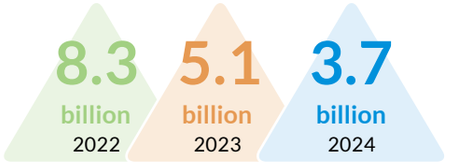
Tax Policy

As a state-owned enterprise, Taipower complies with all relevant government regulations regarding tax filings and expense recognition. Due to its policy-driven responsibilities-such as electricity rates that do not fully reflect actual costs, preferential electricity pricing for certain groups, and expenses related to the maintenance of the Fourth Nuclear Power Plant-Taipower incurred operating losses. As a result, the Company was not subject to corporate income tax in 2024.

Diversified Management and Strategies

To fulfill its dual responsibilities of ensuring a stable power supply and achieving financial sustainability, Taipower actively evaluates opportunities to expand into emerging energy-related industries, in line with global trends in energy transition and net-zero emissions. In addition, the Company promotes asset revitalization to enhance operational efficiency and value.
Taipower has successfully launched several internal ventures, including those related to power operation and maintenance, nuclear technology, communications, training and research, real estate, and cultural and creative businesses. The Company has also engaged in external joint ventures and reinvestment projects, such as coal mine development, cogeneration, and wind energy training.In 2024, these diversified businesses generated NT$3.7 billion in revenue.The decline in 2024's diversified income compared to previous years was mainly due to a reduction in coal sales revenue, as international coal prices stabilized and income from coal mine development businesses decreased.

Diversified Business Income



Land Revitalization

Taipower established a cross-departmental Land Revitalization Project Team to oversee land planning and utilization. The team is responsible for reviewing individual project proposals, promoting revitalization strategies, supervising implementation, and attracting investment. In 2024, a total of nine meetings were held, including working group sessions. Current efforts focus on promoting multi-purpose use of substation land in metropolitan areas, participating in joint development or urban renewal projects for idle properties, and revitalizing large land parcels through public tenders and land use rights agreements. These initiatives aim to enhance asset efficiency and increase corporate income through the optimized use of existing land resources.

Performance in Activating the Green Power Market

Following the 2017 amendments to the Electricity Act, Taiwan opened the green power market to free trade and assigned Taipower the responsibility of supporting stable market operations. In response, the Company has actively prepared and planned for these changes. The following outlines two key areas of action:

01 Supporting Voluntary Green Power Transactions and Green Market Participation

- Fully opened green electricity access for all users.
- Launched the Electricity Trading Platform in July 2021; by the end of 2024, 102 participants had joined, representing 1,791.4 MW of capacity.
- The 2024 green power trading volume reached nearly 3 billion kWh.
- As of December 2024, multiple renewable energy producers and sellers were participating. These included: 4 hydropower companies, 1 geothermal companies , 194 solar energy companiey, and 28 wind power companies, and 93 renewable electricity sales companies.
- In 2023, Taipower launched the Green Power Allocation Sandbox Program. In 2024, purchasing conditions were further relaxed to increase flexibility for corporate buyers.
- In November 2024, Taipower upgraded its small-scale green power sales program, introducing offshore wind power, daytime and all-day green electricity products, and seasonal winter options to better serve small and medium-sized enterprises (SMEs).

02 Fulfilling New Legal Responsibilities While Advancing Energy Transition and Ensuring Supply Stability

- Assumed new statutory responsibilities related to carbon emissions control in the power sector and reserve capacity obligations.
- Submitted annual Power Emissions Factor plans and performance reports to promote low-carbon power generation, supported green electricity incentive programs, and implemented national policies to increase gas, reduce coal, expand renewables, and remain nuclear-free.
- To maintain market stability, the Electricity Reliability Review Council was established, setting a 15% reserve margin target. Electricity retailers are required to contribute to reserve capacity, while Taipower retains the ultimate responsibility for supply and reports annually on reserve capacity planning and results.
- A designated regulatory authority was established by the competent central government agency to oversee power market operations and implement electricity price stabilization mechanisms to prevent excessive volatility.

Corporate Governance

1.2.1 Governance Framework

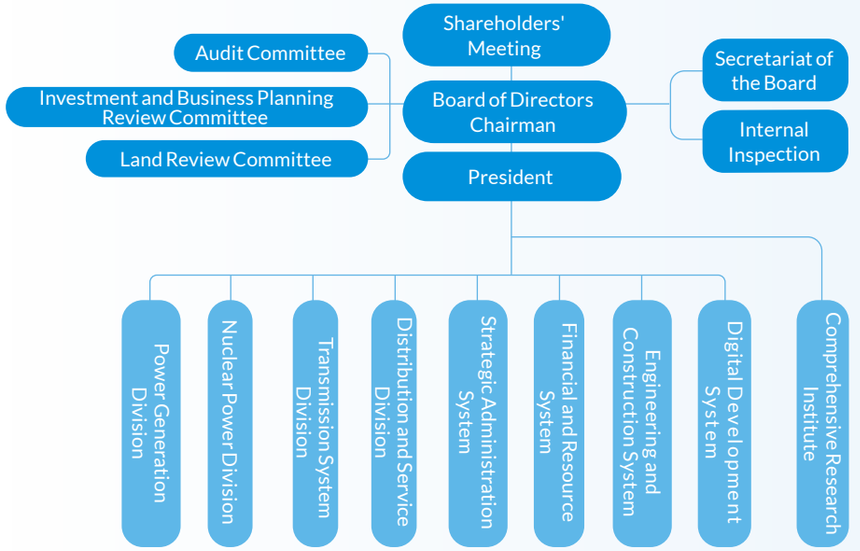
2-9 2-10 2-11 2-15 2-17 2-18 2-19 3-3

Material Topic: Corporate Governance and Sustainable Management

Policy	• To supply stable electricity for the needs of diverse societal development in an environmentally friendly and cost-effective manner.
Management Approach	• Promote corporate governance, integrity practices, and anti-corruption measures to improve management transparency, uphold professional ethics and integrity, and integrate sustainability into business strategy. Strengthen governance structure, sustainability planning, and risk management, while improving risk awareness and organizational resilience to enhance long-term corporate value. • Continue advocating for the removal of policy-imposed obligations and the rationalization of electricity pricing.
Action Plans	• Improve performance in the Corporate Governance Evaluation. • Increase attendance rates for the Board of Directors and Audit Committee. • Develop and implement a supervisory visitation program for integrity affairs.
Actual Performance in 2024	• Received the highest rating ("Excellent") in the 2024 Corporate Governance Evaluation for State-Owned Enterprises by the Ministry of Economic Affairs. • Held 12 project-based integrity seminars with 1,218 participants; 96.9% satisfaction and 99.7% found the sessions helpful. • Organized 309 anti-corruption awareness events with 6,889 participants (23.63% of all employees). • Conducted 26 on-site visits to internal units. • The average board meeting attendance rate reached 99% in 2024, with 100% attendance for audit committee meetings.
Targets for 2030	• In alignment with the SDGs, Taipower aims to strengthen cost control and fuel procurement efficiency, promote business diversification and digital transformation, and deploy circular economy and clean energy technologies (e.g., CCS and hydrogen) to achieve net-zero emissions by 2050.

Taipower's governance responsibilities are carried out by the Shareholders' Meeting, the Board of Directors, and the executive management (see figure below). Under the Board, there are three functional committees-the Audit Committee, the Investment and Business Planning Review Committee, and the Land Review Committee-which are responsible for conducting preliminary reviews of proposals submitted by the executive departments. The Board is also supported by the Secretariat and the Audit Office, which assist with meeting coordination, legal compliance, director training, and internal control matters. Taipower currently has 16 departments at its headquarters and four business divisions: Thermal and Hydro Power Generation, Nuclear Power Generation, Transmission and Power Supply, and Power Distribution and Sales. To meet operational needs, the Company has also established various affiliated units and committees, such as the Taiwan Power Research Institute and the Engineering Office for Nuclear and Thermal Power Development.
As a publicly held company (not listed or OTC-listed), Taipower is not required under the Securities and Exchange Act to establish a Remuneration Committee.

Taiwan Power Company Governance Framework



Board of Directors

Composition of the Board

In accordance with the Company Act and Ministry of Economic Affairs regulations, Taipower's directors are nominated by shareholders and elected at the Shareholders'Meeting. As stipulated in the Articles of Incorporation, the Board consists of 15 directors. In compliance with the Securities and Exchange Act, three independent directors are appointed and serve on the Audit Committee. Among the 15 directors, five managing directors, including one independent director, are elected from among the board members, Directors (including independent and managing directors) serve two-year terms and may be re-elected. As required by the Administrative Law of State-Owned Enterprises, at least one-fifth of the directors representing government shares must be labor union representatives. Therefore, the current board includes: 5 managing directors (1 independent director), 3 independent directors and 3 labor directors.

Board Diversity

Taipower's Corporate Governance Best Practice Principles (Article 20) state that Board composition should consider diversity in gender, age, and professional expertise. All members are expected to possess the knowledge, skills, and competencies necessary to fulfill their duties. Among the 15 current directors, 5 are women and 10 are men. In addition to core expertise in electrical engineering and related technical fields, the Board includes professionals from new and emerging areas aligned with Taipower's long-term strategic needs for energy transition. These areas include smart grids, circular economy, intellectual property, green energy, environmental protection, information technology, civil engineering, economics, accounting, land administration, and law. The Board comprises 9 representatives from government, academia, and industry, 3 Independent Directors, and 3 Labor Union-Nominated Directors. Members range in age from 49 to 67, representing both mid-career and senior professionals. Overall, the Board demonstrates strong diversity in terms of professional background, gender, and age. In principle, Board meetings are held monthly and convened additionally as needed. In 2024, the Board and the Executive Board held 13 and 7 meetings, respectively, with attendance rates of 99% and 97%.

Taipower Board of Directors, 2024

As of December 31, 2024

Title	Name	Current Position	Gender	Age			Professional Background					Attendance Rate
				41-50 Years Old	51-60 Years Old	61-70 Years Old	Electric Energy	Public Policy	Environmental and CSR-related expertise	Finance and Accounting	Law and Land Administration	
Acting Chairman (Managing Director)	Tseng, Wen-Sheng	Vice Minister, Ministry of Economic Affairs	Male		●		V	V	V			100%
Managing Director	Wang, Yao-Ting	President, Taiwan Power Company	Male			●	V	V	V			100%
Managing Director	Lin, Faa-Jeng	Chair Professor, Department of Environmental Engineering, Chung Yuan Christian University	Male			●	V	V	V			93%
Managing Director	Chang, Tien-Chin	Chair Professor, Department of Environmental Engineering, Chung Yuan Christian University	Male			●	V	V	V			100%
Managing Director (Independent Director)	Chou, Shya-Li	Vice President, Taiwan Institute of Economic Research	Female			●	V	V	V	V		100%
Director (Independent Director)	Liu, Chia-Wen	Professor, Department of Accounting, National Taiwan University	Female		●			V		V		100%
Director (Independent Director)	Liu, Chih-Wen	Distinguished Professor, Department of Electrical Engineering, National Taiwan University	Male		●		V	V	V			100%
Director	Lin, Tze-Luen	Spokesperson, Executive Yuan	Male		●		V	V	V			100%
Director	Chiang, Yau-Chi	Professor, College of Maritime Law and Policy, National Taiwan Ocean University	Female	●				V	V		V	100%
Director	Chuang, Ming-Chih	Director, Department of General Planning, Ministry of Economic Affairs	Male		●		V	V	V			100%
Director	Guo, Xiao-Rong	Director, Northern Region Branch, National Property Administration, Ministry of Finance	Female		●			V			V	100%
Director	Luo, Cui-Ling	Director, Department of Economic Law, Ministry of Economic Affairs	Female		●			V			V	100%
Director (Labor Director)	You, Zheng-Da	Section Chief, Chiayi Branch Sales Office, Taiwan Power Company	Male		●		V	V	V			100%
Director (Labor Director)	Yang, Chen-Hsiung	Specialist, Hsinchu-Taoyuan Power Supply District Operations Office, Taipower	Male		●		V	V	V			100%
Director (Labor Director)	Huang, Wen-Feng	Shift Supervisor, Taichung Power Plant, Taipower	Male		●		V	V	V			100%

Functional Committees of the Board

Committee Name	Members	Meeting Frequency / Responsibilities	2024 Performance
Audit Committee	Composed of 3 independent directors in accordance with the Company's Articles and MOEA rules. Independent directors meet the qualifications under the "Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies."	Meets at least once per quarter. Reviews operating budgets and internal control systems.	Held 7 meetings; 100% attendance.
Investment and Business Planning Review Committee	Comprised of 14 members. Formed through director nomination based on professional expertise and appointed by the Board in accordance with internal regulations.	Meetings are held on a monthly basis in principle to deliberate major proposals concerning investment projects, business strategies and operational plans, as well as the acquisition, management, or disposal of land.	Held 11 meetings; 98% attendance.
Land Review Committee	Comprised of 7 members. Formed similarly to the above, with appointments based on expertise and Board approval.		Held 9 meetings; 100% attendance.

Disclosure and Transparency of Corporate Governance Information

Taipower provides dedicated sections on its official website for corporate governance, information disclosure, and sustainability. These sections offer stakeholders access to key corporate information, including the Sustainability Report; monthly generation and sales data (such as installed capacity, net power generation and purchases, electricity sales, and summaries); concise monthly reports (including operational analyses, business reports on generation, transmission, distribution, and sales, and income-expenditure comparisons); and updates on major project progress. In accordance with the "Regulations Governing the Disclosure of Material Information of Public Companies via the Internet," Taipower also discloses key operational information on the Market Observation Post System (MOPS) and in its Annual Shareholders' Meeting Report. Going forward, Taipower will support the implementation of IFRS Sustainability Disclosure Standards (IFRS S1 and S2) as planned by the competent authority to enhance disclosure quality and align with international standards.

Continuing Education for Directors

In 2024, Taipower continued to proactively arrange director training in accordance with the "Directions for the Implementation of Continuing Education for Directors and Supervisors of TWSE and TPEx Listed Companies." Although Taipower is a publicly offered but non-listed company, it voluntarily complies with the same training framework and hour requirements. All directors actively participated and obtained certification. The training covered topics such as carbon management, IFRS sustainability disclosure, climate change impacts on financial reporting, corporate governance and gender equality, equity method investments, AI ethics and governance, and applications of artificial intelligence in smart grids. All directors significantly exceeded the required hours, with an average of 9.4 training hours per director in 2024.

Conflict of Interest Avoidance Mechanism

In accordance with Taipower's Board Meeting Rules and the Audit Committee Charter, directors (including independent directors) must disclose any conflicts of interest during meetings. If a matter could affect the Company's interests, directors are required to recuse themselves from both discussions and voting and may not act on behalf of others. Each Board and Audit Committee meeting notice includes a reminder of these conflict-of-interest regulations.

Board Performance Evaluation Policy

Taipower has established "Board of Directors Performance Evaluation Guidelines" to assess both the overall board and individual directors. The overall board evaluation covers participation in operations, decision-making quality, board composition, selection and training, and internal control, and is conducted annually with results reported by the end of March the following year. In 2024, the Board and its three committees all received "Excellent"or "Outstanding" ratings. The results were publicly disclosed in the "Corporate Governance/Board of Directors" section on the Company's website.

Individual performance evaluations follow the Ministry of Economic Affairs' "Guidelines for Independent Directors" and "Guidelines for the Management of Directors and Supervisors." Directors complete self-evaluations at the end of each year and submit the results to the MOEA as reference for performance review and reappointment.

Remuneration Policy for Directors

Taipower is a state-owned enterprise. The remuneration of directors (including the Chairman) is determined based on standards set by the competent authority-the Ministry of Economic Affairs-and the Company has not established a Remuneration Committee. Independent directors receive fixed monthly compensation only and are not entitled to profit-sharing, year-end bonuses, or any additional remuneration. Labor directors are Taipower employees and receive compensation in accordance with the "Basic Principles for Employee Compensation Authorization for State-Owned Enterprises"and the "MOEA Guidelines for Personnel Compensation" and thus do not receive additional compensation for serving as directors. In view of Taipower's financial loss in 2024, the director compensation ratio has not been disclosed for this year.

Corporate Governance Officer

In accordance with the "Directions for the Appointment of a Corporate Governance Officer,"Taipower has appointed a Governance Officer through its Board of Directors to coordinate corporate governance affairs. The Officer assists board members with legal compliance, continuing education, and access to information required to perform their duties. The role is concurrently held by the Chief Secretary of the Board Secretariat. Compensation is administered under the MOEA's remuneration guidelines for subordinate agencies and is not separately tied to sustainability performance, though it is subject to performance-based and work-related bonus assessment criteria. In 2024, the Corporate Governance Officer completed 28.5 hours of professional training.

1.2.2 Risk Management

Risk Management Mechanism

Taipower actively addresses internal and external risks and emerging opportunities by enhancing risk identification and response strategies. To strengthen risk control following the March 3 power outage, the Company established a Risk Management Center, integrating experts from across business units to oversee and manage key risks at different levels,thereby helping to prevent large-scale blackouts. In response to the challenges of energy transition and climate change, Taipower has advanced initiatives across power generation, the grid, and demand-side management-including increasing gas use, reducing coal, expanding renewable energy, introducing hydrogen-ammonia co-firing technologies, reinforcing grid infrastructure, and deploying energy storage systems. The Company also promotes demand response and energy conservation measures to support the goal of net-zero emissions in the power sector. Taipower will continue to strengthen its risk management practices, raise risk awareness among employees, and dynamically adjust its risk assessments and response strategies to reduce operational risks.

● Risk Management Policy

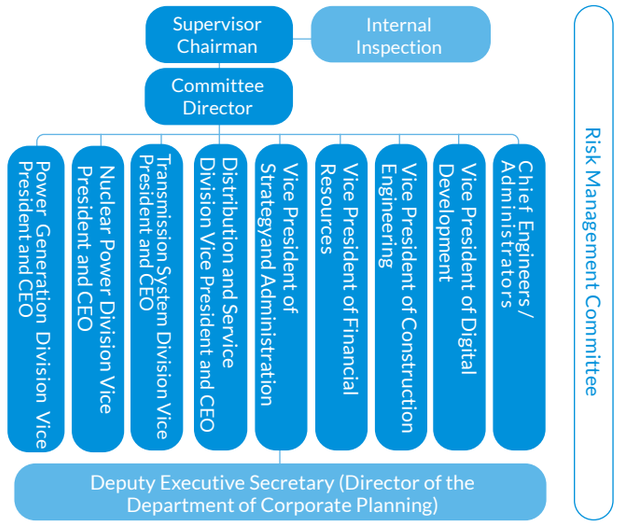
Taipower has formulated four core risk management policies to guide the Company's approach to organizational risk control:

- Provide adequate resources to establish, maintain, and continuously improve the effectiveness of the risk management system, in order to reduce operational risks.
- Establish a dedicated risk management structure to conduct ongoing risk assessment, response, monitoring, and communication.
- Ensure that employees are equipped with the necessary skills to manage risk, foster a supportive work environment and cultivate a risk-aware organizational culture.
- Enhance communication with employees and stakeholders to raise awareness of risk management and ensure full implementation of the policy.

● Risk Management Steering Committee

Taipower's Risk Management Steering Committee is chaired by the Chairman (Supervising Commissioner) and the President (Committee Director). Formed as a task-oriented team, the Committee brings together the Chief Executives of Taipower's four major business divisions-Thermal and Hydropower Generation, Nuclear Power, Transmission, and Distribution & Services-and the Vice Presidents overseeing the four core systems: Strategic Administration, Finance and Resources, Construction and Engineering, and Digital Development. Senior Chief Engineers and Administrative Advisors also serve as members.
The Vice President of the Department of Corporate Planning acts as Executive Secretary, with the department's Director serving as Deputy Executive Secretary, providing planning and administrative support to the Committee.

Taipower's Risk Management Organization Structure



● Risk Management System and Process

1.Risk Management System

Taipower promotes an integrated risk management system that encompasses a wide range of dimensions, including finance, legal and regulatory compliance, environment, and power supply operations. Risk management operates on two levels-the corporate level and the unit level-with rolling reviews conducted quarterly. To ensure thorough implementation of enterprise-wide risk management, the Risk Management Steering Committee convenes semiannually to review implementation performance and approve the Company's risk management plans. Since 2015, Taipower has submitted an annual risk management report to the Board of Directors to strengthen oversight and support continuous adjustment of risk response strategies.

Company-Level

- Quarterly rolling reviews are conducted, and the Risk Management Steering Committee convenes semiannually.
- Review the Company's annual risk management implementation, results, and effectiveness.
- Approve the annual risk management plan and company risk profile.

Unit-Level

- Each unit implements risk management based on the annual plan and company risk profile approved by the Committee.

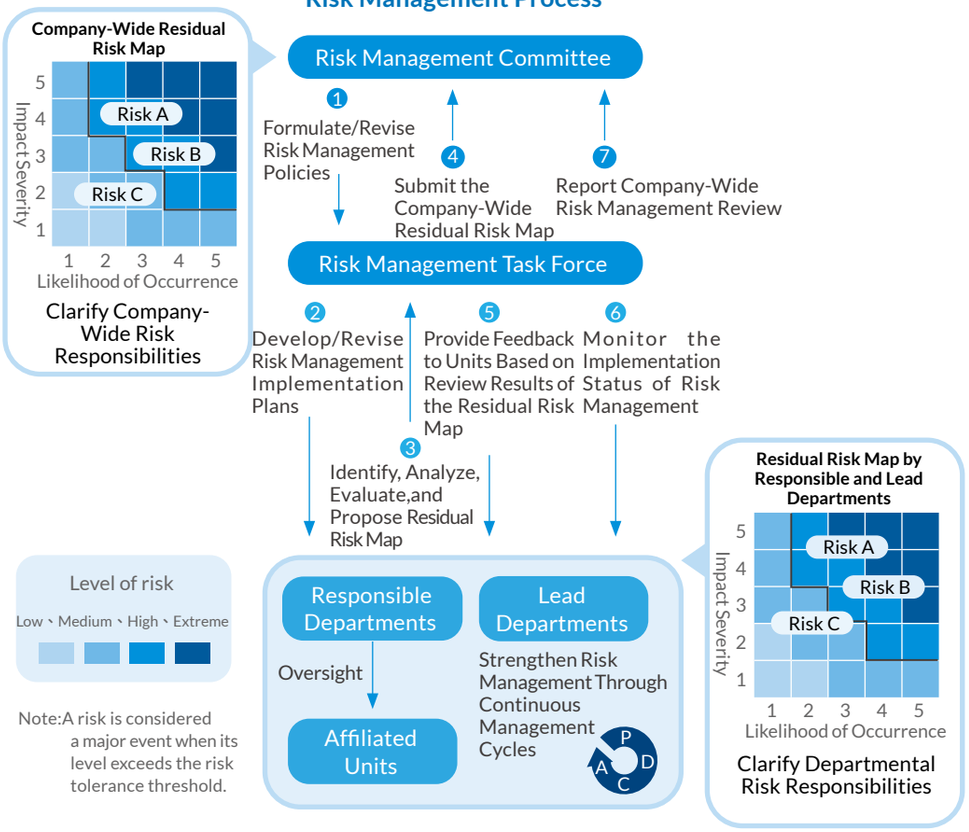
Risk Categories

- Taipower's risk categories are defined with reference to the methodology of the World Economic Forum (WEF).

2.Risk Management Process

The Risk Management Steering Committee formulates Taipower's risk management policies, which are approved by the Board of Directors. Based on these policies, the Department of Corporate Planning develops implementation plans that serve as operational guidelines for all Company units. Taipower adopts a combined bottom-up and top-down approach to risk identification and control. First-level units periodically review operational risk changes, strategic alignment, and corporate goals, and conduct internal risk assessments. Risk events that may impact company-wide objectives are reported upward (bottom-up). Staff departments then consolidate internal and external conditions and compare them with global risk trends. The compiled risks and corresponding residual risk profile are submitted to the Risk Management Steering Committee for deliberation and approval.
Once finalized, the approved risk management plans and company risk map are disseminated top-down to all units for implementation, ensuring that risk control measures are effectively executed across the organization.

Risk Management Process



Risk Assessment and Identification

In conducting risk identification and risk profile analysis, Taipower takes the following key factors into account:

- Issues of concern to stakeholders
- Major issues that may affect the Company's operations and safety
- New policies or significant changes arising from major events
- Incidents under close supervision by upper-level agencies or those receiving special attention from relevant authorities

Risk Events and Response Measures

Taipower uses a structured risk assessment mechanism to monitor risk events, and handles them according to the assessed risk level:

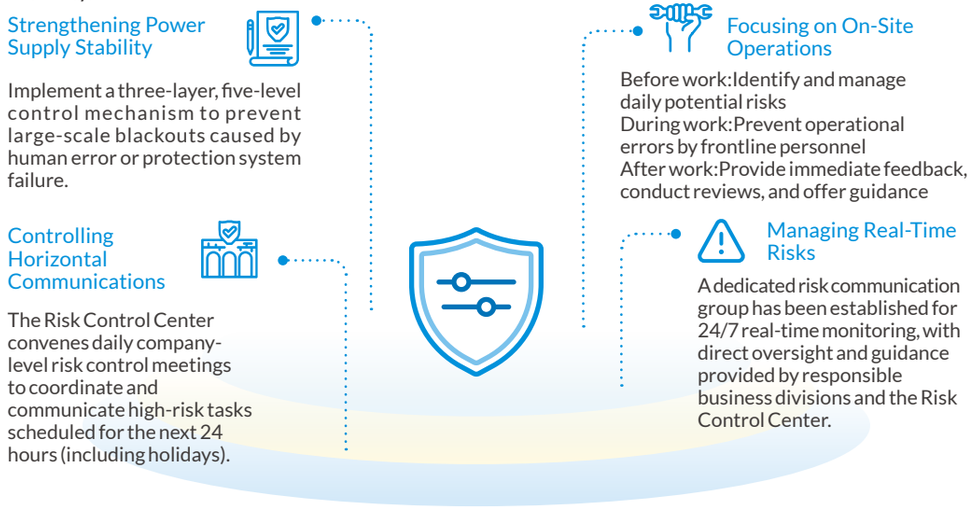
- Extremely High Risk:Top priority. Immediate response required.
- High Risk:Second priority. Response plans must be developed, and resources allocated.
- Medium Risk:Continuous monitoring by responsible departments.
- Low Risk:Handled through standard operating procedures.

In 2024, Taipower identified 13 risk events. For each identified risk, the Company defined scenario-based control measures and began conducting rolling reviews to evaluate performance and track changes. This strengthens both proactive prevention and reactive response capabilities. Through systematic risk management, Taipower analyzes interconnections between risks and sustainability issues, enhances organizational risk awareness, identifies emerging opportunities, and advances toward its long-term sustainability goals.

Risk Category	Risks Identified by Taipower
Power Supply Operation Risks	● Compromised safety or resilience of critical power infrastructure ● Short-term imbalance between supply and demand ● Delays in major medium- and long-term power generation projects ● Delays in major medium- and long-term transmission and substation projects
Environmental & Climate Risks	● Environmental pollution impacts ● Underperformance in achieving net-zero emission targets
Legal and Regulatory Issues	● Major occupational safety and health incidents ● Widespread negative media coverage ● Breach of critical compliance requirements ● Labor disputes and employee protests
Strategic and Financial Risks	● Expanding operating losses ● Insufficient development of core technical capabilities ● Information and cybersecurity failures

Risk Control Center

The Risk Control Center was established in response to the March 3 power outage incident (the "303 Incident") to enhance the stability of power supply operations. It focuses on four key objectives: strengthening power supply stability, managing on-site operational risks, improving horizontal communications, and responding to real-time risks. The Center's scope of oversight includes power generation systems, transmission and distribution networks, renewable energy facilities, independent power producers (IPPs), and fuel supply interfaces. It monitors potential risk factors related to maintenance and testing, construction activities, fault repair, switching operations, and relay coordination across relevant units. Beginning in 2025, IPP facilities will also be formally included under the Company's risk management framework to further strengthen oversight and ensure power supply reliability.



Risk Control Activities

2024 Risk Control Activities

2,045 times	48 times	245 meetings	50 meetings	245 sessions
Spot checks on risk control cases by the Center	Audits conducted on business units or field sites	Daily company-wide risk control meetings held	Weekly risk review meetings for busbar outage-related work	Risk control training sessions (for both executive departments and subordinate units)

1.2.3 Reputational Risk Management

Risk Events and Corresponding Response Measures

To protect Taipower's corporate image and minimize the impact of external negative events, the Company has established a proactive reputational risk management mechanism. By operating a multi-channeled monitoring system, Taipower detects emerging reputational threats in real time and activates its crisis response protocol for issues with escalation potential or facing widespread public concern. Key mechanisms include:

1.Media Monitoring:Taipower conducts daily monitoring across newspapers, TV, online news, and social media to ensure timely internal reporting and full awareness of public sentiment and media trends.

2.Early Warning Notifications:Each department appoints a deputy supervisor as a media liaison, responsible for issuing alerts and coordinating communications on reputational matters.

3.Crisis Management:

- Press Releases and Timely Statements: Taipower proactively issues press releases and immediate statements to convey its position, maintain transparency, and support accurate media reporting.
- Spokesperson System: A designated spokesperson centralizes external communications to ensure message consistency and accuracy in all public disclosures.

Reputational Risk Response Mechanisms

For incidents such as power outages or workplace safety events arising from operational or equipment failures that may impact Taipower's public image, the following response measures are adopted:

1.Timely Clarifications:For urgent or sensitive situations, Taipower swiftly addresses public misunderstandings through real-time explanations or formal press statements to prevent the spread of misinformation.

2.Power Outage Communications:During regional outages, dedicated media channels provide real-time updates on restoration progress, explain causes, and outline corrective actions to reduce public concern.

3.Media Engagement:For incidents under media scrutiny or with the potential to escalate, Taipower delivers timely and appropriate responses while closely tracking developments to maintain a consistent, factual narrative.

Press Release

1.2.4 Integrity and Legal Compliance 2-27 205-1 205-2 205-3

Ethical Corporate Management

Taipower upholds a philosophy of "sincere management and autonomous control" by promoting ethical standards internally and strictly complying with laws and regulations externally. The Company is committed to fulfilling its corporate responsibilities and advancing anti-corruption efforts across the organization.

Ethical Code of Conduct

All Employees	Procurement Personnel	Management
Must comply with the Code of Ethics for Employees under the Ministry of Economic Affairs and the Directions on Lobby Registration and Checks for the Executive Yuan and its Subordinate Agencies. Employees may consult with the Department of Civil Service Ethics for clarification or support, with full protection of their rights.	Must follow the Ethical Guidelines for Procurement Personnel and the Points of Attention for Interactions between Procurement Personnel and Vendors. Training and consultations are regularly provided to ensure fairness, transparency, and integrity in procurement activities.	Must review suspected misconduct cases in a fair and timely manner. Taipower enforces accountability for both directly involved personnel and responsible supervisors to reinforce the principles of ethical corporate governance.

Anti-Corruption Policy

As a state-owned enterprise, Taipower follows the Executive Yuan's National Integrity Building Action Plan by executing corresponding policies and implementation measures. The Company promotes internal anti-corruption efforts, fosters consensus on integrity with the private sector, and holds itself to the highest standards of ethical conduct.

Taipower Anti-Corruption Related Regulations

- Taiwan Power Company's Notes for Interactions between Procurement Personnel and Vendors
- Taiwan Power Company's Guidelines for the Establishment of a Procurement Sampling Inspection Task Force
- Taiwan Power Company's Plan for the Promotion of Anti-Corruption in the Current Stage
- Taiwan Power Company's Guidelines for Holding Personnel and Their Supervisors Accountable for Administrative Liabilities in Cases of Suspected Misconduct

Integrity Promotion and Awareness

Taipower's Department of Civil Service Ethics leads integrity initiatives and reports annually to the Board of Directors. In cases of violations or negative events, it investigates root causes, addresses control gaps, and requests improvement actions from responsible units. Legal promotion is reinforced through real case studies published in a monthly integrity e-bulletin to raise awareness and prevent recurrence.

Implementation of Taipower's Anti-Corruption Procurement Platform

Integrity Committee Meeting Section

Agency Procurement Integrity Platform

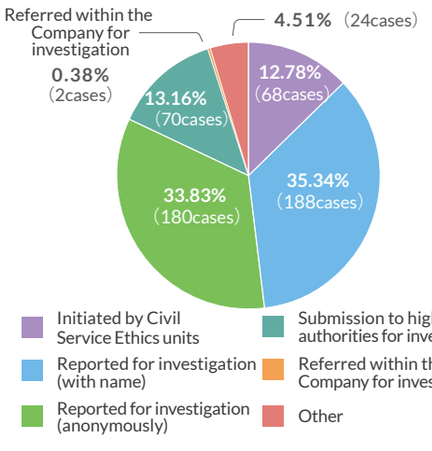
Taipower launched integrity platforms for key projects such as the High-Calorific Coal Spot Purchase and Phase II of the Offshore Wind Power Project's Equipment Procurement. These platforms ensure open communication with prosecutors, ethics agencies, and vendors, and are supported by a public portal on Taipower's website to enable external oversight.

Built on five principles-risk prevention, integrity, public-private collaboration, transparency, and supervision-the platform strengthens audits and mitigates risks. In 2024, Taipower continued to enhance its operations through public disclosures, stakeholder meetings, cross-agency visits, and lectures by prosecutors to ensure transparency, fairness, and compliance in procurement.

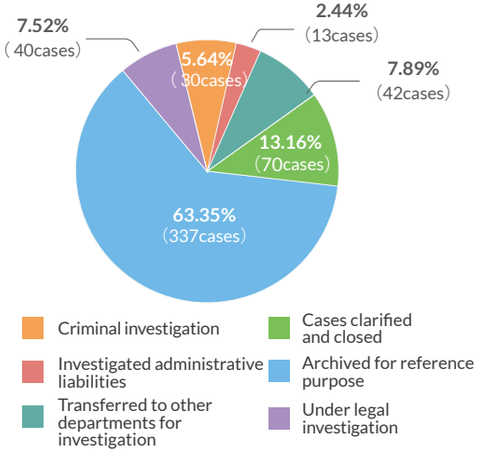
Case Sources and Investigations in 2024

In 2024, Taipower concluded investigations for 532 integrity-related cases. These cases were categorized based on their sources, as illustrated in the figure below. Among them, cases filed through whistleblowing channels accounted for the highest proportion, reaching 69.17%. Taipower continues to strengthen its efforts to promote diverse and accessible reporting mechanisms and to encourage the proper use of these channels.

Sources of Ethics-Related Cases in 2024



Case Handling Results in 2024



Legal Violations and Indictments

In 2024, two Taipower employees were indicted for violating the Anti-Corruption Act. One case involved disclosing procurement details to a specific vendor, who manipulated the bidding process and offered bribes upon winning the contract. The other involved accepting hospitality and gifts from a contractor in exchange for neglecting inspection responsibilities. Taipower convened an Integrity Committee meeting to thoroughly review both cases, identify root causes, and propose corrective actions. Administrative responsibilities were pursued for both the employees and vendors involved. The Company reaffirmed its anti-corruption stance and strengthened integrity training for employees and suppliers to prevent future misconduct.

Anti-Corruption Measures

1.Response to Major Corruption Cases

- Fully cooperated with judicial investigations.
- Reviewed internal control gaps and proposed preventive actions.
- Enhanced integrity awareness among employees and contractors.

2.Promotion of Corporate Integrity

- Convened annual Integrity Committee meetings; outcomes were disclosed on the official website.
- Held the "Powering ESG" seminar to foster ethical procurement practices.
- Reinforced oversight in response to media, legislative, and judicial concerns.

3.Integrity Advocacy and Training

- Internal:Promoted integrity policies through newsletters, briefings, seminars, and online courses.
- External:Conducted vendor sessions to advocate anti-bribery regulations and fair business conduct.

4.Integrity Risk Management Mechanisms

- Carried out annual risk assessments on unethical conduct.
- Implemented audits, inspections, and awareness initiatives to strengthen early-warning controls.

Internal Risk Control

Taipower's internal control system is implemented by management through three lines of defense. The first two lines perform regular risk identification and self-assessment, while internal audit functions as a the third line to ensure overall effectiveness. In accordance with regulations issued by the Financial Supervisory Commission (FSC) and the Ministry of Economic Affairs (MOEA), the Board Audit Office executed the 2024 Annual Audit Plan.

2024 Internal Audit Implementation Overview

In accordance with Taipower's risk management plan, prior audit findings, and recent key business developments, selected units were subject to routine audits, while special audits were conducted on critical topics. The audit scope covered internal control mechanisms, risk management, operational effectiveness, communication and reporting, legal compliance, directives from the Board and Audit Committee, and items assigned by supervisory authorities. A total of 57 routine audits and 16 special audits were completed. An internal control self-assessment report was submitted to support the Board of Directors and the President in evaluating system effectiveness and served as the basis for issuing the 2024 Internal Control System Statement.
To align with Taipower's 2025 corporate goals-a stable power supply, grid resilience, financial sustainability, and net-zero emissions-audit priorities were refined to strengthen preventive management and enhance operational performance.

1. Strengthening Audit Execution and Risk Oversight

- Encourage business units to conduct internal audits and hold review meetings to share best practices.
- Consolidate high-risk findings and report them to independent directors and senior management to enhance oversight.

2. Optimizing Internal Control Processes

- Require departments to review and adjust control procedures in response to environmental changes, strengthening management effectiveness and adaptability.

Legal Compliance

Taipower, as a state-owned public utility, operates under the Company Act, Securities and Exchange Act, and other applicable general laws. In addition, it is subject to the Administrative Law for State-Owned Enterprises and the Electricity Act. Key business aspects-including its organizational structure, accounting, auditing, budgeting, business planning, utility rates, and power resource development-must be approved by the Ministry of Economic Affairs (MOEA). The Department of State-Owned Enterprises under MOEA oversees operations and conveys relevant directives, while the Bureau of Energy serves as the electricity industry regulator. All corporate policies are implemented with full consideration of regulatory requirements and their impacts.

Legal Education and Compliance Promotion

To strengthen legal awareness and reinforce compliance, Taipower's Legal Affairs Office organizes annual sessions of a"Practical Legal Issues Seminar" for various departments. These sessions may be led internally or jointly with external experts and cover topics such as legal fundamentals, regulatory compliance, and case study discussions. The office also provides legal consultation services to help departments address business-related legal challenges and ensure employees act in accordance with relevant laws and internal regulations.

Administrative Fines for Labor Practices

In 2024, Taipower was issued four fines for violations of the Labor Standards Act. The cases involved the exclusion of various allowances-including a shift leader allowance, a dual-role driver allowance, a full attendance bonus, a late-night meal allowance, and a remote location allowance-from hourly wage calculations. These omissions led to underpayment of overtime wages on rest days and regular holidays.

Taipower has filed both administrative appeals and lawsuits to protect its legal rights. Since wage calculations are governed by the Statute for the Management of State-Owned Enterprises and related government regulations, Taipower cannot unilaterally alter its practices. The discrepancy stems from differing interpretations between supervisory and labor authorities. Taipower has reviewed its internal processes and, depending on the outcomes of its appeals, may seek assistance from the Ministry of Economic Affairs.

Administrative Fines for Occupational Safety

In 2024, 27 industrial safety violations resulted in administrative penalties. The violations fell into the following categories:

- Failure to conduct work coordination or communication
- Failure to inspect the workplace
- Failure to use required personal protective equipment or safety devices
- Failure to inform workers of workplace risks in advance
- Failure to install necessary occupational safety and health facilities

To reduce such penalties, Taipower has enhanced its occupational safety management through safety inspections, embracing management by walking around (MBWA), CCTV monitoring, training, and awareness campaigns. Appeals have been filed for certain cases.Looking ahead, Taipower will continue to engage in disaster reduction meetings organized by the Ministry of Labor and the Ministry of Economic Affairs. The Company will also participate in quarterly reviews of industrial safety measures and continue promoting occupational health and safety across its operations.

Administrative Fines for Environmental Protection

In 2024, Taipower received 9 environmental fines, totaling NT$2.5245 million. Although the number of fines increased compared to the previous year, the total remained within the Company's annual control targets (≦17 cases and ≦NT$6.044 million).

The most significant fine in 2024 was imposed on the Datan Power Plant, where Unit 9's gas purging operations were deemed by the Environmental Protection Bureau to have commenced without the required commissioning permit for a stationary pollution source. The operation was determined to be in violation of Article 24, Paragraph 2 of the Air Pollution Control Act and resulted in a fine of NT$1.6 million.

Year	2022	2023	2024
Number of Cases	3	3	9
Total Fines (NT$ thousand)	330	500	2,524.5

Note:The figures in the table exclude policy-related penalties. The statistics for the past three years are as follows:
2022:1 policy-related case, with a fine of NT$600,000
2023–2024:0 policy-related cases, with no fines incurred

Recognizing that environmental penalties may lead to negative public perception and pose significant risks to the Company's reputation and operations, Taipower remains committed to proactive environmental compliance. The Company continues to implement the following measures to prevent environmental violations and protect its image:

1. Preventive Measures:
   (1) Continue assisting on-site units in enhancing the functionality of their environmental management systems.
   (2) Strengthen audits of environmental compliance by relevant departments, including the Environmental Protection Division.
   (3) Invite external experts to conduct on-site reviews to proactively identify and rectify deficiencies.
   (4) Reinforce legal compliance awareness across all business units.
   (5) Provide ongoing ISO 14001 training to enhance environmental management system implementation.
   (6)Conduct performance audits of environmental protection at operational sites.
2. Review and Improvement in Cases of Environmental Violations:
   (1) Hold review meetings to analyze root causes of violations and develop corresponding improvement actions.
   (2) Invite experts to provide targeted guidance to high-risk units, reinforcing their environmental management mechanisms.

Administrative Fine for Violation of Effluent Standards

In 2024, Taipower received one fine related to water usage and effluent quality. On October 27, 2023, the Environmental Protection Bureau of Taichung City conducted independent sampling at the FGD (Flue Gas Desulfurization) outfall outside the Taichung Power Plant. The test results indicated an exceedance in chemical oxygen demand (COD), constituting a violation of Article 7 of the Water Pollution Control Act, and a fine of NT$360,000 was imposed.

Following the incident, the power plant held a review meeting to develop response measures. As the sampling was conducted without the presence of plant personnel and significantly differed from previous test and monitoring results, Taipower raised concerns regarding procedural fairness. The Company has retained legal counsel and filed an administrative lawsuit to contest the penalty.

1.3 Sustainability Strategy

1.3.1 Organizational Structure of the Sustainable Development Commission (SDC) 2-9 2-12 2-13 2-14 2-16 2-24

The Sustainable Development Commission (SDC)

Taipower has established a Sustainable Development Commission (SDC). The Chairman of the Board serves as the Committee Director, and the President serves as the Deputy Committee Director. Commission Members include Vice Presidents and professional Chief Engineers and Administrators. The Commission comprises three steering committees and one project task force, namely the Management Development Steering Committee, the Sustainable Environment Steering Committee, the Social Responsibility Steering Committee, and the Task Force on Climate-Related Financial Disclosures. Each committee or task force is convened by a Deputy General Manager. Through the three steering committees, the Commission addresses the areas of business development, environmental sustainability, and social responsibility. These units analyze external trends and policy developments, formulate long-term sustainable strategies, and identify Taipower's material issues. The Commission is also responsible for promoting Taipower's sustainability agenda and tracking the Company's short-, medium-, and long-term performance targets.

Key Tasks of the SDC

Management Development Steering Committee

This committee focuses on strategic planning and business transformation. It is responsible for shaping Taipower's management vision and governance structure, formulating operational plans, and leading the Company toward more robust business development. Key initiatives include promoting energy transformation, organizational transformation, digital transformation, and diversification, thereby enhancing the Company's overall management capabilities.

Sustainable Environment Steering Committee

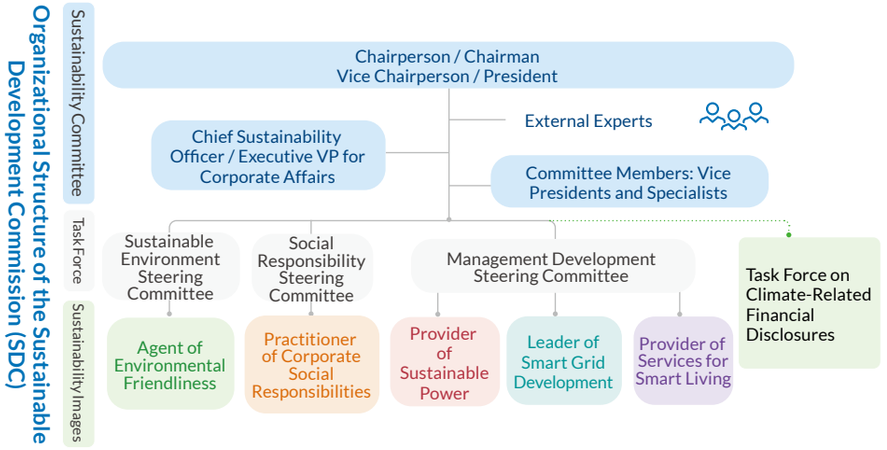
This committee leads efforts to establish a green corporate image and advance low-carbon development. It supports Taipower's environmental mission through the formulation of environmental policies, setting of environmental targets, and implementation of environmentally friendly initiatives. These efforts aim to deliver green electricity and reinforce the Company's reputation as an environmentally responsible enterprise.

Social Responsibility Steering Committee

This committee aims to strengthen corporate culture and demonstrate Taipower's commitment to social responsibility. Through people-oriented values and actions that reflect its corporate citizenship, the Company promotes a human-centered business philosophy. Efforts include cultural and employee care programs-such as the Taipower Family Program-and active participation in public welfare initiatives, highlighting Taipower's social value and responsibilities.

Task Force on Climate-Related Financial Disclosures

The task force enhances the Company's climate-related strategies and disclosure practices as part of its sustainability efforts. Key actions include establishing appropriate management processes for climate risks and opportunities, evaluating and analyzing the financial and business impacts of climate change, and developing effective response strategies. These efforts aim to improve capital allocation and decision-making, while also ensuring transparent communication with stakeholders.



Operating Mechanisms and Performance of the SDC

Through its three steering committees, the Sustainable Development Commission (SDC) analyzes external environmental and policy trends related to management development, environmental sustainability, and social responsibility. In 2023, Taipower additionally established the Task Force on Climate-Related Financial Disclosures (TCFD) to strengthen its climate change responses. The SDC is responsible for formulating the Company's long-term sustainable development strategy, identifying material topics, implementing sustainability-related initiatives, and tracking progress toward Taipower's short , medium , and long-term goals.

Meeting Name	Responsibilities / Scope of Work	2024 Activities
Sustainability Committee	Plan the Company's long-term sustainability direction, define material topics, and approve the sustainability strategy blueprint	Held 1 meeting
Task Force Meeting	Review sustainability plans and performance	Held 2 meetings
Task Force on Climate-Related Financial Disclosures	Strengthen climate-related actions and information disclosure	Held 4 meetings

The Role of the Highest Governance Body in Overseeing Impact Management

Taipower's Board of Directors places strong emphasis on sustainable development, transparency, and stakeholder engagement. Feedback is collected through designated channels on the Company's website, and governance and disclosure information is made publicly available.

The management team annually reviews the Company's sustainability direction and formulates action plans, with results reported to the Board of Directors. The Sustainability Task Force conducts rolling reviews of plans by referencing international benchmarks. The Sustainability Committee is responsible for reviewing the structure of the Sustainability Report and ensuring the accuracy and transparency of disclosed information.

1.3.2 Moving Towards Net-Zero Emissions

3-3 305-1 305-4

Material Topic: Implementing Net-Zero Strategies in Response to Climate Change

Policy	• Actively develop renewable energy and introduce decarbonized energy technologies in alignment with the national 2050 Net-Zero Emissions Pathway, to progress steadily in phases toward net-zero.
Management Approach	• Conduct GHG inventories, identify climate-related risks, and set carbon reduction targets to address potential future impacts of climate change.
Action Plans	• Inventory greenhouse gas emissions • Identify climate-related risks
Actual Performance in 2024	• Completed a parallel research project on climate change adaptation for the power generation system, including climate risk assessments • Continued progress in line with the net-zero transition timeline
Targets for 2030	• Achieve the targets outlined in the net-zero transition timeline

Sustainable Economic Activities Reference Guidelines

In alignment with the government's 2050 net-zero emissions target, one of Taipower's key objectives is to contribute to climate change mitigation. This goal is consistent with the Sustainable Economic Activities Reference Guidelines issued by the Financial Supervisory Commission (FSC), which define categories of "general economic activities"and "enabling economic activities." Taipower's ongoing efforts along its net-zero pathway-including the development of renewable energy, research and deployment of hydrogen energy technologies, advancement of smart grid and energy storage systems, and innovation in carbon capture, utilization, and storage (CCUS) technologies-are all in line with the criteria set forth in the FSC's sustainable activity framework.

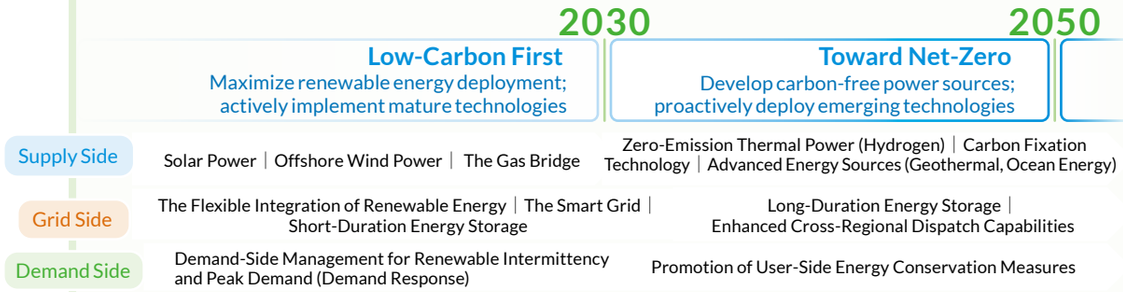
Net-Zero Transition Timeline

In response to the challenges of climate change, Taipower actively aligns with the government's net-zero emission strategy and roadmap. Based on the Ministry of Economic Affairs' "Low Carbon First, Zero Carbon Later"framework and current domestic and international technology trends, Taipower has established the following phased implementation focus areas::

Short Term （through 2025）	Mid-Term（2025 - 2030）	Long-Term（2030 - 2050）
Focus on accelerating the energy transition by maximizing the deployment of mature technologies. Priorities include expanding renewable energy capacity, reinforcing grid connection and enhancement projects, and investing in energy storage systems to address the intermittency of renewables. Taipower is also advancing low-carbon gas-fired power generation by deploying fast-ramping combined-cycle gas turbines to increase the share of natural gas and reduce reliance on high-emission coal-fired units.	Taipower will build on existing energy transition efforts and continue to promote green expansion, increase gas-fired generation, and reduce coal use. The Company will enhance the scale and resilience of renewable energy integration, strengthen energy storage systems to address potential curtailment and low system inertia, and proactively invest in R&D and pilot demonstrations of forward-looking, net-zero technologies.	As Taipower enters the net-zero transformation phase, it will face challenges such as maximum renewable energy penetration and the commercial viability of carbon-free power technologies. The Company plans to introduce hydrogen, ammonia, carbon capture and storage (CCS), geothermal, and marine energy technologies on a large scale. As the shift toward renewables as the primary energy source continues, the grid will require gradual integration of advanced technologies such as long-duration energy storage and low-inertia frequency control systems.

From Energy Transition to Net-Zero Transformation

Energy Transition → Net Zero Transition



Energy Transition → Net Zero Transition

Low carbon first 2030 — Net-zero later 2050

Aspect	Strategy	Metric	2023	2024	2025	2030	2035	2050
Supply	Expand Green Energy	Accumulated Total Capacity of Renewable Energy (10,000 kW)*	73.08 (Wind, solar, geothermal, and ocean energy)	73.94 (Wind, solar, geothermal, and ocean energy)	Estimated at 77.96 (Wind, solar, geothermal, and ocean energy)	189.23 (Wind, solar, geothermal, and ocean energy)	Estimated at 216.12 (Wind, solar, geothermal, and ocean energy)	Estimated at 308.94 (Wind, solar, geothermal, and ocean energy)
		Accumulated Hydropower (10,000 kW)	0.9	2.6	2.6	2.6	Estimated at 4.9	
		Accumulated Wind Power (10,000 kW)*	43.92	44.69	Estimated at 44.21	Estimated at 125.83	Estimated at 130.79	Estimated at 121.02
		Accumulated Solar Power (10,000 kW)*	28.78	29.17	Estimated at 33.67	Estimated at 38.37	Estimated at 43.93	Estimated at 96.92
		Accumulated Geothermal Power (10,000 kW)*	0.084	0.084	Estimated at 0.084	Estimated at 25	Estimated at 43.93	Estimated at 65
		Accumulated Marine Energy (10,000 kW)		0		Estimated at 0.03	Estimated at 6.4	Estimated at 26
	Gas Bridge	Accumulated Installed Capacity of Gas-Fired Units (MW)	12,829	13,953		25,924		
		Average Power Generation Efficiency of Self-Owned Thermal Units (Excluding Purchased Power)	41.58%	42.22%		Expected to be higher than 47%		
		Reduction in Net Greenhouse Gas Emission Intensity of Thermal Units Compared to 2016 (%)	8%	11.7%		20%		
		Introduction of Hydrogen Co-Firing Technology	The 5% hydrogen blending test was completed ahead of schedule (originally targeted for 2024). Continued testing of unit efficiency under varying conditions will provide reference data.	Reapplication review and inspection preparations are underway.	Completion of the review process for reclassification as a Category C hazardous workplace is expected, followed by the initiation of a 7–10% hydrogen co-firing test.	The possibility of increasing the hydrogen co-firing ratio will be assessed based on domestic hydrogen production capacity and hydrogen storage and transportation technologies.		
		Introduction of Ammonia Co-Firing Technology	Signed an MOU with Japan's IHI Corporation and Sumitomo Corporation to promote a 5% ammonia co-firing demonstration project at Dalin Power Plant.	1.Completed a 5% ammonia co-firing feasibility study for Linkou Power Plant in collaboration with Mitsubishi Heavy Industries (Japan). 2.Signed a technical cooperation memorandum with IHI Corporation and Sumitomo Corporation for a 5% ammonia co-firing trial at Dalin Power Plant.	1.Completed a 5% ammonia co-firing feasibility study for Dalin Power Plant in collaboration with IHI Corporation and Sumitomo Corporation. 2.Launched a study on the international intelligence gathering and economic feasibility of integrated hydrogen power generation.	Dalin and Linkou Power Plants have launched demonstration trials of ammonia co-firing at rates above 5%.	Taipower will assess whether to increase the ammonia co-firing ratio or scale up the project, based on the development of coal decarbonization technologies and the green ammonia supply chain.	
	Carbon Fixation Technology	Carbon Capture and Storage (CCS)		Established a CCS Project Promotion Task Force to conduct carbon capture and storage pilot tests at Taichung Power Plant and a preliminary feasibility study at Linkou Power Plant.	1.romoted the establishment of the Taichung Carbon Reduction Technology Park (subject to Taichung City Government's review process). 2.Completed the preliminary feasibility study for CCS at Linkou Power Plant.	1.Begin demonstration operation of a small-scale carbon capture facility starting in 2027. 2.Launch CO_2 injection demonstration projects in 2028 and 2029 (subject to review outcomes).	Complete the injection of 4,000 tons of CO_2 at the carbon capture demonstration site, followed by subsequent monitoring.	
Grid	Grid Resilience	Strengthening Solar Photovoltaic Grid Connection			Taipower is planning 46 renewable energy grid projects, including 9 substations and 10 transmission lines, which are expected to provide an additional 11.825 GW of grid capacity. By the end of 2025, the completed projects are projected to reach 9.98 GW. Taipower will continue to dynamically assess and adjust based on grid connection demand.			
		Strengthening Offshore Wind Power Grid Connection				To support offshore wind power development, Taipower is implementing two phases of power grid enhancement projects, expected to increase grid connection capacity by approximately 17 GW, bringing the total to around 20.5 GW. The Company will continue to dynamically assess and adjust based on future grid connection demand.		
	Smart Grid Development	Cumulative Number of AMI Smart Meters Installed	Reached a total of 2.707 million users	Reached a total of 3.403 million users	Expected to reach a total of 3.9 million users	Reached a total of 6 million users	Deployment rate reaches 100%	
		Accumulated number of IEC 61850 smart substations completed	68 substations	83 substations		185 substations		Deployment rate reaches 100%
	Energy Storage Development	Cumulative Installed Capacity of Self-Built and Procured Energy Storage Systems	680.9MW	1,420.3MW		As energy storage technology performance and cost-effectiveness improve, Taipower will continue to expand storage capacity and periodically review deployment strategies based on generation, load scenarios, and flexibility needs.	The Dajia River Guangming Pumped Storage Hydropower Project, with an installed capacity of 350 MW, is scheduled for completion in 2034.	
Demand	Energy Conservation	Energy Savings by Residential Users and Schools	1.81 billion kWh	1.70 billion kWh				
		Energy-Saving Promotional Activities	1,449 sessions	1,375 sessions				
	ADR (Demand Response)	Applications for Contract Capacity Reduction (10,000 kW)	275	301				
		Reduced Peak Load Capacity (10,000 kW)	116.6	131.4				

Net Zero

Note:1.*Including reinvestment capacity
2.This table complies with forward-looking economic activities in the FSC's Guidelines for the Determination of Sustainable Economic Activities

To achieve phased net-zero emissions in electricity generation, Taipower has adopted a comprehensive strategy covering the power supply side, the grid side, and the demand side. On the supply side, the Company is steadily working toward net-zero by expanding renewable energy, implementing gas bridging, and investing in carbon fixation technologies that are technically feasible.On the grid side, efforts are focused on maintaining a stable power supply through reinforcement, intelligent system upgrades, and energy storage deployment to maximize renewable energy integration and enhance grid resilience. On the demand side, Taipower is responding to increased electricity consumption and electrification by promoting energy conservation and demand response initiatives. These strategic pillars form the core of Taipower's roadmap to net-zero in electricity emissions.

The Power Supply Side

Expand Green Energy

Mature Green Energy:
Actively participate in offshore wind and solar development, expanding green energy through diversified collaboration.

Forward-Looking Energy:
Promote geothermal and marine power development and build integrated green energy systems to enhance energy self-sufficiency on offshore islands.

Gas Bridge

Gas Expansion and Coal Reduction:
In the short to medium term, Taipower is replacing aging, high-emission coal-fired units with fast-start, low-carbon combined cycle gas turbines to reduce the carbon intensity of power generation.

Fuel Substitution:
Taipower is planning pilot projects to introduce hydrogen co-firing in gas units and ammonia co-firing in coal units. These technologies will be gradually scaled up to support decarbonization.

Carbon Fixation Technology

Carbon, Capture, and Storage (CCS):
Conduct CCS pilot projects at thermal plants. A 2,000-ton/year test site will be built at Taichung Plant (2025–2026), followed by a 1-million-ton integrated demo by 2035, with phased deployment based on feasibility.

The Grid Side

Grid Resilience

To accommodate growing renewables, Taipower is reinforcing grid infrastructure, enhancing resilience, and promoting open resource sharing to maximize integration.

Smart Grid Development

Advance smart grid and digital applications to improve energy management and efficiency, while strengthening demand-side strategies to address nighttime supply challenges.

Energy Storage Development

1.The government has set a 2025 energy storage target of 1,500 MW, with Taipower responsible for 1,000 MW-including 160 MW of grid-side systems built on its own sites, and 840 MW incentivized through ancillary service procurement and power trading platforms. The remaining 500 MW is planned for self-build by solar developers. Future targets will be adjusted based on electricity market demand.

2.After 2030, as renewable energy becomes the primary power source, Taipower will assess the adoption of long-duration energy storage and plans to install variable-speed pumped-storage hydro units to maintain grid stability. The Company also plans to introduce hydrogen production technologies to convert surplus electricity into green hydrogen for industrial and transportation use, further supporting system stability.

The Demand Side

Energy Conservation

To ease the pressure of rising electricity demand on net-zero supply-side transitions, Taipower is implementing various energy-saving measures-such as efficiency diagnostics, smart digital services, and the Taipower App. These tools empower users to manage their electricity use and contribute to reduced energy consumption.

ADR (Demand Response)

To balance load variations and maintain system stability, Taipower is developing new time-of-use pricing schemes and incentive-based electricity discounts. These measures encourage users to shift their electricity usage patterns, enabling effective demand response and load management.shift their electricity usage patterns, enabling effective demand response and load management.

Net-Zero Emissions Highlights

Ammonia Co-Firing in Coal Units

On February 29, 2024, Taipower signed an MOU with Japan's IHI and Sumitomo Corporation to promote an ammonia co-firing demonstration project at the Dalin Power Plant, targeting 5% co-firing generation by 2030.

Clean Energy Transition Collaboration

On May 30, 2024, Taipower signed an MOU with the Electric Power Research Institute (EPRI) to launch joint research in three areas: net-zero strategy development, energy hub planning, and CCUS demonstration sites.

Geothermal Development in Datun Mountain Area

On October 1, 2024, Taipower joined forces with Taiwan Cogeneration Corporation, Baseload Power Taiwan, and GreenFire Energy to sign an MOU and jointly initiate geothermal development in the Datun Mountain area of northern Taiwan.

Yilan Dongshan 60 MW Energy Storage System

On November 21, 2024, Taipower and Tatung Intelligence inaugurated a 60MW/85MWh energy storage system at the Dongshan UHV substation in Yilan. The system includes 23 storage containers and provides 85,000 kWh of storage capacity, enhancing renewable energy integration and system stability.

Financial Impact of Achieving Net-Zero Emissions

To support the government's renewable energy goals, Taipower is investing NT$564.5 billion over ten years through a Grid Resilience Enhancement Program to accelerate grid improvements and ensure the stability of the electricity supply.

Following the sharp rise in fuel prices triggered by the Russia-Ukraine war, Taipower absorbed more than NT$280 billion in electricity cost differences from 2022 to 2024. The Company has actively sought government budget allocations to help stabilize electricity tariffs and to provide continued support for power infrastructure projects.

Although international fuel prices moderated in 2023, they remained above pre-war levels. Taipower will continue submitting proposals under the electricity tariff adjustment mechanism to maintain a balance between pricing and operational sustainability.

In terms of net-zero technologies, 2030 is expected to be a key milestone for the commercialization of forward-looking solutions such as hydrogen, ammonia, and carbon capture and storage (CCS). Taipower will continue to monitor global trends, evaluate optimal adoption timing, and allocate resources strategically to maximize investment efficiency and advance the power sector's net-zero transition.

1.4 Climate Action

1.4.1Climate Change Management Framework

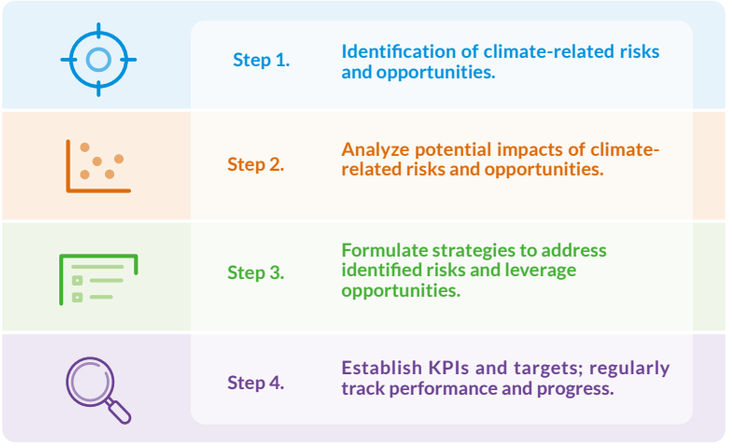
Global climate change has increasingly impacted the energy industry and broader socioeconomic systems. As Taiwan's primary electricity provider, Taipower has long paid close attention to climate-related risks and challenges and actively taken measures in response.

Since 2007, Taipower has disclosed its greenhouse gas (GHG) emissions and carbon reduction strategies. Beginning in 2009, the Company has followed the Global Reporting Initiative (GRI) Standards to report climate-related risks and opportunities. In 2022, Taipower further adopted the Task Force on Climate-related Financial Disclosures (TCFD) framework to identify climate risks and opportunities, assess their potential impacts, and develop appropriate strategies, thereby enhancing its overall climate governance and action planning.

In 2024, Taipower deepened its identification of climate-related risks and opportunities in line with the TCFD framework, initiating a structured and systematic management process. A high-level workshop was held with the participation of the Chairman, President, senior executives from the four major business divisions, four corporate systems, and the Research Institute. The workshop comprehensively assessed the potential short-, medium-, and long-term impacts of climate change on Taipower's operations.Senior leadership collectively evaluated these issues in the context of overall corporate strategy and operational realities to guide the next phase of climate risk and opportunity management.

Taipower continues to strengthen its climate resilience by systematically managing risks and opportunities under the four TCFD pillars: Governance, Strategy, Risk Management, and Metrics & Targets.

Climate Change Management Framework



To strengthen climate resilience, Taipower manages climate-related issues in accordance with the four core elements of the TCFD framework: Governance, Strategy, Risk Management, and Metrics and Targets. Current practices are outlined below:

Core Element	Current Actions
Governance	● The Board of Directors serves as the highest-level decision-making body on climate risk and regularly reviews climate-related topics. ● The Sustainable Development Commission (SDC) oversees climate issues, ● The Risk Management Committee conducts rolling reviews of environmental and climate risks. Both bodies report regularly to the Board. ● A TCFD Task Force under the SDC, supervised by the Executive Secretary and coordinated by the Corporate Planning Department, is responsible for advancing climate-related management. The task force convenes regular meetings with relevant departments. ● A Net-Zero Transition Strategy that is aligned with Taiwan's 2050 pathway has been established and approved by the Board.
Strategy	● Climate-related risks and opportunities are identified annually across business divisions and systems for the short term (<3 years), medium term (3–5 years), and long term (>5 years) Senior executives evaluate these issues from the perspective of company-wide operations and select annual material risks and opportunities. ● Impact assessments, response strategies, and evaluations of significant financial impacts are conducted for key physical and transitional risks and opportunities.
Risk Management	● A company-wide climate risk identification process has been established based on the TCFD framework. ● Each year, major climate-related risks and opportunities are assessed across divisions, taking into account trends and regulatory developments. Outcomes are reviewed by the TCFD Task Force, disclosed in the Sustainability Report, and reported to the SDC and the Board. ● Climate risk has been formally included in the Risk Management Committee's annual rolling review and is also addressed through ad-hoc topic discussions under the SDC.
Metrics and Targets	● Indicators and targets are defined for identified risks and opportunities, referencing the seven major TCFD indicator categories. ● Taipower conducts GHG inventories and discloses emissions as required under the Climate Change Response Act and related regulations, and has formulated voluntary GHG reduction plans.

1.4.2 Climate Risk and Opportunity Management 201-2

Annual Scenario Analysis

To ensure scientific rigor and reliability in its scenario analysis, Taipower references the World Energy Outlook published by the International Energy Agency (IEA) and the Sixth Assessment Report (AR6) issued by the Intergovernmental Panel on Climate Change (IPCC). Multiple scenarios are analyzed to evaluate potential impacts related to extreme weather events, changes in climate-related policies and regulations, and technological transitions driven by climate change.

● Physical Risk Assessment

For physical risk assessment, Taipower employs two climate scenarios-Shared Socioeconomic Pathways (SSPs)-from the IPCC's AR6 to simulate future climate trajectories and impacts:

Scenario	Description and Impact	Projected Temperature Rise by 2100	Source
Low Emissions Scenario (SSP1-2.6)	Assumes a strong global commitment to environmental protection, active carbon reduction policies, and a rapid advancement of clean energy technologies, leading to a significant transformation of the energy system.	~1.8℃	IPCC Sixth Assessment Report
Very High Emissions Scenario (SSP5-8.5)	Assumes continued global reliance on fossil fuels, weak environmental policies, the slow development of clean energy technologies, and increasing energy demand, resulting in persistently high-emission energy systems.	~4.4℃	

● Transition Risk and Opportunity Assessment

In light of accelerating global efforts toward net-zero emissions, Taipower uses the key scenario outlined in the 2024 World Energy Outlook published by the International Energy Agency (IEA) as a reference framework to assess potential transition risks and opportunities related to energy policy, technology development, and market trends.

Scenario	Description and Impact	Projected Temperature Rise by 2100	Source
Net Zero Emissions by 2050 (NZE)	This scenario envisions a global achievement of net-zero emissions in the energy sector by 2050. It aligns with energy-related United Nations Sustainable Development Goals (SDGs)-particularly universal access to modern energy services by 2030 and significant improvements in air quality. It requires countries to take broad carbon reduction measures, including energy transition, reduce fossil fuel use, increase adoption of renewables, and set policies that ensure continued economic growth and energy security.	~1.5℃	2024 IEA World Energy Outlook

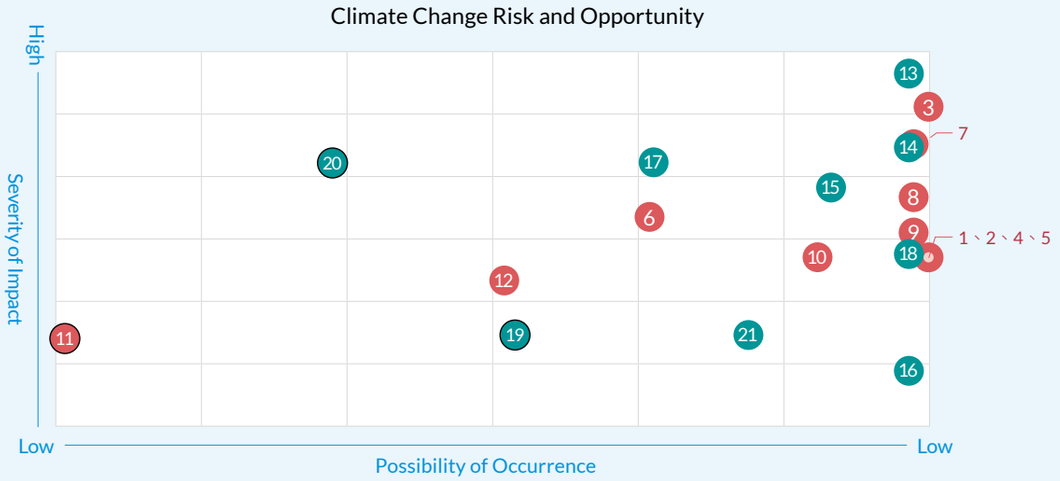
Identification, Analysis, and Assessment of Climate Change Risks and Opportunities

In 2024, Taipower continued to deepen its identification of climate-related risks and opportunities in accordance with the TCFD framework. A high-level workshop was convened with participation from the Chairman, President, senior executives from the four major business divisions, four core systems, and the Taiwan Power Research Institute. The workshop evaluated the potential short-, medium-, and long-term impacts of climate change on Taipower's operations.

Several climate scenarios were considered, in light of Taipower's businesses, and used to identify potential physical risks, transitional risks, and opportunities. The workshop demonstrated the strong commitment of senior management to assessing climate impacts with a broad and forward-looking perspective.

Through its detailed discussions, the workshop identified 6 categories of physical risks, 6 categories of transitional risks, and 9 categories of opportunities. These were then analyzed based on their likelihood of occurrence and the severity of their impacts, and subsequently prioritized.

Taking into consideration Taipower's business development strategy, its core mission of ensuring a stable power supply, and the direction of the national energy policy, a final set of 5 key physical risks, 3 key transitional risks, and 3 key opportunities was selected as a priority focus areas to guide management and resource planning.



Climate Change Risk and Opportunity Response Strategy Development

In 2024, Taipower completed a comprehensive identification and evaluation of climate-related risks and opportunities across its operational environment. Based on the results, the following material risks and opportunities were identified:

- Physical Risks:Extreme and rising average temperatures, changes in typhoon intensity and trajectories, altered rainfall patterns, increased lightning intensity and frequency, and sea level rise.
- Transition Risks:Policy and regulatory changes, increased demand for low-carbon technologies and products/services, and rising costs of raw material procurement.
- Opportunities:Development of new products or services and expansion into new markets, adoption of low-carbon energy and emerging technologies, and enhanced power supply resilience.

In response to these identified items, relevant departments have developed corresponding strategies based on the anticipated operational and financial impacts. Through cross-departmental meetings and targeted interviews, Taipower assessed the implications of climate-related issues on business continuity and overall performance. These assessments were consolidated from a company-wide perspective, and the detailed results are presented in the table below.

Physical Risks

Factor	Impact Description	Financial Impact	Response Strategy	Financial Implications
Increase in Extreme High Temperatures and Average Temperature	Increase in Peak Load and Extended Summer Impacting Dispatch and Demand Management	Increased Operating Costs	● Conduct load assessments and reserve capacity studies that consider extremely high temperatures. ● Construct or expand gas-fired combined cycle units to enhance the system's power reserve. ● Install energy storage systems equipped with automatic frequency controls. ● Deploy smart meters on a large scale to guide users in adjusting electricity usage behavior.	Increased Operating Costs and Capital Expenditures
	Decrease in Power Generation Efficiency and Output		● Adjust gas turbine intake air temperatures based on historical weather data to maintain efficiency. ● Conduct regular inspections to reduce unnecessary electricity consumption.	Increased Operating Costs
	Restricted Working Hours and Project Delays Due to Heat Illnesses Among Outdoor Workers		● Incorporate extreme temperature risks into workforce scheduling and establish heat hazard prevention measures. ● Adjust construction schedules based on temperature changes. ● Conduct high-temperature emergency drills to enhance response capability.	
Changes in Typhoon Intensity and Track	Damage to Power Equipment Leading to Increased Outages	Increased Operating Costs and Decreased Asset Value	● Assess risks based on typhoon forecasts and develop emergency dispatch plans, using smart meters to quickly identify and repair outages. ● Complete inspections and drills before typhoon season, enhance lowland area inspections and flood prevention measures, and test emergency generators for outage response. ● Evaluate the feasibility of undergrounding power facilities in high-risk areas and promote undergrounding projects where suitable.	Increased Operating Costs and Capital Expenditures
	Aggravation of Salt Contamination Causing Prolonged Outages	Increased Operating Costs	● Regularly clean insulators and apply silicone grease , use monitoring systems to track salt contamination. ● Plan to increase manpower to improve insulator cleaning frequency.	Increased Operating Costs
	Increased Water Turbidity from Heavy Rain Affecting Hydropower Plant Operations		● Include turbidity factors in hydropower plant feasibility studies to mitigate dispatch risks from high turbidity.	
Changes in Rainfall Patterns	Extreme Rainfall or Drought Impacting Hydropower Plant Dispatch	Increased Operating Costs	● Conduct early water resource management and equipment inspections based on drought warnings issued by the Central Weather Bureau. ● Incorporate extreme rainfall and drought hydrological data into future hydropower plant development.	Increased Operating Costs
Increase in Lightning Intensity and Frequency	Damage to Power Facilities Causing Outages	Decreased Asset Value	● Install lightning arresters, enhance lightning protection designs, and strengthen maintenance in high-risk areas to promptly repair damaged equipment. ● Build convective storm cell monitoring systems and analyze data to improve automated grid monitoring and emergency response by dispatchers to reduce disaster impacts.	Increased Operating Costs and Capital Expenditures
Sea Level Rise	Damage to Distribution Systems and Equipment Due to Storm Surges or Flooding	Decreased Asset Value	● Reinforce flood protection measures at existing power plants and substations, including floodgates, levees, and waterproof walls. ● Select higher-elevation sites for new plants or substations and install flood protection facilities.	Increased Capital Expenditures
	Reduction in the Inflow Cross-Sections of Power Plant Cooling Water Systems	Increased Operating Costs	● Regularly record water intake depths and cooling pump outlet pressures, make comparisons to historical averages to monitor condenser pressures and maintain vacuums.	Increased Operating Costs

Transition Risks

Factor	Impact Description	Financial Impact	Response Strategy	Financial Implications
Adjustments in Policies and Regulations	Adjustment of Supply, Grid, and Demand Planning and Financial Requirements to Comply with Net-Zero Policies	Increased Operating Costs and Capital Expenditures	Supply Side: ● In response to government net-zero policies, short-term efforts focus on low-carbon gas, solar, and wind power; medium- to long-term efforts invest in advanced net-zero technologies such as hydrogen, ammonia, and carbon capture.	Increased Operating Costs and Capital Expenditures
			Power Grid: ● In line with national policies, promote grid connection projects for wind and solar power, enhance grid capacity, and establish overload protection mechanisms. ● Build smart grids using AI and big data technologies to optimize dispatching and reduce resource waste. ● Promote energy storage R&D and applications to stabilize the renewable energy supply.	
			Demand Side: ● Promote smart meter systems and provide users with real-time electricity information via the Taiwan Power App and the high-voltage customer service portal to support autonomous electricity management; offer energy-saving visits and diagnostic services for industrial and commercial users.	Increased Capital Expenditure
	Increase in Costs Due to Carbon Pricing	Increased Operating Costs	● Set quantified GHG reduction targets and submit self-reduction plans in line with national net-zero policies to secure carbon fee discounts.	Increased Operating Costs

Transition Risks

Factor	Impact Description	Financial Impact	Response Strategy	Financial Implications
Adoption of Low-Carbon Technologies and Products/ Services	Increase in Costs Due to Replacement of Transmission and Distribution Equipment with Low-Carbon Products	Increased Operating Costs and Capital Expenditures	● Strengthen supply chains to ensure a stable supply of low-carbon equipment and products. ● Collaborate with domestic manufacturers to develop eco-friendly low-carbon equipment, reducing overseas transportation needs and procurement-related emissions and costs.	Increased Operating Costs and Capital Expenditures
	Increase in Costs Due to Deployment of Advanced Energy Technologies (e.g., Marine Energy, Geothermal, Hydrogen/ Ammonia Energy, CCS)		● Maintain international exchanges to monitor advancements in ocean energy, geothermal, hydrogen/ammonia energy, and carbon capture and storage (CCS) technologies. ● Conduct small-scale pilot projects to evaluate technical feasibility and cost-effectiveness, and to accumulate experience to reduce adoption risks.	
	Delays or Increased Resources Required Due to a Shortage of Green Energy Talent and Technical Skills		● Adopt construction methods that reduce labor demand, minimize material waste, shorten construction time, and introduce foreign labor or equipment when necessary. ● Enforce contractor compliance and manage project timelines.	
Increase in Raw Material Procurement Costs	Increase in Investment Costs, Delivery Delays, and Fuel Costs Due to Transition to Low-Carbon Energy and Hydrogen Technologies	Increased Operating Costs and Capital Expenditures	● Improve fuel utilization efficiency through gas infrastructure projects and high-efficiency units. ● Build proprietary receiving terminals to mitigate supply risks, promote long-term fuel contracts, and invest in promising domestic and international fuel producers to ensure stable and cost-effective supply.	Increased Operating Costs and Capital Expenditures
	Increase in Raw Material Prices and Higher Costs for New Facilities and Decommissioning Projects Due to Carbon Cost Pass-Through		● Utilize Building Information Modeling (BIM) during design and construction phases to detect clashes between MEP systems and structures, minimizing design changes and material waste during construction. ● Incorporate the latest technological developments and international best practices to enhance work efficiency and strengthen cost and budget control.	Increased Operating Costs

Opportunities

Factor	Impact Description	Financial Impact	Response Strategy	Financial Implications
Development of New Products and Services and Entry into New Markets	Development and Provision of Diversified Green Power and Low-Carbon Products	Increased Revenue	● Conduct renewable energy certificate reviews and install sub-metering systems at company-owned sites. ● Conduct market surveys to understand customer needs and develop green electricity products aligned with market demands.	Increased Operating Costs
	Promotion of Diversified Demand-Side Management Measures (e.g., Time-of-Use Pricing, Demand Response, Energy Conservation)	Reduced Capital Expenditures	● Introduce demand response programs and new time-of-use pricing schemes for residential and commercial users to encourage off-peak electricity consumption. ● Promote the installation of smart meters to enhance the convenience of electricity management.	Increased Operating Costs and Capital Expenditures
Adoption of Low-Carbon Energy or New Technologies	Early Investment in Advanced Energy Technologies (e.g., Marine Energy, Geothermal, Hydrogen/Ammonia Energy, CCS) to Lead Domestic Development, Reduce Carbon Demand, and Expand International Cooperation Opportunities	Enhanced Corporate Reputation	● Actively engage in international exchanges and collaborations, and continue selecting pilot sites for testing ammonia/ hydrogen co-firing gas turbines and carbon capture and storage (CCS) technologies. ● Enhance green competitiveness by carefully evaluating investment returns, securing government subsidies, utilizing green power feed-in tariffs, and participating in carbon trading. ● Leverage forward-looking government technology programs and research budgets to support relevant technology development.	Increased Operating Costs and Capital Expenditures
	Expansion of Low-Carbon Energy (e.g., Wind, Solar, Hydro, Gas) to Increase Low-Carbon Power Supply	Increased Revenue and Enhanced Corporate Reputation	● Continuously plan wind, solar, hydro, and gas projects to support low-carbon renewable energy development. ● Integrate carbon capture technologies with gas-fired units and develop hydrogen/ammonia co-firing to reduce carbon emissions. ● Form cross-industry alliances with enterprises and major electricity users to jointly promote low-carbon power initiatives.	
Enhancement of Power Supply Resilience	Enhancement of Microgrids and ICT Development to Strengthen System Resilience and Future Growth Potential	Reduced Operating Costs	● Strengthen data centers and ICT infrastructure to enhance cloud computing and data storage capabilities; support power system data analytics and diversified operational needs. ● Improve cybersecurity capabilities to enhance system resilience. ● Promote disaster-resilient microgrids and continuously provide technical support to assist local governments in their development.	Increased Operating Costs and Capital Expenditures
	Expansion of Participation in the Power Trading Market to Support Grid Security and Stability		● Utilize the electricity trading platform to encourage privately distributed energy resources to provide ancillary services; expand supply sources.	Increased Operating Costs

1.4.3 Metrics and Targets 305-1 305-2 305-4

In line with the seven major categories of metrics recommended by the TCFD, Taipower has established corresponding indicators and targets to measure performance and track progress in climate change management.
In addition, Taipower systematically inventories and monitors its greenhouse gas (GHG) emissions, strengthens the management of its total carbon emissions, mitigates climate risks, and supports its low-carbon transition goals.

Metrics Category	Metric	2024 Results / Future Targets
Greenhouse Gas Emissions	Disclosure of Scope 1 and Scope 2 Emissions[1]	Scope1 （Direct emissions）:91.45 million tCO_2e Scope2 （Energy indirect emissions）:2.27 million tCO_2e
	Net GHG Emission Intensity of Thermal Power Units	11.7% reduction compared to 2016; target of 17% reduction by 2030
Physical Risks	SAIDI (System Average Interruption Duration Index)	15.831 minutes per household per year in 2024; the 2030 target is 15.5minutes.
	SAIFI (System Average Interruption Frequency Index)	0.209 outages per household per year
	Distribution Feeder Automation	9,784 feeders completed
Transition Risks	Cumulative Installed Capacity of Gas-Fired Units	13,953 MW; target to reach 25,924 MW by 2030
	Grid-Connected Renewable Energy Capacity	20,426 MW as of 2024; target to reach 41,718 MW by 2030.
	Renewable Energy Generation Share in Taipower System	11.9% (approx. 30 billion kWh); target of 24.1% (approx. 68 billion kWh) by 2030
Climate-Related Opportunities	Ammonia and Hydrogen Co-Firing Demonstration	The Linkou and Dalin Power Plants: feasibility study for >5% ammonia (thermal basis) by 2025; co-firing demonstration (>5%) at selected unit by 2030. The Hsinta Power Plant: completed a 5% hydrogen (volumetric basis) test in 2023; a further 7–10% hydrogen co-firing verification is planned by 2025.
	Carbon Capture and Storage (CCS) Pilot Projects	The Taichung Power Plant:2,000-ton CCS pilot project. ● Carbon Capture Facility:geological drilling completed in 2024; target to start 2,000 t/year of capture by March 2027. ● Carbon Storage Facility:procurement awarded in 2024; target to start 2,000 t/year of injection by October 2028.
	Demand Response Programs	Participation volume reached 3.4 GW
Capital Allocation	Power Grid Resilience Enhancement Plans	From 2022 to 2032: Distributed Grid Projects (NT$437.9 billion), Grid Reinforcement Projects (NT$125 billion), System Defense Capability Enhancements (NT$1.69 billion); NT$137.4 billion invested by 2024.
	Gas Infrastructure Investment[2]	Planned NT$974.63 billion investment (2011–2035); NT$298.63 billion invested by 2024.
	Green Bond Issuance	NT$111.2 billion issued as of 2024
Internal Carbon Pricing	Internal Carbon Pricing System	Taipower has established an internal carbon pricing mechanism that considers abatement costs, regulatory penalties, and market prices.

Notes: As Taipower is the primary electricity provider in Taiwan, its total direct emissions also encompass indirect energy emissions.
Gas infrastructure projects include the following:
theTunghsiao Power Plant Renewal and Expansion Project, the Datan Power Plant Gas-Fired Combined Cycle Unit Expansion Project,
the Hsieh-ho Power Plant Renewal and Reconstruction Project, the Hsinta Power Plant Gas-Fired Unit Renewal and Reconstruction Project,
the Taichung Power Plant New Gas-Fired Unit Project, the Tunghsiao Power Plant Phase II Renewal and Reconstruction Project,
the Dalin Power Plant Gas-Fired Unit Renewal and Reconstruction Project, the Taichung Power Plant Phase II New Gas-Fired Unit Project.

1.5 Sustainable Supply Chain

Taipower aims to become an outstanding and trustworthy world-class power utility group and continues to enhance its sustainable development initiatives, with supply chain management being a critical element. As a state-owned enterprise, Taipower manages various types of suppliers in accordance with regulatory requirements. Environmental, social, and governance (ESG) compliance is mandated from the tendering phase, where all bidders must meet legal standards. Based on the nature of goods or services provided, the Company selects appropriate partners during bidding and evaluation.

1.5.1 Supplier Management 2-6

Taipower's suppliers are categorized into three groups: fuel suppliers for power generation, material and equipment suppliers, and electricity providers for external purchases. The Company identifies potential risks based on each supplier type and manages them across quality, output, environmental, and social dimensions. An overview of each supplier category is provided below.

Fuel Supplier Management

The main fuels used in Taipower's thermal power plants include natural gas, coal, and fuel oil, while nuclear power plants require nuclear fuel. To ensure a stable fuel supply, Taipower employs four key strategies: diversifying fuel sources, signing long-term contracts, maintaining secure inventories, and ensuring stable coal transportation. These strategies support the timely, high-quality, and adequate delivery of fuel to each power plant, ensuring a safe and stable power supply. Specific measures and actions are as follows:

Fuel Supplier Management

By signing long-term contracts, Taipower reduces procurement uncertainty and ensures stable supply.

Projects	Energy Supply Diversification	Long-Term Supply Contracts	Safe Inventories
Natural Gas (LNG)	All natural gas used for Taipower's power generation is supplied by CPC Corporation, Taiwan. Taipower continues to monitor CPC's sources of supply. CPC has signed long-term contracts with multiple countries-including Qatar, Australia, the United States, and Papua New Guinea-to achieve diversification of its natural gas supply sources.	Signed long-term contracts with CPC Corporation, including a general supply agreement and the Datan contract	Under an LNG Supply Coordination and Early Warning Mechanism with CPC, Taipower urges CPC to maintain over 80,000 and 100,000 tons of available LNG respectively for the Yongan and Taichung plants Emergency response plans and mutual coordination terms have been established with CPC
Coal	Taipower sets an upper limit on the proportion of coal procured under long-term contracts from any single source country or individual supplier.	Long-term contracts supply 75–85% of coal with the remainder supplied through spot purchases	Coal stock must exceed 30 days of the previous year's average daily consumption In 2024, planning is based on 40–45 days of average daily use
Fuel Oil	Fuel oil is supplied by CPC Corporation through domestic refining or imports. Diesel is supplied by both CPC Corporation and Formosa Petrochemical Corporation.	Signed demand-based long-term contracts with CPC and Formosa Petrochemical to ensure supply	Operating stock for fuel oil is maintained at 120,000–200,000 kiloliters Diesel inventory is adjusted based on supply conditions at each power
Nuclear Fuel	Nuclear fuel processing services are sourced from two to three different suppliers to ensure diversification.	Existing uranium inventory is sufficient, so procurement has been suspended Long-term contracts signed for all enrichment services	One batch of nuclear fuel is stocked for each unit; final batches are excluded to optimize usage

Stable Transportation and Supply

In 2024, Taipower transported approximately 5.73 million metric tons of coal using company-owned and long-term chartered vessels, maintaining a self-shipping ratio of 24%. Through autonomous management of coal logistics, the Company ensures stable fuel supply and dispatching.

Total gas and oil supplies remained stable in 2024, with 12.35 million metric tons of LNG (1.675 billion cubic meters), 868,000 kiloliters of fuel oil, and 60,000 kiloliters of diesel delivered.

Fuel Procurement Policy

Natural Gas (LNG) Procurement

In line with Taiwan's energy transition, Taipower has shifted to a gas-first, coal-second power generation structure. The stability of the gas supply is critical to reliable electricity and renewable energy integration. Currently, all natural gas is supplied by CPC Corporation under an established coordination mechanism that responds to supply risks.
Looking ahead, Taipower will diversify its LNG sources by continuing procurement from CPC and purchasing directly from international markets. The Company also plans to build LNG terminals in Taichung and Hsieh-ho (government-approved) to support the Taichung, Hsieh-ho, and Tunghsiao Phase II gas-fired units. This approach enhances fuel autonomy, reduces procurement costs, and improves supply stability and security.

The Natural Gas Supply and Demand Contact Mechanism and Early Warning System for Taipower and CPC

Frequency	Communication Measures
Annually	● By the end of May, Taipower sends revised second-half gas consumption estimates to CPC if needed. ● By August 20, Taipower submits the next year's monthly gas consumption estimates and a gas unit maintenance schedule. ● By the end of October, Taipower confirms any revisions to the earlier forecasts.
Quarterly	● Both parties hold a quarterly coordination meeting to review LNG supply matters.
Monthly	● By the 25th of each month, Taipower sends a "Planned Daily Gas Usage Table" for the next two months and the monthly usage estimates for the next three months to CPC for 45/90-day shipping coordination.
Daily	● CPC updates and sends an"LNG Usage and Inventory Report" daily before noon (faxed on holidays). ● By 4:00 p.m. on workdays, Taipower sends CPC a "Two-Week Daily Gas Usage Forecast." If estimates affect supply and cannot be adjusted by ship, CPC and Taipower coordinate.
Under Special Circumstances	● If CPC pipeline work may affect supply, it should be scheduled on holidays and CPC must notify Taipower in writing in advance. ● If CPC's Yongan or Taichung terminals will be affected by a Taipower power outage, Taipower shall coordinate with CPC first.

Coal Procurement

To support coal procurement, Taipower established a cross-departmental Coal Procurement Review Task Force comprising members from internal departments (Materials, Accounting, Procurement, Legal Affairs) and external experts in energy, economics, and legal affairs. Through regular meetings and consultations, the Task Force develops flexible procurement strategies that ensure the timely, sufficient supply of high-quality coal while meeting environmental standards and minimizing costs.

Fuel Oil and Diesel Supply

Fuel oil is supplied by CPC Corporation, while diesel is procured via tender from both CPC and Formosa Petrochemical Corporation (in 2024, CPC won all bids). All fuels comply with relevant government regulations and environmental standards. Each power plant sets appropriate inventory levels based on logistical conditions. After the decommissioning of the Hsieh-ho Power Plant in 2025, fuel oil demand will significantly decrease, with usage limited to offshore island plants.

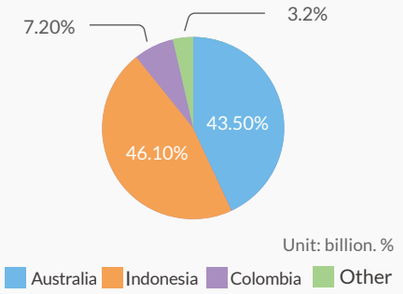
Nuclear Fuel Supply

Nuclear fuel procurement includes uranium purchases and three stages of processing: conversion, enrichment, and fabrication. In alignment with the government's nuclear-free homeland policy, uranium procurement has ceased as current inventories are sufficient through decommissioning. Processing services continue under long-term contracts.

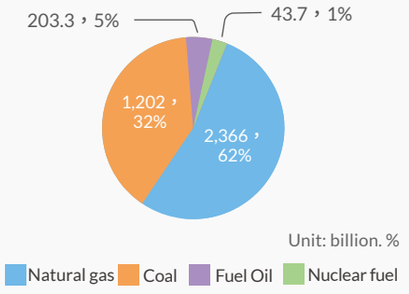
Contingency Planning

Coal inventories are planned at 40–45 days in 2024, complying with legal requirements (over 30 days) and ensuring a stable supply. Fuel oil inventories are determined based on unit maintenance, power supply schedules, and unique factors such as maritime transport to offshore islands. Taipower works closely with CPC under a joint contact and early warning mechanism to monitor and respond to LNG supply conditions.

Proportion of Coal Source Countries in 2024



Proportion of Fuel Expenditures in 2024



Data source: 2024 self-prepared final accounts

Suppliers of Materials and Equipment

Supplier Review Standards under the Government Procurement Act

To ensure material quality, power supply safety, and procurement efficiency, Taipower conducts reviews of bidding documents in accordance with the Government Procurement Act and tender specifications. Where there are ambiguities, bidders may be asked to provide further explanation or clarification.

Regulations Governing the Review of Supplier Manufacturing Capacity are published on Taipower's corporate website.

↓

Suppliers file online applications for manufacturing capacity reviews.

↓

Taipower conducts reviews of suppliers' manufacturing capabilities through onsite inspections and document screening, in accordance with the Capability Review Guidelines for Manufacturers.

↓

Interim inspection rules: In accordance with Taipower's material standards, semi-finished product inspections are conducted based on the specific requirements of each item. If any inspection item fails to meet the standards, the supplier must rectify the entire batch and undergo re-inspection.

Screening Process for Selective Tendering and Qualified Suppliers

Taipower has established the General Principles for Manufacturer Capability Review for Selective Tendering Materials and Capability Review Guidelines, which serve as an evaluation basis for suppliers. Suppliers must first obtain a Capability Certificate before participating in selective tenders.
In 2024, Taipower intensified its audits of material suppliers. Of the 143 approved suppliers for selective tenders, 71 underwent re-evaluation based on the expiration of their respective 3-year qualification terms (noting that validity periods vary by material). This accounted for 49.6% of all suppliers. All reviewed suppliers met Taipower's re-evaluation requirements. In addition, Taipower conducted 441 on-site inspections of supplier production processes throughout the year.

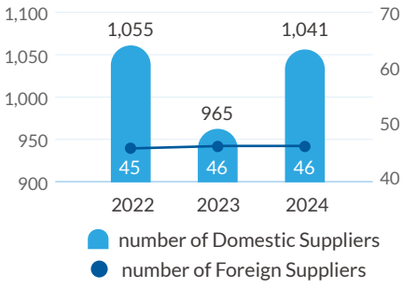
Supplier Evaluation and Audit

Taipower conducts periodic re-evaluations of suppliers with Certificates of Manufacturing Capacity in accordance with the Guidelines for Re-evaluation of Power Equipment and Materials and the Guidelines for Supplier Capacity Review and Qualified Supplier Management. Re-evaluations must be completed before the expiry of the certificate, which is valid for up to three years.
The re-evaluation process includes a comprehensive assessment of the supplier's manufacturing capacity, quality management system, lists of manufacturing and inspection equipment, subcomponent or raw material suppliers, delivery performance over the past three years, and measures taken to address non-conformities. Suppliers that meet the requirements will be re-certified. Those that fail to comply must submit corrective actions within a specified period or reapply for certification if no valid reason is provided.

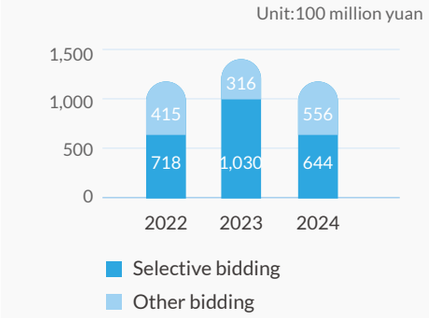
Domestic Procurement

In 2024, Taipower processed a total of 3,046 material procurement cases, involving 1,087 suppliers (1,041 domestic and 46 international). The total awarded contract value for property procurement across the Company reached approximately NT$120 billion.
Among this, domestic procurement accounted for around NT$88 billion, representing 73% of the total. Selective tenders contributed approximately NT$64.4 billion (54%) with 79 contractors awarded contracts, while other procurement methods accounted for NT$55.6 billion, or 46% of the total.

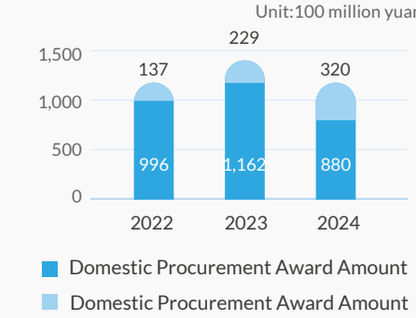
Domestic and Foreign Suppliers from 2022 to 2024



Selective and Other Bidding Processes from 2022 to 2024



Domestic and Foreign Procurement Amounts from 2022 to 2024



The Materials Supply Chain

Taipower oversees the entire materials supply chain-from material coding, supplier qualification, and approved vendor management to requisition, procurement, acceptance, and logistics. Internal training and consultation on the Government Procurement Act are provided to ensure compliance. The Company is also advancing a digital transformation of the supply chain through the implementation of Enterprise Resource Planning (ERP), Supply Chain Management (SCM), Smart Procurement Assistant System (SPAS), Warehouse Management System (WMS), and Material Traceability Management System (MTMS), thereby strengthening internal and external collaboration and building a comprehensive management framework.

Equipment Supply Chain

To ensure supplier-provided equipment meets Quality, Cost, Delivery, and Service (QCDS) requirements, Taipower has adopted ISO 9001 to integrate evaluation, re-evaluation, interim inspection, and defect feedback. Relevant regulations were revised to establish a quality assurance program for power equipment, enhancing suppliers' capabilities to deliver compliant products.
Taipower also established Review Procedures for the Manufacturing Capability of Power Equipment Suppliers and Guidelines for the Management of Qualified Suppliers to strengthen supplier management and ensure equipment reliability and power supply safety.

Bidding Evaluation for Primary Power Generation Equipment Suppliers of Thermal Power Plants

Taipower uses a restricted tendering approach to engage technical services and consulting firms. In the evaluation criteria for "understanding of service matters," the Company includes environmental regulations to ensure consultants are familiar with current environmental laws and developments. This helps align future equipment tender specifications with environmental impact assessment (EIA) commitments.
For the procurement of key power generation equipment and auxiliary facility projects, Taipower includes a dedicated environmental section in tender documents. Contractors must comply with relevant regulations from the Air Pollution Control Act, Water Pollution Control Act, Waste Disposal Act, Marine Pollution Control Act, and Environmental Impact Assessment Act. A designated percentage of each contract's value is allocated for environmental protection expenses to ensure construction meets environmental standards and minimizes impact.

Electricity Supplier Management

To ensure power supply reliability and promote economic development, the government opened the power generation sector to private producers. Taipower's avoidable costs served as the pricing reference for power purchases from these suppliers. Prior to 2016, power procurement from Independent Power Producers (IPPs) was conducted in accordance with announcements issued by the Ministry of Economic Affairs (MOEA), which reviewed supplier qualifications. Qualified IPPs then entered into contracts with Taipower through competitive bidding or at announced prices.
Cogeneration and renewable energy purchases follow the Enforcement Rules of the Cogeneration System and the Renewable Energy Development Act, and are exempt from the Government Procurement Act. Taipower is legally required to purchase electricity under these mechanisms.
Following the 2017 amendment of the Electricity Act, the MOEA no longer announces new private generation programs. Taipower now assesses capacity needs based on the regulator's supply planning, and if purchases are required, conducts open tenders as per the Government Procurement Act with regards to setting base prices , public briefings, qualification reviews, and price negotiations.
As of the end of 2024, Taipower had signed power purchase agreements with 11 IPPs, 49 cogeneration providers, and 66,480 renewable energy installations (including solar, wind, hydro, and others). Total power purchased from external sources in 2024 reached 79 billion kWh.

1.5.2 Creating a Sustainable Supply Chain

2-6 204-1 308-1 414-1 414-2

Supply Chain Management Mechanisms

To ensure material quality, power supply safety, and procurement efficiency, all of Taipower's procurement activities follow the Government Procurement Act. The Instructions to Tenderers and Contract Terms incorporate requirements on human rights, environmental protection, labor safety, labor rights, anti-human trafficking, and protections for people with disabilities and indigenous peoples.
Taipower promotes sustainable supply chains through communication and cooperation, and in agreement-based commitments with suppliers. To enhance supply chain resilience, Taipower continues sourcing equipment domestically and has established a Supply Chain Management (SCM) platform and promoted digital supply chain collaboration (including supply chain financing).
Since 2023, Taipower has introduced ESG reviews into its supplier management system. These reviews assess resilience from the perspectives of sustainable operations, environmental friendliness, and social responsibility, and aim to mitigate risks and support long-term corporate sustainability.

Supplier ESG Review

Stability, resilience, and sustainability have become new expectations for Taipower's supply chain management. On top of the existing (Quality, Cost, Delivery and Service (QCDS)framework, Taipower has introduced an additional "S" for Sustainability.
The Company has also established a Code of Conduct for Material Suppliers, covering compliance with environmental, occupational safety and health, and labor and human rights standards. Suppliers are also required to sign a Sustainability Commitment Letter.
Taipower is strengthening both internal and external sustainability capabilities, identifying ESG risk issues across the supply chain, assessing key actions and implementation progress, enhancing ESG management capacity, and working with suppliers to build a sustainable supply chain. These efforts encourage suppliers to reduce carbon emissions, minimize waste, improve labor conditions, and reinforce supply chain resilience and adaptability-paving the way for the gradual rollout of a sustainability review mechanism aligned with the QCDSS framework.

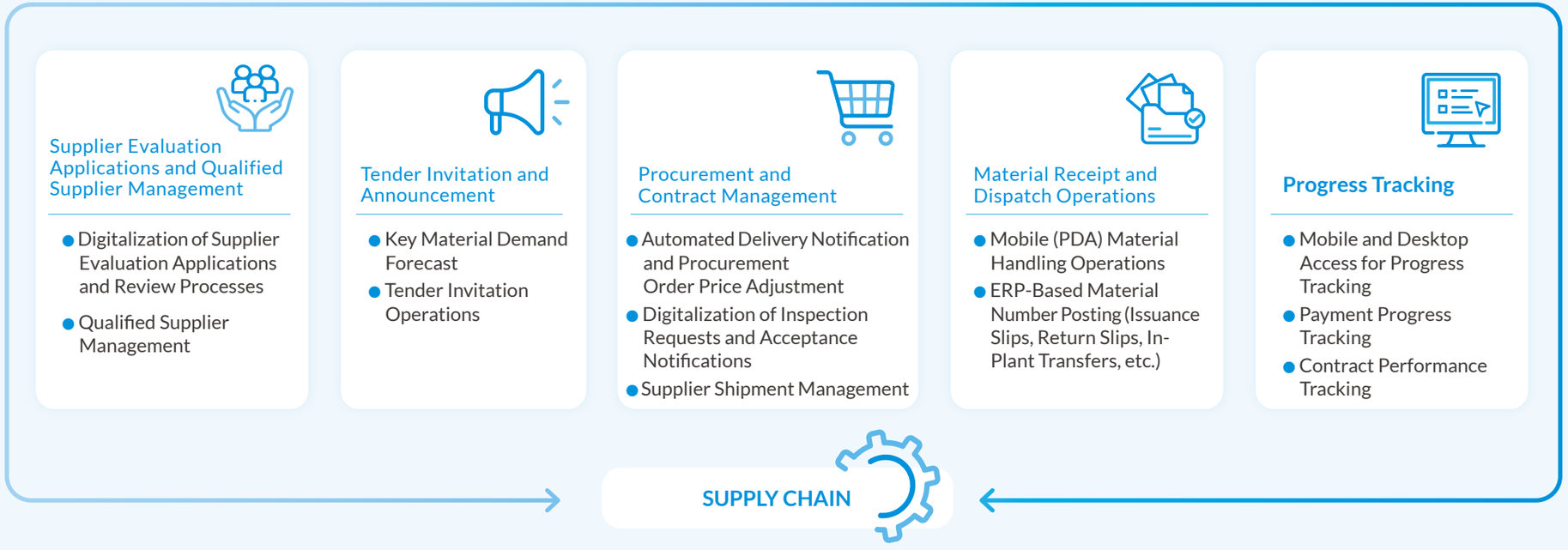
Supply Chain Management (SCM) Platform

The platform currently supports applications for supplier evaluation, invitations to tender, procurement announcements, contract execution management, mobile material receiving/dispatch operations, progress tracking, and more. It is integrated with ERP system data to streamline certain delivery and fulfillment processes (such as dispatch operations) through digitalization, significantly improving the efficiency of material supply chain operations and strengthening partnerships with suppliers. Operating on a user-pays model, the platform collected nearly NT$7 million in total fees from suppliers between 2021 and 2024. Participating financial institutions that provide digital supply chain financing services are also required to pay information usage fees. Together, these efforts are gradually forming an ecosystem that supports a value-driven supply chain.

Digital Supply Chain Collaboration (Supply Chain Financing)

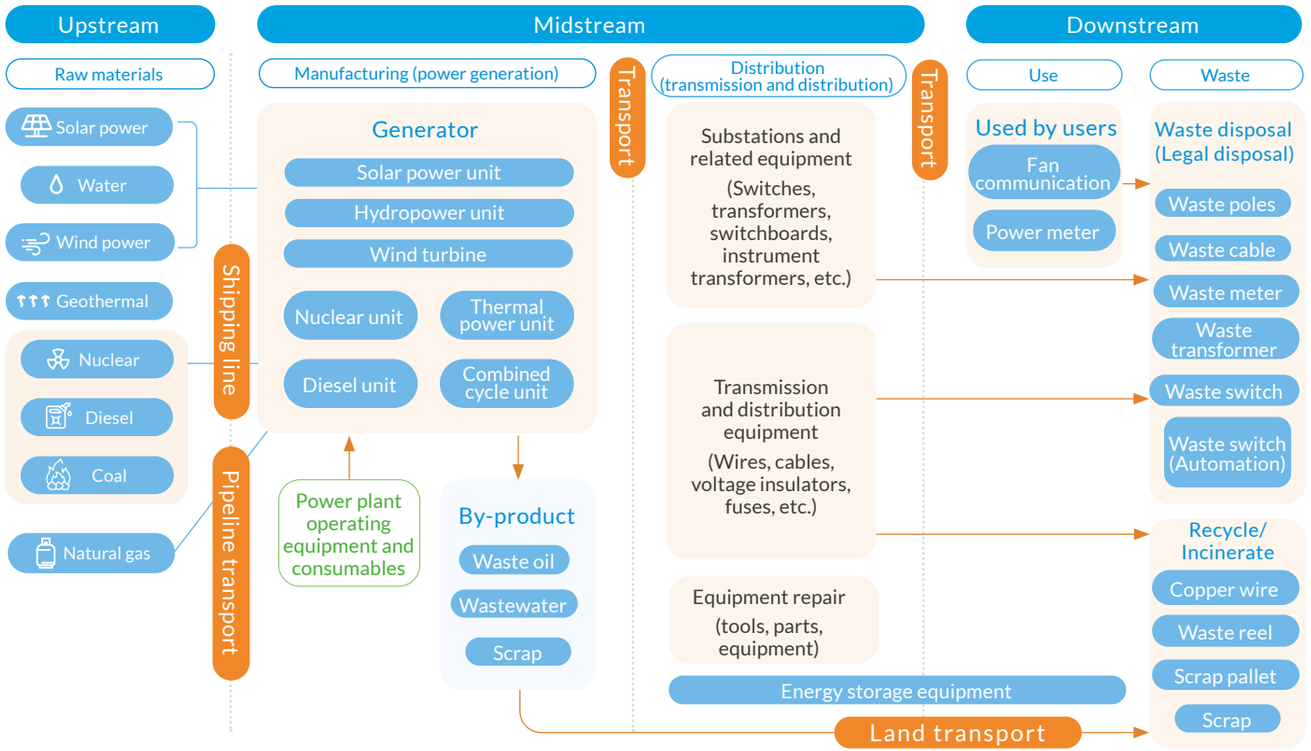
Since 2022, Taipower has signed digital collaboration agreements with banks for supply chain financing.
Through API integration, Taipower shares supplier performance data to facilitate credit evaluations and reduce financing risks, thereby supporting stable power supply.
As of 2024, eight banks had signed agreements, including Taipei Fubon, Mega Bank, Bank of Taiwan, Chang Hwa Bank, Taiwan Business Bank, Land Bank, Bank SinoPac, and Hua Nan Bank.
The total contract amount had reached approximately NT$1.78 billion.

Establishing a Cloud-Based Supply Chain Collaboration Platform Integrating Procurement, Contract Management, and Material Operations



Supply Chain Management for Major Materials

Taipower primarily handles midstream power generation, transmission, and distribution, and also provides limited downstream user services and maintenance.
Company-level materials are mainly used for power distribution and customer-end services.
The Materials Department is responsible for procuring relevant equipment and ensuring compliance with Taipower's quality and specification requirements.
To manage these materials, Taipower classifies them into seven categories and three groups based on function, with reference to Taiwan's industrial classification and SASB standards.
Taipower also refers to the 2023 DJSI questionnaire to identify major suppliers for supply chain management.



Material Supply Chain Sustainability Assessment Action

To strengthen the ESG management of company-level material suppliers, Taipower referred to the principles of ISO 20400 Sustainable Procurement – Guidance to identify key sustainability issues. Based on these issues, corresponding management requirements were proposed for suppliers. The identification results are presented in the following table.

Issue \ Category	Transformers and Inverters	Electronic Control Equipment and Materials	Metal Instruments	Cables	Telecommunications and Communications Equipment
Corporate Governance	●				●
Labor Standards	●	●		●	
Environmental Issues (including climate change)	●		●	●	
Fair Operating Practices	●	●			
Consumer Rights (including quality control)	●	●		●	●
Community Engagement and Development					●

Note:Suppliers not listed are classified as having no significant sustainability issues identified.

Based on the results of material topic identification, Taipower established the Code of Conduct for Material Suppliers and the Sustainability Commitment for Material Suppliers, incorporating key international sustainability indicators. A pilot ESG documentary review was launched in December 2023 to assess supplier responses to material sustainability issues. Twelve key equipment suppliers were selected for the review, all of whom completed the documentation and signed both the Code and Commitment (100% completion rate). Two suppliers were further selected for on-site audits, resulting in the identification of four high-risk suppliers with recommendations for improvement. The overall review process is illustrated below.

Supplier ESG Review and Risk Improvement Roadmap

Taipower continues to implement its "Sustainable Supply Chain Management Promotion" program, which plans to gradually expand the scope of ESG reviews for suppliers and introduce supply chain carbon disclosure reviews from 2025 to 2027.
The Company has engaged consulting firms to conduct training and technology transfer to enhance employees' sustainability awareness and build internal capabilities for sustainability management. A digital platform will be introduced for information disclosure and the management of sustainable supply chain data. In addition, Taipower will strengthen supplier engagement and promote joint sustainability efforts by organizing supplier conventions and dialogues.

Major Supplier Sustainability Risk Assessment Process

A weighted scoring system is used to identify major suppliers. The assessment takes into account the following criteria, each of which are assigned a specific weighting for score calculation:

Procurement Amount Share
- Percentage of total procurement amount accounted for by a single supplier
- Percentage of procurement amount within a specific category accounted for by an individual supplier

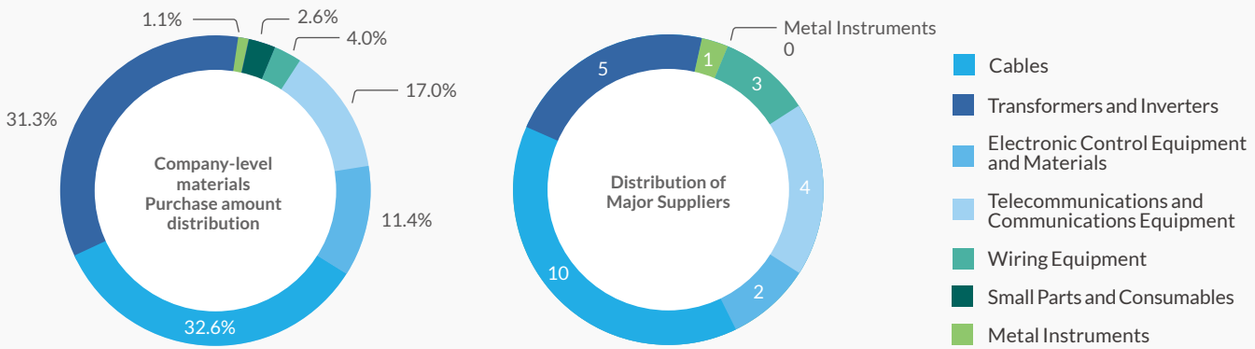
Taipower's Industry-Specific Supply Risks – Risks of Supply Disruption
- Products imported from overseas (foreign suppliers)
- Products with specific specifications supplied by a single supplier
- Product categories with only one supplier

ESG Materiality
- Governance risks associated with the supplier
- Social risks associated with the supplier
- Environmental risks associated with the supplier

Contract Duration
- Purchase contracts lasting no less than two yearss

Material Supply Chain Management Indicators and Performance

Taipower analyzed the procurement distribution of company-level materials based on the major supplier sustainability risk assessment process. As shown in the figure, the 25 major suppliers accounted for 83.1% of the total procurement value. Of this, 98.4% of material (by value) was directly sourced from local suppliers in Taiwan. The remaining 1.6% came from overseas suppliers, who mainly provided specific types of cables, wires, and insulators.



02

CHAPTER

Provider of Sustainable Power

Suitable for the following stakeholders

Shareholders, Board of Directors, Employees, Partners, Government Agencies, Elected Representatives, Media, Users, Residents

35.3%

Renewable energy accounted for 35.3% of Taipower system's installed capacity in 2024.

47.37%

The gross thermal efficiency of all thermal power plants rose from 46.63% in 2023 to 47.37% in 2024.

137.4 billion

A total of 98 projects under the Power Grid Resilience Enhancement Program were completed in 2024, with a progress rate of 29.61% and cumulative investment of NT$137.4 billion.

A stable electricity supply is vital to people's livelihoods, industrial development, and the overall economy. Taipower operates around the clock to ensure stable power for the entire nation and plays a pivotal role in supporting Taiwan's economic growth. With the advancement of energy transition, the share of renewable energy is steadily increasing. However, the intermittency and variability of renewable generation will pose growing challenges to future power dispatching.

On the supply side, Taipower is actively promoting diversified energy sources and has adopted three major transformation directions to strengthen the power system's resilience: developing renewable energy, promoting low-carbon gas-fired power, and upgrading coal-fired units to ultra-supercritical (USC) systems . At the same time, it seeks to improve power generation, transmission, and distribution reliability; leverage energy characteristics in dispatching; modernize thermal units; and increase the share of gas-fired generation. These actions not only support energy transition goals but also enhance operational performance and market competitiveness.

2.1Building Resilient Electricity

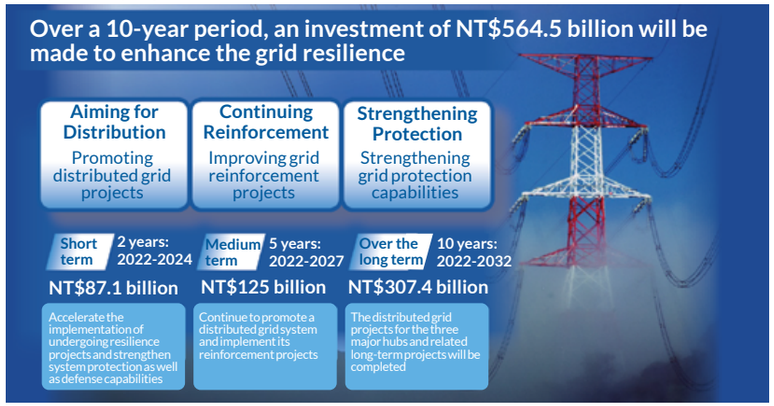
2.1.1 Strengthening Power Grid Resilience

Power Grid Resilience Enhancement Program

To achieve the 2050 net-zero emissions target for electricity, Taipower launched a Power Grid Resilience Enhancement Program, with grid decentralization as its core philosophy, while also reinforcing grid robustness through a dual-track framework of regional resilience and national integration. The Company continues to enhance system defense capabilities to eliminate potential risks.

Under the core strategy of strengthening grid resilience, Taipower formulated five key action plans: promoting distributed grid projects, reinforcing the power grid, strengthening system defense capabilities, enhancing grid supply capacity and reliability, and developing forward-looking technology research, each with specific implementation measures.

The overall plan consists of three main pillars and ten strategic areas, with a total investment of NT$564.5 billion, of which NT$376.1 billion is allocated to ongoing projects. In addition, the Phase 1 Special Grid Resilience Project, which is comprised of eight sub-projects, was approved by the Executive Yuan on September 23, 2023.



To enhance grid resilience, Taipower has implemented decentralization projects to reduce risks associated with grid concentration, reinforced infrastructure to improve equipment stability, and strengthened system defense mechanisms to prevent the spread of power outages. In 2024, Taipower continued to advance its "Transmission and Substation Division's Ten-Year Equipment Renewal Plan,"which aims to equalize maintenance efforts and identify system vulnerabilities in advance. By proactively assessing potential risks and undertaking timely maintenance or replacement, the reliability of transmission and substation equipment is enhanced, ensuring the stable operation of the transmission system.

Concrete Actions for Strengthening Grid Resilience

Three Strategic Pillars	Ten Focus Areas	Key Measures (as of 2024)
Decentralization -Reducing Centralized Grid Risks (Budget: NT$437.9 Billion)	Direct Power Supply to Industrial Parks	Includes multiple 161kV lines such as Datan–Linkou, Linkou–Luzhu, Linkou–Donglin, the Nankan–Dinghu expansion, Shanshang–Sanzhu, and Xingda South (New)–Baoding.
	Decentralized Green Energy Supply	7 substations and 7 lines under planning, 9 substations and 10 lines under reinforcement, including multiple preliminary grid-connection points and supporting lines.
	Clustering of Key Grid Nodes	Projects include 345kV system lines at Kaogang (A) and (B) substations.
	Expansion of Distribution Nodes	Substation projects such as Fuhe D/S and Dakeng D/S.
	Enhancement of Regional Dispatch	Bidding initiated for the development of regional EMS centers.
Reinforcement – Enhancing Equipment Stability (Budget: NT$125 Billion)	Grid Expansion and Upgrade	161kV line upgrade projects including Xizhi–Minquan, Shenmei–Qizhang, Xinying–Taitie, and Taixi–Sihu.
	Deployment of Energy Storage Facilities	Storage capacity added at Luyuan, Longtan, Dongshan, Jianshan, and Zhushan sites.
	Substation Compartmentalization	Phase 1 compartmentalization projects implemented at Kaogang (A), (B), and Wanlong substations.
Preventing the Spread of Power Outages (Budget: NT$1.69 Billion)	Strengthening of Defense in Depth	190 protection relays replaced in 2024, ; a total of have been 462 completed.
	Real-Time Dynamic Defense	An automatic fault information transmission system established for 161kV and 345kV lines, validated through RTDS simulation.

Total Budget:NT$564.5 Billion

As of December 2024, 98 projects have been completed, and the execution progress has reached 29.61%, with NT$137.4 billion invested.

98 projects
Completed construction project

137.4 billion
Achievements

2.1.2 Increase Adaptive Capabilities 203-1

Strengthening Disaster Prevention, Response, and Recovery

Natural disasters pose a major challenge to Taipower. The Company has established a comprehensive disaster prevention and emergency response framework to enhance internal and external resilience. This mechanism ensures rapid response, damage mitigation, and expedited power restoration in the event of natural disasters.
Internal Response

Internal Response

- Established disaster prevention policies and protocols to ensure swift response to natural disasters and major power supply incidents.
- Issued emergency bulletins, conducted regular drills, training, and random inspections to improve readiness.

External Coordination

- Pre-disaster communication: Prior to typhoons or other disasters, local branch offices issue alerts through radio, cable TV, flyers, letters, and phone calls to raise public awareness.
- During disasters: The feeder adoption mechanism is utilized to collect information that is supplemented by the official website, the Taipower app, the 1911 hotline, and coordination with local leaders to assess damage and through dispatch repair teams.
- Information transparency:Issue at least one press release daily to report on repair progress and power restoration status.

Taipower's Disaster Prevention and Response – Management Strategies and Implementation Responsibilities

Execution Timing	Management Strategy and Key Measures	Responsible Unit
Twice a year	Hold "Extraordinary Disaster Prevention and Review Meetings" every January and April to review deficiencies, establish annual disaster prevention plans, and confirm the command and coordination framework.	All branch offices
Once a year	Inventory manpower, vehicles, and equipment from all branches and contractors; conduct disaster preparedness campaigns, education, and drills to enhance emergency response capabilities.	Department of Distribution, all branch offices
Before flood season	Assess potential locations for forward command posts and prepare necessary equipment in advance.	All branch offices
Before typhoons	• Typhoon preparedness: Plan pre-disaster deployment of personnel, equipment, and machinery based on government forecasts to ensure timely repairs in isolated areas. • Risk assessment and advance deployment: Dispatch repair teams to high-risk areas based on Central Weather Administration forecasts to accelerate power restoration.	Department of Distribution, all branch offices
During disasters	• Activate disaster response centers in each branch for damage assessment and repair mobilization; if power restoration does not reach 95% within 2 days, initiate cross-region support. • Establish forward command posts depending on damage severity, with senior Distribution Department personnel on-site to coordinate resources.	Department of Distribution, all branch offices
Year-round (unannounced)	Strengthen distribution system incident reporting mechanisms through regular emergency alert drills and unannounced inspections to improve reporting timeliness.	Department of Distribution

Strengthening Substation Facility Resilience

Substation Equipment Safety

- Conduct regular inspections of substation equipment to ensure proper operation.
- Perform monthly patrols and maintenance to prevent malfunctions and accidents.

Transmission Equipment Safety

- Maintain transmission lines in accordance with the Transmission Line Maintenance Guidelines of the Power Transmission Division to ensure supply reliability.
- Hold quarterly meetings on lightning and salt damage prevention, and conduct monthly random inspections.

On-Site Operational Safety

- Strengthen pre- and post-operation risk control via the Risk Control Center to reduce accident probability.
- Implement a three-tier, five-level risk identification and management procedure for high-risk operations.
- Perform monthly inspections of tools and construction methods to ensure safe operations.

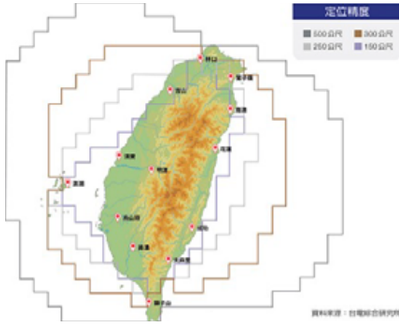
Talent Training

- Provide risk identification and management training for mid- and senior-level supervisors to enhance crisis response capabilities.
- Conduct regular safety and technical training for employees to reduce incident rates.

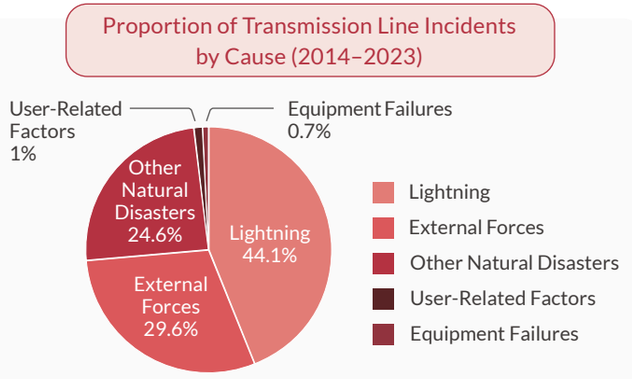
Lightning Detection and Scientific Lightning Protection Strategies

Taiwan's subtropical climate and complex terrain contribute to frequent lightning activity, which has increased in both frequency and intensity in recent years due to escalating extreme weather events. Given the high sensitivity of high-tech industries to voltage stability, the impact of lightning strikes on the power system has become increasingly significant. To address this, Taipower introduced a lightning detection system in 1989 and upgraded it to an Integrated Lightning Detection System in December 2013. A total of 13 lightning detection stations have been established, covering Taiwan's main island and surrounding waters, enabling effective monitoring of both intra-cloud and cloud-to-ground discharges. To enhance the accuracy of cloud-to-ground lightning strike location, Taipower continues to upgrade its equipment by combining Magnetic Direction Finding (MDF) and Time-of-Arrival (TOA) positioning technologies, reducing the margin of error to within 150 meters. High-risk areas are identified through lightning density mapping, which serves as a basis for prioritizing the deployment of lightning protection equipment to reduce the occurrence of lightning-related incidents.

In response to the growing challenges of lightning hazards and extreme weather, Taipower leverages science and technology to strengthen grid resilience, reduce lightning risks, and ensure the stability of the power supply. Moving forward, Taipower will continue to collaborate with meteorological agencies to enhance its understanding of lightning dynamics and minimize the impact of lightning on industrial operations and residential electricity use.



Distribution of Taipower's 13 Lightning Detection and Cloud-to-Ground Discharge Coverage with High-Precision Strike Localization Stations



Emergency Incident Response Policy and Guidelines

During the Incident	Immediately After the Incident	Post-Incident Review and Accountability
● Establish an Emergency Response Team to carry out incidentinvestigation and impact assessment, and activate relevant contingency plans. ● Adjust project schedules and plans according to the situation, allocate additional resources, and coordinate with supply chain partners. ● Strengthen both internal and external communication to optimize overall risk management.	● Promptly report the incident and initiate emergency response protocols. ● Form a troubleshooting task force to inspect the site, implement containment measures, and prevent further escalation.	● Analyze the root causes and submit a formal review report. ● Convene dedicated review meetings to address weaknesses in equipment or processes. ● Review personnel responsibilities based on established reward and penalty guidelines to prevent recurrence of similar incidents.

Ensuring Nuclear Safety

Taipower adheres to a Defense-in-Depth strategy to ensure the safe operation of its nuclear power plants. The core principles of this approach include:

- Highest Safety Standards: All nuclear power facilities are designed, constructed, supervised, and operated in compliance with the highest industry and regulatory standards. Each unit undergoes detailed assessments based on its geographic location and potential natural disaster risks, including earthquakes, tsunamis, typhoons, tornadoes, and floods.
- Multiple Physical Barriers: Nuclear reactors are equipped with multiple physical containment barriers to prevent the release of radioactive fission products under any circumstances.
- Redundant Safety Systems: Redundant and independent safety systems are installed and maintained in an operational state. These systems are subject to routine testing to ensure high levels of reliability and readiness in the event of an emergency.

▼ Taipower implements the concept of Defense-in-Depth through four lines of defense to ensure nuclear safety in the face of natural and man-made hazards:

1 Prevention

- Design protective mechanisms against natural disasters such as earthquakes, floods, strong winds, and external fires.
- Assess the potential impacts of compound disasters (e.g., earthquakes triggering fires or floods).

2 Mitigation

Install protective systems and equipment to reduce the impact of accidents and enable rapid responses.

3 Emergency Preparedness

- Ensure sufficient protective measures are in place to safeguard the public in the event of radioactive release.
- Take appropriate actions to minimize radiation exposure.

4 Strategy

- Establish response guidelines for extreme events.
- Strengthen operational procedures and emergency capabilities based on lessons learned from the Fukushima incident.
- Follow emergency operating procedures (EOPs) and severe accident management guidelines (SAMGs) to ensure robust response mechanisms.

Level of Nuclear Accident Impact

Taipower is a member of the Nuclear Procurement Issues Corporation (NUPIC) in the United States and regularly participates in its meetings to obtain vendor audit information related to nuclear power plant procurement. This ensures the quality and safety of critical equipment and components.

In compliance with the Enforcement Rules of the Nuclear Materials and Radioactive Waste Management Act, Taipower submits reports to the competent authority on the treatment, storage, and final disposal of radioactive waste, as well as annual reports covering operational performance, radiation protection, and environmental radiation monitoring.

Nuclear accidents are classified into three levels based on their potential impacts:

Emergency Alert
A significant degradation in the safety condition of the nuclear reactor facility has occurred or is likely to occur. However, public protective actions are not yet required.

Plant Emergency
A major failure in the safety functions of the nuclear reactor facility has occurred or is likely to occur, and public protective actions may be required.

General Emergency
A severe core degradation or meltdown has occurred or is likely to occur, possibly compromising the integrity of the containment structure. Public protective actions must be implemented.

Actual Drill Implementation

Taipower conducts one emergency response drill annually at each operating or decommissioned nuclear power plant. These drills are categorized into in-plant drills and nuclear safety drills. Each year, one nuclear power plant is selected to conduct a comprehensive Nuclear Safety Drill in coordination with the competent authority. This large-scale mobilization involves Taipower, central and local governments, the military, police, and medical institutions. Nuclear power plants not selected for the Nuclear Safety Drill in a given year will instead conduct an in-plant drill. In addition to oversight by the competent authority, Taipower also invites external experts and scholars to form a drill assessment panel, which evaluates the effectiveness of various emergency response measures. This process helps enhance the robustness and completeness of the Company's emergency preparedness plans and actions.
In 2024, Nuclear Safety Drill No. 30 was held in September at the First Nuclear Power Plant. The Third Nuclear Power Plant and Second Nuclear Power Plant also conducted individual emergency response drills in June and November, respectively.

2.2 Improving Power Supply Stability

2.2.1 A Stable Power Supply and Generation System

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Material Topic: Stability and Reliability of Power Supply

Policy	• Maintain a robust energy structure and power grid, and continue providing stable and reliable power services to users through smart grid upgrades, low-carbon transition, precise demand control, and nationwide energy-saving promotion.
Management Approach	To enhance the stability and reliability of the power supply, Taipower has adopted the following three management strategies: • Equipment Maintenance: Implement preventive maintenance and improve weak points in generation units to ensure stable operation. • Personnel Training: Focus on core technologies and safety culture to strengthen operational discipline and prevent human error. • Risk Management: Apply multi-level controls, conduct stringent reviews of high-risk tasks, and reduce incident rates.
Action Plans	Strengthen the transmission network Construct, renew, and expand power plants Reduce national power outage time
Actual Performance in 2024	• Under the 7th Transmission and Substation Project, 24.56 circuit-km of transmission lines and 52.79 MVA of substation capacity were completed, with an overall cumulative progress rate of 96.54%. • Completed replacement of 33 aging towers, 44.87 km of ground conductors, and 42.415 circuit-km of oil-filled cables. • The national power outage time (SAIDI value) was 15.831 minutes per household per year. • Completed 23 new, upgraded, or expanded substations, totaling 5,540 kVA; and completed 56 new or expanded lines, totaling 286 circuit-km. • The reserve margin during the 2024 evening peak was 11%.
Targets for 2030	• Complete three major hub node distribution projects and related long-term plans between 2027 and 2032. • Achieve a 15% reserve capacity ratio to ensure system stability during peak demand periods. • Submit progress milestones for tower, ground wire, and oil-filled cable replacements in periodic meetings. • Continuously improve the distribution system through feeder automation, voltage regulation, secondary substation upgrades, and grid enhancements for renewable energy integration. Vegetation trimming and infrared inspections were also continued. • Continue to reduce the national power outage time (SAIDI value).

Material Topic: Energy Efficiency

Policy	• Implement energy-saving measures and continuously promote energy efficiency through education and advocacy, with a focus on improving the generation efficiency of thermal and renewable energy units.
Management Approach	• Hydropower and Thermal Power Plants: Promote energy-saving projects through equipment upgrades and operational mode adjustments. • Renewable Energy Management: Establish operation and maintenance systems and develop 48-hour solar and wind power forecasting to enhance unit performance. • Demand-Side Management: Use time-of-use electricity pricing to guide users to adjust consumption habits and reduce supply costs. • Energy-Saving Technologies: Apply advanced technologies to improve equipment efficiency and reduce energy consumption.
Action Plans	• Improve the average efficiency of in-house thermal power units (excluding purchased power) • Reduce the line loss rate • Increase the share of generation from clean fuels (renewables and natural gas) • Increase the share of self-produced renewable energy in total system generation
Actual Performance in 2024	• The average generation efficiency of in-house thermal power units (excluding purchased power) exceeded 42.22% • The system-wide line loss rate was 2.93% • The power generation mix was 33.4% coal-fired (including 2.3% cogeneration), 47.3% gas, 4.7% nuclear, 11.9% renewable energy, and 2.7% from other sources (fuel oil and pumped storage) • The share of self-produced renewable energy in the system was11.9% (approximately 30 billion kWh)
Targets for 2030	• Achieve an average generation efficiency of over 47% for in-house thermal power units (excluding purchased power) • Conduct annual rolling reviews of the system-wide line loss rate (Refer to the T-SDGs target of 4.21%). • Reach a generation mix of 50% gas, 20% coal, and 30% renewable energy • Increase the share of self-produced renewable energy in the system to 24.1% (approximately 68 billion kWh) • Double energy efficiency and achieve a 17% reduction in net GHG emission intensity compared to 2016

Stable Power Supply and Installed Capacity

In response to record-breaking electricity demand in Taiwan, Taipower remains committed to ensuring a stable power supply. The Company continues to enhance generation capacity through the commissioning of new units, the grid integration of renewable energy, the implementation of time-of-use (TOU) pricing, demand response programs, and nighttime peak demand measures. These efforts have maintained a peak reserve margin above 8% and improved overall system stability through refined dispatch strategies for conventional units. For nuclear power plants, Taipower conducts ongoing reviews of operational vulnerabilities, strengthens oversight during major maintenance periods, implements equipment upgrades, and evaluates unplanned incidents each year to ensure safe and stable plant operations.

Total Amount and Composition of Power Generation

	2022		2023		2024	
	Billion kWh	%	Billion kWh	%	Billion kWh	%
Amount of Power Generated	188.3	75.1%	174.5	71.1%	172.1	68.4%
Pumped Storage Hydro	3.1	1.2%	3.0	1.2%	3.1	1.2%
Thermal	156.0	62.2%	149.7	61.0%	152.4	60.6%
Nuclear	22.9	9.1%	17.2	7.0%	11.7	4.6%
Renewable Energy	6.3	2.5%	4.6	1.9%	4.9	1.9%
Amount of Purchased Power	62.5[Note]	24.9%	71.0[Note]	28.9%	79.4[Note]	31.6%
Privately-Owned Thermal	43.7	17.4%	45.3	18.5%	48.0	19.1%
Renewable Energy	15.3	6.1%	19.7	8.0%	25.1	10.0%
Cogeneration	3.4	1.4%	5.9	2.4%	5.9	2.4%
Purchased Power from Storage (Battery)	0.0	0%	0	0%	0.3	0.1%
Net Amount of Power Generated and Purchased	250.7	100.0%	245.5	100.0%	251.4	100.0%

Note:Figures may not add up to totals due to rounding. No round-off adjustment has been made.

Average Availability Rates for Power Generating Units

Unit: %

Unit		Energy Type	2022	2023	2024
Thermal	Steam	Coal	85.71	85.79	86.52
		Oil	89.67	86.19	94.29
		LNG	94.09	90.40	90.32
	Combined Cycle	LNG	89.49	90.44	90.57
Hydro		Hydro	95.37	96.77	96.67

Note:1. Availability of thermal power units = 1 − (Power output affected by unit during the period ÷ Hours during the period ÷ Maximum net output of the unit)
Average availability of thermal power plants = Σ (Unit availability × Unit maximum net output) ÷ Σ Unit maximum net output
2.Availability of hydro units = (Operating hours + Standby hours) ÷ Total hours in a year
3.Annual availability of hydropower plants = Arithmetic average of unit availability within the plant

Average Availability Rates for Nuclear Power Plants

Unit: %

Year	NPP1		NPP2		NPP3	
	Reactor 1	Reactor 2	Reactor 1	Reactor 2	Reactor 1	Reactor 2
2022	-	-	-	88.95	87.64	99.67
2023	-	-	-	80.83	99.36	88.49
2024	-	-	-		98.08	86.98

Note:1.Annual availability of nuclear units = Annual grid-connected hours ÷ Total hours in a year
2.Reactor 1 of NPP1, Reactor 1 of NPP2, and Reactor 1 of NPP3 have been decommissioned in July 2019, March 2023, and July 2024 respectively. Only Reactor 2 of NPP3 remains operational.
3.The Fourth Nuclear Power Plant (NPP4) has never entered commercial operation and is currently under asset management by Taipower.

Improve Power Supply Reliability

Taipower is committed to enhancing the efficiency of power system management, with a key focus on increasing the availability of generation units. This is achieved through preventive maintenance, regular inspections, and continuous improvements that address identified weaknesses, thereby reducing the risk of malfunctions.

To further enhance power quality and service stability, Taipower established the Task Force on Power Quality Management and Improvement for Industrial and Export Processing Zones, which conducts regular inspections of power lines and promptly addresses anomalies. The Company also implements a user engagement mechanism to handle customer feedback effectively. By holding regular meetings with major electricity users, Taipower strengthens communication and continuously improves service quality.

Taipower also maintains a comprehensive mechanism for power dispatching and reliability management, with specific action plans and current practices outlined below.

Power Dispatch and Reliability Management Mechanism

Regular Review and Analysis	Execution Method	● Regularly convene Electromechanical System Incident Review Meetings. ● Regularly convene Power Dispatch System Incident Review Meetings.
	Execution Status	● Held Electromechanical System Incident Review Meetings on a monthly basis. ● Held Power Dispatch System Incident Review Meetings every two months.
Risk Management Implementation	Execution Method	● Identified "power shortages affecting system stability and safety"as a key risk control focus. Risks are assessed under various scenarios based on potential impact, with corresponding mitigation measures developed. ● Conducted quarterly tracking and review of implementation status. ● Performed a comprehensive review at the end of each quarter and established future control objectives.
	Execution Status	● In 2025, developed risk control measures in response to "short-term power supply and demand imbalances." ● In 2024, reported the implementation outcomes of the risk event "power shortages affecting system stability and safety" and conducted rolling reviews of evolving risks.
Personnel Training	Execution Method	● Trained reserve online dispatch personnel and administered license certification exams for new dispatchers ● Required licensed personnel to complete specified retraining hours every three years to maintain certification and ensure professional competency

Taipower uses SAIDI (System Average Interruption Duration Index) and SAIFI (System Average Interruption Frequency Index) as key indicators of power supply reliability. In 2024, the SAIDI was 15.831 minutes and the SAIFI was 0.209. Through continued implementation of the Distribution System Resilience Program, the number of distribution-related outages decreased by nearly 25% compared to 2022. Moving forward, Taipower will further promote Feeder Automation Systems to achieve "fewer outages and faster restoration," minimizing the public impact of power disruptions.

● Power Outages Attributable to Non-Taipower Causes

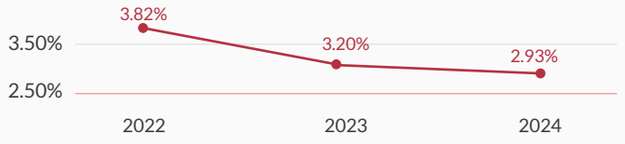
1. Construction Restrictions: Road repaving projects limit excavation, requiring approval before repair crews can begin work during outages, thereby extending restoration time.
2. Coordination with Public Infrastructure Projects: Power supply is affected by the need to expand or relocate electrical equipment to accommodate MRT construction, sewer systems, and road widening projects.
3. External Factors: Outages caused by lightning strikes, abnormal customer-side equipment, and other unforeseen incidents.
4. Gas Supply Issues: Shortages in gas supply affect power generation, resulting in outages.
5. Independent Power Producer (IPP) Incidents: Trips in IPP or cogeneration units trigger under-frequency load shedding, leading to power outages.

Power Reliability and Performance

		2022		2023		2024	
		Target	Performance	Target	Performance	Target	Performance
The average duration of outages (minutes / household · year)	Working blackout	12.176	11.298	12.103	11.292	12.063	11.325
	Outage blackout	4.424	3.638	4.398	3.933	4.337	4.506
	Total	16.6	14.936 (91.285)Note	16.5	15.225	16.4	15.831
The average number of outages (times / household · year)	Working blackout	0.064	0.057	0.065	0.056	0.065	0.055
	Outage blackout	0.196	0.124	0.195	0.130	0.195	0.154
	Total	0.26	0.181 (0.467)Note	0.26	0.186	0.26	0.209

Note: The major outage incident on March 3, 2022, significantly impacted the annual averages. Excluding this incident, the 2022 average outage duration per household was 14.936 minutes, and the average number of outages was 0.181 times.

Taipower System Line Loss Rate



Safeguarding Power System Security

Protective relays are essential safety components in the power system. They detect anomalies and isolate faulted areas to maintain system stability. Taipower employs a dual-main protection design, combining well-functioning hardware and optimized coordination settings to enhance system reliability and safety, improve power quality, and reduce maintenance costs.
To strengthen system protection, Taipower is pursuing both defense-in-depth and real-time dynamic defense strategies. These includes accelerating the replacement of aging digital relays, developing a relay data return and push notification system, and implementing a real-time dynamic simulation system. These efforts aim to expand protection coverage and prevent large-scale blackout incidents.

Guidelines and Planning for Power Plant Construction, Renewal, and Expansion
Material Topic:Power Plant Renewal and Decommissioning

Policy	• In response to the decommissioning of existing units and the long-term growth in electricity demand, Taipower is enhancing the overall operational performance and competitiveness of its power plants, while reducing emissions of carbon dioxide and sulfur oxides. Nuclear power plant decommissioning is being carried out in accordance with the "Regulations for Implementation of the Nuclear Reactor Facilities Control Act."
Management Approach	• Planning and execution of new power plant projects, renewal, expansion, and decommissioning efforts • Ensuring proper radiation protection, management of spent nuclear fuel and radioactive waste, environmental radiation monitoring, and project governance to safeguard public health and environmental safety
Action Plans	• Power generation equipment improvement projects, and the renewal, expansion, and addition of gas-fired combined cycle and energy storage units • Implementation of decommissioning works for the Chinshan Nuclear Power Plant (NPP1), and preparatory tasks for the Kuosheng and Maanshan Nuclear Power Plants (NPP2 and NPP3)
Actual Performance in 2024	• Accelerated progress on the renewal, expansion, and addition of gas-fired combined cycle units • Continued implementation of decommissioning and dismantling work for NPP1, and preparatory efforts for NPP2 and NPP3, in accordance with the decommissioning schedule
Targets for 2030	• In line with the government's policy of promoting natural gas as a bridging energy source during the energy transition, Taipower plans a net increase of approximately 17.86 GW in gas-fired generation capacity between 2024 and 2033.

Note: Decommissioning-related information is disclosed on the Taipower website and the official Nuclear Backend Operations Portal.

Taipower's power development plans are guided by the core principle of stabilizing the power supply as part of Taiwan's energy transition policy. The Company is consequently "increasing gas, reducing coal, expanding renewables, and phasing out nuclear," and conducts rolling reviews of national power supply and demand. New generation capacity is planned based on electricity demand growth and the retirement schedule of existing units to ensure supply stability. Taipower is also actively adding gas-fired combined cycle and energy storage units to reduce coal dependence and maintain a reasonable reserve margin, thereby ensuring sufficient electricity to support economic development.
Taipower is currently implementing major gas-fired combined cycle unit projects at Tunghsiao, Tatan, Hsinta, Taichung, Dalin, Tunghsiao Phase II, Hsieh-ho, and Taichung Phase II. Project progress is monitored through regular and ad-hoc project meetings and on-site inspections. Contractors are actively supervised to accelerate construction and ensure timely, high-quality completion.

Power Plant Renewal and Expansion Projects in 2024

Project	Progress	Expected Benefit
Gas-Fired Combined Cycle Unit Renewal, Expansion, and Addition Projects	Tunghsiao (99.96%), Datan (99.27%), Taichung (54.23%), Hsinta (83.90%), Hsieh-ho (35.15%), Tunghsiao Phase II (26.26%), Dalin (31.35%)	Annual coal consumption for power generation is expected to decrease from over 38 million metric tons in 2017 to approximately 26 million tons by 2026.
Nuclear Power Plant Decommissioning	NPP1 completed the dismantling of transmission towers, lines, and gas turbines, and began hot testing of the dry storage facility on October 23, 2024. NPP2 commenced construction of its dry storage facility on December 31, 2024. The NPP3 decommissioning plan has passed review by the Nuclear Safety Commission and is currently undergoing environmental impact assessment.	Decommissioning progresses according to established plans, ensuring safe and orderly transition of nuclear facilities.
Phase I – Small Hydropower Development Nationwide	Commercial operation scheduled for August 2024.	Total installed capacity of 16,553 kW with an estimated annual generation of 74.6 GWh.
New Hydropower Development Projects	Planning is underway for the Guangming Pumped Storage Project on the Dajia River, with commercial operation expected by 2037. The Wanli Hydropower Project underwent surveys and feasibility assessments in 2024.	Guangming and Wanli projects will provide a combined installed capacity of 580 MW and 49 MW, with expected annual generation of 767 GWh and 170.1 GWh, respectively.

Challenges in Power Plant Renewal, Construction, and Decommissioning

Power plant renewal and decommissioning face increasingly stringent regulatory requirements and high development costs linked to necessary community consultations. Taipower seeks to ensure smooth project execution by complying with relevant regulations, strengthening stakeholder communication, and implementing comprehensive planning.

Regulatory Constraints

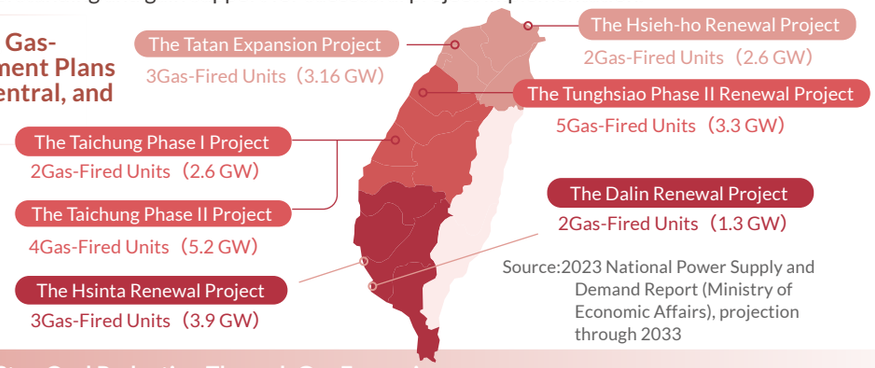
During the feasibility study phase, all applicable regulations are identified and necessary licenses and development permits are integrated into the project schedule to minimize delays and extra costs. In addition, power plant renewal projects must comply with the Environmental Protection Administration's Best Available Control Technology (BACT) and Best Available Technology (BAT) standards. As emissions regulations tighten, Taipower will adopt advanced international technologies to improve efficiency and reduce long-term operational costs.

Community Engagement

Power plant renewal projects often draw public attention from local communities and environmental groups. To reduce disputes and related development costs, the following measures are used:

- Engage with local governments and elected officials: Establish constructive relationships early to reduce differences in opinion.
- Hold information sessions and public hearings: Present the environmental benefits of the renewal project to local authorities, community leaders, and residents to enhance public support.
- Strengthen communication platforms: Use social media to build transparent, two-way communication channels.
- Host site visits:Allow the public to witness the operation of low-emission, low-carbon equipment firsthand to foster understanding and gain support for successful project implementation.

Taipower's Ongoing Gas-Fired Unit Development Plans Across Northern, Central, and Southern Taiwan



Source:2023 National Power Supply and Demand Report (Ministry of Economic Affairs), projection through 2033

Nationwide, Step-by-Step Coal Reduction Through Gas Expansion

1 **New Tunghsiao Gas Units**
Creating the conditions for major coal reductions at Taichung Power Plant
Coal consumption was reduced by 6 million metric tons from 2014 to 2023

2 **New Hsinta Gas Units**
Add gas capacity before decommissioning aging coal units
Four coal units are approaching 40 years of operation and scheduled for phase-out

3 **New Datan Gas Units**
Replace coal-fired capacity following Mailiao decommissioning
After the Mailiao coal units retire, further 5 million metric tons of coal reduction expected by 2026

4 **New Taichung Gas Units — Phase I**
Two new units, each generating 7 billion kWh annually
7 billion kWh to fill the supply-demand gap, and 7 billion kWh to meet tech sector growth

2.2.2 A Robust Transmission and Distribution System

3-3 203-1 203-2

Improving Accessibility of Electricity Services

In fulfilling its responsibility under the Electricity Act to uphold the rights of individuals to access a stable power supply, Taipower has established 24 branch offices, 24 service centers, 260 local service stations (as of December 31, 2024), and 2 customer service call centers. The Company continues to expand its infrastructure in coordination with local public works and new service applications to enhance accessibility and ensure equal access to electricity services.

Taiwan has achieved a 100% national electrification rate. Only a few remote locations remain unconnected due to inaccessibility-where access routes are mountain trails, equipment cannot be transported, or ecological and landscape conservation concerns restrict construction. Taipower continues to optimize its power service network to meet electricity needs nationwide.

Ongoing Implementation of the Distribution System Resilience Program

The power grid serves as the critical link between generation and consumption. Grid resilience is essential to reducing outage risk and ensuring power quality. Taipower has established an extensive nationwide grid and continues to enhance it through regular maintenance and equipment renewal to ensure system stability.

From 2018 to 2022, Taipower implemented a Distribution System Resilience Programwhich focused on improving distribution lines, replacing secondary substation equipment, expanding feeder automation, and constructing smart substations. As a result, the number of system incidents fell from 15,264 in 2017 to 8,140 in 2022 (a 47% reduction), while the average annual outage duration per household also dropped from 4.0870 minutes to 3.347 minutes (an 18% reduction), significantly enhancing supply stability.

To build on these improvements, Taipower launched a Five-Year Distribution System Upgrade Program to run between 2023 and 2027 Key initiatives of the program include distribution optimization, full feeder automation, undergrounding for disaster prevention, feeder voltage upgrades, replacement of aging equipment, enhancement of renewable energy integration, and the implementation of preventative improvement measures—all aimed at strengthening power quality and system resilience.

Power Grid Construction Projects Implemented in 2024

Transmission and Substation Projects	● Northern Region Phase I & II Grid Projects ● Central Region Phase I Transmission and Substation Project ● Southern Region Phase I Transmission and Substation Project ● Construction of the Songhu UHV Substation (7th Transmission and Substation Project) ● Phase I Grid Resilience Project
Substation Reconstruction Projects	Complete Substation Reconstruction Projects (Phase I & II)
Offshore Wind Power Grid Enhancement Projects	Phase I Offshore Wind Power Grid Enhancement Project (Zonal Development Stage)
Ultra-High Voltage Projects for Science Parks	● Expansion of the Southern Taiwan Science Park (STSP) UHV Substation ● Construction of the Baoshan UHV Substation

Enhancing Power Distribution Reliability

To reduce power generation costs and improve supply capacity, Taipower's distribution system follows line loss rate targets set by the Department of System Operations. Each branch office establishes improvement plans to reduce line losses and prevent power distortion. Considering system adaptability and load transfer capabilities during outages, Taipower has also developed distribution system planning guidelines and adopted a management target to reduce the number of feeders with currents exceeding 300 amps, which serves as a benchmark for feeder performance.
The Department of Distribution and the regional branches regularly convene Power Supply Reliability Enhancement Meetings and High-Voltage Outage Review Meetings to assess distribution system outage performance, analyze the causes of major incidents, and develop corrective actions. As part of ongoing risk management, potential factors affecting system stability and reliability are reviewed annually and included in the following year's risk control plans.

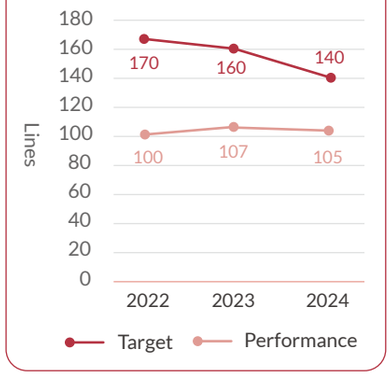
Taipower also conducts regular on-the-job training for distribution maintenance and dispatch personnel to enhance technical skills and operational effectiveness. Audit operations have been strengthened through irregular inspections of equipment performance, while each regional office is supervised in executing preventive and corrective action plans to minimize risks associated with human error or improper operation.

In response to Taiwan's energy transition and the development of next-generation power supply systems, Taipower has accelerated the deployment of feeder automation, moving toward fully automated and intelligent distribution networks. This approach not only improves power supply quality, but also enhances real-time fault detection. By remotely operating automated switches on site, fault areas can be quickly isolated to minimize the scope of outages. In 2024, 66% of automated feeders restored power to non-fault downstream areas within 5 minutes after mainline incidents. By the end of 2024, more than 35,000 automated switches were under monitoring, and the number of automated feeders reached 9,784-achieving a penetration rate of approximately 96%. Full feeder automation is expected to be completed by 2025.

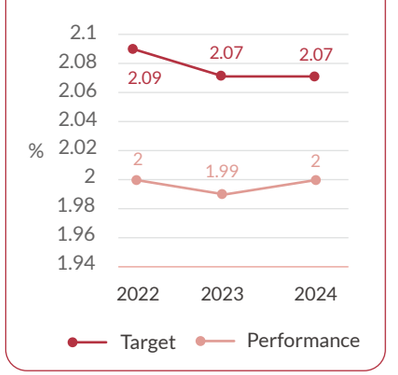
Distribution Feeder Automation Performance

Performance Indicator	2022	2023	2024
Cumulative Number of Automated Feeders	8,384 lines	9,045 lines	9,784 lines
Number of New Automated Switches	2,180 units	2,670 units	2,862 units
Proportion of Incidents Restored Within 5 Minutes (Downstream Area)	49%	57%	66%

Reduction of Feeder Lines with Currents Exceeding 300A



Distribution Line Loss Rate



2.3 Implementing Energy Transition

2.3.1 Promoting Power Transformation 203-2

Prioritize Renewable Energy Development and Create a Grid-Friendly Environment > **Advance Low-Carbon Gas-Fired Power Projects and Construct LNG Terminals** > **Prepare Emergency Backup Capacity to Address Supply and Demand Uncertainty**

Taipower is actively promoting the development of offshore and onshore wind power, solar photovoltaic, geothermal, and small/micro hydropower systems. The Company is also working to improve grid interconnection conditions that create a grid-friendly environment and expand renewable energy deployment in collaboration with private sector partners.

Taipower is actively replacing and expanding coal-fired capacity with low-carbon, gas-fired units. To ensure a stable gas supply, the Company is building LNG receiving terminals at Taichung Port and Keelung Port (for the Hsieh-ho Plant), and is cooperating with CPC Corporation to construct a third LNG terminal.

With over 96.67% of Taiwan's energy resources being imported, and global energy policy trends emphasizing diversification, Taipower is maintaining emergency backup power capacity and continuously optimizing dispatch and management strategies to ensure grid stability in the face of unpredictable demand or climate-related events.

Power Transition as a Response to Policy and Public Expectations

In alignment with the government's energy transition policy and public expectations, Taipower is prioritizing the development of renewable energy and gradually reducing coal consumption and carbon emissions through measures such as reducing the load on existing subcritical coal-fired units and constructing new gas-fired combined cycle units. The phased decommissioning of subcritical units is planned, while emergency backup generation facilities are also being prepared to address uncertainties in power supply and demand. The planning direction is outlined as follows:

Short, Medium, and Long-Term Plans for Power Transition

Taipower's power development plan targets a reasonable reserve capacity of 15% to ensure reliability and stability in the power system. In 2024, the actual nighttime reserve margin was 11%. The annual power generation mix in 2024 was as follows: 33.4% coal-fired (including 2.3% from coal cogeneration), 47.3% gas-fired, 4.7% nuclear, 11.9% renewable energy, and 2.7% from other sources (fuel oil and energy storage).

To align with the government's 2030 energy mix targets-50% gas-fired, 30% renewable energy, and 20% coal-fired—Taipower is actively expanding renewable energy deployment and fostering a grid-friendly environment. At the same time, the Company is promoting a switch in fuel from coal to gas by developing additional in-house gas-fired combined cycle units and procuring power from independent gas-fired producers (IPPs). The phased decommissioning of subcritical coal-fired units at Hsinta and Taichung is also planned to support the transition.

Short-Term Actions

Taiwan's dense population and limited land availability make it challenging to secure sites for power plants and transmission infrastructure.The not in my backyard (NIMBY) sentiment and public concern over greenhouse gas emissions further delay project progress. To reduce the risk of power shortages amid these uncertainties, the following short-term actions are being implemented:

- Optimize dispatch strategies by leveraging the characteristics of renewable energy.
- Strengthen demand-side management measures to suppress peak electricity demand.
- Ensure the stable operation of existing units and timely commissioning of new units under construction.

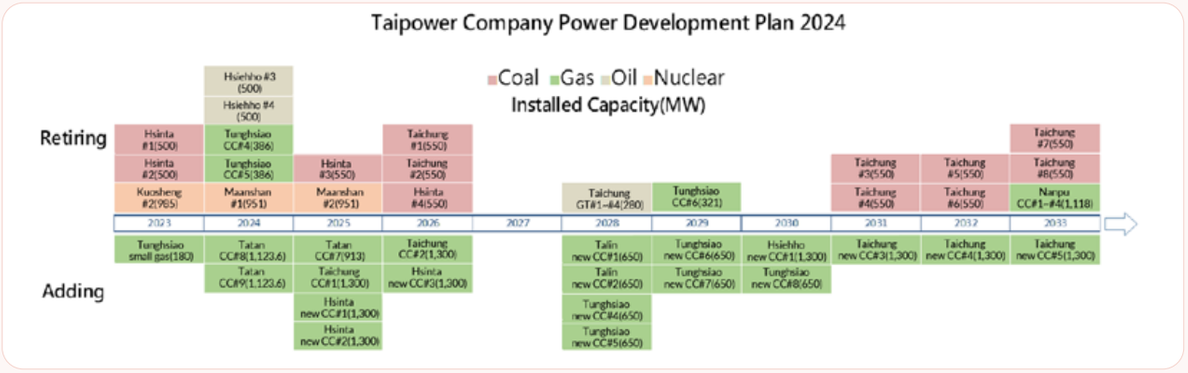
Medium-Term Measures

Taipower continues to upgrade and replace conventional thermal power plants to enhance regional power supply balance and improve generation efficiency. In support of the government's low-carbon and sustainability goals, the Company is implementing a series of renewal and expansion projects across northern, central, and southern Taiwan, covering wind, solar, thermal, hydropower, and biomass energy sources.

Long-Term Power Development

1.In light of rising electricity demand and the phased decommissioning of existing generating units, Taipower has developed a long-term power development plan through 2033. This plan aligns with the government's energy transition policy and considers both internal and external environmental factors. The development roadmap is illustrated in the figure below.

2.In support of Taiwan's 2050 net-zero target, Taipower is actively increasing the share of renewable energy while adopting a "gas-for-coal"strategy as a bridge in the transition to net zero. According to the power development plan, all newly added generation capacity will be gas-fired. In parallel with the accelerated deployment of gas-fired projects, subcritical coal-fired units at plants such as Hsinta and Taichung are scheduled for phased decommissioning. This strategy helps balance the goals of improving air quality and maintaining a stable power supply.



Remark: According to Report of the assessment to energy referendums on Jul 15th, 2024 by the MOEA.

Promoting Vehicle Electrification and Decarbonization

In response to the government's electric vehicle (EV) policy and the growing domestic EV market, Taipower has shifted from a passive power facilitator to an active participant, formulating the following strategies:

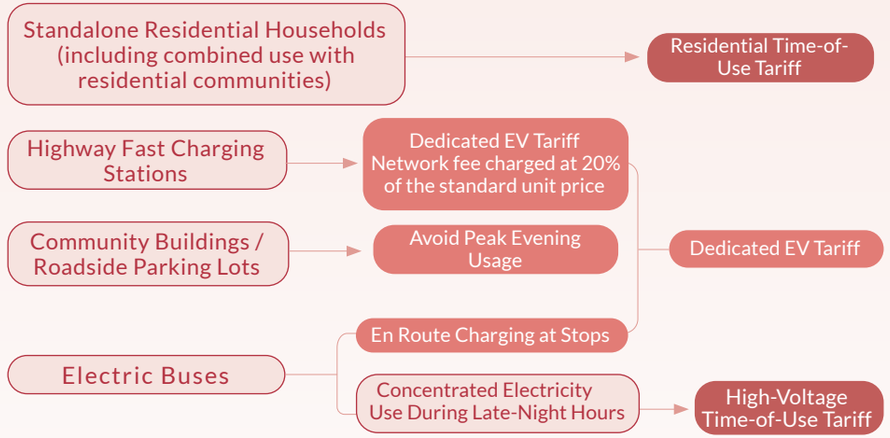
Short Term	Medium to Long Term
● Established an EV charging demonstration site at the Taipei Regional Office to simulate scenarios such as public charging stations, commercial buildings, and multi-unit housing, incorporating Energy Management System (EMS) technologyfor smart charging control. ● Since March 1, 2022, newly constructed multi-unit residential buildings have been approved to use dedicated meters for EV charging. For existing buildings, phased installation using dedicated metering is recommended. ● Users are encouraged to adopt EMS-based charging to shift usage to off-peak hours, helping to reduce peak load and electricity costs.	● Introduce EV-specific Time of Use (TOU) rates, Demand Response events, ancillary service signals, and load capacity commands to verify system compatibility for charging control, Vehicle-to-Grid (V2G) operations, and communication interfaces. ● Develop a travel pattern-based forecast model for public charging infrastructure, serving as a reference for future grid strengthening in response to rising EV electricity demand.

To help the public better understand electricity-related information for electric vehicles, Taipower has produced a range of multimedia materials-such as educational videos and brochures, 24 regional offices across Taiwan have established dedicated EV service desks to provide consultation services to the public and charging service providers. Employees at these offices have also been mobilized to engage with local governments, associations, vendors, community management committees, and other stakeholders to promote awareness of EV electricity use.

Through public land tenders and partnerships with private operators, Taipower facilitated the installation of 57 charging guns between 2021 and 2024.

To meet the enhanced requirements of the Distribution-level Renewable Energy Advanced Management System (DREAMS), Taipower's Department of Distribution completed system acceptance testing in January 2025. This included the deployment and integration of monitoring systems at five EV charging stations across northern, central, and southern Taiwan. System management interfaces and function modules were developed to support the expansion and optimization of charging station management systems.

Electric Vehicle Charging Options



2.3.2 Diversified Development of Renewable Energy and Low-Carbon Gas-Fired Power Generation

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Material Topics: Renewable Energy Development and Low-Carbon Gas-Fired Power Generation

Policy	•In support of the government's 2050 net-zero emissions policy, Taipower is advancing toward short-term low-carbon and long-term zero-carbon goals. The Company actively promotes the deployment of offshore and onshore wind power, solar photovoltaics, geothermal power, and small/micro hydropower. Zero-carbon renewables and low-carbon gas-fired generation are prioritized as the main energy sources, while the use of outdated coal-fired units is being scaled down. Taipower also closely monitors international developments in emerging energy technologies and introduces them when appropriate. In parallel, efforts are being made to strengthen grid infrastructure and create a grid-friendly environment to facilitate private-sector renewable energy development, thereby maximizing renewable energy expansion.
Management Approach	•Taipower continues to implement grid enhancement projects at the distribution level to support renewable energy integration in coordination with government-designated solar photovoltaic zones. The Company is committed to expanding renewable energy and promoting clean energy sources with low air pollutant emissions.
Action Plans	•Expand installed capacity of carbon-free renewable energy and low-carbon gas-fired generation. •Increase capacity for renewable energy grid connections.
Actual Performance in 2024	• Installed capacity of renewable energy: Accumulated total of 2,557.04 MW (excluding equity investments) • Grid-connected renewable energy capacity: 20,425.60 MW
Targets for 2030	• Align with the government's 2030 energy mix target of 50% gas, 30% renewables, and 20% coal. •Complete feasibility studies for long-duration battery energy storage systems (BESS), and submit proposals to the government in accordance with energy policy and grid resilience needs. •Plan and conduct 5% ammonia blending demonstration trials at Dalin and Linkou Power Plants by 2030. •Continue supporting renewable energy projects in achieving grid connection, contributing to the government's goal of 20 GW in solar PV integration. •Renewable energy installed capacity: Accumulated total of 4,522.3 MW •Renewable energy grid-connected capacity: 41,718 MW

Vision and Development Goals

Taipower is promoting renewable energy based on three strategic pillars-grid-friendly integration, demonstration leadership, and system stability-with the ultimate goal of maximizing renewable energy development.

- Grid-Friendly Integration:Strengthen grid infrastructure and provide sufficient feeder capacity to facilitate the growth of installed renewable capacity, ensuring that privately developed renewable systems can be smoothly connected to the grid.
- Demonstration Leadership:In addition to ongoing investment in solar, onshore, and offshore wind power, Taipower is advancing high-tech and forward-looking demonstration projects. The Company actively collaborates with industry, government, and academia to promote renewable energy development through outreach, education, and technological leadership.
- System Stability:To address the intermittent nature of renewable generation, Taipower maintains system stability and security by employing smart generation and dispatch, demand-side management, and energy storage technologies-thus enabling a higher penetration rate of renewables.

In line withnational policies, Taipower will continue to increase the share of renewable energy in its power mix and actively pursue the research and development of emerging renewable sources as it strives to deliver lower-carbon, more sustainable electricity to users across Taiwan.

Development Strategies and Action Plans

- Gas-Fired Generation Program:Expand self-owned gas-fired units and procure power from independent power producers (IPPs) that use natural gas.
- Carbon Capture and Storage (CCS): Conduct a preliminary feasibility study on carbon capture and storage at the Linkou Power Plant.
- Energy Storage:Currently conducting a feasibility assessment of long-duration energy storage facilities, focusing on three commercially available electrochemical battery technologies:lithium-ion, sodium-sulfur, and vanadium redox flow batteries.
- Ammonia Blending Power Generation:Plan to conduct 5% ammonia blending demonstration tests at the Dalin and Linkou Power Plants by 2030.

Promoting Renewable Energy Through Diversified Development Approaches

1. In-House Development:In addition to continuing to install renewable energy facilities on Taipower-owned land and rooftops, the Company will evaluate the feasibility of leasing land from the National Property Administration and industrial parks to develop solar, onshore wind, and geothermal power projects.
2. Collaborative Development: Drawing on international models, Taipower will expand renewable energy deployment by forming strategic alliances with developers through reinvestments and equity partnerships to participate in offshore wind block development.
3. Forward-Looking Demonstration and Leadership: Taipower plans to collaborate with international geothermal developers and introduce advanced geothermal technologies, while also exploring partnerships with domestic developers. These initiatives aim to encourage broader private sector participation and support the government in accelerating geothermal development and scaling up capacity.

Current Status and Progress of Renewable Energy Development

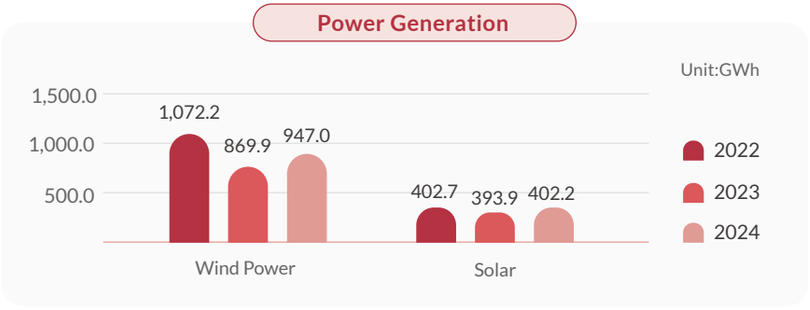
To meet the growing demand for grid integration as green power production expands and to support Taiwan's energy transition policy, Taipower launched Phase I of the Green Energy Project in 2021. The project aims to develop a total installed capacity of 115 MW in renewable energy systems-primarily solar photovoltaics and onshore wind-between 2022 and 2027.

By the end of 2024, Taipower's total installed capacity reached 57,923 MW, with thermal power accounting for 58.6% and renewable energy increasing to 35.3% of the total capacity.

Renewable Energy Generation Status in 2024

Type of Project / Program	Deployments	Installed Capacity (MW)	Annual Generation (GWh)	Estimated Households Supplied [2]
Hydropower	90	1,826[1]	3,536	982,000
Wind Power	28sites, 203 units	439	947.0	263,000
Solar Power	62 sites	291	398.1	112,000
Geothermal Power	1 sites	0.84	3.0	841

Note1:Hydropower includes only conventional hydro generation.
2:Based on data published by Taipower, published data, the average household uses about 300 kWh per month, or approximately 3,600 kWh annually.



Taipower will continue to serve as a pioneer in the renewable energy sector.In addition to its nearly century-long legacy of using hydropower, the Company has established comprehensive development plans for wind and solar power in recent years. Taipower is also actively investing in the research and development of emerging energy sources, such as geothermal and biomass energy. The current status of renewable energy projects promoted by Taipower is summarized as follows:

Current Status of Renewable and Low-Carbon Energy Development in 2024

Hydropower

Phase 1 of the Small Hydropower Project includes 7 sites and 13 units (16.5 MW); commenced commercial operation in August 2024.

Onshore Wind Power

Since 2000, 27 wind farms with 182 turbines have been built, totaling approximately 338 MW by the end of 2024.

Offshore Wind Power

Phase 1 (109.2 MW) began operation at the end of 2021 off the coast of Fangyuan, Changhua County.

Phase 2 is under construction and scheduled for grid connection in 2026.

Solar Power

Launched in 2008; the total installed capacity reached 290.7 MW by the end of 2024, including 150 MW in Tainan Salt Fields and 100 MW in Changbin, Changhua County.

Geothermal Power

- Expanded the Renze Geothermal Power Plant in Yilan County and continued exploration of geothermal resources in Guguan and Yilan.
- Signed a Memorandum of Understanding (MOU) with an international team to jointly develop geothermal resources in The Datun Volcanic Group.
- Collaborated with landowners and developers through public solicitations to invest in geothermal power plant construction.

Marine Energy

Wave data collected and offshore feasibility assessed near Green Island (2023–2024); results will guide future development.

Biomass Power Generation

Focus on CFB technology with units of 10–25 MW. Taipower continues to monitor global trends and collect technical information.

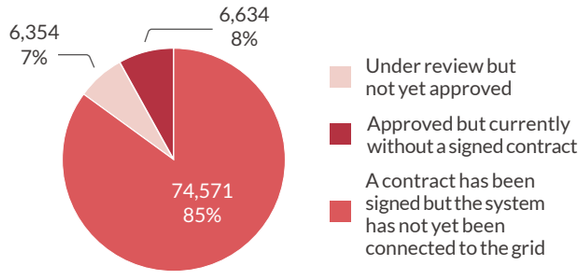
The Current Status of Renewable Energy Grid Connections

To support the government's renewable energy development policies, Taipower has adjusted its grid connection strategy based on emerging technologies and the latest international development trends, while ensuring grid operational safety and taking its own financial and operational conditions into account. These efforts aim to meet the growing demand for renewable energy grid connections. The cumulative number of cases and the installed capacity for various types of solar photovoltaic systems is shown in the table below (as of December 31, 2024).

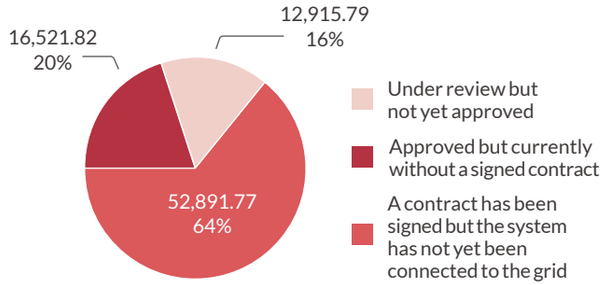
Accumulated Number of Cases and Installed Capacity of Various Types of Solar Power (as of December 31, 2024)

Case Status	Number of Cases	Installed Capacity (MW)
Grid-Connected Cases	71,581	14,270
Official Power Purchase Cases	60,538	11,660.78

Solar Power Accepted Cases (Number)



Solar Power Accepted Capacity(MW)



Challenges and Response Strategies

Renewable energy is subject to weather and seasonal variability, resulting in intermittent and unpredictable generation. To address these challenges, Taipower is implementing a diversified strategy to support the growth of renewables-encompassing solar, wind, and emerging technologies such as floating offshore wind, geothermal, and marine energy. In line with government policy, Taipower ensures investment certainty through 20-year fixed power purchase agreements, provides a grid-friendly integration environment, and advances grid and energy storage infrastructure to resolve intermittency issues and increase the share of renewables in the energy mix.

Smart Operations and Generation Forecasting

1.Operation and Maintenance (O&M) Management System:Taipower is developing an O&M management system to track equipment failures, maintenance schedules, and repair activities. By leveraging data analytics, the system helps reduce downtime, shorten repair cycles, and improve overall equipment availability.
2.Generation Forecasting System:Taipower has independently developed a forecasting system for solar and wind power generationthat provides48-hour ahead predictive data to support grid dispatching and system planning.

Average Availability Rates of Renewable Energy

	2022	2023	2024
Availability Rate of Wind Power (%)	92.10	88.17	88.11
Capacity Factor of Solar Power (%)	16.16	15.83	15.99

Note:1.Annual Wind Power Availability Rate = Unit Generating Hours (Including Standby Hours)/Annual Number of Hours
2.Solar Power Capacity Factor = Annual Power Generation of Units/Device Capacity * Year-Round Hours

Grid Enhancement and Renewable Energy Integration

1.Grid Enhancement Projects: A total of 46 grid reinforcement projects have been planned. Of these, 33 projects have been completed or partially completed thereby increasing renewable energy grid capacity by 6.05 GW. The remaining 13 projects are in progress and are expected to add an additional 5.775 GW of grid capacity.
2.Decentralized Installation and Tiered Grid Access: Large-scale renewable projects are connected to the transmission system, while small-scale projects are connected to the distribution system, ensuring optimal utilization of feeder capacity.
3.Shared Substation Model: Private developers construct shared substations to integrate projects located in fishery–solar co-location zones and on non-arable land. This model improves transmission efficiency and accelerates the grid connection process.
4.Preventing Feeder Capacity Hoarding: Since July 2018, Taipower has implemented measures such as capacity reviews, connection fee payments, and application deadlines to prevent non-committed applications from occupying feeder capacity and to reduce project queuing.
5.Relaxing Feeder Connection Limits: Based on actual operating conditions, feeder capacity limits and transformer reverse-flow conditions have been reassessed and expanded to enhance overall grid hosting capacity.

Exploring Emerging Renewable Energy Technologies

Forward-Looking Geothermal Technology	Taipower is conducting geothermal exploration in Gengziping, Shenao, and Lile under its 2035 development plan. International technology references and feasibility assessments are being used to evaluate future development potential.
Offshore Wind Farm Development	In line with the Energy Administration's 100 MW floating wind demonstration policy, Taipower surveyed waters 30–90 meters deep from Taoyuan to Pingtung to assess generation potential, technical risks, and regulatory conditions. Development strategies for self-building and joint ventures are being formulated.
Guguan Geothermal Project	Following the Renze project, Taipower and CPC are drilling and testing in Guguan to verify geothermal resources and evaluate power generation potential.

台灣電力公司
Taiwan Power Company

03 CHAPTER

Agent of Environmental Friendliness

Stakeholders

Government Agencies, Civil Groups, and Electricity Users

100%

The coal ash reuse rate reached 97.2%, and the desulfurized gypsum reuse rate 100%.

1,727 times

A total of 1,727 voluntary and environmentally-Voluntary Load Reductions were carried out across all power plants in 2024.

reduced 71.9%

Air pollutant emission intensity was reduced by 72% compared to 2016 levels in 2024.

As a power utility, Taipower is committed to maximizing its positive impact and minimizing environmental harm. The Company continues transitioning to cleaner energy and enhancing energy efficiency in collaboration with society and businesses. This approach aims to achieve both economic growth and environmental sustainability.

To address air quality and climate issues, Taipower is adjusting its energy mix by increasing the share of power generated from gas and renewables, strengthening pollution control equipment, and improving energy resource efficiency. The Company will continue working to reduce the environmental footprint of power facilities and fulfill its commitment to environmentally friendly operations.

3.1 Strengthening Environmental Management

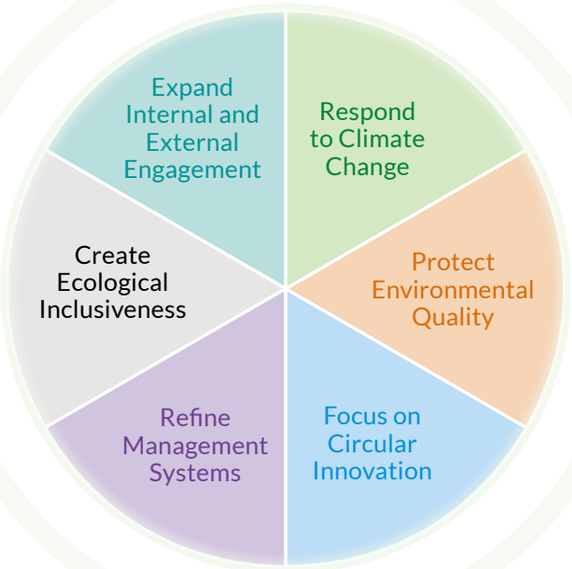
3.1.1 Environmental Policy and Environmentally Friendly Initiatives 305-4

As a power utility, Taipower must balance energy quality, supply security, and environmental sustainability. Guided by its mission to provide reliable electricity through environmentally friendly and cost-effective means, and its vision of becoming a trusted, world-class energy provider, Taipower actively responds to key environmental challenges and global sustainability trends.

In response to the UN's Sustainable Development Goals (SDGs) and Taiwan's 2050 net-zero emissions goal, Taipower has adopted six strategic directions within its environmental policy. These guide the implementation of company-wide action plans in adherence to the slogan of "One Integration (internal and external dialogue), Two Reductions(carbon and pollution), and Three Transformations" (intelligent operations, ecological harmony, and circularity). Through this approach, Taipower aims to build an environmentally friendly power infrastructure and establish a green, sustainable power generation, transmission, distribution, and retail system.

Taipower also adjusts its environmental initiatives in response to international trends, regulatory changes, and operational needs. Cross-department collaboration ensures that each business unit proposes forward-looking and feasible sustainability actions that are aligned with its operation and contribute to Taipower's vision of being a green enterprise.

The Six Major Aspets of Taipower's Environmental Strategy



Taipower's Environmental Policy – 2024 Highlights

Strategic Aspect	Description	2024 Highlights
Respond to Climate Change	Taipower continues to implement mitigation and adaptation measures in response to climate change. These include GHG management, renewable development, and investment in low-carbon technologies	Taipower continued to advance power sector transformation through renewable energy expansion, the increased use of natural gas, and coal reduction. Air pollution control equipment for the Taichung Power Plant's Units #5 and #6 was upgraded to enhance emission control performance, and Gas Unit #9 at the Datan Power Plant was added to the power grid to support low-carbon electricity supply.
Protect Environmental Quality	Ongoing reductions of Taipower's environmental and public health impacts through air, water, and radioactive waste.	As a result, the air pollutant emission intensity of thermal power generation in 2024 decreased by 71.9%, and CO_2 emission intensity dropped by 11.7% compared to the 2016 baseline.
Focus on Circular Innovation	Promote resource efficiency and circular resource use in line with circular economy principles; develop circular business models.	A dormitory renovation project at the Training Institute was selected as a demonstration site and incorporated circular design principles for space, energy, materials, and water.

Taipower Environmental Policy – 2024 Highlights

Strategic Aspect	Description	2024 Highlights
Refine Management Systems	Strengthen and integrate environmental management systems and develop smart power management capabilities.	A total of 3.403 million smart meters were deployed, covering 81.52% of electricity usage nationwide.
Create Ecological Inclusiveness	Integrate ecology and biodiversity into facility planning and operations, and protect surrounding ecosystems.	The Wanta Plant restored local Taiwan soybeans on-site; The Maanshan NPP signed an MOU with Kenting National Park for butterfly conservation; The Hsinta Plant earned environmental education certification for its wetland conservation; Dajia River Plant improved fishways and deployed AI-based underwater monitoring with public education programs.
Expand Internal and External Engagement	Maintain active communication with internal and external stakeholders, share environmental and energy transition efforts, and support Taiwan's energy transformation.	Taipower hosted exhibitions and public events such as the Kilowatt Design Award and the "Love Mother Earth"campaign, reaching over 920,000 people with environmental communications in 2024.

In line with international sustainability trends, social expectations, and regulatory developments, and with consideration for Taipower's operational status, each unit through cross-departmental collaboration formulated feasible, forward-looking representative actions based on its business characteristics to help shape the Company's green enterprise vision.

Implementing Environmental Impact Assessments

To ensure a stable power supply, Taipower continues to develop and renovate facilities across Taiwan. However, these projects run the risk of impacting local environments and communities through pollution, noise, waste generation, or the disruption of natural and cultural resources. To mitigate these risks, Taipower conducts environmental impact assessments (EIAs) and public reviews before development, and implements continuous environmental monitoring during construction.

Development Projects Approved by the Ministry of Environment in 2024

- Offshore Wind Power Phase II Project – Second Revision of the Environmental Impact Statement, including review conclusions and updated cetacean protection measures
- Environmental Impact Variance Analysis Report for the Taichung Gas-Fired Unit Project – Addition of the a New Switchyard
- Environmental Impact Statement for Phase II of the Taichung Power Plant Gas-Fired Unit Construction Project
- Environmental Impact Statement for Penghu's Zhongtun Wind Turbine Renewal Project

Environmental Accounting

To clearly evaluate Taipower's investment in environmental protection, the Company has implemented an environmental accounting system (EAS) since 2008. Environmental expenses are categorized into capital expenditures (such as depreciation and amortization of environmental assets) and recurring expenses (such as reimbursements related to environmental activities). When employees make purchase requests, conduct procurements, or submit reimbursement requests, they input the appropriate environmental accounting codes. These are then compiled in the EAS for the analysis and tracking of environmental protection investments.
In 2024, Taipower's capital expenditure on environmental protection amounted to approximately NT$5.107 billion, and recurring expenses were approximately NT$3.204 billion.

External Environmental Communication Achievements

- A total of 49 positive media reports were published following press events during the 2024 Environment Month.
- Approximately 180 participants attended the lectures and forums held during the 2024 Environment Month in 2024.
- Around 980 participants joined Environment Month outreach activities that also lead to 28 instances of positive media coverages in 2024.
- The documentary "A Day as a Bat Box Inspector – Exploring a Green Energy World for Bats"reached over 12,000 views in2024.
- The documentary titled "Near-Zero Mission – Air Pollution Control Improvement at Taichung Power Plant Units 5–10" reached nearly 3,000 views in 2024.
- Public site surveys and hearings were conducted for the Third Nuclear Power Plant Decommissioning Plan and the Dajia River Guangming Pumped Storage Hydropower Project in 2024.

On-site inspection was conducted for the Dajia River Guangming Pumped Storage Hydropower Project

On-site inspection was conducted for the Decommissioning Plan of the Third Nuclear Power Plant

3.1.2 Energy Resource Management

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Fuel Usage Management

To promote environmental sustainability, Taipower has opted for fuels with low ash, sulfur, and nitrogen content. The Company is committed to gradually transitioning from coal-fired to gas-fired power generation. It continues to construct and upgrade gas-fired units and their associated facilities to minimize pollutant emissions from thermal power generation.

Taipower's Use of Fuels

Types	2022	2023	2024
Gas (millions of m^3)	16,395	15,671	16,750
Coal (millions of tons)	28.115	26.823	24.563
Fuel Oil (1,000 kL)	933	822	928
Nuclear Fuel (10,000 lbs)	115.83	70.18	12.10

Sulfur Hexafluoride (SF_6) Reduction

Sulfur hexafluoride (SF_6) is a greenhouse gas with a high global warming potential that can gradually escape into the atmosphere during long-term use. Due to its excellent insulating properties, it is widely used in Taipower's power generation and transmission equipment. To reduce SF_6 emissions, Taipower has introduced reduction measures, including a maintenance procedure requiring relevant units to reclaim and purify SF_6 before substation overhauls, and to refill the purified gas afterward. This approach lowers greenhouse gas emissions, mitigates climate change, and supports circular economy and resource regeneration goals.

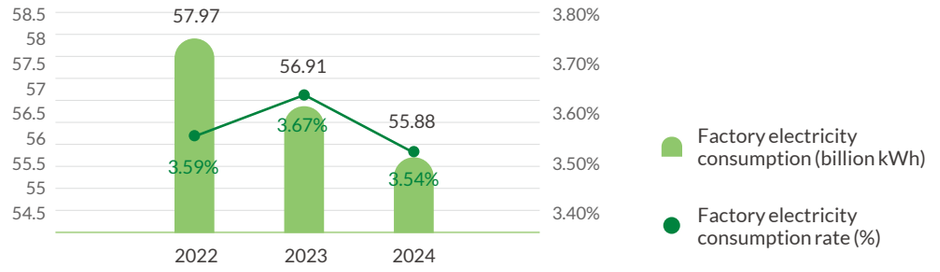
Improving the Energy Efficiency of Operations

Taipower has established a Material Flow Management Information System to monitor the inputs and outputs of energy, resources, and waste at each unit. All units are required to submit annual reports, allowing the Company to track and manage waste conditions. Moving forward, Taipower will continue to inventory the flow of energy and resources across its power generation, transmission, distribution, and sales value chains, while developing and expanding strategies to enhance overall efficiency.

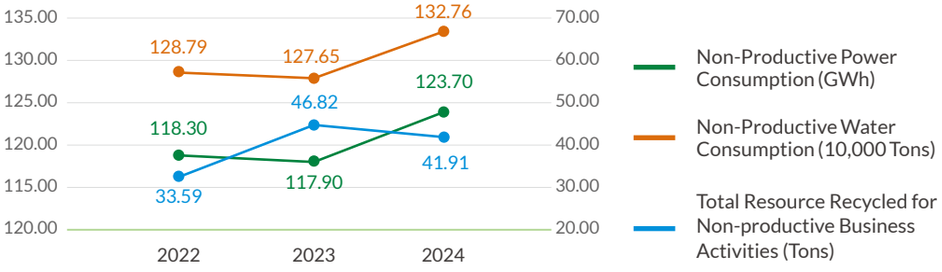
In 2024, Taipower continued to implement the Executive Yuan's Electricity Efficiency Enhancement Program for Government Agencies and Schools with an aim of achieving zero annual growth in electricity consumption. It also promoted water conservation in accordance with the Ministry of Economic Affairs' Water Saving Normalization Action Plan. Led by the General Management Office, the program was extended to regional offices and power plants to implement energy-saving and carbon-reduction actions. Monthly tracking of water, electricity, and fuel usage is conducted, and annual evaluations are carried out to recognize outstanding performance.

Taipower actively promotes energy-saving programs at thermal power plants through equipment upgrades and operational adjustments. Initiatives include the procurement of high-efficiency vehicles, lighting, elevators, air conditioning, and water-use systems. The Company also enhances unit efficiency by adopting variable-frequency motors, upgrading core components, and adjusting equipment operation modes such as vacuum pumps in condensers, ventilation fans in plant buildings, and steam warm-up timing for boiler soot-blowing-to improve overall energy-saving performance.

In-Plant Power Consumption Status of All Thermal Power Plants



Total employee consumption and resource recycling within the scope of Taipower



Notes:1.The statistics presented reflect resource recycling results from the Taipower Headquarters building.
2.Recycled items include paper, tin and aluminum cans, other metal products, plastic containers, glass containers, and more.
3. In 2024, higher average temperatures, power plant expansions, and increased personnel contributed to a rise in electricity consumption. Taipower aims to enhance energy efficiency through equipment upgrades.

The Effectiveness of Non-Production Resource Management

Item	Measures in 2024
Water-Saving	● Priority was given to water-efficient equipment and rainwater reuse (e.g.,for toilet flushing and plant watering) to reduce tap water consumption. ● In line with the Water Saving Normalization Action Plan, water-saving equipment was installed, and outdated equipment replaced in offices, at construction sites, and in dormitories. ● Leak inspections of pipelines and the reuse of rainwater, condensate, andrinse water were strengthened to enhance water conservation.
Power-Saving	● Priority is given to the procurement of electrical appliances with energy efficiency labels or classified as level 1 or 2 in energy performance. ● Preference is given to air conditioning units with higher Cooling Seasonal Performance Factor (CSPF) values. ● Adjust the chilled water outlet temperature of central air-conditioning systems moderately to maintain cooling efficiency while reducing energy use. ● Establish energy management systems to enhance energy efficiency through monitoring and analysis of electricity usage. ● Actively replace outdated energy-intensive equipment , such as air conditioners and lighting,in office areas. ● Maintain indoor office temperatures at 26–28° C, supplemented with circulator fans. ● Shut down chiller units 30 minutes before the end of working hours, while maintaining water circulation and air flow. ● Prohibit the use of non-official electrical appliances in office spaces. ● Implement energy-saving operational modes for elevators and office equipment in all units.
Fuel-Saving	● Promoted carpooling in vehicle dispatch and strengthened vehicle maintenance andinspection to reduce fuel consumption. ● Allocated budget resources to accelerate the replacement of fuel-powered vehicles with electric vehicles, while increasing the usage rate of existing EVs. ● Vehicle fuel consumption at the headquarters decreased by 831 liters in 2024 as compared to 2023.
Paper-Saving	● Continued to implement paper-reduction initiatives through the use of official digital documents and online approval systems. achieving performance rates of over 70% and 85%, respectively. These figures are based on company-wide document statistics in accordance with the official formula for the Electronic Document Energy Saving and Paper Reduction Program. ● Additionally, double-sided printing was promoted among employees, resulting in the conservation of approximately 3.13 million sheets of paper.

Taipower will continue to phase out outdated and energy-intensive electrical equipment that has reached the end of its service life. With the goal of achieving zero growth in electricity consumption compared to the previous year, the Company will implement appropriate usage controls and introduce energy-efficient equipment to reduce energy consumption without compromising office environment quality. Additionally, Taipower has allocated a budget to expedite the replacement of fuel-powered vehicles with electric vehicles and to enhance the utilization of existing EVs.

3.2 Environmental Impact Management

3.2.1 GHG M 305-5 a 305-6 e 305-7)5-1 305-4

Material Topic: Environmental Impact Management

Policy	• Taipower aims to reduce environmental impact and fulfill its corporate responsibilities through resource recycling and reuse, air pollution control, water conservation, and waste management practices.
Management Approach	• Resource Recycling:Reduce waste and promote reuse through the auctionofdiscardedcables,theresaleofironreels,andonlinesalesplatforms. • Air Pollution Control: Reduce thermal unit loads during periods of poor air quality and gradually upgrade pollution control equipment to balance electricity supply and environmental protection. • Water Resource Management:Promote rainwater harvesting and wastewater recycling to reduce water consumption in power generation and support sustainable use. • Waste Disposal: Classify, store, and remove waste in accordance with regulations, and rigorously track waste flow to prevent illegal dumping. • Waste Reuse: Promote reuse of coal ash for land backfill and convert desulfurized gypsum into construction materials to improve resource utilization and reduce the environmental burden.
Action Plans	• Net GHG emission intensity from thermal power units • Air pollutant emission intensity
Actual Performance in 2024	• Net GHG emission intensity from thermal power units decreased by11.7% compared to 2016. • Air pollutant emission intensity decreased by 71.9% compared to 2016.
Targets for 2030	• Reduce net GHG emission intensity from thermal power units by 17% compared to 2016. • Reduce air pollutant emission intensity by 75% compared to 2016.

Greenhouse Gas Emissions

Taipower is committed to developing high-efficiency power generation technologies in response to the global low-carbon energy transition. In recent years, the Company has actively pursued energy transformation by expanding the use of low-carbon power to reduce the carbon intensity of electricity generation. It has also promoted the use of cleaner energy sources to reduce greenhouse gas (GHG) emissions and provide cleaner electricity for both industries and households in Taiwan. For thermal power generation, Taipower focuses on two key strategies:

Gas Expansion and Coal Reduction

In 2024, the trend of using"gas as primary, coal as supplementary" continued, with the share of gas-fired generation exceeding that of coal-fired.

Gas-Fired Unit Upgrades

Older gas-fired combined-cycle units are gradually being replaced with newer, higher-efficiency combined-cycle gas turbines.

Taipower's GHG emissions originate from thermal power generation, coal storage yards, fuel-consuming equipment, insulating gases in electrical switches, and refrigerants in air conditioning systems. In compliance with the Climate Change Response Act and its relevant regulations, Taipower conducts annual GHG inventories that adhere to the"GHG Inventory and Calculation Guidelines." Each year, responsible units perform internal inventories and verifications, while third-party certification bodies are commissioned to conduct external verification. In 2024, Taipower disclosed that its total Scope 1 GHG emissions amounted to 91.45 million metric tons, with 90.78 million metric tons attributed specifically to emissions from coal, oil, and gas-fired thermal power units.

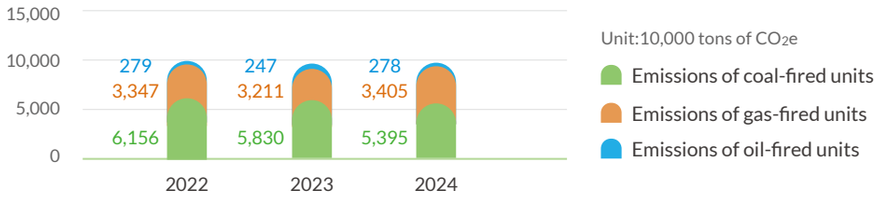
Greenhouse Gas Emissions

Unit:10,000 tons of CO_2e

Year	CO_2	CH_4	N_2O	SF_6	HFC	PFCs	NF_3
2022	9,775	25	31	12	3	0	0
2023	9,286	27	26	8	1	0	0
2024	9,085	25	25	7	3	0	0

Note:As Taipower is the primary electricity provider in Taiwan, the Company's total emissions inventory includes only direct (Scope 1) emissions. Indirect emissions from purchased electricity (Scope 2) are excluded to avoid double-counting.

Emissions of Thermal Power Units



Strengthening Air Pollution Emission Reduction

Taipower employs a three-stage approach to reduce air pollution from thermal power plants short-term load reduction, mid-term environmental upgrades, and long-term gas-fired unit development so that it can balance power supply stability with environmental protection.

1 Air Pollution Control Measures

During periods of poor air quality, Taipower implements environmental dispatching and load reduction to decrease emissions of PM, SOx, and NOx. Low-ash and low-sulfur fuels are prioritized, with a gradual shift toward cleaner energy sources. Continuous Emissions Monitoring Systems (CEMS) are installed at each plant to ensure compliance with emission standards.

2 Air Pollution Improvement Plans

Of nine scheduled improvement projects, seven have been completed. Ongoing upgrades at the Taichung Power Plant include equipment modernization and indoor coal storage construction. Taipower aims to reduce coal use by 3 million metric tons starting in 2032 and fully phase out coal by the end of 2034.

3 The Gas Expansion and Coal Reduction Policy

Taipower is advancing the construction of new gas-fired units to accelerate energy transition efforts.

The Actual and Regulatory Values of Major Air Pollutants

Unit: kg/GWh

Year	PM		SOx		NOx	
	Actual Value	Regulatory Value	Actual Value	Regulatory Value	Actual Value	Regulatory Value
2022	5	60	84	277	169	359
2023	5	58	77	263	160	331
2024	6	53	66	212	144	269

Note:The Regulatory values are calculated by estimating the total air pollution emissions for each thermal power unit based on the emission standards, and then dividing the result by the gross electric power generation of all thermal power plants in the current year.

Management of Stationary Emissions

Short-Term Response – Load reductions for coal and oil-fired units during periods of poor air quality, with gas-fired units prioritized in dispatch

To demonstrate its commitment to environmental protection, Taipower has implemented voluntary environmental load reductions at coal and oil-fired thermal power plants since November 2017, on the condition that power system stability can be maintained. These measures include both proactive and friendly reductions. In 2024 alone, load reductions were carried out 1,727 times. By the end of December 2024, the cumulative number of load reductions had reached 10,653, with a total generation reduction of 99,059.91 GWh.

Principles for Load Reductions in Response to Air Pollution Levels

Reduction Action	Criteria for Taking Action	Action Planning
Voluntary Load Reductions	The Ministry of Environment's Air Quality Monitoring Network releases AQI forecasts daily at 4:30 p.m. If any area is forecast to reach a red level or higher (AQI > 150).	Provided that power supply is secure, coal-fired power plants located in or upwind of the affected air quality area will reduce their loads in advance during off-peak nighttime hours (e.g., 12:00 a.m.–7:00 a.m.).
Autonomous Load Reductions	When real-time data from the Environmental Protection Administration's Air Quality Monitoring Network shows that one-third or more of the monitoring stations within an air quality region have reached a red-level (Level 1) warning or above.	If the power supply is sufficient, coal or oil-fired power plants within the affected air quality area are scheduled for load reductions.
Mandatory Load Reductions	Air quality reaches severe deterioration levels (AQI > 200, 300, or 400).	Each power plant must comply with the Emergency Control Regulations for the Severe Deterioration of Air Quality, under which actual emission reductions must reach 10%, 20%, or 40% of the plant's daily permitted emission levels.

Load Reductions in 2024

Load Reduction Action	Frequency of Load Reductions (Times)	Reduced Load Amounts (10 MWh)		
		Annual Overhauls (Maintenance)	Non-Annual Overhauls (Maintenance)	Total
Voluntary Load Reductions	1,687	702,403	951,841	1,654,244
Autonomous Load Reductions	40	8,781	15,891	24,672
Mandatory Load Reductions	0	0	0	0
Total	1,727	711,184	967,732	1,678,916

Mid-Term Approach – Inventory, upgrade, and install high-efficiency air pollution control equipment

Taipower continues to carry out the comprehensive inventorying and upgrading of existing air pollution control equipment, while planning the installation of high-efficiency systems. Operational measures are also implemented to maximize pollutant removal efficiency.

Advanced and more efficient pollution control devices are installed in new power plants or integrated into upgrades at existing plants. To ensure emission transparency, continuous emission monitoring systems (CEMS) are installed on chimneys to facilitate real-time oversight.

Between 2017 and 2025, Taipower allocated a total of NT$69.229 billion to upgrade air pollution control equipment. Upon completion of these initiatives, the improvements are expected to reduce annual emissions of particulate matter (PM) by 398 metric tons, sulfur oxides (SOx) by 7,118 metric tons, and nitrogen oxides (NOx) by 15,460 metric tons.

The installed systems include electrostatic precipitators (EPs) with 99.8% dust removal efficiency, NOx removal efficiencies of over 80%, and SOx removal efficiencies exceeding 95%.

Long-Term Approach – A Power Source Shift from "Primarily Coal with Gas as Support" to "Primarily Gas with Coal as Support"

In line with national energy policy,Taipower is gradually shifting its thermal power generation from "primarily coal with gas as support" to "primarily gas with coal as support" in addition to increasing the share of renewable energy. According to the power development plan,all new thermal units will be gas-fired, aside from the ultra-supercritical coal-fired units at Linkou and Dalin, . The new gas fired-thermal units are located at the Hsieh-ho, Tunghsiao, Datan, Taichung, and Hsinta plants. This approach ensures both improved air quality and a stable power supply.

Once the new gas-fired units at Taichung and Hsinta begin commercial operation, some of the existing coal-fired units will be decommissioned or converted to standby mode, contributing positively to air quality improvement.

Management of Mobile Emission Sources

According to analysis by the Ministry of Environment, large diesel trucks account for the highest share of emissions among mobile pollution sources. In response, Taipower has inventoried its phase-one and phase-two compliant large diesel vehicles and is cooperating with the Ministry to phase out outdated vehicles. Each decommissioned older vehicle is estimated to reduce PM2.5 emissions by approximately 67 kilograms per year. For large diesel vehicles that meet phase-three standards, Taipower has installed diesel particulate filters, which are expected to reduce PM2.5 emissions by about 10 kilograms annually per vehicle.

Management of Fugitive Emission Sources

Taipower's fugitive emission sources include coal yards and construction sites. In addition to complying with the Management Regulations for Construction Project Air Pollution Control Facilities issued by the Ministry of Environment, Taipower has established guidelines for both Promoting Environmentally Friendly Measures at Green Construction Sites and for Penalties Imposed on Contractors for Violations of Environmental Protection Clauses in Contracts. These guidelines are incorporated into contracts based on project-specific conditions and are used to require contractors to carry out environmental measures accordingly, thereby reducing fugitive emissions during construction.

3.2.2 Improving Water Resource Use Efficiency

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Water Resources Management

Taipower monitors the Ministry of Environment's wastewater discharge standards and regulatory updates in accordance with ISO 14001. For example, 24 new control items were added at the end of 2017. From 2021, ammonia nitrogen was gradually regulated, and limits on mercury, arsenic, and selenium in coal-fired flue gas desulfurization wastewater were tightened. From 2026 to 2031, water pollution fees will increase annually. In 2019, regulations were amended to require periodic testing and reporting, with penalties for violations. In response to regulatory changes, power plants increase testing frequency and reduce pollution in the short term, while optimizing wastewater treatment and equipment resilience in the long term.

During droughts, contingency measures include stopping irrigation, reducing domestic and miscellaneous water use, maintaining high storage tank levels, and reallocating agricultural water. Nuclear power plants have improved wastewater reuse efficiency, achieving a radioactive wastewater recovery rate over 99%, and strengthened chemical control and recycling.

RADIOACTIVE WASTEWATER RECOVERY RATE OVERTAKE

99%

Water Consumption for Power Generation at Thermal Power Plants in 2024 (Unit: m3)

Power Plant	Volume of Tap Water	Volume of Well, River, or Desalinated Water	Total
Hsieh-ho	273,519	6,790	280,309
Linkou	539,516	0	539,516
Datan	503,576.6	0	503,576.6
Tunghsiao	706,079	0	706,079
Taichung	5,283,908	0	5,283,908
Hsinta	1,163,606.2	0	1,163,606.2
Dalin	126,141	381,126	507,267
Nanbu	115,800	0	115,800
Jinshan	0	49,395.4	49,395.4
Tashan	0	26,012	26,012
Total	8,712,145.84	463,323.4	9,175,469.24

Taipower Water Consumption Statistics

Power Type		Unit	2022	2023	2024
Total Water Consumed	Thermal Power	m^3	9,503,885	8,488,819	9,175,469
	Nuclear Power	10,000 tons	63.7	25.43	18.03
Total Water Discharged	Thermal Power	m^3	3,239,482	2,699,166	2,878,480
	Nuclear Power	10,000 tons	7.11	3.49	3.37
Total Water Withdrawal	Thermal Power	m^3	12,743,367	11,187,985	12,053,949
	Nuclear Power	10,000 tons	70.81	28.92	21.40
Water Intensity	Thermal Power	ton /GWh	58.82	52.17	60.86
	Nuclear Power	ton /GWh	27.80	14.83	15.37

Note:Total water withdrawal = total water consumed (i.e., water used) + total wastewater discharge.

Wastewater Recycling and Reuse

Taipower promotes rainwater harvesting and wastewater reuse at thermal power plants to reduce water consumption. Reclaimed water is primarily used for landscape irrigation, dust suppression on roads and coal piles, boiler sealing and bottom ash handling, and other processes. Each plant monitors water usage monthly and quarterly in accordance with the "Water Management Procedures for Thermal Power Plants"under the Fossil-Fuel Power Department and uses water balance diagrams to control and track resource efficiency.

Recycled and Reused Water at Thermal Power Plants Unit: tons

	2022	2023	2024
Rainwater Reuse	61,292.7	50,513	86,802
Wastewater, Process Water, and Boiler Blowdowns	2,385,843	2,037,828	2,100,816

Note:Wastewater from flue gas desulfurization (FGD) is not reused due to high salinity, which may cause equipment corrosion and soil salinization. It is therefore excluded from the reuse statistics.

3.2.3 Waste Management 306

Taipower implements mitigation and improvement measures to minimize the impact of major waste generated across all stages of its value chain, including power generation, transmission, distribution, and sales. The following outlines the measures taken for each type of power generation.

Mitigation and Improvement Measures for Major Waste by Power Generation Type

Generation Type	Main Waste	Environmental Impact	Materiality Narrative	Mitigation and Improvement Measures
Thermal Power	Coal ash (fly ash, bottom ash)	Improper storage may result in environmental pollution	Thermal power accounts for approximately 78.5% of Taipower's total electricity generation. Waste and by-products from generation are properly managed or reused	Coal ash is managed in accordance with the Waste Disposal Act and handled by licensed contractors for reuse as concrete admixtures or backfill materials
Nuclear Power	Low-level waste (resin, waste liquid, residues, protective clothing, components); high-level waste (spent nuclear fuel)	All nuclear waste is managed under the Ionizing Radiation Protection Act. To date, no environmental impact has been reported	Taipower strictly manages radioactive waste storage to ensure no harm to the environment or nearby communities	Waste is stored in temperature- and humidity-controlled facilities to ensure isolation. Reduction targets are set annually to lower low-level waste volumes
Renewable Energy	Decommissioned equipment	No waste is generated during operations; equipment has a long lifecycle, and environmental impact is minimal	Hydropower, wind, and solar generation rely on natural resources and have long service lives. Some wind turbines are now reaching decommissioning	Taipower works with the Ministry of Environment to treat retired blades as cement kiln fuel, and explores other reuse options such as construction or plastic additive materials. Licensed contractors will handle waste removal and recycling to minimize impact

Taipower manages coal ash accumulation by controlling ash levels and evaluating the load of fly ash, taking into account factors such as wind force, seismic activity, soil pressure, silo wall stress, and temperature variations. The Company analyzes structural safety by assessing bearing capacity, deflection, displacement, subsidence, and angular variation to ensure silo integrity and minimize potential risks. The accumulation level of coal ash is classified based on its potential hazard. Details for each coal-fired power plant are provided below:

Diameter, Height, and Actual Controlled Ash Levels of Fly Ash Silos at Various Coal-fired Power Plants

Power Plant	Linkou	Taichung	Dalin	Hsinta
Number of Silos	2	10	2	4
Diameter (m)	16.5	15~16	16	17
Height (m)	28	16~18	26.6	24
Control Ash Level (m)	22	14	10	20

Industrial Waste Management Mechanisms

Taipower classifies, stores, transports, and reports on industrial waste in accordance with the Waste Disposal Act. Waste is tracked using a triplicate manifest system to prevent illegal disposal. For radioactive waste, short, medium, and long-term treatment and disposal plans are developed based on waste type. Taipower also monitors the "idle material rate"and "idle waste processing rate"annually to ensure management effectiveness.

Nuclear Energy-Related Waste Disposal Methods

	Short-Term	Medium-Term	Long-Term
Storage and Disposal Processes for Low-Level Radioactive Waste	Before 1996:Temporarily stored at the Lanyu Low-Level Radioactive Waste Storage Site. Since 1996: Temporarily stored at low-level waste storage facilities at nuclear power plants.	A centralized temporary storage facility is being planned, and waste will be transported to this facility for storage.	Waste will be transported from short-term or medium-term temporary storage facilities to a final disposal site.
Storage and Disposal Processes for Used Nuclear Fuel	In keeping with international norms, used nuclear fuel is stored in a dry storage facility after temporary storage in a used nuclear fuel pool.		

Utilization of Industrial Waste

Reuse of Coal Ash and Desulfurized Gypsum in 2024

Waste	Coal Ash	Desulfurized Gypsum
Reuse Practice	Used in trench backfilling projects and sold as construction materials to increase reuse and reduce environmental impact.	Reused by the cement and fire-retardant board industries.
2024 Production	1,805 thousand tons	261 thousand tons
2024 Reuse Volume	1,754 thousand tons	261 thousand tons
2024 Reuse Ratio	97.2 %	100 %

Sale of Industrial Waste

Taipower disposes of waste cables and metal waste generated during operations through public bidding. In accordance with the relevant regulations, the Company commissions qualified vendors to handle removal and disposal, and all waste leaving the premises is tracked and reported online using the triplicate form system to ensure legal and compliant disposal. Pursuant to the Regulations Governing Determination of Reasonable Due Care Obligations of Enterprises Commissioning Waste Clearance, Taipower and the commissioned removal contractors bear joint responsibility for preventing illegal dumping. To further reduce the generation of industrial waste and minimize environmental impact, Taipower continues to promote online auctions of scrapped materials, thereby fulfilling its corporate environmental responsibilities.

Sales Volumes and Amounts for Taipower's Industrial Waste

Item	2022	2023	2024
Coal Ash Output (10,000 tons)	217.8	208.9	180.5
Volume of Scrap Cable and Other Metal (1,000 tons)	10.097	8.621	8.545
Value of Scrap Cable and Other Metal (NT$100 million)	16.427	15.03	16.47

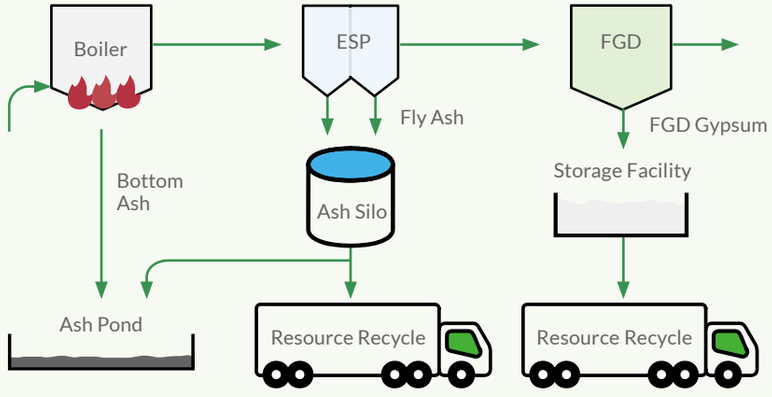
3.3 Creating a Circular Business Model

3.3.1 Practicing Circular Economy

Taipower has conducted research projects on circular economies, focusing on energy and resource inputs and outputs across the power sector value chain, including at the generation, transmission, supply, and distribution levels. Moving forward, Taipower will regularly update its strategic blueprint and formulate detailed action plans to support implementation.

Research, Development and Promotion of Coal Ash Reuse and Recycling

Taipower's coal ash output in 2024 reached approximately 1.805 million tons. In response to the government's resource recycling policies, Taipower not only invests in R&D and promotes reuse technologies, but also strengthens production management. Coal ash from coal-fired power plants can partially replace cement and serve as a binding material in concrete. Most of the coal ash produced is currently sold to the construction market, making it a model of circular resource utilization. Through diversified applications, Taipower aims to increase the reuse rate and added value while supporting the government's "waste reduction at source and resource reuse" policy, thereby contributing to both green energy and carbon reduction goals.

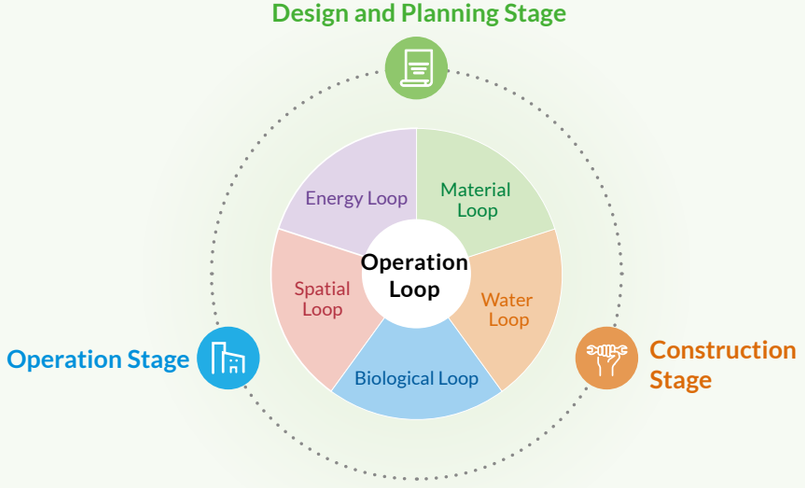


24th Taipower kW Design Award Ceremony: Promoting public engagement in power-related issues through creative design, in alignment with the theme of circular sustainability

A towering wind turbine is reimagined as a car fragrance diffuser-compact, calming, and inspired by renewable energy

Implementation of Circular Construction

Taipower possesses a significant amount of infrastructure. Promoting circular construction throughout the design, construction, operation, and decommissioning stages of that infrastructure enhances resource efficiency and reduces waste, supporting the goals of a circular economy. To support this transition, Taipower organized internal workshops and seminars to strengthen employee awareness. In 2023, Taipower consolidated its efforts into Circular Construction Implementation Guidelines and a Circular Construction Checklist as references for new construction and renovation projects. In 2024, the concept was applied to the Renovation of Dormitory No. 1 at the Training Center as a pilot project to guide future circular construction practices and realize sustainable building.



3.3.2 Promoting Ecological Coexistence

Valuing Biodiversity and Reducing the Environmental Impact of Operations

Aspect	Key Initiatives and Results
Overall Strategy	Taipower promotes ecological coexistence with a focus on minimizing the environmental impact of its operations. Through environmental management, stakeholder engagement, and diverse action plans, the Company enhances its social and environmental contributions. In response to global biodiversity issues, Taipower has made proactive commitments to ensure that its development and operational activities comply with regulations. For sensitive areas, it follows a mitigation hierarchy approach-avoidance, minimization, mitigation, and compensation-to implement protection measures.
Governance and Management Mechanism	Under the Company's Sustainability Committee, Taipower has established the Sustainable Environment Promotion Task Force, which conducts annual reviews of ecological action outcomes.A designated department leads interdepartmental coordination to implement a full management process from policy to field-level action. Stakeholder feedback is regularly collected and used to review and adjust strategies to ensure practical outcomes.
Action Outcomes and Forward Planning	Taipower has strengthened internal training to enhance environmental and conservation awareness across all levels of staff. Externally, the Company actively monitors global developments and engages in both domestic and international dialogue. In 2024, a consultation meeting with external experts was held to collect recommendations on linking nature conservation with sustainable development. These insights reinforced internal cross-departmental collaboration. Looking ahead, Taipower plans to further expand its ecological co-existence initiatives at power facilities in 2025, including the formation of in-house conservation areas. Additionally, the Company will align with the international TNFD (Taskforce on Nature-related Financial Disclosures) framework by developing relevant methodologies and conducting nature and biodiversity risk assessments to ensure disclosure quality and alignment with global standards.

Environmental and Community Collaboration

Taipower actively builds community partnerships and promotes environmental education through activities such as beach cleanups, fish fry releases, and collaborative workshops.

Power Plant Expansion Assessment

Before adding new units, Taipower carefully evaluates environmental factors and communicates with local stakeholders to ensure legal compliance and mutual benefit.

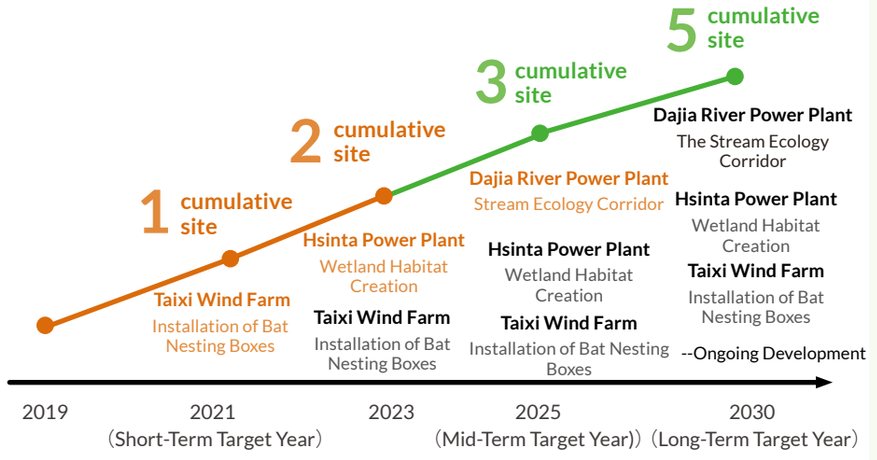
Sustainable Power Facility Sites

Taipower promotes the "One Plant, One Feature" approach to develop eco-friendly power plants. The Company also embraces the OECM (Other Effective Area-Based Conservation Measures) framework to expand habitat conservation, and is developing eight power facility sites featuring flagship species as demonstration areas.

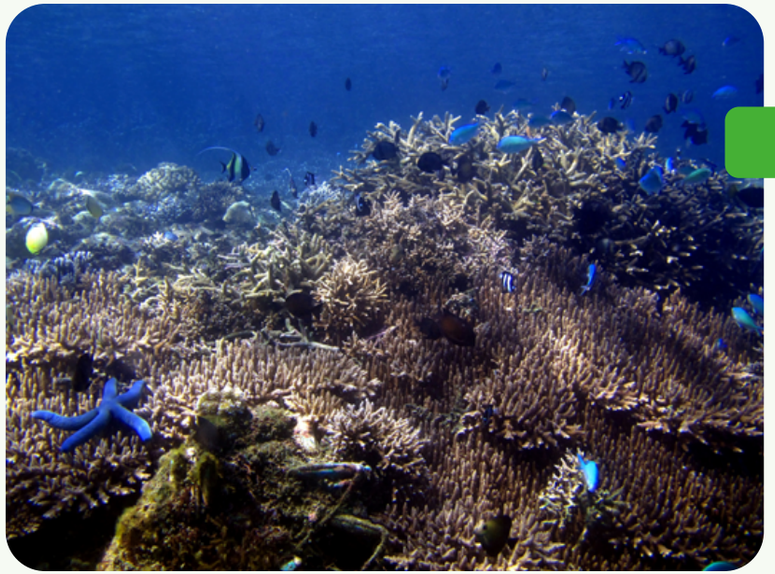
Ecological Conservation Actions

In 2024, Taipower held six fish fry release events at thermal power plants and offshore wind farms. The events released approximately 1.33 million fry in total. The Company also promoted coral restoration through heat-resistant coral nurseries, improved transplant techniques, and ex-situ cultivation to advance biodiversity management.

Ecological Coexistence Goals for Power Facilities



Source:Taiwan Environmental Protection Administration



Protecting Coral Reef Ecosystems in Nanwan

Taipower actively supports international biodiversity conservation efforts and has launched coral reef restoration and ecological research initiatives in Nanwan in, Hengchun Township. The Nanwan reef hosts rich marine life and a diverse range of coral species, making it one of Taiwan's most iconic coral ecosystems. In collaboration with academic institutions, Taipower is conducting long-term underwater monitoring and coral restoration programs. These include coral planting, disease prevention, and public education to restore ecosystem functions and serve as a model for marine conservation and sustainability.

Ecological Map of Flagship Species at Eight Power Plants

Taipower is committed to both environmental sustainability and achieving net-zero power generation. Through upgrading environmental control equipment, introducing low-carbon gas-fired units, advancing carbon capture, and promoting hydrogen-ammonia co-firing, Taipower is accelerating its energy transition. The Company will continue to strengthen ecological conservation alongside the development of green electricity to ensure the coexistence of power development and environmental sustainability.

Ecological Conservation Achievements

Taipower surveyed over 100 power facility sites across Taiwan and published an Ecological Map featuring eight major power plants and ten flagship species, illustrating the long-term results of its conservation efforts. Highlights include: the Hsieh-ho Power Plant (coral), the Cholan Power Plant (the purple crow butterfly), the Dajia River Power Plant (the plumbeous water redstart and Formosan river loach), the Wanda Power Plant (the Musheshe longhorn beetle and Taiwan wild soybean), the Taixi Wind Farm (the East Asian free-tailed bat), the Hsinta Power Plant (the black-faced spoonbill), the Maanshan Nuclear Power Plant (the damselfish), and the Jinshan Power Plant (the water caltrop).

Welcoming Nature's Guests with Care and Fostering Biodiversity

Taipower has made biodiversity a core element of corporate governance. Through ecological monitoring, conservation programs, and eco-friendly engineering practices, the Company ensures harmony between power plants and their surrounding environments. By continually advancing ecological preservation and sustainable corporate development, Taipower promotes the coexistence and mutual prosperity of energy development and the natural environment.

The Yongan Wetland (Hsinta Power Plant)

Long-term maintenance of wetland ecosystems provides vital habitats for migratory birds, making it a world-class birdwatching destination.

Bat Conservation (Taisi Wind Farm)

Migration corridors and bat boxes were installed, achieving a 95% occupancy rate and attracting more than 1,700 bats -the first corporate-led bat conservation program in Taiwan.

Coral Restoration (Hsieh-ho Power Plant)

Emphasizing marine ecological integration, Taipower applies avoidance, minimization, mitigation, and compensation strategies to create coral attachment sites on newly constructed breakwaters, helping to maintain a balanced marine ecology.

Marine Monitoring at the Maanshan Nuclear Power Plant

Real-time video and long-term data collection are used to track coral reef changes and safeguard local biodiversity.

A Once-in-a-Lifetime Encounter Yongan Wetland Becomes a Haven for Waterbirds

Yongan Wetland, located within the Hsinta Power Plant area, is an important stopover site for migratory birds passing through Taiwan. Taipower has designated a 41.25-hectare wetland conservation zone with both buffer and greenbelt areas. By using water level management techniques, the Company has created an eco-friendly habitat and collected over 500,000 ecological observation records since 2010. The wetland is home to more than 160 bird species. The number of black-faced spoonbills has quadrupled over the past decade, and some migratory birds have begun to reside year-round.

Taipower has adopted scientific management and integrated local education efforts, and has achieved the status of being the first thermal power plant in Taiwan to be certified by the Ministry of Environment as an environmental education site. In January 2025, Taipower held a Migratory Bird Season and Unveiling Ceremony to deepen collaboration with local schools.

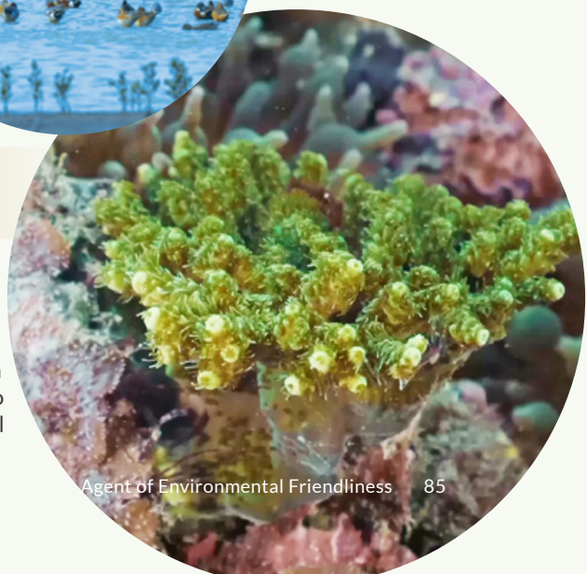
The Company also released the documentary Flying Birds Power Plant, which has received recognition from multiple international film festivals.

Taipower will continue promoting ecological coexistence and striving to balance energy development with environmental conservation.

Underwater Coral Alley at the Breakwater Zone of Hsieh-ho Power Plant

The submerged breakwater zone of the Hsieh-ho Power Plant is located within a restricted area, shielded from human interference. This has created an ideal habitat for coral, demonstrating that power development and ecological conservation can coexist.

Although corals in this area were once a point of contention for opposition during the planning stages for the land reclamation element of the Hsieh-ho plant renewal project, they now serve as evidence of Taipower's effective coral conservation efforts in the region.



台灣電力公司
Taiwan Power Company

04

CHAPTER

Leader of Smart Grid Development

Suitable for the following stakeholders

the Board of Directors, Government Agencies, Elected Representatives, Media, and Users

81.52%

By the end of 2024, over 3.403 million AMI meters were installed, covering 81.52% of total national electricity consumption data.

Ranked 2nd globally

Global recognition: Ranked 2nd globally in the 2024 Smart Grid Index (SGI) by Singapore Power (SP) Group.

Hundreds of Kilometers of Fiber Optics, Thousands of Communication Links

Strengthening grid communication: Deployed 106 km of optical fiber, 61 sets of transmission equipment, and 1,982 communication circuits in 2024.

With rapid developments in AI, ICT, big data, blockchain, and cloud computing, industry models are being reshaped. Taipower is actively investing in smart grids to enhance management efficiency and operational performance, laying a solid foundation for renewable energy growth.
In alignment with government policy, Taipower aims to strengthen grid flexibility in the short term and build a stable power network with high renewable energy penetration and improved dispatching and emergency response. In the medium term, it will reinforce grid resilience to address climate change and ensure grid safety and adaptability. Over the long term (by 2030), it will implement power sector reforms, promote low-carbon energy use, ensure a secure and reliable grid, and advance transparency and fair market transactions.

4.1 Strengthening the Smart Grid

4.1.1 The Smart Grid Action Plan

Smart grids are vital to driving energy transition and industrial development. Taipower is dedicated to mitigating the intermittency of renewable energy generation, enhancing grid resilience, improving transmission and distribution integration, and strengthening disaster response and troubleshooting. It also aims to optimize supply-demand management and boost user participation to build an efficient and stable smart grid.

The primary goals of smart grid development are:

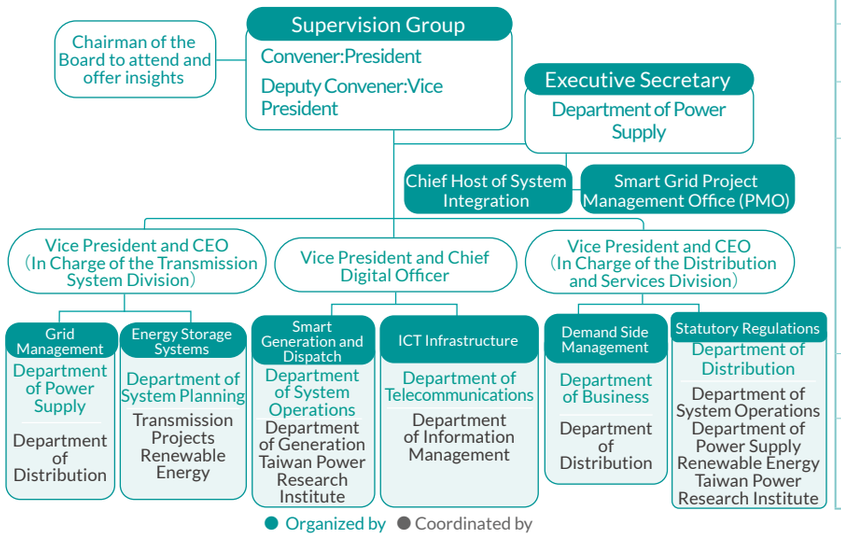
(1) addressing the challenges of integrating renewable energy

(2) strengthening existing grid resilience to improve power quality and cope with extreme weather; and

(3) encouraging user participation in energy conservation to enhance power system efficiency.

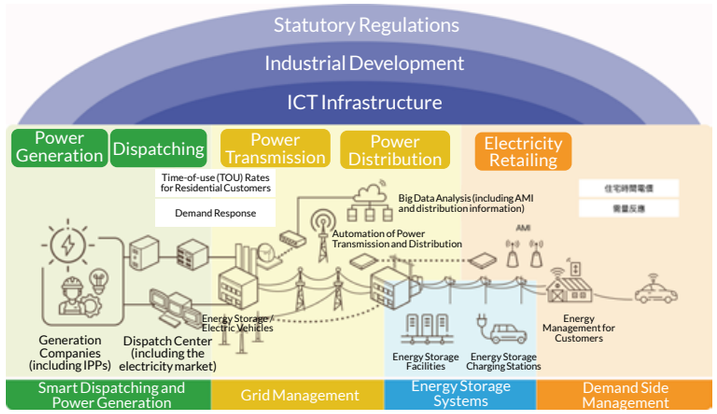
To implement the Smart Grid General Plan, Taipower established a Smart Grid Task Force chaired by the President. The task force holds regular reviews on project progress and future development to accelerate smart grid deployment.

Smart Grid Task Force



Smart Grid Action Plan

Taipower has been implementing smart grid infrastructure based on the Smart Grid Master Plan which was approved and revised by the Executive Yuan on March 27, 2020. The plan is structured around problem-solving and system integration, with 7 strategic areas, 21 specific measures, and 14 key checkpoints. Taipower is responsible for 6 of the 7 areas, 17 of the specific measures, and 13 of the key checkpoints. It continues to implement and regularly review progress to enhance energy management and grid resilience.



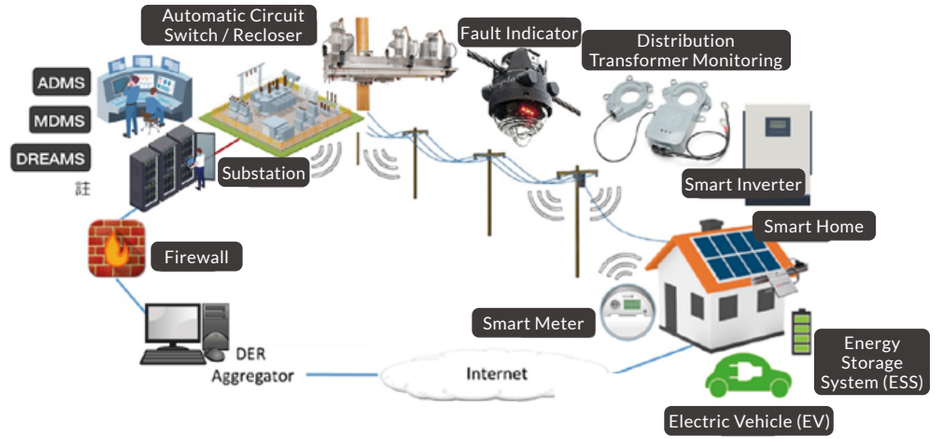
The Smart Grid General Planning Framework

Key Strategic Areas	Specific Practices
Smart Dispatching and Power Generation	● Establish a renewable energy generation monitoring system ● Establish an energy trading platform ● Establish a big data damage monitoring system for the boiler tubes of coal-fired units ● Undertake ancillary service demand research
Grid Management	● Apply and promote transmission system data in planning, operations, and maintenance ● Apply and promote feeder automation system data
Energy Storage Systems	● Construct an Energy Storage System at a Taipower site ● Establish an ancillary service procurement mechanism
Demand Side Management	● Establish a low voltage Automated Meter Infrastructure (AMI) ● Apply AMI data ● Review electricity price structures and run trials on dynamic pricing ● Review and run trials on various demand response schemes
ICT Infrastructure	● Enhance smart grid information security ● Enact a smart grid data application plan ● Establish an upgrade plan for backbone/regional fiber optics systems ● Introduce an electrical IoT communication system
Industrial Development	● Expand product and system services (Industrial Development Bureau) ● Drive enterprises to participate in the electricity market (Industrial Development Bureau)
Statutory Regulations	● Review current electricity-related regulations (BSMI) ● Refine interconnection technology for renewable generation systems ● Develop national standards and establish an equipment testing platform (BSMI)

The Construction of a Smart Grid

As the proportion of renewable energy generation continues to rise, the smart grid serves as a critical foundation for maintaining power supply stability. Through flexible scheduling, it helps stabilize grid operations and ensures overall system reliability. Taipower is promoting smart grid development in three phases. The first, Smart Grid 1.0, focuses on infrastructure building and has been under continued implementation. The second, Smart Grid 2.0, focuses on practical operations. The final phase, Smart Grid 3.0, will aim for full energy market liberalization and the effective integration of energy resources to enable widespread application. Taiwan is currently in the second phase, which emphasizes ensuring stable system operation, improving power quality, and encouraging user participation in energy conservation. Taipower is implementing an Advanced Metering Infrastructure (AMI) system, integrating AI, 5G, IoT, and big data technologies. By using smart meters, communication systems, and data management platforms, the Company consolidates data from generation, equipment operations, and electricity usage to enhance grid efficiency and supply reliability, while also promoting user participation in energy conservation. These efforts support digital transformation and the development of new business models.

Introduction to smart meter applications



Note:1. Advanced Distribution Management System, ADMS
2. Meter Data Management System, MDMS
3. Distributed Renewable Energy Advanced Management System. DREAMS
4. Source::Taiwan Power Company

Introduction to smart meter applications

Strengthening Communication Infrastructure

As part of its digital transformation efforts, Taipower completed communication system deployments in 2024 for key infrastructure, including Hsinta Power Plant's Unit 1, the Changhua Industrial Substation, secondary substations, and service centers. The expansion and upgrade of the Ultra-High-Speed IP Fiber-Optic Communication System, including card module extensions, addressed the bandwidth needs of smart grid, AI, and IoT applications, improving power supply stability. Going forward, Taipower will continue expanding its fiber-optic communication systems to increase bandwidth and communication reliability, thereby strengthening its digital infrastructure

Communication Infrastructure and Upgrades

1.Optical Transport Network (OTN):Planned deployment to meet the high bandwidth demands of Taipower's future cloud data centers.
2.Microwave Communication System Upgrade:Enhances grid dispatching and power supply stability.
3.Strengthening Communication for Power Plants, Substations, and Service Centers (2024 Achievements):

- 106 kilometers of optical cables deployed.
- 61 sets of transmission equipment installed.
- 1,982 communication circuits provided (for relay protection, dispatching lines, and feeder automation).

Enhancing Smart Grid Information Security Management

Taipower has established a secure and high-efficiency fiber-optic network to support smart grid applications such as monitoring, smart substations, distribution automation, and Advanced Metering Infrastructure (AMI). The network also provides IP broadband and power IoT communication services. The Company continues to enhance cybersecurity, data applications, and communication technologies to support smart grid development and energy digital transformation.

1.Strengthening Cybersecurity for Smart Grids:Taipower is implementing Intrusion Detection Systems (IDS) and integrating with its Security Operation Center (SOC). As of now, deployment has been completed at 23 Operational Technology (OT) sites, with full implementation across all dispatch centers expected by 2025.
2.Smart Grid Data Applications:Taipower is developing a Common Information Model (CIM) and establishing a big data analysis and data-sharing platform to improve data utilization efficiency.
3.Fiber-Optic System Upgrade:Backbone and regional fiber-optic communication capabilities are being enhanced to support smart grid development.
4.Power IoT Implementation:A dedicated enterprise network is being developed. Taipower is also evaluating self-built, partnership, and lease models to optimize the power of IoT applications and benefits.

4.1.2 Smart Grid Applications

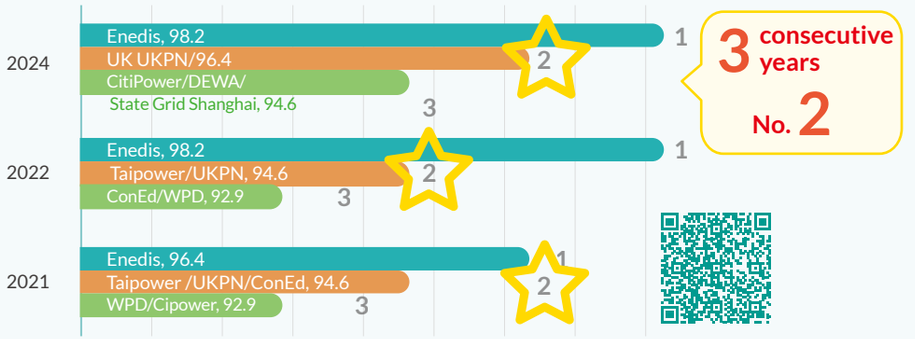
Vehicle-to-Grid (V2G) Technology

Taipower Partnered with Gogoro to Build the World's First Electric Scooter V2G Battery Exchange Station

Energy transition, working to achieve net-zero-carbon emissions, and the increasingly widespread adoption of electric vehicles have all make the effective conversion of electricity demand into power supply a significant challenge. In response, Taipower is exploring diverse power sources that go beyond the conventional paradigm of large-scale power plant construction, while actively developing renewable energy. In 2021, Taipower partnered with Gogoro to establish the world's first electric scooter battery swapping station featuring Vehicle-to-Grid (V2G) functionality. This pioneering initiative enables bidirectional power flow, supports the development of decentralized virtual power plants and new electricity trading models, and enhances grid stability. While V2G technology is becoming more mature, its commercial models and infrastructure such as bidirectional chargers are still under development. Taipower will continue to adjust its strategy based on the growth trends of electric vehicles and charging infrastructure as well as the extent of support provided by international carmakers, to maximize the storage potential of EVs.

Smart Grid Index, SGI

The Singaporean Smart Grid Index (SGI) is an international benchmarking system that evaluates smart grid development across power utilities based on seven core dimensions: customer empowerment and satisfaction, cybersecurity, green energy, distributed energy integration, power reliability, data analytics, and monitoring and control. The evaluation covers companies from the Asia-Pacific region, Europe, and the Americas. After rising to 2nd place in 2021, Taipower retained the 2nd position in both 2022 and 2024. Going forward, Taipower will continue to advance smart grid development and participate in international benchmarking to stay aligned with global smart energy trends.



Smart Grid Index (SGI) by Singapore Power (SP) Group

Smart Streetlights:Illuminating the Path to Smart Cities

Countries including the U.S., U.K., Germany, Canada, South Korea, and Japan are actively building smart cities and promoting smart streetlight systems. In Taiwan, cities such as Taipei, Taoyuan, and Kaohsiung have already implemented smart streetlights capable of wireless data transmission, enabling automatic fault detection and shortening repair time to improve public safety. These smart streetlights use 130-watt energy-saving LED lights (in contrast to traditional 400-watt bulbs) and are equipped with adaptive dimming systems to reduce electricity costs and carbon emissions.

In addition, lamp posts are integrated with 5G base stations and sensors to expand signal coverage and collect environmental, traffic, and weather data, thereby improving public service capabilities. Smart streetlights can also be integrated with traffic signals, community surveillance, and electronic signage to provide real-time information such as weather updates, news, and bus schedules. This helps reduce physical space usage and contributes to creating a more aesthetic and safer urban environment.

Smart Grid Performance in 2024

Under the Smart Grid Master Plan approved by the Executive Yuan, Taipower is responsible for six of the seven strategic areas. In 2024, the Company recorded major achievements in five of these areas. Key performance highlights are as follows:

1. Smart Dispatch and Power Generation: Taipower integrated real-time renewable energy generation data and established an information management platform, a power market trading platform, and a big data monitoring system for coal-fired units. It also introduced the Distribution-level Renewable Energy Advanced Management System (DREAMS). Real-time monitorable renewable capacity reached 8.44 GW in 2024.
2. Grid Management: Taipower planned, operated, and maintained transmission system data, and consolidated information to strengthen asset management for transmission and distribution systems. In 2024, the average failure time of transmission system equipment was 0.0 hours per year.
3. Energy Storage Systems: The installed capacity of energy storage systems reached 1,420.3 MW in 2024.
4. Demand Side Management: Taipower focused its Automated Metering Infrastructure (AMI) deployment on users with high power-saving potential. By the end of 2024, a cumulative total of 3.403 million AMI installationshad been completed.
5. Information and Communications Technology (ICT) Infrastructure: Completed 106 km of optical cable deployment, installed 61 sets of fiber optic communication systems, and provided 1,982 communication circuits.

2024 Asia-Pacific Power Awards
Smart Grid of the Year – Taiwan
Integrate distributed energy resources to provide ancillary services to the power system

Smart Grid Performance and Targets

Review Item		2024 Target	2024 Performance	2025 Target (Approved by Executive Yuan)
1 Real-Time Monitorable Capacity of Renewables (GW)		9	8.44（Wind 3.88、Solar 4.56）	16.5
2 Forecast Accuracy for Renewables (Day-ahead / Hour-ahead Error Rate, %)	Wind Power	13/6.5	10.72/3.3	10/5
	Solar Photovoltaics	12/6	3.59/2.3	10/5
3 Ancillary Service Reserve (MW)	Frequency Regulation Reserve	1,000	1,125	1,300
	Real-Time Reserve	1,100	1,150	1,100
	Supplemental Reserve	1,100	1,197	1,100
4 Number of Power Equipment Incidents (Cases/Year)		16	12	15
5 Equivalent Unavailability Factor (EUF) of Coal-Fired Units (Equivalent Tube Rupture Downtime Hours)		1.35%（118小hours /unit/year）	0.0%	1.2%（105 hours /unit/year）
6 Average Failure Time of Transmission System Equipment (Hours / Year)		1.425	0.0	1.42
7 Percentage of Downstream Automated Feeder Outages Restored within 5 Minutes (%)		58%	66.4%	70%
8 Installed Capacity of Energy Storage Systems (MW)		657	1,420.3	590
9 AMI Smart Meter Infrastructure (Cumulative Households)		3 million	3.403 million	350 million
10 Time to Make AMI User Electricity Data Available Online		5 hours	4 hours	4 hours (2 hours for TOU users)
11 Demand Response Participation (GW)		2.75	3.4	2.8
12 Backbone/Regional Optical Fiber Bandwidth (Gbps)		Regional::10 Gbps Optimization	Procurement for Next-Gen OTN system published (2024.12.19–2025.01.13)	Regional: 10 Gbps (Completed 2023)
13 IDS Cybersecurity Deployment		One regional distribution dispatch center completed	1. 8 sites deployed and integrated into SOC 2. procurement for 11 more underway	All 32 dispatch centers completed
14 Smart Grid Output Value (Industrial Development Bureau)		Accumulated NT$ 368 billion (NT$ 40.3 billion annually)	Accumulated NT$ 392.3 billion (NT$48 billion annually)	Accumulated NT$400 billion (NT$43 billion annually)

4.2 Enhancing the Green Energy Grid

4.2.1 Promotion of Microgrids

A microgrid is a localized energy system that integrates power generation, energy storage, and energy management. It can operate independently or in parallel with Taipower's main grid, thereby enhancing power supply stability and disaster resilience.
To promote energy autonomy and the development of green energy, Taipower has introduced microgrid technologies in remote areas and offshore islands, aiming to ensure a "stable grid in normal times and resilient grid during disasters."
Furthermore, to strengthen regional grid resilience, Taipower has launched regional energy storage projects at eight secondary substations across the main island to expand microgrid applications.

Developing Microgrid and Energy Storage Integration Technologies

Taipower is building microgrids in rural and offshore areas with the dual purpose of reducing the cost of electricity generation on offshore islands and addressing the risk of isolated power outages in remote mountainous areas during major disasters where both transportation and electricity/communications may be cut off-. The initiative also has the benefit of moving small offshore islands toward the goal of low-carbon or carbon-free islands. The microgrids consist of distributed power sources, energy storage systems, energy management systems (EMS), and protection devices. They can supply electricity to meet local demand and remain connected to Taipower's transmission and distribution network under normal conditions. In some cases, these systems can even feed electricity back into the grid. During power outages, the microgrid can function independently as self-sufficient mini power system, ensuring uninterrupted electricity supply.

● Disaster-Resilient Microgrids

These microgrids are built in disaster-prone areas that may become isolated. Powered by solar panels, batteries, and diesel generators, and managed by an energy management system, they can provide power for over 72 hours during emergencies. Taipower launched the first such system at the Fushan Elementary School in Wulai, and has since implemented pilot projects in New Taipei, Pingtung, and Chiayi. In 2024, Taipower offered technical guidance to local governments, which will handle budgeting and contract planning.

● Offshore Island Microgrids

Offshore islands are not connected to the main grid, making power supply reliability more challenging. Taipower actively improves island power systems to ensure power quality for residents. Taiwan's first offshore microgrid was launched in 2018 on Qimei Island, Penghu, and the Company now has microgrids on both Qimei and Wangan Islands. The development of offshore microgrids requires support from local governments and residents. Taipower continues communication and plans microgrid construction accordingly.

● Regional Grid Energy Storage

The regional grid energy storage project is a response to government policies on energy independence and green energy development. The project plans to install energy storage systems, diesel generators, and energy management systems within existing substations, that are connected to distribution feeders. The system is monitored and remotely controlled by the distribution dispatch center to demonstrate the benefits of partial power supply during total blackouts. In 2024, Taipower implemented the project at five substations. System operation tests will begin in 2025, with three additional substations planned for testing in 2026. The total capacity will exceed 2 MW for generators and 4 MW for storage, with optimal configurations adjusted based on available substation space.

Offshore Island Power Planning Toward Green and Low-Carbon Islands

Taipower continues to improve power supply quality on offshore islands. In 2018, it established the first offshore smart microgrid demonstration system at the Qimei Green Energy Park. In 2020, Taipower promoted smart grid development, positioning Kinmen as a "Smart Low-Carbon Demonstration Island." To enhance supply stability, smart substations and distribution automation systems were installed, significantly reducing power outages. Smart meters were fully deployed across the area, further improving grid stability. Kinmen's total installed generation capacity is 113.3 MW, sufficient to meet the current peak demand of 60 MW. The peak demand is expected to increase to 65 MW by 2031, which remains within supply capacity. Looking ahead, Taipower will continue promoting renewable energy development and strengthening grid resilience to improve offshore power quality.

The Kinmen Guning Energy Storage SiteSite

The Kinmen Tashan Power Plant

Renewable Energy Grid Connection Policy

● Enhancing Offshore Wind Power Grid Connection Capacity

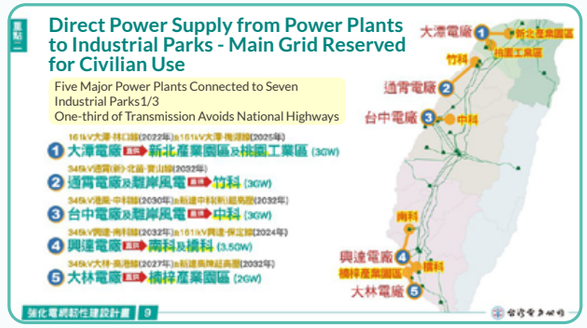
Taiwan's central offshore areas have excellent wind conditions. Consequently, the grid connection capacity for offshore wind farms north of central Taiwan is being expanded. Seven new substations and seven new transmission lines are under construction, along with the new Bei-Miao EHV substation that will collect offshore wind power from the Hsinchu and Miaoli regions. The grid connection capacity will be increased, with electricity directly transmitted via 345 kV lines to nearby load centers.

● Aggregating Regional Green Energy and Planning Direct Power Supply to Load Centers

Long-distance power transmission increases energy loss, grid load, and operational risks . With rising electricity demand from the AI and semiconductor industries, power development must follow the principle of regional balance to effectively reduce these risks. Consequently, Taipower is accelerating the construction of power plants, substations, and transmission lines in northern, central, and southern Taiwan to enhance the grid and expand transmission capacity. Taipower is also planning new dedicated transmission lines from power plants directly to industrial parks to reduce voltage drops, reserve main lines for residential use, and lower the risk of grid concentration. In addition, quarterly coordination meetings are held by each regional office, and joint annual maintenance is conducted for science and industrial parks to improve power supply stability.

● Enhancing Solar Power Grid Connection Capacity

To meet growing nationwide solar power grid connection demand, a total of nine new substations and ten transmission lines are under construction. To address grid weaknesses, long-distance transmission lines are planned to extend the grid into coastal solar power zones. The Liuke EHV substation is being constructed to collect solar power from the Yunlin–Chiayi–Tainan region. The grid connection capacity will be increased, with electricity transmitted directly via 345 kV lines to nearby load centers.



Functions and Safety Planning of Energy Storage Systems

To address the intermittency of renewable energy integration, Taipower installs energy storage systems that stabilize grid frequency, enhance dispatch flexibility, and ensure a stable power supply. Since 2021, Taipower has operated a power trading platform. In 2022, it introduced E-Reg energy storage technology and began planning for 1,000 MW of storage capacity. This includes 160 MW of self-built battery storage and 840 MW of ancillary services. The system regulates frequency through rapid battery charge/discharge to maintain grid stability.

As of 2024, Taipower has completed 160 MW of self-built energy storage systems, including 20 MW at Tainan Yantian Solar Site, 20 MW at Kaohsiung Luyuan Substation, and 60 MW at Longtan EHV Substation. The Dongshan Storage System (60 MW) is scheduled to begin operation in November 2024. These systems help smooth out demand fluctuations, reduce system instability risks, and further enhance supply reliability to meet renewable energy challenges.

4.2.2 Improving the Accuracy of Renewable Energy Generation Forecasts

In response to the energy transition and changes in the power supply structure, power grids and generation equipment must be upgraded to enable real-time monitoring of generation. As renewable energy is weather-dependent and less stable than conventional sources, monitoring systems are also essential for its effective management and dispatching. Additionally, Taipower will install real-time monitoring systems for coal-fired units to reduce failure rates and maintenance times.

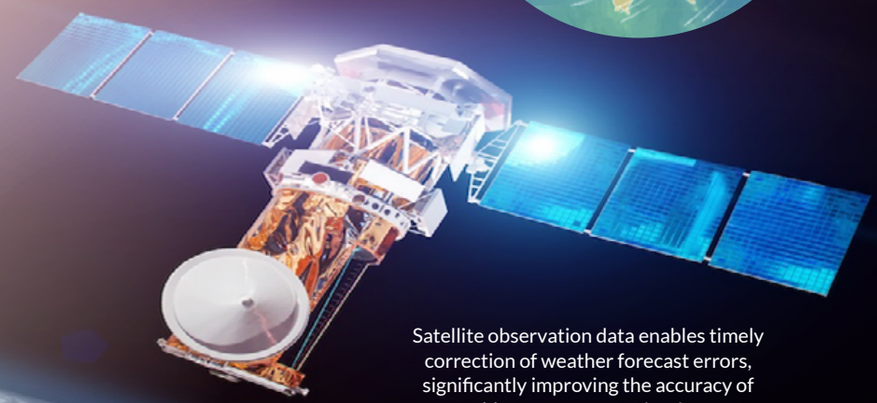
Future smart dispatch and generation efforts will focus on improving energy efficiency, increasing the share of renewable energy grid connection, and enhancing plant performance and reliability. This will be achieved by integrating DREAMS, Advanced Metering Infrastructure (AMI), and forecasting systems to ensure the successful integration of 20% renewable energy into the grid. Taipower has planned key initiatives, including a renewable energy information platform, an electricity trading platform, and a big data monitoring system for coal-fired units, with a total investment of NT$1.742 billion.

A five-year, real-time power system inertia measurement project has been launched in collaboration with the UK-based Reactive Technologies Limited (RTL) to enhance supply stability. Real-time frequency change rate measurement systems have been installed at 10 service sites across Taiwan. In 2024, the Dongshan energy storage site completed its periodic power modulation function to support real-time inertia measurement.

Improving Weather Forecast Accuracy for More Realistic Power Dispatching

To improve dispatching efficiency, Taipower is developing various renewable energy generation forecasting models. By integrating weather forecast data with AI and big data analytics, Taipower enhances the accuracy of solar and wind power generation forecasts to better anticipate weather changes and support dispatch operations.

This helps prevent generation fluctuations caused by changes in cloud cover or wind speed, enabling the dispatch center to adjust unit operations in real time and avoid sudden frequency drops, thereby enhancing power supply stability. As renewable energy integration continues to grow, Taipower must plan in advance for load reduction and ramp-up across various units to maintain system balance and further support green energy transition and net-zero emissions goals.



Satellite observation data enables timely correction of weather forecast errors, significantly improving the accuracy of renewable energy generation forecasts.

05 CHAPTER

Provider of Services for Smart Living

Suitable for the following stakeholders

Board of Directors, Government Agencies, Elected Representatives, Media, and Users

102 Electricity trading platform

The number of participants in the electricity trading platform increased from 74 to 102, with grid-connected storage systems providing 1,260.3 MW of ancillary service capacity in 2024.

12.05 million

A total of 12.05 million cybersecurity attacks were detected, with all incidents effectively contained and no damage caused in 2024.

94.72%

The 1911 customer service hotline answered over 1.967 million calls, with 94.72% of calls answered by a representative within 20 seconds in 2024.

Taipower aims to become a "Provider of Services for Smart Living"by introducing 5G and AIoT technologies to make electricity services smarter and more responsive to user needs. Its demand-side management focuses on demand response and energy conservation. Smart meters (AMI) are used to analyze supply data and monitor user consumption. This allows them to guide customers to shift usage through time-of-use pricing to reduce peak demand. Incentive programs and diverse communication channels promote user participation in energy-saving efforts, creating a nationwide culture of conservation and achieving a "win-win" outcome for the power sector, users, and the environment. With the broader adoption of smart meters, Taipower will develop solutions for nighttime net load control, integrate smart appliances with energy management systems, implement automated demand responses, and introduce real-time pricing to increase user participation. Demand response will enhance dispatch flexibility through monthly operations, day-ahead scheduling, same-day dispatching, and fast response within 15 minutes. The participation target is set at 3.0 GW by 2030.

5.1 Implementing Digital Transformation

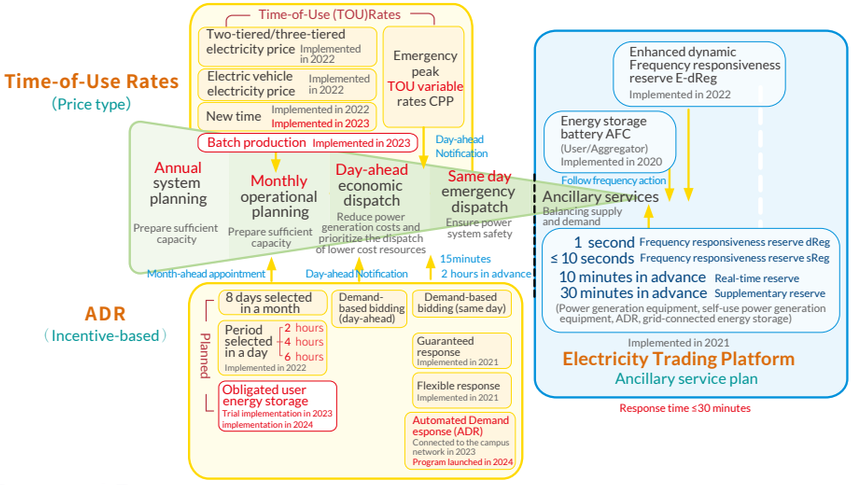
5.1.1 Demand Side Management Measures

3-3 203-2 302-5

Material Topic:Digital Applications and Information Security

Policy	• In line with the government's digital transformation policy, Taipower established a Digital Development Task Force in 2021 to plan digital advancement through strategic planning, data governance, and digital applications. The strategy strengthens infrastructure, cybersecurity, and talent development, and leverages data analytics and AI to support digital transformation and net-zero goals.
Management Approach	• Promote digital transformation across all power-related fields by introducing AI and generative AI, establishing key cybersecurity performance indicators, adopting a hybrid cloud model (with the Changhua Cloud Data Center scheduled for launch by the end of 2025), and continuing to build fiber optic communication infrastructure for future applications.
Action Plans	• Propose five initiatives: Digital Development Promotion, ICT Infrastructure Enhancement, Innovative Digital Technologies and Applications, Big Data Storage and Analytics, and Renewable Energy Grid Integration Optimization. • Compliance measures for the Cybersecurity Management Act. • Promote overall IT strategy planning and system architecture development. • Strengthen the protection of critical information infrastructure, IT systems, cybersecurity, and personal data. • Promote corporate cybersecurity intelligence sharing and joint defense mechanisms.
Actual Performance in 2024	• Successfully blocked 12.05 million external cyberattacks in 2024. • Maintained stable cybersecurity and customer privacy protection in 2024. • Achieved a communication service reliability rate of 99.999%, surpassing the international standard of 99.85% in 2024. • Fully launched the upgraded ERP system as the core enterprise operating platform in 2024.
Targets for 2030	• Focus on digital applications, ICT infrastructure, innovative technology adoption, and big data analytics, while enhancing renewable energy dispatch to improve overall operational efficiency and intelligence. • Starting in 2029, Taipower will establish an internal OT cybersecurity monitoring center that, in coordination with the Kaohsiung Central Dispatch Center, will be responsible for round-the-clock monitoring and alert handling of industrial control system security.

In accordance with Article 47, Paragraph 4 of the Electricity Act, electricity retailers are required to submit annual plans to the electricity regulatory authority outlining measures to encourage and assist users in saving electricity. Taipower centers its strategy on demand-side management, with demand response and energy conservation as its two main pillars. By fostering an energy-saving culture and promoting related practices, Taipower aims to generate a collective public response that reduces peak loads and advances energy efficiency as a nationwide effort. This initiative supports behavioral change across society and encourages broad public participation in energy conservation and carbon reduction.



Demand Response

Since 1987, Taipower has implemented various demand response load management measures that have generally offered electricity bill reductions as incentives. These measures encourage users to reduce peak electricity consumption or shift it to off-peak hours during periods of system demand. Planned measures include pre-agreed load reduction programs such as the "8 days selected in a month"and"periods selected in a day" types. Immediate measures include guaranteed and flexible responses activated during power supply shortages. Demand bidding measures allow users to submit their own bids for incentive rates. Upon winning the bid, they reduce electricity usage at the specified time. Bidding types include economic, reliable, and combined models. In 2024, Taipower launched a pilot program for automated demand response in residential and commercial sectors.

Time-of-Use Rates

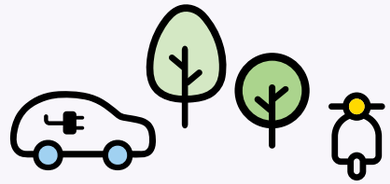
Time-of-Use (TOU) rates apply different tariffs for different time periods to reflect variations in power supply costs and guide users to shift or reduce peak electricity consumption to off-peak hours. Taipower has implemented TOU rates since 1979, and currently, there are 16 TOU rate schemes available for different types of users. TOU rates have been mandatory for high-voltage users since 1989, while low-voltage users may opt in voluntarily. To meet system requirements and offer users more flexible options, Taipower continues to refine and promote TOU rate schemes.

Power Consumption Category	Total Customers	TOU Customers	Ratio (%)
Meter-rated lighting for non-businesses	13,767,042	92,406	0.67%
Meter-rated lighting for businesses	1,047,797	141,944	13.55%
Low-voltage electricity users	311,965	41,532	13.31%
High-voltage electricity users	25,112	25,112	100.00%
Ultra-high-voltage electricity users	720	720	100.00%
Total	15,152,636	301,714	1.99% Note

Note:
1. If only potential customers (residential users with monthly consumption >800 kWh and small businesses >1,600 kWh) are considered, the TOU adoption rate is approximately 22%.
2. With the exception of contracted lighting and power (charged by capacity without seasonal pricing), all other electricity tariffs are seasonal, covering 99% of users.
3. The share of electricity sales revenue under the Lost Revenue Adjustment Mechanism (LRAM): 0%.

Demand Side Management Measures

Measure		Description	Applicable Customers	Results in 2024
TOU Rates	TOU rates have been used since 1979	The rates reflect the cost of electricity during different periods and encourage off-peak electricity users to reduce energy consumption during peak hours.	Optional for meter-rated lighting and low-voltage customers; applicable to all high-voltage customers.	Evaluation indicates that without the implementation of TOU rates and related measures in 2024, the monthly nighttime peak load during peak months would increase by 1.32 GW compared to 2021 (based on the previous time blocks).
	Launched Simplified Residential/ Commercial TOU rates in 2016	Provides more diverse rates for residential/commercial customers. Price signals are used to guide users to reduce electricity consumption during peak hours, thereby reducing peak load.	Residential, small shops and low-voltage customers.	
	Added new, three-stage TOU rates for standard and low-voltage meter-rated lighting in 2021			
Demand Response Load Management Measures	Implemented"Electricity Consumption Adjustment Measures" (originally "Power Consumption Reduction Measures") in 1987	Provides reduced rates as incentives to encourage customers to reduce electricity consumption during peak hours or to shift to off-peak hours, thereby reducing system peak loads.	(Extra) high-voltage users with a contracted capacity of 100 kW or above, or school users (depending on the program). Examples include factories, schools, etc.	1.On the 2024 nighttime peak load day (July 22), demand response measures reduced peak load by 1.31 GW, accounting for approximately 3.5% of thesystem load. 2. A total of 910 million kWh of electricity was curtailed in 2024, with total bill deductions of approximately NT$1.85 billion and an average execution cost of NT$2.03 per kWh.
	Implemented Demand Bidding Measures in 2015	By allowing users to set their own incentive prices, the program grants greater autonomy and unlocks potential for demand reduction. This helps improve system load profiles, delay the need for new power generation capacity, and reduce the risk of potential power shortages.	Regular high-voltage or higher level electricity users.	
	Implemented"Emergency Response" (now renamed "Flexible Response") and "Contracted Guarantee" (now renamed "Guaranteed Response") measures in 2021	During grid emergencies, users participate in load reductions to enhance demand-side responsiveness	Regular high-voltage and above electricity users.	
	Introduced a Smart Load Adjustment Measure – Campus Air Conditioning Type in 2022	Utilizes ICT to work with demand response providers or smart appliance vendors to remotely adjust user-side device settings-such as increasing air conditioning temperatures or switching to fan mode-for energy savings.	School users at senior high school level or below.	
	A Pilot Program for Residential and Commercial Automated Demand Response was conducted from July to November 2024		Low-voltage residential and commercial users.	
Energy-Saving Diagnostics		Taipower encourages and assists large electricity users in energy conservation. Technical service specialists from regional branches conduct on-site diagnostics of major energy-consuming equipment-such as lighting and air conditioning-in enterprises, government agencies, and schools using professional measurement tools. Preliminary reports with energy-saving recommendations are provided as references for future replacement with high-efficiency equipment.	Users that are frequently in excess of high-voltage usage levels	1.After conducting an energy-saving diagnosis for China Steel Corporation's headquarters,lighting and equipment upgrades were completed, achieving an 11.4% energy-saving rate and an annual reduction of 270,000 kWh. 2.In 2024, Taipower assisted 66 state-owned enterprises and agencies in conducting energy diagnostics, with a total estimated electricity savings of 31.18 million kWh.
Community Energy Saving Campaigns		Taipower offers free power-saving education services for communities and associations. Through community gatherings, the Company promotes electricity conservation, shares relevant knowledge and experiences, and advocates practical energy-saving techniques-such as using high-efficiency products and improving public facility electricity use.	Local communities and associations	A total of 1,375 seminars were held in 2024, attracting approximately 160,000 participants.



Current Status of Electric Vehicle Planning

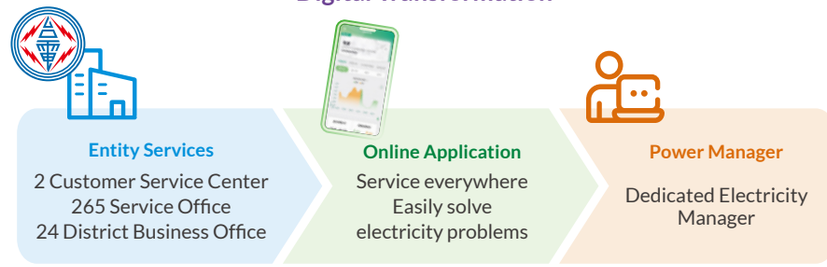
Taipower has drawn on international practices to integrate electric vehicle (EV) charging and battery swapping needs, promote the development of charging infrastructure, and support the growth of the EV market while maintaining grid stability. In 2022, Taipower introduced the "Electric Vehicle Charging and Swapping Facility Tariff," which features three key attributes: low basic charges, high price differentials, and extended off-peak periods. This tariff applies to high-demand, contracted-capacity charging or swapping facilities such as residential building chargers, public or private charging stations, and electric scooter battery exchange stations. In support of government efforts to promote transportation electrification, Taipower has relaxed the application requirements for EV chargers in collective housing and established dedicated electricity pricing schemes. As of December 31, 2024, Taipower had received 7,109 electricity service applications for EV use, of which 5,142 had completed power supply connection, and 1,967 cases were still pending. Among the pending cases, 332 had not been energized for over six months for reasons unrelated to Taipower. The relevant application statistics, special tariffs, and TOU rate selections are detailed as follows:

	Number of New Installations	Number of Cases that Have Begun Power Transmission	Number of Cases that Have Not Begun Power Transmission	Percentage of Electricity Not Yet Transmitted (%)
Electric Vehicle Charging Equipment	7,109	5,142	1,967	27.67 %
Choose Exclusive Electricity Price for Electric Vehicles	1,039	651	388	37.34 %
Select TOU Rate	2,508	1,853	655	26.12 %

5.1.2 Accelerating Digital Transformation

Taipower is steadily advancing undergoing a digital transformation in line with its business strategy. The Company is gradually introducing new technologies to optimize its business model and internal processes, enhance its corporate image and customer value, and explore new operational and business models. To realize Taipower's overarching strategy of "Promoting Digital Transformation," five action plans have been proposed to (1) Drive Digital Development, (2) Advance ICT Infrastructure, (3) Introduce Innovative Digital Technologies and Applications, (4) Enhance Big Data Storage, Analysis, and Applications, and (5) Improve Renewable Energy Grid Integration and Dispatch. Concrete implementation measures have also been formulated.

Digital Transformation



Data is King	Focus on Talent	Based on Information Security
Use technologies such as AI, big data, and IoT to collect and analyze data on markets, customers, products, and competitors, enhancing decision-making efficiency and accuracy.	Cultivate and recruit talents with digital skills, provide platforms for collaboration and learning, and foster innovation and progress.	Establish data governance and protection mechanisms to safeguard company and customer data and privacy, and to prevent cyberattacks.

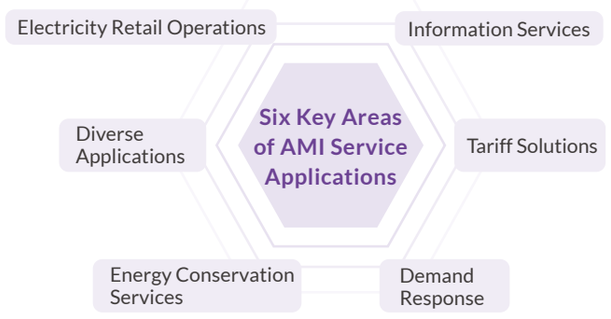
The Introduction of 5G Service Applications

Taipower has identified power applications using 5G technology. In coordination with the Kaohsiung Asian New Bay Area 5G AIoT Innovation Park initiative, Taipower established a 5G AIoT Promotion Office at Nanpu Power Plant (also referred to as the Southern Power Plant) in 2021 to conduct relevant energy application verifications.Using innovative 5G AIoT technology, Taipower provides on-site workers with mobile and fixed video equipment to simplify procedures and reduce operational errors. The project is being implemented in three phases and is currently in Phase 3 system optimization.

Smart Meters (AMI) Usher in a New Era of Energy Management

Taipower has integrated mobile digital technology and big data applications to launch a dedicated "Taiwan Power App" and an "Electricity Usage Diagnosis Center." These platforms offer residential electricity consumption analysis services and serve as integrated platforms for service applications, bill inquiries and payments, case tracking, and push notifications. A dedicated section for AMI services is also included.

As of the end of December 2024, the number of registered Taipower App users reached 2.082 million. These users had linked a total of 2.776 million electricity account numbers (including 634,000 low-voltage AMI users), among which 1.449 million accounts had completed identity verification. With the growing number of low-voltage AMI users, Taipower continues to enhance AMI-related services within the app. Examples include offering energy-saving recommendations based on user questionnaires ("Power Saving Tips") and sending push notifications for power outages, thereby improving overall service efficiency.



Innovative Services via the Taipower Mobile App

Taipower continues to expand payment options and push notification features. For low-voltage AMI users, the app now offers visualized consumption charts, unbilled electricity data, tariff simulation, usage alerts, and residential electricity analysis to meet user needs and enhance service quality.

5.2 Strengthening Information Security

418-1

Product Responsibility and Personal Data Protection

Taipower sets electricity tariffs in accordance with government regulations and manages customer information in compliance with the Personal Data Protection and Electricity Acts. The Company conducts annual reviews of personal data files, examining the necessity of each data field to ensure appropriate protection of personal information. Confidentiality mechanisms are in place for customer information, and identity verification is required for electricity data inquiries. Key databases are monitored in real time through audit systems. Abnormal records are reviewed monthly, and all inspections in 2024 were normal with no violations found.

0 Item

2024 Violations

Personal Data Protection Measures

- Regular Reviews and Updates:Annual inspections and reviews of personal data files and systems.
- Confidentiality Mechanisms:Establish mechanisms to prevent leakage or misuse of customer information.
- Dedicated Task Force: Establish a "Personal Data File Security Management Task Force" to develop and implement the "Personal Data Protection Guidelines" and a "Security Maintenance Plan and Post-Termination Handling Procedures for Personal Data Files."
- Audit Mechanisms: Implement database audit mechanisms to ensure data processing complies with regulations.
- Data Exchange Controls:Strictly manage data exchanges with external entities to prevent information leakage.
- User Consent:Electricity usage information is disclosed or queried only with user consent or legal authorization, and identity verification is required.
- Data Storage:Strengthen storage and handling of electricity registration documents to ensure data security.
- Online Access Restrictions:Limit online access to billing data; display prompts and retain audit logs for internal inquiries.

Information and Communication Security Risk Management Framework

Taipower has established an information and communication security risk management framework that covers both company-level and department-level risk management. In line with the Company's risk management policy, the framework includes risk identification, assessment, control, and monitoring to mitigate the impact of information security risks on operations and to support sustainable development. Taipower's information security policy is based on the ISO/IEC 27001 international standard and covers areas such as system inventory, risk assessment, vendor management, and incident reporting.

In accordance with internal policies, Taipower implements the following information security management measures:

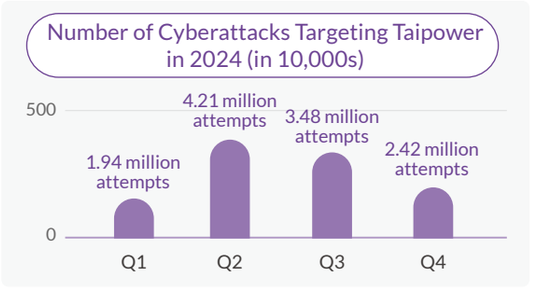
Taipower implements the following information security management measures

- Personnel security management and training
- Vendor relationship security management
- Information security incident management
- Information asset security management
- Network security management
- System access control
- Business continuity planning

Information Security Management Performance and Results

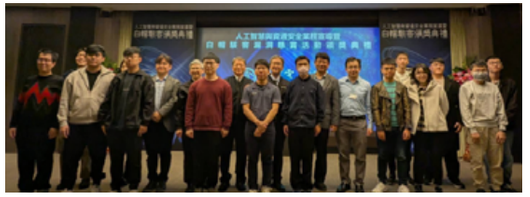
Management Aspect	Performance Indicator	Implementation in 2024
Organization	Whether the information security policy, approved by management, has been communicated to all employees	Communicated
Asset	Whether assets have been classified	Classified
Risk	Whether vulnerability scans are conducted quarterly on hosts and improvements are tracked	Scanned and improved
Risk	Whether the use of information and communications technology (ICT) products from mainland Chinese manufacturers is prohibited to reduce cybersecurity risks.	Prohibited
Operations	Whether regular patching and updates are conducted	Patched and updated
Continuity	Whether annual business continuity drills are conducted for core ICT systems	Conducted
Training	Whether two social engineering drills are held annually	Conducted
Testing	Whether annual penetration tests are conducted for all core ICT systems	Conducted
Incident	Whether incidents are handled in accordance with Taipower's Information Security Incident Reporting and Response Procedures	Followed

All results for 2024 were reviewed and found to be normal, with no violations of relevant regulations.



Taipower's Information and Communication Security Policy

Open Data Section on the Official Website



In 2024, a total of 60 vulnerabilities were disclosed through Taipower's bug bounty program for white hat hackers, with approximately NT$1.32 million awarded in bonuses.

5.3 Promoting Energy Conservation

5.3.1 Promoting an Electricity-Saving Society 302-5

Taipower has promoted power-saving incentives since July 2008 to encourage energy conservation. In 2018, a registration mechanism was introduced: users signing up via the website, a hotline, or at a counter receive NT$0.6 per kWh saved, with a minimum reward of NT$42 for monthly billing, and NT$84 for bimonthly billing.

The "Power Instant"app regularly offers energy-saving missions, where users earn points to redeem prizes, join raffles, or offset bills-helping cultivate saving habits. Taipower also promotes energy education through service teams, community campaigns, and customized diagnostics.

Power-Saving Reward Performance

Year	Amount of Electricity Saved (Billions of kWh)	Reward Amount for Saving Electricity (NT$100 million)	CO_2 Emission Reduction (10,000 metric tons)	Equivalent Number of Daan Forest Parks (CO_2 absorption in one year)
2022	23.1	17.0	114	2,933
2023	18.1	14.5	90	2,302
2024	17	14.0	84	2,159

Notes:
1. Based on the electricity emission coefficient of 0.494 kg CO_2e/kWh announced by the Energy Administration under the MOEA in April 2024, and the 2020 report indicating that one Daan Forest Park absorbs 389 metric tons of CO_2 annually.
2. Performance data includes users who completed registration for the reward program (4.98 million users by the end of 2024).
3. Annual electricity savings are calculated using the previous year as the base year.

The"Power-Saving Infinity: Unlimited Happiness" Education Program

In 2024, Taipower's energy-saving education focused on six themes learning, doing, playing, listening, smelling, and seeing and used diverse and interactive experiences to raise public awareness. Four major campaigns were held: "Power-Saving in Business"at the Yilan International Children's Folklore Festival, "Power-Saving Night Show" at the Penghu Music & Light Festival, "Have a Power-Saving Cup" at the Yunlin Taiwan Coffee Festival, and"Run for Power Saving"at the Tianzhong Marathon in Changhua. Taipower also organized 150 school-based events to educate children and families through fun activities.

To instill energy-saving habits at a young age, Taipower has used theater, magic shows, board games, and picture books to help elementary students learn and share power-saving knowledge at home and in their communities. The program also encourages people to use digital tools such as the Taipower app and e-bills to improve energy management.

In 2024, Taipower invested NT$20.845 million, with an estimated outreach of 42 million person-times. Moving forward, Taipower will continue to promote energy-saving culture across age groups and regions through innovative activities and cross-sector collaboration, fostering community participation and advancing toward net-zero emissions.

Actual Power-Saving Outcomes

1 On April 3, 2024, the Hualien earthquake and high temperatures created peak load pressure. Through price adjustments and demand responses, Taipower reduced electricity usage by approximately 4.8 million kWh on April 15, saving over NT$20 million (about NT$5 per kWh)-a more economical and environmentally friendly solution than building new peak-load units.

2 In 2024, demand response participation reached 3.01 GW. The actual maximum participation, based on the peak month's combined load management and ancillary services, totaled 3.42 GW.

3 The "Power Instant" app promoted power-saving from 6:00 p.m. to 8:00 p.m. among residential users, achieving a total savings of 1,233.2 kWh in 2024-an average of 0.35 kWh per household per hour.

4 A pilot Automated Demand Response (ADR) program was launched from July to November 2024. Service providers (or smart appliance vendors) remotely adjusted participating household appliances to fan-only or off mode, offering users a new model of energy saving. Over 2,000 households and 4,000 devices participated, with a cumulative power saving of 15,000 kWh.

Power-Saving Incentive Program Registration

5.3.2 Refinement of Customer Services 2-26

Taipower places great emphasis on issues of concern to the general public. Through diverse channels, the Company maintains bilateral communication with its customers and improves service quality by following customer suggestions. In addition, Taipower facilitates customer inclusion by attempting to resolve all service hindrances caused by language, culture, and literacy-related issues. Taipower's customer services are now available in Mandarin Chinese, Taiwanese, Hakka, and English to cater to customers' power service needs in the language of their preference.

Engagement Channel

● Taipower's Official Website

In order to increase public awareness of issues affecting the electricity industry, Taipower has disclosed 32 items of information on its official website under six categories. These include Management, Power Generation Information, Power Supply and Demand, Customer Information, Environmental Information, and Engineering Information. These disclosures allow the public to browse online and gain a greater understanding of the actual operations of the company.

Taipower's Official Website

Taipower TV – YouTube Channel

The Taipower Fan Page on Facebook

● Taipower TV – YouTube Channel

Taipower TV was launched on May 1, 2013. All videos-from planning and production to release-are created in-house and cater to various audience interests. As of 2024, the channel has accumulated over 3 million views on YouTube. Content covers power policies, current affairs, and practical energy-saving tips, with topics such as the Hsieh-ho Oil-to-Gas Project, gas-fired plant transitions, typhoon restoration efforts, blackout incident explanations, and the Taipower "Flying Tigers" repair team. In 2024, the channel began focusing on vertical short videos (Shorts) to enhance reach and responsiveness.

● The Taipower Fan Page on Facebook

The Taipower Fan Page on Facebook has over 260,000 followers and reached more than 45 million views in 2024. Post topics include corporate policies, power saving, electricity safety, power knowledge, user-friendly services, and event updates. In 2024, key communication themes included power dispatch, electricity pricing, clarification about the idea that outages do not mean shortages, energy policies, solar power myth-busting, the Hsieh-ho Oil-to-Gas Project, green electricity procurement, and energy conservation. Through social media sharing, Taipower expanded its outreach and improved communication effectiveness. In 2024, its posts were cited 2,331 times in online news, shared 23,231 times on Facebook, and generated a total of 36,160 mentions.

User Communication and Management

To protect the legitimate rights of its customers, Taipower has established "Guidelines for Handling Customer Petitions" to ensure that user suggestions or complaints are addressed fairly, reasonably, and in a timely manner. This not only enhances service quality but also strengthens the Company's public image. Customers are encouraged to express their opinions regarding Taipower's business measures, service conduct, protection of rights, or on matters of public interest through a variety of communication channels.

● District Service Offices

Taipower has established a comprehensive service network throughout Taiwan, providing over-the-counter electricity applications and consultation services. These district service offices are responsible for the construction and maintenance of power supply lines in their respective areas, ensuring fast responses to customer needs and maintaining positive customer engagement. Each year, Taipower holds a seminar with the Taiwan Electrical Engineering and Industrial Association to promote two-way communication and build consensus with contractors. These meetings help resolve electricity application issues and disseminate important business information. The 2024 seminar was held on November 20 at the Tainan District Office of Taipower.

Feedback Channels

Taipower has established multiple channels to address diverse customer service needs. They include a feedback mailbox on its official website, the 1911 customer service hotline, and dedicated personnel services.
Through its customer service center, website feedback mailbox, and AI customer service system, Taipower provides mechanisms for users and stakeholders to submit feedback and lodge complaints 24/7. The mechanisms cover electricity tariff appeals, equipment repair requests, and service quality feedback. All cases are handled and responded to in a timely manner according to established procedures, ensuring that concerns are effectively addressed and tracked.

Customer Feedback Mailbox
A feedback mailbox is available on Taipower's official website for users to submit inquiries and suggestions. In 2024, a total of 5,002 messages were received.

Customer Service Hotline and Intelligent AI Support
The 1911 customer service hotline and AI customer support system provide 24/7 year-round services, handling electricity bill inquiries, applications, and repair requests. In 2024, over 1.967 million calls were answered, with a 94.72% pickup rate within 20 seconds.

Dedicated Customer Service
Taipower offers dedicated customer service visits to group enterprises, high-consumption users, industry associations, and science parks. In 2024, 3,560 in-person service visits were conducted.

Customer Satisfaction

From October 21 to November 29, 2024, Taipower conducted a customer satisfaction survey for general, medium, and large users. The survey covered service quality, corporate image, user feedback, and overall satisfaction. Results showed satisfaction levels exceeding 90%, indicating strong recognition of Taipower's services. The Company has reviewed and addressed the reasons for dissatisfaction and issues raised via the user opinion mailbox, and has promoted follow-up improvement reports. Moving forward, Taipower will continue to enhance customer service and communication in line with the Ministry of Economic Affairs' Implementation Plan for Improving Service Efficiency.

2024 Survey Objectives, Period and Areas

Survey Objectives	Period	Survey Facets
1.General users: low-voltage users who have had business contact with Taipower in the past year. 2.Medium and large users:users with acontracted capacity of more than 100 kW.	October 21 – November 29, 2024	1.Service quality 2.Corporate image of the company 3.Customer feedback 4.Overall customer satisfaction

Customer Satisfaction Scores

2022	2023	2024
95.1	96.4	96.8

Satisfaction Survey Link

Open Data Section Link on the Official Website

Diverse Green Power Options

Green energy development is a global trend and a critical requirement for Taiwan's industrial exports. It also plays a key role in the nation's economy and strategy. Since 2021, Taipower has operated a power trading platform modeled after advanced market structures in the U.S., U.K., and Australia. By leveraging ancillary service transactions and cloud technology, the platform encourages private self-use generation and grid-connected energy storage systems to participate in the grid. This competitive bidding mechanism enables fair profit opportunities while supporting grid stability nationwide.

Performance Indicators for Green Power Direct Supply

Driven by the government's active promotion of renewable energy deployment and Taipower's efforts to facilitate grid connection, the volume of renewable energy directly supplied in 2024 reached 2.999 billion kWh, representing a 73.05% increase from 1.733 billion kWh in 2023. This reflects the growing vitality of green power market transactions.

Dedicated Webpage for Renewable Energy Grid Connection

Taipower's official website features a dedicated "Renewable Energy Grid Connection" section, providing three online inquiry systems. The platform also discloses remaining grid capacity by region and solar power interconnection statistics, assisting developers in selecting areas with greater available capacity for investment.

- Grid Capacity Inquiry:Developers can search for available grid capacity of nearby feeders by address or land number.
- Application Progress Inquiry:Users can check their case progress online using the application number.
- Queue Status for Full Capacity Feeders:Displays the queue order for feeders that have reached capacity.

Green Power Market Development Plan

Taipower launched the"Green Power Sandbox Program,"allowing single legal entities to allocate their self-generated power among different electricity accounts within the same TOU period. This helps prioritize the use of green power and reduce surplus energy. The program began on October 1, 2023, and was initially scheduled to end on September 30, 2024, but was extended on June 4, 2024, to continue through September 30, 2025. In 2024, the volume of transferred power under the program reached 1.387 billion kWh, accounting for 47.0% of total transferred green power. Going forward, Taipower will align with amendments to the Electricity Act and continue reviewing relevant transfer and direct supply regulations and contract terms, while assisting companies as they transition to direct supply to improve efficiency and user-friendliness.

Electricity Bill Inquiry Portal for Rental Housing

To enhance transparency in the rental housing electricity market, Taipower launched an online platform on January 31, 2024. After completing authentication at a Taipower service center, tenants can access the website to check the average electricity rate per kilowatt-hour for their rental unit. This helps tenants better understand their electricity usage, protect their rights, and assess whether electricity charges are reasonable.

Rental Electricity Bill Inquiry Portal

台灣電力公司
Taiwan Power Company

06

CHAPTER

Practitioner of Corporate Social Responsibility

Suitable for the following stakeholders:

Board of Directors, Shareholders, Employees Government Agencies, Elected Representatives, Residents

107,857 participants

A total of 107,857 participants received training in 2024

4.44 billion

In 2024, electricity discounts totaling NT$4.44 billion were provided to eligible users in accordance with regulations

4,600 cases

Approximately 4,600 neighborhood support cases were undertaken in 2024, with donations totaling around NT$100 million

Taipower's operations span across Taiwan. By engaging internal and external stakeholders through diverse channels, the Company strengthens partnerships to promote shared growth. Building on its core electricity business, Taipower is advancing green science education, cultural asset preservation, and community care to fulfill its corporate social responsibilities. Internally, talent development is the foundation of sustainability. Consequently, Taipower consistently enhances its recruitment, training, deployment, and retention systems, adopts new technologies and action plans, improves training and occupational health and safety, and safeguards the rights of employees and contractors to foster a healthy and happy workplace.

Through transparency and active communication with stakeholders, Taipower strives to meet societal expectations. It has long supported culture, arts, and sports as part of its social engagement. Now, in the midst of organizational transformation, the Company is continuing to strengthen talent training, workplace development, compensation and retirement systems, and industrial safety management to achieve a zero-accident goal and build a friendly, safe, and fulfilling work environment.

healthy and happy workplace.

6.1 Human Rights, Diversity, and Inclusion

6.1.1 Human Rights Policy

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Material Topic:Human Rights, Diversity, and Inclusion

Policy	• Uphold the human rights of employees and create a safe, equal, non-discriminatory, and harassment-free workplace.
Management Approach	• Comply with relevant labor laws (e.g., the Labor Standards Act, the Employment Service Act, the Act of Gender Equality in Employment, and the People with Disabilities Rights Protection Act), and prohibit bullying, discrimination, child labor, and sexual harassment.
Action Plans	• Ensure equal pay, fair performance evaluations and promotions, and provide grievance mechanisms. • Define working hours through work rules and collective agreements; pay overtime or provide compensatory leave in accordance with labor laws. • Establish hotlines and mailboxes for reporting sexual harassment; promote prevention education and counseling programs. • Respect employees' rights to form unions and associations; offer labor education and funding support. • Set up grievance channels, integrity mailboxes, and performance appeal mechanisms to ensure employee feedback is heard. • Develop personal data protection policies under the Personal Data Protection Act and form a dedicated task force. • Require contractors to comply with labor laws and implement complaint and labor counseling mechanisms. • Establish a labor compliance zone on the HR platform and communicate related laws to all employees.
Actual Performance in 2024	• Employment inclusion: Hired 980 persons with disabilities in 2024 (with each severely or extremely severely disabled individual counted as two); provided assistive devices such as screen magnifiers and Bluetooth adapters; received positive feedback. • Onboarding guidance: New employees were informed about union rights, childcare and welfare measures, and sexual harassment prevention. The union's membership rate reached 99.8% in 2024. • Family-friendly policy:Piloted a reduced work hour plan for parents of children aged 3–6 from September to December 2024; extended the trial from January 2025 until the child's 6th birthday.
Targets for 2030	• Continue to strengthen human rights protections and promote workplace diversity and inclusiveness, creating a happy and friendly work environment. Departments will report gender ratios when filling positions and reinforce related policies during management meetings.

Taipower is committed to supporting and adhering to internationally recognized human rights standards, such as the United Nations Universal Declaration of Human Rights, the UN Global Compact, and International Labor Organization conventions. These standards are incorporated into its operational activities. As an important public utility, Taipower must respect and protect the human rights of all stakeholders, including its employees, and strive to prevent any potential human rights violations.

Gender Equality Section

Human Rights Policy

Taipower established a Human Rights Policy to uphold the rights of internal and external personnel, ensuring a safe, equal, non-discriminatory, and harassment-free work environment. The Company is committed to protecting fundamental rights, providing a friendly workplace, ensuring occupational health and safety, upholding freedom of association, fostering labor-management harmony, and safeguarding personal data.

Taipower's Human Rights Policy

In 2024, Taipower offered various human rights-related courses through its training centers and online academy. Physical courses included employee assistance training, supervisor development programs, mentoring workshops, gender equality and prevention practices, labor law courses, and topical seminars. Topics covered listening and leadership, gender interaction boundaries, emotional and stress management, gender equality law updates, intergenerational communication, and gender equity. Online courses addressed corporate culture, employee rights, gender mainstreaming (including CEDAW and harassment prevention), international human rights conventions (including protections for persons with disabilities), workplace health, safety, and ethics. With over 63,000 participants, these programs effectively raised awareness of human rights and promoted a friendly workplace culture.

Management Measures for Important Human Rights Issues

Taipower conducted a preliminary human rights risk identification and assessment in 2022. The results were integrated into the 2022 human rights due diligence, and corresponding actions were implemented as shown below:

Important Topics of Concern	Specific Policies	Management and Mitigation Measures
Non-Discriminatory Promotion	Equalization of employee rights and benefits in the workplace	1.The salary and benefits schedule for internal employees, as well as the work rules, are submitted to and approved by the Board of Directors. 2.Promotion and attendance-related regulations, along with the Taipower Information Security Policy for protecting employee personal data, are approved by the President.
Privacy Protection	Protection of the personal information of employees	Establish personal data-related regulations, plans, and processing methods, and set up a Personal Data File Security Maintenance and Management Team.
Protection of Work and Labor Conditions / Forced Labor	Establishment of a friendly working environment for employees	If it is necessary to work beyond normal working hours, the extension must be approved by the labor union. Wages for the extended hours are paid in accordance with the Labor Standards Act, and employees may choose to take compensatory leave instead.
Right to Family Life – Not Compromising the Right to Family Life	Implementation of a gender-friendly workplace and provision of childcare support and benefits; emphasis on work–family balance for employees	1.Established the Personnel Difficulties and Matters of Grievance Processing Guidelines. 2.Formulated a Measure to Reduce Working Hours by One Hour Per Day for Employees Raising Children Under 3 Years Old, with full pay during flexible reduced hours. 3.Piloted a plan to reduce working hours for employees raising children aged 3 to under 6, where reduced hours are calculated to the minute and are unpaid. 4.These measures exceed those proscribed in Article 19 of the Gender Equality in Employment Act and include three options: starting work one hour later, leaving one hour earlier, or adjusting both start and end times by 30 minutes.
Right to Health – Measures to Protect Health / Providing Occupational Safety Training	Establishment of a friendly working environment for employees	1.Established qualifications and measures for labor health service medical and related personnel in accordance with the Labor Health Protection Regulations and the Occupational Safety and Health Education and Training Rules. 2.Planned and implemented various safety, health, and on-the-job training programs annually to fulfill safety and health management requirements at each business unit.
Personal Freedom and Safety	Providing a healthy and safe workplace for employees	Set up a hotline and mailbox for sexual harassment complaints, regularly publish e-newsletters on sexual harassment prevention, and implement the "Heart-to-Heart" Employee Assistance Program (EAP) to support employee work adjustment and address physical and mental challenges.

6.1.2 Diversity and Inclusion in the Workplace

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To help employees balance family and work, Taipower provides a diverse range of leave types. These include menstrual leave, family care leave, matrimonial leave, maternity leave, leave for prenatal check-ups, spousal leave for prenatal check-ups, and paternity leave. Since March 1, 2022, employees raising children under the age of 3 may apply to reduce their daily working hours by one hour with full pay, up to the day before the child turns 3. From September to December 2024, a pilot program was launched for employees with children aged 3 to under 6 to reduce working hours by one hour per day without affecting attendance or performance reviews (though the reduced hours are unpaid). The program will continue temporarily from January 1, 2025, and may be extended based on further instructions.

Taipower promotes gender-friendly measures by providing childcare subsidies, breastfeeding rooms, policies for the prevention of sexual harassment, workplace safety protections, equal pay, and workplace safety measures for pregnant women. The Company aims to ensure that no decision-making body is composed of less than one-third of any gender. Gender-friendly restrooms have been established, and the promotion of female supervisors is actively encouraged, with the ratio increasing year by year. These initiatives reflect Taipower's commitment to creating a gender-equal workplace.

Female and Male Employee Pay Ratio

Taipower's salaries and bonuses are determined based on job position and level, without differences due to gender or other factors. The pay ratio between male and female employees is 1:1 for both general staff and management positions, based on equivalent job levels.

Employee Category	Basic Salary Ratio	Total Compensation Ratio
Senior Management	1:1	1:1
Middle Management	1:1	1:1
First-line Supervisors	1:1	1:1
General Staff	1:1	1:1

Ratio of Female to Male Employees in Management Positions 405-1

Taipower is a public power company. Its on-site technical work often involves high/low voltage electrical hazards, high temperatures, noise, or working at height. Due to the high physical demands and occupational risks, such work is predominantly undertaken by male employees. As a result, the male-to-female ratio in middle and senior management is slightly higher than that of the overall employee gender ratio.

In 2024, Taipower had 5,239 managers in total (including first-line, middle, and senior managers), of which 922 were female. The gender gap in middle and senior management was 66.4% (male: 83.2%; female:16.8%), while the gap for all employees was 65% (male: 82.5%; female:17.5%).

Over the past three years, the proportion of female middle and senior managers has increased from 16.7% to 16.8%. Taipower encourages gender diversity in promotions by disclosing gender ratios during position openings and hosting briefing sessions and video promotions. Friendly workplace measures, such as unpaid parental leave and childbirth subsidies, have also contributed to a gradual rise in the number and proportion of female managers.

● Specific Results of Diversity and Inclusion in the Workplace

Happy Enterprise Recognition

Awarded the Gold Award in the manufacturing industry category by the 1111 Job Bank for four consecutive years (2021–2024), highlighting Taipower's commitment to employee well-being.

Talent Development and Recognition

In 2024, Taipower received the only national Excellence Award from the Ministry of Education for establishing employee learning systems within the central government, demonstrating outstanding achievements in talent development.

Family-Friendly Measures

- Reduced working hours for employees raising children under3 years old: 2,909 users by the end of 2024.
- Pilot program for reduced working hours for employees with children aged 3 to 6. The program had 189 users by the end of 2024.

Childcare Support and Benefits

Childcare facilities and diverse benefits are provided; each child under the age of 6 is eligible for an annual NT$6,000 subsidy, funded through 0.01% of the employee welfare budget.

High-Quality Childcare Environment

- Seven childcare service centers were established in partnership with nonprofit organizations. Five received scores above 90 in the Ministry of Education's evaluation, with nearly perfect parental satisfaction.
- In 2024, Premier Chen of the Executive Yuan visited and praised Taipower's support for the "Government Helps Raise Children from 0–6" policy, and the Company's efforts in helping reduce the burden on parents.

Salary Adjustment and Talent Recruitment

Adjusted base salaries and new employee starting pay in reference to 2024 civil servant pay increases, prioritizing frontline staff to address talent shortages and declining birth rates.

6.2 Building a Happy Electricity Industry

6.2.1 Talent Management and Development

2-7 2-8 3-3 401-1 401-2 401-3 404-2

Material Topic:Talent Management and Development

Policy	● Attract and recruit outstanding talent, offer competitive salaries, training programs, welfare benefits, and a comprehensive retirement and care system.
Management Approach	● Recruit talent through diverse channels to maintain and pass on core power-related technical skills.
Action Plans	● Engage with academic institutions early to cultivate talent forthe power sector. ● Implement annual training plans to support talent development. ● Launch specialized training focused on topics such as risk management and net-zero. ● Continue the mentoring system to improve new employee adaptation.
Actual Performance in 2024	● Strengthened industrial-academic collaboration and scholarship mechanisms to expand recruitment channels. ● Employee training satisfaction scores in 2024: teaching methods4.77, materials 4.72, learning outcomes 4.70, contribution to work development 4.69. ● A "Comprehensive Power Technology Practical Workshop"was held from June to October 2024 to enhance technical staff expertise. ● Satisfaction with the new employee mentoring system reached 91.8%.
Targets for 2030	● Increase learning hours: ensure each employee receives at least 30 hours of external training annually. ● Improve training quality:achieve all targets set in annual training plans and maintain TTQS evaluation compliance. ● Enhance the mentoring system: refine training based on new employee feedback and aim for mentor satisfaction rates above 94%. ● Strengthen childcare support:seek to increase the welfare fund allocation rate in support of the "0–6 Joint Childcare"policy. ● Improve the quality of internal childcare centers and expand benefits to help employees balance work and family life.

Human Resource Strategy

Taipower's energy transition, pursuit of low-carbon sustainability, and smart grid development bring challenges. While maintaining a stable power supply, the Company must also cultivate talent that meets future development needs. By maintaining a core technology skills inventory, Taipower identifies talent gaps and implements diversified recruitment strategies to attract professional power industry talent. In addition, Taipower enhances the professional and cross-disciplinary capabilities of its employees through comprehensive training systems and knowledge transfer mechanisms that enable the workforce to respond to transformations in the green economy and digital era.

Taipower integrates internal and external training resources to strengthen the development of talent in renewable energy and smart grid areas. The Company continues to cultivate professionals aligned with business development needs to achieve effective human resource management across recruitment, development, deployment, and retention.

Taipower's Strategies for Recruitment, Training and Development, Utilization, and Retention

Recruitment	● Balanced and systematic human resource planning and appointments ● Diversified recruitment strategies to meet staffing needs, including staff and contract staff examinations, scholarships for undergraduate, graduate, and vocational school students, cooperation programs with vocational schools, and internal promotion channels through examinations
Training & Development	● Strengthen the transfer of technical expertise across business divisions and promote core operations ● Develop innovative training models to enhance organizational learning ● Implement succession plans for supervisors and build a company-wide talent pool ● Promote lifelong learning through online resources ● Enhance talent development effectiveness
Utilization	● Effectively allocate and manage personnel budgets ● Improve HR systems for greater flexibility and efficiency ● Implement job rotations and performance evaluations ● Utilize data analysis to support managerial decision-making ● Strengthen HR functions in each business division ● Conduct internal promotion exams to identify and promote outstanding contract employees
Retention	● Provide public labor health insurance, medical subsidies for occupational injuries, and health checkups through welfare programs ● Offer labor education courses and recreational activities to support employees' physical and mental well-being

Talent Recruitment and Compensation Optimization Strategy

Each year, Taipower evaluates staffing needs across its business units including power plant maintenance, circuit design, big data analytics, and cultural heritage preservation and conducts open recruitment accordingly. The Company continuously improves its recruitment and compensation strategies to attract outstanding talent, enhance competitiveness, and ensure stable corporate development.

Human Resource Development – Talent Recruitment, Utilization, and Discipline

1 Open Recruitment of Outstanding Talent

- Recruitment follows the "MOEA Regulations Governing the Employment of Personnel by Affiliated Enterprises"and uses an open examination system to ensure fairness and transparency.
- Recruitment visibility is increased through newspapers, digital media, job search platforms, and social media channels (e.g., Taipower's official Facebook page).

2 Salary Adjustment for New Employee

Through persistent efforts by Taipower, the Ministry of Economic Affairs approved a salary increase for newly hired staff starting in 2023-from Grade 2, Level 1 (NT$42,037) to Grade 2, Level 5 (NT$45,094). This aligns salaries with market standards and sets them at a level comparable to those at other state-owned enterprises.

3 Information Disclosure and Supply Chain Transparency

Recruitment information, salary structure, bonuses, and benefits are publicly disclosed on Taipower's official website, along with enhanced supplier collaboration and transparency.

4 Scholarships and Campus Recruitment

Annual scholarship selection is held for university and graduate students, along with campus recruitment events across Taiwan's four regions to attract specialized talent.

5 Mentorship System

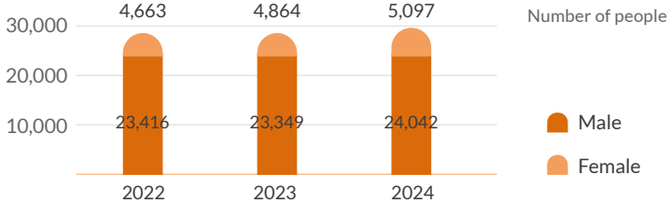
A mentorship system is in place, with experienced employees guiding new hires to help them quickly adapt and grow.

Structure of Human Resources

● Employment Categories

Taipower does not employ foreign nationals. All employees are hired as full-time, permanent workers. The Company does not hire temporary, part-time, or gig-economy employees.

Total Number of Employees and Gender Ratio



Employee Distribution in 2024

		Male		Female		Total
		Number of people	%	Number of people	%	Number of people
Non-management Employees	General Staff	19,725	82.53	4,175	17.47	23,900
Management	Senior Management	291	86.09	47	13.91	338
	Middle Management	954	82.31	205	17.69	1,159
	First-line Management	3,072	82.1	670	17.9	3,742
Contract Type	Full-time Permanent	24,042	82.51	5,097	17.49	29,139
	Part-time Permanent	0	0	0	0	0
	Full-time Contract	0	0	0	0	0
	Part-time Contract	0	0	0	0	0
	Dispatched Workers	0	0	0	0	0
Location	Taiwan	24,040	82.5	5,097	17.5	29,137
	Overseas	2	100	0	0	2
Nationality	ROC Nationals	24,042	82.51	5,097	17.49	29,139
	Foreign Nationals	0	0	0	0	0

82.53%
Male employees

17.47%
Female employees

Notes:1.Permanent Employees: Hired under indefinite-term contracts. Employment continues unless terminated or voluntarily resigned. Employees are entitled to severance pay, and employers are required to contribute to retirement funds.
2.Contract Employees: Employed under fixed-term contracts only for temporary, short-term, seasonal, or specific work. Employment ends upon contract expiration unless renewed. Not entitled to severance pay, but employers must contribute to retirement funds.
3.Full-Time Employees: Defined by Article 30, Paragraph 1 of the Labor Standards Act as employees working 8 hours per day and 40 hours per week.
4.Part-Time Employees: Employees working fewer hours than full-time standards. These employees have statutory rights equal to those of full-time employees, with wages and leave calculated on a proportional basis.
5.Data cutoff date: End of December 2024.

New Employees by Age, Gender, and Management Level

Unit:Number of people

Year		2022		2023		2024	
Total New Employees		2,028		1,840		2,507	
		Male	Female	Male	Female	Male	Female
Age	Under 30	1,034	262	845	275	1,207	289
	31-50	482	235	469	223	722	254
	Over 51	13	2	22	6	32	3
	Total	1,529	499	1,336	504	1,961	546
Management	Senior Management	3	0	2	0	2	0
	Middle Management	9	2	5	2	4	1
	First-line Management	7	8	5	8	6	13
Non-management Employees General Staff		1,510	489	1,324	494	1,949	532

Departing Employees by Age, Gender, and Management Level

Unit:Number of people

Year		2022		2023		2024	
Total Departing Employees		1,794		1,738		1,609	
		Male	Female	Male	Female	Male	Female
Age	Under 30	278	48	282	45	317	51
	31-50	213	156	240	148	280	156
	Over 51	991	108	918	105	692	113
	Total	1,482	312	1,440	298	1,289	320
Management	Senior Management	38	5	28	4	33	4
	Middle Management	77	14	64	11	69	16
	First-line Management	198	36	168	36	121	27
Non-management Employees General Staff		1,169	257	1,180	247	1,066	273

Note:The statistical cut-off date is the end of December 2024.

Diversified Employee Numbers, Age and Gender Distribution

Employees with Disabilities

Unit:Number of people

Year		2022		2023		2024	
Total Number of Employees with Disabilities		Number of Employees with Disabilities		Total Number of Employees		Percentage of Employees with Disabilities	
		Male	Female	Male	Female	Male	Female
Age	Under 30	84	53	4,380	1,211	1.92%	4.38%
	31–50	244	169	13,990	2,909	1.74%	5.81%
	Over 51	172	108	5,672	977	3.03%	11.05%
	Total	500	330	24,042	5,097	2.08%	6.47%

Indigenous

Unit:Number of people

Year		2022		2023		2024	
Total Number of Indigenous		Number of Indigenous		Total Number of Employees		Percentage of Indigenous	
		Male	Female	Male	Female	Male	Female
Age	Under 30	50	19	4,380	1,211	1.14%	1.57%
	31–50	112	30	13,990	2,909	0.80%	1.03%
	Over 51	22	5	5,672	977	0.39%	0.51%
	Total	184	54	24,042	5,097	0.77%	1.06%

Analysis of Employee Turnover

Taipower has implemented multiple initiatives to improve its work environment, career development prospects, and overall quality of life for its employees. These efforts have significantly enhanced employee loyalty and job satisfaction, thereby reducing the likelihood of voluntary turnover. In 2024, the turnover rate among new hires was approximately 4.4%, and vacancies from these resignations will be reflected in the unfilled headcount of the following year. To improve retention of new employees, Taipower plans to implement the following measures:

1. Raise starting salaries during training - New employees holding relevant power-related certifications may receive higher starting salaries to encourage professional growth.
2. Enhance recruitment outreach - Disseminate recruitment information through press releases, recruitment websites, bulletin boards, and LED displays. Collaborate with high schools and employment service agencies nationwide, and host information sessions at universities and graduate schools to highlight competitive salaries, career development, and promotion pathways.
3. Strengthen employee engagement - Department heads regularly explain Taipower's business philosophy and development strategies during meetings and assemblies to enhance employee identification and stability.
4. Tailored training and advancement - In addition to basic training, employees receive training based on performance evaluations. Outstanding employees are selected for supervisory training and given promotion opportunities to support long-term career development.
5. Support for workplace and life adaptation -Supervisors, welfare committees, and the employee support platform provide assistance for new hires adjusting to work and life. Employees are encouraged to participate in clubs, trips, and social gatherings to foster camaraderie and well-being.

Distribution of Turnover Reasons

Year		2022	2023	2024
Regular Employees	Voluntary Turnover Rate	1.92%	1.68%	1.61%
	Involuntary Turnover Rate	3.22%	3.15%	2.48%
	Performance-Based Turnover Rate	0.01%	0.00%	0.00%
	Total Turnover Rate	5.15%	4.83%	4.09%
Contracted and Dispatched Employees Note		0.00%	0.00%	0.00%

Note: Involuntary turnover includes contract expiration, retirement, death, etc. Data for contract and dispatched personnel turnover rates are not applicable.

Use of Contracted and Outsourced Workforce

As of the end of December 2024, Taipower employed 1,152 workers under outsourced service and labor contracts. These personnel were engaged in tasks such as cleaning, clerical work, telephone operations, and driving.

Workers Who Are Not Employees

Non-Employed Workers	Number of People	Contractual Relationship	Type of Work
Volunteers	636	None. These are retired Taipower staff or non-Taipower volunteers.	• Sports advocacy (cheering for Taipower's sports teams) • Guidance services at branch office service counters

Human Resource Training

Taipower classifies and evaluates job positions based on the attributes of its position system. In line with this structure and employee training needs, the Taipower Training Center develops and implements core competency training programs to ensure alignment between training and job responsibilities, thereby enhancing retention and supporting long-term talent development.

New employees are paired with mentors who pass on technical knowledge and provide guidance in both work and personal matters. This support helps improve adaptability, foster stability, and accelerate integration into the workplace.

Taipower also identifies critical roles and maintains a high-potential talent pool to ensure the effective cultivation and deployment of personnel with key technical and managerial capabilities, reinforcing the Company's competitiveness and succession of expertise.

Training Type	Training Subject		Number of Participants (2024)
Development Training	Pre-service training for newly dispatched staff		820
	Fundamental development training		853
	Subtotal		1,673
On-the-Job Training	Professional Training	Professional training – by the Training Institute	14,101
		Professional training – by departments	85,881
		External training programs	4,188
	Subtotal		104,170
Manager Training	On-the-job training for managers		1,162
	Managerial development training		850
	Subtotal		2,012
Postgraduate Education	Graduate school recommendations – Master's degree 2		2
	Subtotal		2
	Total		107,857

Human Resource Development – Training and Education

Training Programs

1.New Employee Training:

- Dispatched Employees (Staff):Participate in a "New Talent Learning Camp" that covers corporate culture, general management knowledge, and interpersonal skills.
- Hired Employees:Receive phased technical training. After acquiring required certifications, they undergo practical field training.

2.On-the-Job Training:

- Designed for entry, mid, and senior-level managers based on their ranks and responsibilities.
- Adjusted flexibly according to new technology implementation and business needs.
- In line with government policies, Taipower promotes skill certification and licensing exams.

3.Mentorship System:

- Each new employee is assigned a dedicated mentor to provide job guidance and support.
- An annual survey is conducted to evaluate the system's effectiveness. In 2024, the satisfaction rate exceeded 90%.

2024 National Talent Development Award – Government Organization Category

2024 Ministry of Education's Award for Outstanding Employee Learning System, the highest distinction awarded to only one organization nationwide

Outcomes and Impacts

Talent Development Results

- In 2024, a total of 108,201 instances of training were recorded, accounting for 75.14% of all eligible employees.
- Over the past three years, Taipower has continuously implemented talent development programs, with an increasing number of employees benefiting annually.
- The mentorship system has improved the adaptation rate of new employees, with workplace satisfaction exceeding 90% in 2024.

Resource Investment

- 2022: NT$331 million invested; average training cost per employee was NT$11,808.
- 2023:NT$382 million invested; average training cost per employee was NT$13,540.
- 2024: NT$421 million invested; average training cost per employee was NT$14,426.

Evaluation Mechanisms

- Learning outcomes are evaluated through post-training tests, project reports, and skill assessments.
- Post-training effectiveness is tracked quarterly through follow-up surveys on 20 training sessions per quarter.
- Course evaluations are conducted to assess participant satisfaction with course content and teaching methods.

6.2.2 Employee Rights and Benefits

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Employee Compensation Policy

Taipower, as a state-owned enterprise, has adopted a salary point system in accordance with the Personnel Expenses and Salary Management Guidelines for Enterprises under the Ministry of Economic Affairs. Total personnel expenses, including salaries, benefits, and insurance, must remain within the approved budget. Salaries are calculated based on job grade salary points and the annual conversion standard. Additional allowances are provided based on location, job-related hazards, and the rarity of the position. Salary adjustments are benchmarked against those of military personnel, civil servants, and teachers, and are submitted to the Board of Directors for approval and subsequently reported to the Ministry of Economic Affairs, to ensure market competitiveness.

Average Employee Compensation Ratio

Year	2023	2024
Average Salary per Employee (NT$)	1,219,165	1,258,857
Average Benefits per Employee (NT$)	220,394	229,277
Total Salary of Full-Time, Non-Managerial Employees (NT$)(A)	29,417,774,833	30,667,376,473
Number of Full-Time, Non-Managerial Employees(B)	25,151	25,394
Average Salary of Full-Time, Non-Managerial Employees (NT$) (A/B)	1,169,646	1,207,662
Median Salary of Full-Time, Non-Managerial Employees(NT$)	1,117,117	1,149,156

Notes: 1."Salary expenses" include base pay, overtime pay, bonuses, and other recurring and non-recurring compensation for employees employed throughout the year.
2."Benefit expenses" include labor and health insurance, retirement contributions, and other employee benefits.
3."Non-managerial" refers to employees who worked full time throughout the year and did not hold a managerial position (manager level or above) at any time.

Total Annual Compensation Ratio

Year	2022	2023	2024
Highest-Level Individual Annual Total Compensation (NT$)	2,875,589	3,374,511	3,522,853
Percentage Increase in Total Compensation for the Highest-Level Individual	-5.84%	17.35%	4.40%
Total Annual Compensation for All Other Employees (NT$)	31,868,024,448	32,315,462,403	33,716,233,914
Median Percentage Increase in Total Compensation for All Other Employees	6.80%	4.84%	7.22%

Notes: 1.The highest-paid individual is the General Manager. In 2022, a transition took place on March 8, with the Deputy General Manager being promoted. This caused a temporary dip in annual compensation that was adjusted in 2023.
2.Compensation includes base salary, overtime pay, job-related bonuses, and performance incentives.
3.Figures are based on employees who were employed for the full year.

Employee Performance and Evaluation Policy

Taipower conducts employee performance evaluations in accordance with relevant regulations. Supervisors at all levels assess the performance of their subordinates across seven major dimensions and determine the evaluation results within the specified timeframe, followed by the issuance of performance bonuses. Taipower is committed to promoting a performance-based reward system to recognize outstanding or dedicated employees and departments, thereby enhancing employee engagement, operational performance, and team morale. The key implementation aspects of employee performance evaluation and performance-based reward mechanisms are as follows:

Employee Performance Evaluation

- Applies to officially appointed and eligible employees
- Supervisors evaluate employees across seven dimensions: 1.Professional competency; 2. Job performance; 3. Teamwork; 4. Work attitude; 5. Integrity and ethics; 6. Management ability and 7.Leadership skills

Performance Management by Responsibility Centers

- Bonuses are distributed based on responsibility center performance results
- 40% of the total bonus pool is allocated as efficiency bonuses

Instant Reward Mechanism

- 2% of the total performance bonus is reserved for business unit heads
- 50% is granted as real-time rewards by the Chairman, President, and Vice Presidents
- 50% is flexibly used by unit supervisors following incentive guidelines

Employee Rights and Benefits

Taipower is committed to safeguarding"employee rights and benefits"by effectively implementing relevant measures in accordance with legal regulations. Through diverse welfare policies and programs, the Company strives to enhance and protect employee well-being.

Key Employee Benefits and Care

Diverse Career Development Resources	Provide comprehensive training and development resources.Ensure employees acquire the competencies needed for career advancement.
Salary Guarantees	Maintain a transparent salary system. Implement a comprehensive performance incentive program.
Retirement Care	Establish a well-rounded retirement care system, publish relevant information on a dedicated website, and organize farewell events to help retiring employees smoothly transition into retirement.
Multiple Protections	Provide labor and health insurance coverage. Offer medical subsidies for work-related injuries. Conduct regular health check-ups. Organize recreational activities.

In the future, Taipower will continue to enhance its employee welfare policies through diverse health care initiatives and by enriching employee travel and empowerment activities. In collaboration with related organizations such as the Taiwan Power Union and the General and Branch Committees of the Taipower Employees'Welfare Committee-Taipower will organize cross-regional (inter-county and inter-city) recreational events to further improve and safeguard employee welfare.

Employee Welfare Measures

Employee Retirement System and Sustainability Commitment

Taipower is committed to providing comprehensive retirement protection for its employees and has established both a defined benefit plan in accordance with the Labor Standards Act and a defined contribution plan under the Labor Pension Act. This dual approach reinforces human capital care and embodies the Company's corporate sustainability responsibilities.

For employees hired on or after July 1, 2005, Taipower offers a defined contribution plan based on the Labor Pension Act. The Company contributes no less than 6% of employees'monthly salary to individual pension accounts. For employees under the older Labor Standards Act system, Taipower sets aside retirement reserves based on years of service, which are paid in a lump sum upon retirement. In 2024, the total defined benefit cost recognized for regular and contract employees was NT$1.756 billion, an amount that allows for the stable fulfillment of long-term obligations.

Additionally, Taipower enrolls certain employees with specific statuses in the civil servant insurance program in accordance with the law. Based on recent legal amendments, Taipower also recognizes net defined benefit liabilities for the portion of pension obligations exceeding the basic pension rate (i.e., excess pension payments).

Taipower evaluates retirement obligations based on International Financial Reporting Standard (IFRS) IAS 19"Employee Benefits,"and commissions an independent professional actuary to conduct annual actuarial assessments. Related costs and actuarial gains or losses are recognized and disclosed in financial reports. Taipower continues to review the design and financial sustainability of its retirement systems to ensure fairness, stability, and adaptability, and to fulfill its core value of ensuring long-term care as a responsible enterprise.

Implementation of Measures to Protect the Rights of Dispatched (On-Site) Workers

Taipower ensures that all outsourced procurement projects are conducted in compliance with the Labor Standards Act and follow contract templates and labor guidelines issued by the Public Construction Commission (PCC) and the Ministry of Labor. Various measures have been established to safeguard the labor rights of outsourced personnel, including:

1. Ensuring contractors comply with labor laws by creating a "Penalty Table for Violations of Labor Laws by Contractors," that outlines common non-compliance scenarios. Taipower has also adopted a standard labor contract template, that makes reference to the model provided by the Taipei City Government, for contractors to use with dispatched workers.
2. Requiring all units to use the PCC's official "Labor Service Procurement Contract Template" when engaging dispatched labor. If case-specific adjustments are necessary, supplementary clauses must be added to ensure comprehensive contracts that enforce contractor accountability for protecting labor rights.
3. Conducting random interviews with dispatched workers to verify contractor compliance with agreed labor protections in accordance with Taipower's "Guidelines for Establishing Task Forces to Interview and Counsel Dispatched Workers Employed by Labor Service Contractors."
4. Updating the Company's internal policy ("Matters to Note When Handling Outsourced Operations") to align with the Ministry of Labor's revised "Guidelines for Government Agencies Utilizing Labor Outsourcing," with the aim of strengthening the implementation of labor outsourcing practices.
5. Posting information on the "Grievance Mechanism for Dispatched Workers" prominently at all units and workplaces and conducting periodic awareness campaigns for dispatched workers to ensure they understand how to seek assistance and assert their rights.

Since April 1, 2024, these measures have been fully implemented. Each unit has conducted regular interviews with dispatched workers per contract requirements and has actively promoted awareness of sexual harassment prevention and complaint channels to protect labor rights.

6.3 A Sound Working Environment

6.3.1 Occupational Safety and Health

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Material Topic:Safety Management and Crisis Response

Policy	Taipower's Safety and Health Management Policy ● Abide by laws and observe discipline: Comply with occupational safety and health regulations and meet all relevant standards. ● Life is priceless, take the initiative to care: Ensure workplace safety and promote both physical and mental well-being. ● Intrinsic safety, prevent problems before they occur: Enhance the safety of facilities and environments, and proactively identify potential hazards. ● Full participation and continuous improvement: Everyone is responsible for safety and health; the pursuit of workplace safety is a continuous journey.
Management Approach	● Taipower has established key guidelines for occupational safety and health, including training and promotion, inspection and supervision, operational safety, use of protective equipment, fire safety, traffic safety, health management, accident handling, reward and penalty systems, and contractor management. These efforts aim to comprehensively implement safety and health policies, prevent occupational accidents, and protect the safety and health of all employees.
Action Plans	● Establish rapid reporting procedures for various disasters and emergency events. ● Define key procedures for handling occupational safety incidents. ● Implement mechanisms to verify the execution of industrial safety and health policies and objectives.
Actual Performance in 2024	● Held approximately 160 disaster prevention and emergency response drills, with total participation of around 12,000 people. ● Collaborated with internal and external training institutions to conduct 760 sessions of legally required and specialized occupational safety and health training, attended by approximately 28,098 participants. ● Held 1,078 occupational safety and health training sessions for contractors, with around 35,625 attendees.
Targets for 2030	● Continue conducting statutory occupational health and safety training, promote interactive hazard identification education, and improve risk assessment capabilities through case reviews and on-site inspections. ● Implement unannounced workplace safety audits, strengthen supervision and management, introduce third-party expert reviews, and conduct targeted safety inspections for accident-prone or underperforming units to identify hidden risks. ● Introduce AI image recognition technology to automatically detect unsafe behaviors such as not wearing helmets or entering restricted areas, enhancing management efficiency and reducing workplace accidents. ● Strengthen preparedness for nuclear units by ensuring the performance of drills, the reliability of emergency response teams, and the effectiveness of warning systems. Quarterly reports will be submitted to the Nuclear Safety Commission as the basis for regulatory oversight.

Material Topic:Worker Health and Safety

Policy	● Systematically manage the occupational safety of both employees and contractors to prevent occupational injuries.
Management Approach	● Units that have implemented occupational health and safety management systems must regularly (annually) evaluate and review their hazard identification and risk assessment processes. In the event of non-routine circumstances, they should promptly discuss, adjust, or update assessments and determine necessary control measures.
Action Plans	● Establish key points and control measures in accordance with Taipower's Occupational Safety and Health Management Guidelines ● Implement Taipower's Risk Assessment Guidelines for Contracted Construction Projects
Actual Performance in 2024	● Employee injury frequency rate: 0.13 ● Contractor labor injury frequency rate: 0.38
Targets for 2030	● Employee injury frequency rate ≦ 0.1 ● Contractor labor injury frequency rate ≦ 0.1

Health and Safety Management Policy

Aspects, Basis, and Practices of Occupational Safety Management

Taipower has formulated occupational safety and health (OSH) management measures to prevent and mitigate major safety risks and hazards associated with its operations, products, and services.

1.Key Points for Handling Occupational Safety Incidents

- Workers are required to report occupational hazards and dangerous conditions in accordance with regulations. In the event of an incident, they must notify the responsible management unit within one hour and, if necessary, report it to the local labor inspection authority.
- If a worker deems that their current work condition may result in injury or illness, they are entitled by law to suspend operations, withdraw to a safe location, and promptly report to their direct supervisor.

2.Rapid Reporting Procedures for Disasters and Emergencies

After an incident occurs, the competent authorities and Taipower supervisors at all levels immediately utilize various communication tools to obtain real-time updates. This enables swift coordination of emergency response actions to mitigate damage. The reporting procedures for various types of disasters and emergencies ensure that superior authorities and Taipower supervisors stay continuously informed in real time, allowing for prompt command and coordination among relevant units to reduce disaster-related losses.

Dimension	Management Method	Management Bases / Practices
Regulatory	Training	Procedures for Training and Utilizing Occupational Health and Safety Personnel from Affiliated Units
	Auditing and Supervision	Management Enforcement of Procedures through Inspections by Supervisors at All Levels
	Operational Safety	Enforcement Procedures for Operational Safety Standards Enforcement Procedures for Consultative Organizations in Joint Operations
	Personal Protective Equipment Management	Management Procedures for Personal Protective Health and Safety Equipment
	Incident Handling	Occupational Safety Accident Handling Procedures Guidelines for Assisting Employees in Handling Industrial Incidents
	Rewards and Punishments	Procedures for Punishment of Health and Safety Regulation Violations Procedures for Rewarding Excellent Health and Safety Performance
	Contractor Management	Procedures for Health and Safety Counseling Procedures for Penalizing Contractor Violations of Contractual Health and Safety Requirements Procedures for Additional Training on Contractual Health and Safety Requirements following Contractor Violations
Onsite Execution	Before Job Task Starts	Industrial Safety Communications and Hazard Notifications Pre-Work Training Workshops Review Lists for Operating Personnel
	During Job Progress	Health and Safety Check-ins for Operating Personnel Executing Toolbox Meeting – KY (Kiken Yochi) and Making Records Implementing Automatic Inspections Auditing Health and Safety Measures
	Operational Equipment and Machinery Inspection	Regular Inspections and Confirmations of Machinery Dedicated Notebooks or Files for Inspection Records Building Coordination and Control Mechanisms

The Percentage of Workers in the Formal Health and Safety Committee Composed of Labor and Management

41.2%

Total Number of Health and Safety Committee Members	34
Number of Labor Representatives on the Committee	14
Percentage of Labor Representatives on the Committee	41.2%

The Occupational Health and Safety Management System

Taipower's Occupational Health and Safety Committee consists of at least seven members, including the President (employer), labor representatives, and other members appointed by the President as needed. The committee convenes meetings at least once every three months.

According to Article 12-2 of the Occupational Safety and Health Management Regulations, enterprises classified as Category I with over 200 workers are required to establish an occupational health and safety management system based on the national standard CNS 45001 or an equivalent standard.

Taipower has established such a system and had completed CNS 45001 certification for 47 units (including headquarters) by 2023. The Company continuously applies the Plan-Do-Check-Act (PDCA) management cycle for ongoing reviews and improvements.

The system applies to all workplaces and all types of personnel, including employees, contractors, volunteers, and self-employed workers at hydro and thermal power plants, nuclear power plants, branch offices, power supply district operation offices, engineering departments, and other units.

Occupational Safety Performance

In 2024, the primary causes of occupational injuries among Taipower workers were contact with high or low temperatures, falling objects, falls, and electric shocks.

Taipower's Occupational Health and Safety Management System includes a "Hazard Identification and Risk and Opportunity Assessment Procedure" to reduce risks through a hierarchy of controls, such as elimination, substitution, engineering controls, signage/warnings and/or administrative controls, and the use of personal protective equipment (PPE).

When necessary, these measures are reviewed, adjusted, or updated through discussion at meetings, and further improvements are implemented as needed.

Analysis and Statistics of Occupational Injuries in 2024

Type of Worker	Total	Contact with High or Low Temperatures	Falls	Electric Shocks	Collapses	Stabbing, Cutting, Scratching	Struck	Trip	Falling Objects	Caught/ Entangled
Employees	7 cases 8 disabilities	4 cases 5 disabilities	0 cases	1 cases 1disabilities	2 cases 2disabilities	0 cases	0 cases	0 cases	0 cases	0 cases
	Injury Rate by Accident Category	62%	0%	13%	25%	0%	0%	0%	0%	0%
Contractors	21 cases 4 deaths 18 disabilities	5 cases 6 disabilities	3 cases 1 deaths 2 disabilities	2 cases 1 deaths 1 disabilities	3 cases 2 deaths 1 disabilities	1 cases 1 disabilities	2 cases 2 disabilities	2 cases 2 disabilities	2 cases 2 disabilities	1 cases 1 disabilities
	Injury Rate by Accident Category	28%	13%	9%	13%	5%	9%	9%	9%	5%

Note:1.Disaster Type Injury Rate = (Number of casualties by type / Total casualties in the year) × 100%
2.Occupational injury data for Taipower employees does not include 16 cases of non-commuting traffic accidents.

Statistics on Serious Work-Related Injuries in 2024

Type of Worker	Employees			Construction Contractors
Gender	Male	Female	All Genders	All Genders
Total Number of Work Hours	49,181,456	10,357,615	59,539,071	57,649,347
Deaths Caused by Occupational Injuries(Number of People)	0	0	0	4
Deaths Caused by Occupational Injuries (Rate)	0	0	0	0.013
Severe Occupational Injuries (Number of People)	8	0	8	18
Severe Occupational Injuries (Rate)	0.032	0	0.026	0.062
Recordable Occupational Injuries (Number of People)	8	0	8	22
Recordable Occupational Injuries (Rate)	0.032	0	0.026	0.076
False Alarms (Number of People)	11	1	12	13
False Alarms (Rate)	0.044	0.019	0.040	0.045

Notes:1.Employees:Includes both dispatched and directly employed personnel.
2.Contractors:Includes both contracted labor and self-employed workers.
3.Total Working Hours:Calculated by allocating overall work hours based on the gender ratio among Taipower employees.
4.Rate of Deaths Caused by Occupational Injuries = (Number of Deaths ÷ Total Work Hours) × 200,000 (per 100 employees, based on 50 weeks × 40 hours/year).
5.Severe Occupational Injury: Refers to injuries resulting in death or those that prevent the worker from returning to pre-injury health within six months. Contractor work hours by gender were not compiled in 2024 and will be addressed in future reporting.
6.Rate of Severe Occupational Injuries (excluding deaths) = (Number of Severe Injuries ÷ Total Work Hours) × 200,000.
7.Rate of Recordable Occupational Injuries = (Number of Recordable Injuries ÷ Total Work Hours) × 200,000.
8.False Alarms:Work-related incidents that result in no loss or injury.

In the event of a false alarm involving Taipower employees or contractors (including contracted labor and self-employed workers), the department head or responsible unit head shall serve as convener to form a Unit Investigation Team with the Occupational Safety Department and the Taipower Union branch. If necessary, the unit's ethics office may join the investigation. The unit must submit an Occupational Safety Accident Report within three working days after the incident. In special cases, prior approval may be granted with later submission of relevant documents.

Emergency Response Policy

Taipower regularly conducts educational drills for emergency response to industrial safety accidents to enhance emergency response capabilities. In the event of any form of industrial safety accident involving employees or contractors, all units follow the "Guidelines for Handling Industrial Safety Accidents," immediately initiating necessary first aid and rescue efforts, promptly notifying and reporting to relevant units, and dispatching personnel to conduct investigations. Subsequently, an accident review meeting is held to identify and implement horizontal preventive measures across relevant units (departments), followed by a responsibility review meeting to evaluate the accountability of involved personnel.

Occupational Safety and Contractor Management

Taipower continues to strengthen its occupational health and safety management system, aiming to raise safety awareness among both internal and external personnel and ensure a safe and stable working environment. Each unit is required to regularly assess occupational hazards and risks, and promptly adjust control measures under the following circumstances:

- When there are changes or additions to operating methods.
- When changes occur in the work environment.
- When occupational accidents take place.
- When there are changes in infrastructure, equipment, or raw materials provided by the organization or other parties at the workplace.

- Contractor Safety Management Mechanism
  To ensure the construction safety of contractors and subcontractors, Taipower holds pre-construction safety coordination meetings and convenes regular or ad-hoc joint operation coordination meetings to enhance inter-unit cooperation. The safety management process is outlined as follows:
  - Pre-construction meetings - Clarify work interfaces and safety matters
  - Joint operation coordination meetings - Held regularly or as needed to promote collaboration
  - Training programs - 1,078 training sessions conducted for contractors
  - On-site supervision - Enhanced inspections, supervisor walkthroughs, and CCTV monitoring
  - Violation handling and corrective actions — Issuance of notice or contractual fines as appropriate

Occupational Safety Performance in 2024

Item	Number of Sessions	Number of Participants
Disaster Prevention and Emergency Response Drills	160 sessions	Approximately 12,000 participants
Various Occupational Safety Training Courses (e.g., Safety Managers, Supervisors)	760 classes	Total of 28,098 participants
Contractor Occupational Health and Safety Training	1,078 sessions	Approximately 35,625 participants

- Public Opinion Response and Corporate Image Protection
  To effectively respond to incident risks and external media coverage, Taipower has established a Standard Operating Procedure for Public Opinion Reporting. This enables the Company to swiftly clarify misinformation during media-sensitive events, safeguard its corporate image, and prevent the escalation of controversy.

Analysis of Industrial Safety Accidents and Continuous Improvement Measures

In the past decade, the most common types of occupational injuries at Taipower have been contact with high or low temperatures, electric shocks, and falls. A closer analysis reveals the following common causes:

- Failure to conduct or properly implement risk assessments
- Workers rushing to meet deadlines, taking shortcuts, or lacking risk awareness
- Insufficient implementation of the "Three Protections" approach (protecting personnel, equipment, and environment)
- Non-compliance with standard safety procedures or failure to wear protective gear
- Inadequate cross-unit communication or ineffective control of personnel entry into the worksite

To reduce the risk of occupational injuries, Taipower continues to promote industrial safety strategies by optimizing systems, strengthening education and training, enhancing supervision and audits, and applying technology. Beginning in 2024, Taipower has actively implemented the following five key areas of improvement:

1.Strengthening Systems and Management
- Revising safety construction procedures to enhance safety standards.
- Increasing the weight of safety evaluations and requiring bidders to submit risk assessment reports.
- Implementing change management and enhancing control of key personnel and protective equipment.

2.Enhancing Education and Training
- Conducting pre-work safety briefings and simulation drills to ensure workers possess safety awareness.
- Promoting VR-based fall prevention training; 14 sessions were held in 2024.
- Including hazard identification training as a performance indicator to strengthen risk awareness.

3.Enforcing Penalties and Violation Management
- Enforcing disqualification mechanisms for violating individuals and contractors to ensure compliance.
- Implementing a progressive penalty system to reinforce accountability.
- Mandating re-education training sessions for personnel who violate safety rules.

4.Strengthening Supervision and Audits
- Establishing a safety early warning system for real-time risk tracking.
- Enhancing control of holiday construction activities to reduce accident risk.
- Introducing third-party audit mechanisms; 39 audits of high-risk units were conducted by external experts in 2024.

5.Applying Technology and Encouraging Employee Participation
- Installing CCTV systems to improve real-time on-site supervision.
- Creating a safety concern reporting platform that allows employees to report safety issues and promotes internalization of a safety culture.

Occupational Health Services

According to the Regulations Governing Labor Health Protection, business units with over 50 employees or involving operations with special health hazards must employ or contract medical personnel to provide on-site health services and occupational disease prevention. As of December 2024, Taipower had contracted physicians stationed at 67 units and nurses assigned to another 67 units (51 full-time and 16 contract nurses). These personnel are responsible for analyzing health checkup results, assigning suitable tasks, assessing high-risk workers, managing individual cases, promoting maternal health protection, and preventing occupational diseases to foster a friendly workplace environment.

Taipower has established various plans including: the Ergonomic Hazard Prevention Plan, Maternal Health Protection Plan, Disease Prevention Plan for Irregular Work Conditions, and Workplace Harassment Prevention Plan. These guide health risk assessments, medical examinations, and management of high-risk job roles to prevent occupational injuries and protect employee health. In 2024, Taipower conducted 1,125 health promotion activities, covering health seminars, flu vaccinations, four-cancer screenings, and fitness assessments. Additionally, through the Heart-to-Heart Program, each employee is entitled to eight hours of free psychological counseling per year to help relieve stress and improve quality of life.

Health and Physical and Mental Care

Taipower strengthens employee mental resilience through its Employee Assistance Program (EAP), helping stabilize organizational operations and improve overall performance. Key features include:

1.An Emphasis on Employee Health
- Taipower believes that employee well-being and technical excellence are essential to ensuring a stable power supply. Since 1988, it has promoted mental and physical wellness through the Heart-to-Heart program.

2.An Employee Assistance Program (EAPs)
- Part-time Employee Assistance Officers are assigned and connected with external professional resources to provide psychological counseling and support.
- Each employee is offered eight hours of company-funded counseling per year to help address work, life, and emotional challenges, thereby supporting personal well-being.

Sexual Harassment Grievance Channels

Handled by the General Office as the single point of contact:
Grievance Hotline:(02)2366-7730
Grievance Email:a960601@taipower.com.tw

6.3.2 Labor-Management Communication and Collective Bargaining

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Taipower places great importance on the voices and needs of all employees, offering diverse channels for expressing opinions and actively responding to suggestions. The Company is committed to fostering a labor-management environment built on employee satisfaction and mutual trust.

Communication Performance

Labor-Management Conferences	Training Courses	Intranet Website
Regularly held to ensure effective communication. A total of 12 labor-management conferences were held at the company level, with active interaction and dialogue among the parties.	A variety of training programs were continuously provided to support employee career development and serve as a communication platform.	The W3 internal network provides various company information and content, and features dedicated sections on employee-related topics (such as the disclosure of business information, the latest news, new hires, transfer information, and employee rights) to enhance the efficiency of internal information flow.

Negotiations on Collective Agreements

Taipower signed a collective agreement with the Taiwan Power Labor Union in 2013 and renewed the agreement in 2021. In response to amendments to the Labor Standards Act and changes in the external environment, the parties engaged in three years of deliberation and expanded the agreement from 8 chapters and 47 articles to 8 chapters and 55 articles. The revised agreement was officially signed on April 9, 2024. The signing ceremony was attended by the Chairman of Taipower and the President of the Labor Union, with officials from the Ministry of Labor and the Ministry of Economic Affairs witnessing the event, symbolizing labor-management harmony and a win-win outcome.

Number and Ratio of Employees Covered by the Collective Agreement

Item	2022	2023	2024
Total Employees	28,079	28,213	29,139
Number of Union Members (persons)	27,878	27,988	29,074
Union Membership Ratio (%)	99.3%	99.2%	99.8%

Note:The provisions of Taipower's collective agreement regarding working conditions are handled in accordance with government laws, supervising agency regulations, and company policies. As such, all employees are afforded protection.

Performance and Implementation of the Grievance System

1.Employee Grievances and Difficulties
- Taipower has established the Guidelines for Handling Employee Difficulties and Grievances to assist employees in addressing issues such as work assignments, family-related problems, or inquiries regarding Company regulations. If such issues cannot be resolved through internal channels, employees may file a formal grievance with the Grievance Committee.

2.Sexual Harassment Prevention and Reporting Mechanism
- Taipower has implemented a sexual harassment prevention policy and provides reporting channels. Employees may file complaints with the Sexual Harassment Complaint Review Committee. The Company will carry out investigations and handle disciplinary actions as appropriate.

3.Annual Performance Review Appeals
- If employees disagree with their annual performance review results, they may submit an appeal within one month of receiving the notice, along with supporting documents, in accordance with relevant regulations.

6.4 Deepening Social Participation

6.4.1 Cultural Contributions

In 2016, Taipower began inventoriying and preserving non-butilding cultural assets as part of its responsibility to ensure historical preservation and sustainable operations. A Cultural Heritage Preservation and Maintenance Task Force was established, chaired by the Vice President of Strategy and Administration. Through "Cultural Heritage Preservation Planning Meetings," the task force undertakes preservation, research, and public engagement. Following the principle of "research and archive first, display and exchange later," Taipower adopted a phased and flexible approach. Annual surveys of historical documents and oral history interviews are conducted to collect, preserve, and exhibit Taiwan's electric power heritage, thereby promoting resource sharing and revitalization, and fulfilling corporate social responsibility.

Localization and Revitalization

The power industry has played a key role in driving domestic industrial and economic development. Taipower has not only provided Taiwan with a continuous supply of energy but has also contributed to the creation of tangible historical sites and intangible collective memories. In response to evolving societal development and growing awareness of cultural preservation, Taipower has transitioned from a purely development-oriented model to one that incorporates cultural conservation and creative thinking. The Company actively promotes the humanities and public welfare, using culture as a bridge to engage with the public and shape its image as a civicly-minded enterprise.

● Planning for the Power Industry Cultural Trail

Taipower is committed to planning cultural trails for the power industry by gradually inventorying power-related cultural assets across Taiwan, establishing a promotion framework, and identifying potential anchor points. The goal is to build a thematic and development-oriented network of cultural routes. Through resource integration and interaction, the Company promotes the sustainable preservation and management of the power industry's heritage.

Taipower also actively maintains cultural assets related to the power industry, encouraging local sites to integrate historical archives with social resources to foster mutual prosperity between the Company and communities, thereby forming a power industry cultural sphere. By tracing the development of local electricity systems and connecting them with regional economies, cultures, and social interactions, Taipower deepens historical transmission. In addition, the Company has established local heritage exhibition centers that are open by reservation and serve as educational spaces for community learning and knowledge sharing.

● Cultural Activities in 2024

- Inventory of Cultural Assets
  - Completed an inventory of "blueprints from the Japanese colonial period" and "31 volumes of historical documents"
  - Approximately 400 items were inventoried, archived, digitized, and packaged.
- Oral History Interviews
  - Since 2023, interviews were conducted with 16 veterans of the hydropower sector. Audio, video, and transcripts were archived in a management system, and a highlight video was produced.
  - A results presentation was held on March 7, 2024.
  - Plans for 2025–2026 include interviews with 50 veterans in power distribution and sales, with related articles and edited videos to be published on the Power Industry Cultural Collection website.
- Power Industry Cultural Walks
  - In 2024, the "Xindian River Hydropower and Power Industry Cultural Walk"was launched, with two exchange events and 24 guided walks held, attracting 500 participants.
  - In 2025, similar activities are planned for the Zhuoshui River hydropower region.
- Establishment of the Cultural Heritage Collection Center
  - Built in compliance with National Development Council's archival standards, the center preserves important artifacts and records from the Japanese colonial period to the present. It is the first such center established by a state-owned enterprise.
  - The center features four core functions: professional archiving, resource sharing, digital access, and cultural exchange, promoting preservation and sustainable cultural development.
- Power Industry Cultural Collection Website
  - A total of 960 power-related artifacts have been made public online. The site offers five themed sections: historical publications, fun facts, knowledge packs, cultural trails, and multimedia content. These efforts help narrate stories of the power industry and enhance public awareness and engagement.

Power Industry Cultural Collection

Feature article: ESG Lessons from Local Communities | How Do Power, Ecology, and Heritage Coexist Along the Century-old Xindian River?

● Activating Power Industry Heritage and Archives

Taipower is committed to the preservation of historical records from the power industry. Through collection, research, exhibitions, and exchanges, the Company deepens academic understanding and public awareness of Taiwan's electricity development and fulfills its corporate social responsibility.

1.Establishment of the Cultural Heritage Collection Center: The center was officially launched in January 2024, marking a milestone in cultural preservation. Through systematic archiving, research, and exhibition, the center embodies the philosophy of "learning from the past to guide the future."
2.Development of Power Industry Cultural Pathways:Taipower is integrating power-related cultural assets to develop a "Taiwan Power Industry Cultural Pathway," linking historical sites with social resources. Since 2023, the Company has promoted the "Xindian River Hydropower × Power Industry Cultural Walk." In 2024, 24 guided walks were held, attracting 500 participants. In 2025, the program will expand to the Zhuoshui River Basin.
3.Digitization of Cultural Assets: Taipower has established a Power Industry Cultural Collection website that integrates specialized publications and multimedia content. Local power heritage museums are connected through a unified digital management platform that is open for public access and engagement

Professional Electricity Curation

Taipower seeks to enhance public understanding of energy, electricity, and its applications through the lens of global citizenship education. By integrating diverse resources and platforms for public energy education and outreach, the Company is creating communication and learning opportunities for audiences of all ages. Through interdisciplinary collaboration and innovative curation of electricity-themed exhibitions, Taipower is transforming complex power-related technologies into accessible knowledge tailored for different target groups, thereby deepening public awareness of energy and electricity.

● Service Innovation Demonstration at the Keelung District Office

In 2021, Taipower launched the "Taipower Aesthetic Brand Integration and Design Center Plan" to introduce design into its core operations. The customer service lobby of the Keelung District Office was selected as a demonstration site for innovation, and the space and signage systems were redesigned. The office's exterior was also upgraded, and a mini-curation titled "Supercharged Keelung" was set up in the multifunctional area of the lobby to showcase innovative service outcomes and promote public understanding of electricity, creating a friendly local environment.

Taipower Pavilion at the 2024 Taiwan Design Expo – Central Forward-looking Theme Area

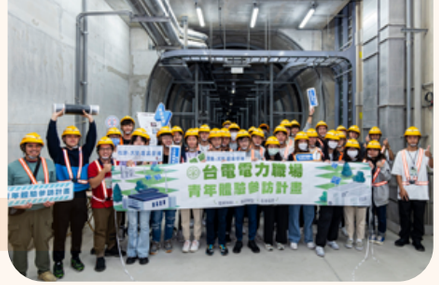
To highlight Taipower's key role in industrial development and urban sustainability, and to convey the importance of power infrastructure as one of the most fundamental types of national and local development, Taipower was invited to present a dedicated exhibition area in the "2024 Taiwan Design Expo – Central Forward-looking Theme Area." The exhibition emphasized the connection between power infrastructure and everyday urban life.

Collaborative Exhibition of the "Power of Tomorrow" Art Installation at the 2024 Taiwan Design Expo

The installation art piece "Power of Tomorrow,"which was featured at the 2024 Taiwan Design Expo, consisted of 30 traditional and smart electricity meters interwoven with lighting to represent how electricity injects vitality into the city. The futuristic design drew attention and encouraged public interaction through photo-taking and social media sharing. After the exhibition, the piece was relocated to Taipower's headquarters lobby for display and will eventually become a permanent exhibit at the Southern Exhibition Center of the Maanshan Nuclear Power Plant to enhance public communication.

The Promotion of Popular Science Education on Energy

Taipower Youth Workplace Experience Program



Taipower has launched a "Youth Workplace Experience Program" that invites university and college students to visit power-related facilities and sets a precedent for large-scale site visits to state-owned enterprises. Guided by professional supervisors and staff at each facility, students receive in-depth explanations and engage in meaningful exchanges. The program not only enhances understanding of the energy industry but also serves to attract top talent and address challenges in recruitment and retention. From October 2023 to March 2024, a total of 117 tour groups were organized, involving approximately 4,000 teachers and students, with satisfaction ratings exceeding 90%. As of September 2024, nearly 50 groups have already booked for the new program year, which is scheduled to continue through the end of June 2025.

Connecting Electricity Education with Ecological Sustainability – Seeing Taipower: A Journey into Ecology

Taipower published a special issue titled "Seeing Taipower: A Journey into Ecology" to highlight its long-standing efforts in ecological sustainability and biodiversity conservation. The publication, produced by a professional editorial team, uses photographs, illustrations, and compelling stories to communicate with the public and to showcase the Company's environmental protection practices and achievements. Through this special edition, Taipower aimed to enhance public understanding of how it balances power development with ecological conservation, thereby demonstrating its commitment to its core corporate values and sustainable development.

Smart Power Generation and Hands-On Energy Learning – D/S ONE

Taipower established D/S ONE, Taiwan's first renewable energy exhibition center, which is integrated with a distribution substation and the Banqiao three-rail skywalk. Redesigned in accordance with international standards, the center aims to become the most influential renewable energy education site in the country. As of the end of 2024, the center had received over 330,000 visitors and was honored with the LINE Biz-Solutions Award for "Best ESG Contribution of the Year."

In 2024, D/S ONE continued to promote campus outreach, inter-museum exchanges, branded exhibitions, and popular science experiences. Four Powerlab events were held, attracting over 200 parents and children. The center also upgraded its VR equipment and launched a new "Hydropower Plant Green Energy Flight" VR experience. In mid-December, D/S ONE hosted an anniversary special exhibition and networking event titled Reservoir of the Future, providing an immersive educational experience.

Delivering Knowledge Through Design – kW Design Award

Taipower promotes electricity and energy-related issues through its kW Design Awards, a nationwide creative competition that calls for submissions in communication design, multimedia design, and creative product design from high school and vocational students, university students, and the general public.

Over the past decade, the award has attracted more than 100,000 participants and received over 20,000 submissions, opening new avenues for electricity-themed popular science education. The theme for 2024 was "WATT'S NEXT: Powering New Ideas," which invited creative proposals related to net-zero electricity, renewable energy, and everyday applications.

The event included 22 campus tours and 3 promotional briefings across Northern, Central, and Southern Taiwan, reaching 22 schools and drawing nearly 1,600 entries competing for NT$900,000 in prizes. Winning entries were showcased on large screens at metro stations, shopping malls, and railway stations. Some outstanding designs were even commercialized, including wireless charging pads disguised as manhole covers, transformer box-themed chargers, and magnetized safety helmets-transforming creativity into practical products.

Save Energy, Love the Earth, and Start from a Young Age – Taipower's Interactive Storytelling Campaign

Since 2011, Taipower has promoted energy conservation and electrical safety among young children (aged 4 to 6) through a touring theater-style storytelling campaign. In 2024, a total of 63 sessions were held near Taipower's power plants, substations, and service centers across Taiwan, with approximately 5,400 participants.

To strengthen community engagement, Taipower also partnered with the Shoushan Zoo, Eslite Spectrum Xindian, and children's homes for charity sessions thereby enhancing connections with external groups and government agencies.

In 2024, the campaign launched a new theme song and collaborated with picture book creators to publish Power Adventure, a storybook for children. On August 13, Premier Cho Jung-tai personally read the book and led the children in singing and dancing during a visit to a childcare center. A short promotional video of the event was also produced and shared via social media platforms.

Investment in Cultural and Artistic Activities

From 2018 to 2024, Taipower has consistently invested in art bank painting rentals and performances that support young Taiwanese artists and musicians. These artistic efforts enhance the cultural ambiance of workspaces, cultivate employees'soft thinking and humanistic literacy, bring art into the organization, and promote engagement with the public. Taipower is also working to enhance the quality of its local cultural relic exhibition halls by upgrading both hardware and software. The goal is to connect with cultural, historical, and community organizations and to integrate power infrastructure with local historical contexts. Through preservation, education, and value-added applications, these exhibition halls will be transformed into cultural assets. Taipower plans to integrate its exhibition centers in Northern, Central, Southern, and Eastern Taiwan to form a nationwide cultural pathway. This will be supported by a unified identity system and guided signage, enabling curation, experiential learning, and education that deepen tourism marketing and stimulates local economic and tourism development.

Statistics on Painting Rentals and Exhibition Activities

	Year	2022	2023	2024
Painting Rentals	Number of items	84	33	21
	Amount (NT$)	545,575	147,651	147,767
Art Gallery	Number of exhibitions	0	8	9
	Amount (NT$)	0	30,000	58,968
Exhibitions and Activities in the Grand Hall	Number of exhibitions	14	5	3
	Amount (NT$)	206,797	250,400	272,986

TPCreative:A Circular Economy Brand

TPCreative is a cultural and creative business initiative developed by Taipower based on the core concept of a circular economy. The initiative makes use of decommissioned materials generated during the power generation process and integrates Taipower's brand elements into the design and production of cultural products. Through product sales, TPCreative fosters closer connections with the public and enhances the Company's corporate image. TPCreative represents Taipower's efforts to pursue environmental sustainability through the principles of a circular economy. The Company hopes that TPCreative's products will become part of everyday life and help raise public awareness and empathy toward environmental issues. The 2024 achievements are as follows:

Design Awards and Recognition

Gold Award, Shining New Star in Branding – Pinkoi Design Award

Product Category – Earth Guardian Design Award:

- Gold Award – Decommissioned Transformer Box Reuse: aipower Heat Pad
- Bronze Award – Sun Moon Lake Sediment Manhole Cover Coaster
- Honorable Mention – Whims E010 Bedside Reading Lamp

Channel Expansion

- In 2024, new retail channels were added, including MOCA Taipei, Taiwan Sugar's Healthy Shopping Network, Jinshui 361, and Vunhao Select at Shenji New Village, to enhance brand visibility and boost sales of Taipower's cultural and creative products.

Annual Thematic Projects

- Launched the "Decommissioned Copper Strip Reuse Project," featuring hydro pens, pen holders, and spinning tops made from sealed copper strips.
- Exhibited at the Taipower Building and Taipei Fine Arts Museum, promoting circular economy practices.
- Received the 2024 Golden Pin Design Award and was shortlisted for the German iF Design Award.

International Exhibition

- The "Sun Moon Lake Sediment Manhole Cover Coaster" was selected for the Taiwan Pavilion at Milan Design Week 2024, showcasing the brand's sustainability vision.

Seminars and Exhibition Promotion

- Brand experience sharing:Delivered talks at Chiayi's Second Street Lantern Lecture, Taipower's "Electro Hall No.1," and the Driving Force Forum (DFF).
- Circular design exhibitions: Participated in the 2024 Taiwan Design Expo (Tainan Art Museum) and Maker Faire Taipei.
- Cross-disciplinary collaboration: Showcased installations made from decommissioned wooden crossarms and substation boxes at "META Motion 2024."

6.4.2 Management of Charity Events

To fulfill its corporate social responsibilities and promote the values of integrity, care, service, and growth, Taipower actively encourages employees to participate in volunteer and community service efforts. The Company also established a "Taipower Volunteer Service Team," focusing on four core themes:energy conservation and carbon reduction, community services, social and cultural care, and environmental protection. To ensure transparency and fairness, Taipower has set up a volunteer grievance mechanism to safeguard volunteers' rights. In addition, it submits biannual performance reports in July and the following January to evaluate outcomes. In 2024, Taipower organized a wide range of charity events, reaching a total of 57,000 participants.

Fostering Positive Community Relations

Educational Support	Environmental Protection	Cultural and Festive Events	Sports Engagement	Plant-Initiated Community Programs
Scholarship award ceremonies are held annually by all hydro and thermal power plants (except Shimen, Zengwen, and Gaoping) to encourage student achievement.	Beach cleanups, mountain cleanups, and community cleaning activities are organized periodically-for example, Tongxiao and Taichung Power Plants' beach cleanups and Hsieh-ho Power Plant's environmental maintenance.	Power plants maintain regular communication with local associations and neighborhood leaders, actively participating in community gatherings and festive visits.	Power plants promote electricity infrastructure and energy conservation through sports sponsorships and events-for instance, Taichung's school basketball sponsorship, Tashan's cycling events, and Southern Plant's annual ball games.	Activities initiated by power plants include elderly care, emergency relief funding, and neighborhood engagement. For example, Tonghsiao Power Plant processed 254 subsidy cases and hosted community leader banquets with around 200 participants to strengthen local interaction and collaboration.

Public Welfare and Sponsorship

Taipower supports Taiwan's economic development while promoting mutual prosperity within society by actively investing in cultural, artistic, and public welfare initiatives as part of its corporate social responsibility. As power infrastructure may affect local environments, Taipower fosters strong community relations through neighborhood engagement efforts. These include emergency relief, support for low-income households, welfare for the elderly and persons with disabilities, and educational and cultural programs. In 2024, approximately 4,600 neighborhood care cases were handled, with around NT$100 million in subsidies provided.

Taipower compiles and publishes a list of approved neighborhood support cases monthly on its official website

100 million
Amount of subsidy

Dream Graduation Album Program for Rural Students

Demonstrating long-term care for rural education, Taipower partnered with the Dream Builders Association in 2024 to help students from schools near the Takuan and Maanshan Power Plants create memorable graduation albums. This initiative preserved cherished school memories and raised public awareness of rural education, creating a positive social impact.

Climb to the Top of Taipower Building with Guting Elementary School

To promote healthy habits, Taipower collaborated with Guting Elementary School in Taipei's Da'an District to host a stair-climbing event in May 2024. About 250 fifth-grade students challenged themselves by climbing all 27 floors of the Taipower Building, marking a symbolic coming-of-age moment and reinforcing the value of community engagement.

End-of-Year Care Program for Elderly Living Alone

Since 2005, Taipower has hosted Lunar New Year gatherings for elderly individuals living alone. Activities include gift deliveries and shopping assistance. Traditional group meals, suspended for three years due to COVID-19, resumed in 2024. On January 25, Taipower, the One Grain Foundation, and Taitung Christian Hospital jointly held an event for 134 seniors, while Taipower units across Taiwan conducted similar care programs, benefiting over 5,000 elderly participants

Taiwan Power Company, One Grain of Wheat Foundation, and Taitung Christian Hospital Join Hands to Celebrate Lunar New Year Early with Taitung Seniors

Reading Promotion: The Firefly Children's Reading Project

Since 2007, Taipower has partnered with the One Grain Foundation and Taitung Christian Hospital to address the lack of educational resources for rural children in Taitung. The program includes tutoring classes, mobile libraries, summer reading camps, and year-end gatherings. On December 29, 2024, 120 students from eight tutoring sites in Taitung and Hualien joined the Firefly Year-End Talent Showcase at the Canaan Senior Care Center, where they performed and completed intergenerational team challenges with elders and teachers. The event received positive media coverage and promoted community learning.

Firefly Project Coming-of-Age Ceremony: Students, Teachers, and Local Seniors Take on Challenges Together Across Three Generations

Firefly Children's Reading Program

Seeds of Hope:The Hope Cultivation Project

Since 2005, Taipower has offered summer job opportunities to underprivileged indigenous college students from Taitung, Hualien, and Pingtung. In 2024, 58 students participated, serving 350 schoolchildren. The program fosters both student development and community engagement and encourages participants to give back to their hometowns.

"Seed of Hope" Program Enters Its 19th Year, Supporting Students Returning Home for Community Work

2024: 19th Edition of Seed of Hope – First Gathering

"Seed of Hope" Moves Forward – Taipower and Mennonite Christian Hospital Have Collaborated for 19 Years

2024 Lantern of the Heart Thousand-Step Prayer Walk:Lighting the Way for Coexistence

In 2024, Taipower continued to use repurposed transformer magnetic sleeves to create the "Lantern of the Heart" as a symbol of sustainability. The event combined energy and environmental education, cultural heritage, and community participation through a ritual at Zhinan Temple. General Manager Wang Yao-Ting and Deputy General Manager Cheng led over 300 participants-including representatives from Zhinan Temple, the U-Theatre Culture & Arts Foundation, Taipei City Government, National Chengchi University, and local communities-to carry lanterns up a thousand-step trail. At Chunyang Hall, they offered lights in prayer for stable power supply, energy transition, and a sustainable future, strengthening community bonds and Taipower's image as a sustainable enterprise.

Taipower President Wang Yao-Ting Led the Lantern Procession in Prayer

Cultivating Sports and Exerting Social Influence

Taipower is deeply committed to grassroots sports development and organizes initiatives such as the "Caring Train," "Ball Fun Power Camp," and the "Taipower Cup" to give back to society. Through sustained training and competition, Taipower has nurtured many star athletes and contributed significantly to national teams, becoming one of the leading corporate supporters of ball sports in Taiwan.

Elevating the Level of Sports Performance

Taipower actively recruits promising athletes from high schools and universities to serve as athletic staff. Through long-term training and open trials, selected individuals have the opportunity to become official team members. A comprehensive career support system enables athletes to balance sports and professional development. After retirement, players can transition into full-time roles within Taipower. This lifelong employment mechanism allows athletes to focus fully on their training and competition and helps to elevate national sports performance and support the government's sports policy.

Rooted in Grassroots Sports

Taipower's teams regularly visit remote areas and disadvantaged institutions to provide coaching through the "Caring Train" initiative. During the summer, each team holds a "Ball Fun Power Camp" to promote sports skills, teamwork, and sportsmanship among children. The "Taipower Cup" offers a competitive platform for discovering young talent and fostering skill transmission. These outreach programs positively influence Taiwan's sports development and promote public sports participation.

Expanding the Reach of Fun Power Camps

Since 2016, Taipower has organized "Ball Fun Power Camps" during summer, featuring national-level players from baseball, volleyball, badminton, soccer, and basketball teams. These camps give children a chance to explore various sports. Participation has grown from 2,500 to 3,600 students and the camps have received enthusiastic feedback.

3,600 Students Flock to Taipower's Sports Fun Camp – Exciting Opening Today!

Although the camps were suspended during the COVID-19 pandemic, they resumed in 2023 and continued in 2024, injecting new energy into Taiwan's sports scene and offering children a fun, meaningful summer experience while cultivating grassroots sports culture.

Deepening the Caring Train Initiative

To bridge the urban-rural sports resource gap, Taipower teams provided coaching at 12 schools in 2024. For instance, the baseball team visited Taoyuan Elementary School in Kaohsiung; the men's volleyball team went to Taitung Vocational High School; the women's volleyball team visited Erlun and Maguang junior high schools in Yunlin; the women's badminton team coached at Hukou Elementary School in Hsinchu; and the soccer team taught at Ryukyu, Baisha, Tiannan, and Quande elementary schools in Pingtung. These on-site coaching sessions inspired children's interest in sports and demonstrated Taipower's long-standing support for public sports.

Taipower Baseball Team "Recharges" a Remote Youth Team - Volunteers as Coaches at Taoyuan Elementary School in Kaohsiung's Mountain Region (Liberty Sports)

Enhancing the Taipower Cup

The "Taipower Cup Volleyball Tournament" has been held since 2018, with participation steadily increasing. In 2024, the sixth edition drew 41 elementary school teams from Tainan, Kaohsiung, and Pingtung. The "Taipower Cup Soccer Invitational" began in 2019 and expanded in 2024 to include 10 elementary, 5 junior high, and 5 senior high school teams. The "Taipower Cup Basketball Invitational," launched in 2020, reached its fifth edition in 2024 with 5 junior and 5 senior high school teams. These tournaments help teams build competitive strength and prepare athletes for national leagues like the HBL and JHBL. Taipower athletes share their expertise, discipline, and team spirit, earning wide public praise and reinforce the Company's commitment to sports development.

6th Taipower Cup Soccer Invitational

6th Taipower Cup Volleyball Championship

5th Taipower Cup Basketball Invitational

GRI Standards Index

Statement of Use	Taiwan Power Company Limited has reported content for the period of January 1, 2024 to December 31, 2024, in accordance with the GRI guidelines.
GRI Standard Used GRI 1	GRI 1: Foundation 2021
Applicable GRI Sector Guidelines	No applicable GRI sector guidelines.

GRI Standards	GRI Items	Reference	Page/URL
GRI 2: General Disclosures (2021)			
The Organization and Its Reporting Practices			
GRI 2: General Disclosures (2021)	2-1 Organizational details	1.1.1 Taipower Profile	25
	2-2 Entities included in the organization's sustainability reporting	Reporting Principles	3
	2-3 Reporting period, frequency and contact point	Reporting Principles	3
	2-4 Restatements of information	NA	-
	2-5 External assurance	Assurance Statement	129
Activities and Workers			
GRI 2: General Disclosures (2021)	2-6 Activities, value chains and other business relationships	1.1.1 Taipower Profile	25
		1.5.1 Supplier Management	48
		1.5.2 Creating a Sustainable Supply Chain	52
	2-7 Employees	6.2.1 Talent Management and Development	105
	2-8 Workers who are not employees	6.2.1 Talent Management and Development	105
Governance			
GRI 2: General Disclosures (2021)	2-9 Governance structure and composition	1.2.1 Governance Framework	29
		1.3.1 Organizational Structure of the Sustainable Development Commission (SDC)	38
	2-10 Nomination and selection of the highest governance body	1.2.1 Governance Framework	29
	2-11 Chair of the highest governance body	1.2.1 Governance Framework	29
	2-12 Role of the highest governance body in overseeing the management of impacts	1.3.1 Organizational Structure of the Sustainable Development Commission (SDC)	38
	2-13 Delegation of responsibility for managing impacts	1.3.1 Organizational Structure of the Sustainable Development Commission (SDC)	38
	2-14 Role of the highest governance body in sustainability reporting	1.3.1 Organizational Structure of the Sustainable Development Commission (SDC)	38
	2-15 Conflicts of interest	1.2.1 Governance Framework	29
	2-16 Communication of critical concerns	1.3.1 Organizational Structure of the Sustainable Development Commission (SDC)	38
	2-17 Collective knowledge of the highest governance body	1.2.1 Governance Framework	29
	2-18 Evaluation of the performance of the highest governance body	1.2.1 Governance Framework	29
	2-19 Remuneration policies	1.2.1 Governance Framework	29
	2-20 Process to determine remuneration	6.2.2 Employee Rights and Benefits	110
	2-21 Annual total compensation ratio	6.2.2 Employee Rights and Benefits	110
Strategy, Policies and Practices			
GRI 2: General Disclosures (2021)	2-22 Statement on sustainable development strategy	Statement from the Chairman	4
	2-23 Policy commitments	6.1.1 Human Rights Policy	103
	2-24 Embedding policy commitments	1.3.1 Organizational Structure of the Sustainable Development Commission (SDC)	38
	2-25 Processes to remediate negative impacts	6.1.1 Human Rights Policy	103
		6.3.2 Labor-Management Communication and Collective Bargaining	116
GRI 2: General Disclosures (2021)	2-26 Mechanisms for seeking advice and raising concerns	5.3.2 Refinement of Customer Services	100
	2-27 Compliance with laws and regulations	1.2.4 Integrity and Compliance	35
	2-28 Membership associations	Communication with stakeholders	18
Stakeholder Engagement			
GRI 2: General Disclosures (2021)	2-29 Approach to stakeholder engagement	Communication with stakeholders	18
	2-30 Collective bargaining agreements	6.3.2 Labor-Management Communication and Collective Bargaining	116
GRI 3: Material Topics (2021)	3-1 Process to determine material topics	Analysis of Material Topics and Communicating with Stakeholders	13
	3-2 List of material topics	Analysis of Material Topics and Communicating with Stakeholders	13
Stability and Reliability of Power Supply			
GRI 3:Material Topics (2021)	3-3 Management of material topics	Analysis of Material Topics and Communicating with Stakeholders	13
GRI 203: Indirect Economic Impacts (2016)	203-1 Infrastructure investments and services supported	2.2.2 A Robust Transmission and Distribution System	66
	203-2 Significant indirect economic impacts	2.2.1 A Stable Power Supply and Generation System	61
		2.3.1 Promoting Power Transformation	67
Power Plant Renewal and Decommissioning			
GRI 3: Material Topics (2021)	3-3 Management of material topics	Analysis of Material Topics and Communicating with Stakeholders	13
GRI 203: Indirect Economic Impacts (2016)	203-1 Infrastructure investments and services supported	2.2.1 A Stable Power Supply and Generation System	61
		2.2.2 A Robust Transmission and Distribution System	66
Digital Applications and Information Security			
GRI 3: Material Topics (2021)	3-3 Management of material topics	Analysis of Material Topics and Communicating with Stakeholders	13
GRI 418: Customer Privacy2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	5.2 Strengthening Information Security	98
Corporate Governance and Sustainable Management			
GRI 3: Material Topics (2021)	3-3 Management of material topics	Analysis of Material Topics and Communicating with Stakeholders	13
GRI 203: Indirect Economic Impacts (2016)	203-2 Significant indirect economic impacts	1.1.2 Operational Performance	26
		1.2.1 Governance Framework	29
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	1.2.4 Integrity and Compliance	35

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Operational and Financial Performance			
GRI 3: Material Topics (2021)	3-3 Management of material topics	Analysis of Material Topics and Communicating with Stakeholders	13
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	1.1.2 Operational Performance	26
	201-2 Financial implications and other risks and opportunities due to climate change	1.4.2 Climate-Related Risk and Opportunity Management	44
	201-3 Defined benefit plan obligations and other retirement plans	6.2.2 Employee Rights and Benefit	110
Renewable Energy Development and Low-Carbon Gas-Fired Power Generation			
GRI 3: Material Topics (2021)	3-3 Management of material topics	Analysis of Material Topics and Communicating with Stakeholders	13
	203-2 Significant indirect economic impacts	2.3.1 Promoting Power Transformation	67
		2.3.2 Diversified Development of Renewable Energy and Low- Carbon Gas-Fired Power Generation	69
	305-4 GHG emissions intensity	1.3.2 Moving Towards Net-Zero Emissions	39
		2.3.2Diversified Development of Renewable Energy and Low-Carbon Gas-Fired Power Generation	69
		3.1.1 Environmental Policy and Environmentally Friendly Initiatives	73
Implementing Net-Zero Strategies in Response to Climate Change			
GRI 3: Material Topics (2021)	3-3 Management of material topics	Analysis of Material Topics and Communicating with Stakeholders	13
GRI 201: Economic Performance 2016	201-2 Financial implications and other risks and opportunities due to climate change	1.4.2 Climate-Related Risk and Opportunity Management	44
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	3.2.1 GHG Management	76
	305-4 GHG emissions intensity	1.3.2 Moving Towards Net-Zero Emissions	39
		3.2.1 GHG Management	76
Energy Efficiency			
GRI 3: Material Topics (2021)	3-3 Management of material topics	Analysis of Material Topics and Communicating with Stakeholders	13
GRI 203:Indirect Economic Impacts (2016)	203-2 Significant indirect economic impacts	2.2.1 A Stable Power Supply and Generation System	61
GRI 302:Energy 2016	302-1 Energy consumption within the organization	3.1.2 Energy Resource Management	75
	302-4 Reduction of energy consumption	5.1.1 Demand Side Management Measures	95
	302-5 Reductions in energy requirements of products and services	5.3.1 Promoting an Electricity-Saving Society	99
Environmental Impact Management			
GRI 3: Material Topics (2021)	3-3 Management of material topics	Analysis of Material Topics and Communicating with Stakeholders	13
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	3.2.2 Improving Water Resource Use Efficiency	79
	303-2 Management of water discharge-related impacts		
	303-3 Water withdrawal		
	303-4 Water discharge		
	303-5 Water consumption		
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	1.4.3 Metrics and Targets	48
	305-2 Energy indirect (Scope 2) GHG emissions	3.1.1 Environmental Policy and Environmentally Friendly Initiatives	73
	305-4 GHG emissions intensity		
	305-5 Reduction of GHG emissions		
	305-6 Emissions of ozone-depleting substances (ODS)	3.1.2 Energy Resource Management	75
	305-7 Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	3.2.1 GHG Management	76

GRI Standards	GRI Items	Reference	Page/URL
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	3.2.3 Waste Management	80
	306-2 Management of significant waste-related impacts		
	306-3 Waste generated		
	306-4 Waste diverted from disposal		
	306-5 Waste directed to disposal		
Safety Management and Crisis Response			
GRI 3:Material Topics (2021)	3-3 Management of material topics	Analysis of Material Topics and Communicating with Stakeholders	13
GRI 203: Indirect Economic Impacts (2016)	203-1 Infrastructure investments and services supported	2.1.2 Increase Adaptive Capabilities	58
	203-2 Significant indirect economic impacts	1.2.2 Risk Management	32
		6.3.1 Occupational Safety and Health	112
	205-2 Communication and training about anti-corruption policies and procedures	1.2.4 Integrity and Compliance	35
	205-3Confirmed incidents of corruption and actions taken		
Worker Health and Safety			
GRI 3:Material Topics (2021)	3-3 Management of material topics	Analysis of Material Topicsand Communicating with Stakeholders	13
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	6.3.1 Occupational Safety and Health	112
	403-2 Hazard identification, risk assessment, and incident investigation		
	403-3 Occupational health services		
	403-4 Worker participation, consultation, and communication on occupational health and safety	6.3.2 Labor-Management Communication and Collective Bargaining	116
	403-5 Worker training on occupational health and safety		
	403-6 Promotion of worker health		
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships		
	403-9 Work-related injuries		
Talent Management and Development			
GRI 3:Material Topics (2021)	3-3 Management of material topics	Analysis of Material Topics and Communicating with Stakeholders	13
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	6.2.1 Talent Management and Development	105
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	6.2.2 Employee Rights and Benefit	110
	401-3 Parental leave		
GRI 404:Training and Education 2016	404-2 Programs for upgrading employee skills and transition assistance programs		
Human Rights, Diversity, and Inclusion			
GRI 3:Material Topics (2021)	3-3 Management of material topics	Analysis of Material Topics and Communicating with Stakeholders	13
GRI 405:Diversity and Equal Opportunity2016	405-1 Diversity of governance bodies and employees	6.1.2 Diversity and Inclusion in the Workplace	104
	405-2 Ratio of basic salary and remuneration of women to men		
GRI 406:Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	6.1.1 Human Rights Policy	103
GRI 407:Freedom of Association and Collective Bargaining 2016	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk, and measures taken to support these rights	6.3.2 Labor-Management Communication and Collective Bargaining	116
GRI 409:Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor, and measures taken to contribute to the elimination of all forms of forced or compulsory labor	6.1.1 Human Rights Policy	103

SASB Index Table

Topics	Code	Accounting Metrics	Reference	Page	Corresponding Content
Activity Metrics	IF-EU-000.A	Total Number of Users	Taipower's Value Chain and Operational Elements	6	Total number of users: 15.35 million
	IF-EU-000.B	1.Electricity Delivered to Users 2.Percentage of Electricity Sold to End Users	Taipower's Value Chain and Operational Elements	6	1.Users power supply 239.1 billion kWh: Industrial:133.3 billion kWh, Residential:50.6 billion kWh, Commercial:36.9 billion kWh, Other:18.2 billion kWh 2.Users power consumption (sold) by percentage: Industrial: 56%, Residential: 21%, Commercial: 15%, Other: 8%
	IF-EU-000.C	1.Total Length of Transmission Lines 2.Total Length of Distribution Lines	Taipower's Value Chain and Operational Elements	6	1.18,466.4 circuit kilometers of transmission lines in 2024 2.434,463 circuit kilometers of distribution lines in 2024
	IF-EU-000.D	Total Electricity Generated	2.2.1 A Stable Power Supply and Generation System	61	Total electricity generation in 2024 amounted to 172.1 billion kWh, comprising 152.42 billion kWh (88.6%) from thermal power, 11.73 billion kWh (6.8%) from nuclear, 3.07 billion kWh (1.8%) from pumped-storage hydropower, and 4.88 billion kWh (2.8%) from renewables.
	IF-EU-000.E	Total Electricity Purchased	2.2.1 A Stable Power Supply and Generation System	61	Total power purchased: 79.05 billion kWh
Greenhouse Gas Emissions and Energy Resource Management	IF-EU-110a.1	1.Gross global Scope 1 emissions 2.Percentage covered under emissions-limiting and emissions-reporting regulations	1.4.3 Metrics and Targets 3.2.1 GHG Management	48 77	1.The total Scope 1 greenhouse gas (GHG) emissions amounted to 91.45 million metric tons of CO^2e. 2.Taiwan currently has no mandatory regulations on emission limits or disclosure requirements.
	IF-EU-110a.2	Greenhouse gas (GHG) emissions associated with power deliveries	3.2.1 GHG Management	76	Emissions from Taipower's own power generating units accounted for 90.78 million metric tons of CO^2e.
	IF-EU-110a.3	Discussion of long- and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	3.2.1 GHG Management	76	Please refer to Section 3.2.1 for Taipower's short-, medium-, and long-term strategies and targets for managing Scope 1 GHG emissions, including performance assessments.
	IF-EU-110a.4	1.Number of customers served in markets subject to Renewable Portfolio Standards (RPS) 2.Percentage fulfillment of RPS targets, by market	-	-	As renewable energy in Taiwan is fed into the national grid and mixed with other sources of electricity, it is not possible to independently identify or track individual renewable energy customers.
Air Quality	IF-EU-120a.1	Air emissions of the following pollutants: (1) NOx (2) SOx (3) PM Percentage of each in or near areas of dense population	3.2.1 GHG Management	76	1. NOx:144 kg/GWh 2. SOx:66 kg/GWh 3. PM:6 kg/GWh ; The emission ratio in or near densely populated areas is 100%.
Water Resources Management	IF-EU-140a.1	Total water withdrawn, total water consumed, and percentage of each in areas with High or Extremely High Baseline Water Stress	3.2.2 Improving Water Resource Use Efficiency	79	1.Total water withdrawal: Thermal power plants: 9,175,469 cubic meters Nuclear power plants:180,300 metric tons 2.Water intensity: Thermal power plants: 60.86 metric tons/GWh Nuclear power plants: 15.37 metric tons/GWh Taipower does not operate in areas with High or Extremely High Baseline Water Stress.
	IF-EU-140a.2	Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations	1.2.4 Integrity and Compliance	35	In 2024, there was 1 violation related to water withdrawal or water quality regulations.
	IF-EU-140a.3	Description of water management risks and discussion of strategies and practices to mitigate those risks	3.2.2 Improving Water Resource Use Efficiency	79	Please refer to Section 3.2.2 for details on water management risks and mitigation strategies.

Topics	Code	Accounting Metrics	Reference	Page	Corresponding Content
Coal Ash Management	IF-EU-150a.1	Amount of coal combustion residuals (CCR) generated; percentage recycled	3.2.3 Waste Management	80	In 2024, a total of 1.805 million metric tons of coal ash were generated, with a reuse rate of 97.2%.
	IF-EU-150a.2	Total number of coal combustion residual (CCR) impoundments, broken down by hazard potential classification and structural integrity assessment	3.2.3 Waste Management	80	For details on coal ash accumulation and management, please refer to the table titled "Diameter, Height, and Actual Controlled Ash Levels of Fly Ash Silos at Various Coal-fired Power Plants" in Section 3.2.3.
Energy Affordability	IF-EU-240a.1	Average retail electric rate for (1) residential, (2) commercial, and (3) industrial customers	1.1.2 Operational Performance	26	Average retail electricity price: (1) Residential: NT$2.7431/kWh, (2) Commercial:NT$3.9185/kWh, (3) Industrial: NT$3.6243/kWh. Note: Taiwan does not categorize users by 500 or 1,000 kWh consumption levels.
	IF-EU-240a.2	Typical monthly electric bill for residential customers for (1) 500 kWh and (2) 1,000 kWh of electricity delivered per month	5.1.1Demand Side Management Measures	95	
	IF-EU-240a.3	Number of residential customer electric disconnections for non-payment, percentage reconnected within 30 days	-	-	In 2024, a total of 32,877 households experienced power disconnection due to non-payment. The reconnection rate within 30 days after payment was 100%.
	IF-EU-240a.4	Discussion of impact of external factors on customer affordability of electricity, including the economic conditions of the service territory	1.1.2 Operational Performance	26	Taipower is committed to reducing energy costs and environmental impact through continuous technological innovation and energy transition, while providing reliable and affordable electricity. Taiwan's electricity prices remain among the most affordable globally.
Workplace Health and Safety	IF-EU-320a.1	1. Total Recordable Incident Rate (TRIR), 2. Fatality Rate, 3. Near Miss Frequency Rate (NMFR)	6.3.1 Occupational Safety and Health	112	1. Total Recordable Incident Rate (TRIR):0.026 2. Fatality Rate:0.000 3. Near Miss Frequency Rate (NMFR):0.040
User Efficiency and Demand	IF-EU-420a.1	Proportion of electricity revenue from (1) decoupling, (2) loss revenue adjustment mechanism (LRAM) rate structure	-	-	Not applicable. (LRAM is a profit mechanism used in the U.S. electricity industry.)
	IF-EU-420a.2	Percentage of electric load served by smart grid technology	3.1.1 Environmental Policy and Environmentally Friendly Initiatives 4.2.2 Improving the Accuracy of Renewable Energy Generation Forecasts	73 93	Smart meters (AMI) covered 81.52% of the national electricity consumption information.
	IF-EU-420a.3	Customer electricity savings from efficiency measures, by market	5.3.1 Promoting an Electricity-Saving Society	99	A total of 1.7 billion kWh of electricity was saved through energy-saving incentives in 2024.
Nuclear Safety and Crisis Management	IF-EU-540a.1	Total number of nuclear power units, broken down by results of most recent independent safety review	-	-	Not applicable. This metric requires classification of nuclear power plants based on the U.S. NRC Action Matrix Column. Currently, only two nuclear power plants are in operation in Taiwan.
	IF-EU-540a.2	Description of efforts to manage nuclear safety and emergency preparedness	2.1.2 Increase Adaptive Capabilities	58	Please refer to Section 2.1.2 for Taipower's measures to ensure nuclear safety and emergency preparedness.
Grid Resiliency	IF-EU-550a.1	Number of incidents of non-compliance with physical or cybersecurity standards or regulations	1.2.4 Integrity and Compliance	35	In 2024, there were a total of 40 regulatory violations, including 4 labor penalties, 27 occupational safety penalties, and 9 environmental protection penalties.
	IF-EU-540a.2	1.System Average Interruption Duration Index (SAIDI) 2.System Average Interruption Frequency Index (SAIFI) 3.Customer Average Interruption Duration Index (CAIDI)	1.4.3 Metrics and Targets 2.2.1 A Stable Power Supply and Generation System	48 61	1.The System Average Interruption Duration Index (SAIDI) was 15.831 minutes per customer per year in 2024. 2.The System Average Interruption Frequency Index (SAIFI) was 0.209 times per customer per year in 2024. 3.The Customer Average Interruption Duration Index (CAIDI) is calculated as SAIDI divided by SAIFI. However, this index may not fully align with actual power reliability performance and is therefore not adopted in practical evaluation.

Index for TCFD Contents

Level	Information Disclosed	Chapter	Page
Governance	The board's oversight of climate-related risks and opportunities	1.4.1 Climate Change Management Framework	43
	Management's role in assessing and managing climate-related risks and opportunities	1.4.1 Climate Change Management Framework	43
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INDEPENDENT AUDITORS' LIMITED ASSURANCE REPORT

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INDEPENDENT AUDITORS' LIMITED ASSURANCE REPORT

To:Taiwan Power Company

We have been engaged by Taiwan Power Company (the "Company" or "Taipower") to perform assurance procedures on selected sustainability performance information disclosed in the 2024 Taipower Sustainability Report (the "Report") and to issue this limited assurance report. The subject matter and applicable criteria are described in Appendix 1.

Management's Responsibilities

Management is responsible for the preparation of the sustainability performance information in the Report in accordance with the GRI Standards issued by the Global Reporting Initiative (GRI), and for designing, implementing, and maintaining internal control relevant to the preparation and presentation of the information so that it is free from material misstatement, whether due to fraud or error.

Our Responsibilities

Our responsibility is to express a limited assurance conclusion on the selected sustainability performance information based on our work performed in accordance with International Standard on Assurance Engagements 3000 (ISAE 3000), Assurance Engagements Other than Audits or Reviews of Historical Financial Information, issued by the International Auditing and Assurance Standards Board (IAASB). The nature, timing, and extent of procedures performed in a limited assurance engagement are less than those in a reasonable assurance engagement and, accordingly, the level of assurance obtained is substantially lower. We do not express a reasonable assurance opinion on the Report as a whole.

Limited Assurance Procedures

We exercised professional judgment in planning and performing our limited assurance procedures to obtain sufficient appropriate evidence regarding the selected sustainability performance information. However, due to the inherent limitations of internal controls, there is a risk that material misstatements may not be detected. Our key procedures included, but were not limited to, the following:

- Obtaining and reading the 2024 Taipower Sustainability Report;
- Interviewing management and relevant personnel to understand the Company's policies and procedures for preparing the Report;
- Performing analytical procedures on the selected subject matter and, where necessary, examining supporting documents and records on a sample basis to obtain sufficient and appropriate limited assurance evidence.

Independence and Quality Controls

We have complied with the Code of Professional Ethics for Certified Public Accountants in the Republic of China, which sets forth the fundamental principles of integrity, objectivity, professional competence and due care, confidentiality, and professional behavior. Our firm has also established and maintained a system of quality management in accordance with the requirements of Quality Management Standard No. 1, "Quality Management for Accounting Firms Performing Audit or Reviews of Financial Statements," issued by the Accounting Research and Development Foundation in Taiwan. This system includes policies and procedures designed to ensure compliance with professional ethics, professional standards, and applicable legal and regulatory requirements.

Inherent Limitations

The sustainability report includes non-financial information, which is subject to greater inherent limitations than financial data. Such information may involve significant judgments, assumptions, or interpretations made by the management of Taipower. Consequently, different stakeholders may interpret the same information differently.

Conclusion

Based on the limited assurance procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the selected sustainability performance information disclosed in the 2024 Sustainability Report of Taiwan Power Company is not, in all material respects, prepared in accordance with the applicable reporting criteria.

Other Matters

After the issuance of this assurance report, we do not assume any obligation to perform additional assurance procedures with respect to any changes made by the Company to the subject matter information or the applicable criteria.

Crowe (TW) CPAs
Taipei, Taiwan
Republic of China
May 16,2025

Attachment 1: Summary Table of Assurance Subjects

No.	Corresponding Chapter	Information Subject to Assurance	Applicable Criteria
1	SASB Index	System Average Interruption Duration Index (SAIDI) of 15.831 minutes/customer-year and System Average Interruption Frequency Index (SAIFI) of 0.209 times/customer-year	Taipower's system-wide power supply reliability statistics
2	SASB Index	A total electricity saving of 1.7 billion kWh in 2024	Taipower's monthly electricity consumption comparison and energy-saving statistics
3	SASB Index	Air pollutant emissions (1) NOx:144 kg/GWh (2) SOx:66 kg/GWh, (3) PM:6 kg/GWh	Taipower's thermal power plant emission statistics
4	SASB Index	Total coal ash production of 1.805 million metric tons in 2024 with a recycling rate of 97.2%	Taipower's coal combustion byproduct and recycling statistics
5	SASB Index	In 2024: Employees – TRIR: 0.026, Fatality Rate: 0.000, NMFR: 0.040 Contractors – TRIR: 0.076, Fatality Rate: 0.013, NMFR: 0.045	Taipower's occupational injury statistics
6	2.3.2 Diversified Development of Renewable Energy and Low-Carbon Gas-Fired Power Generation	Installed renewable energy capacity (excluding investments): cumulative total of 2,557.04 MW Grid-connected capacity: 20,425.60 MW in 2024	Taipower's statistics on renewable energy generation capacity
7	3.2.1 GHG Management	In 2024, air pollution intensity decreased by 71.9% compared to the base year (2016)	Comparison of air pollution emissions from Taipower's thermal power plants
8	6.1.2 Diversity and Inclusion in the Workplace	By the end of 2024, a total of 2,905 employee uses of reduced working hours for childcare (under age 3)	Taipower's statistics on employee use of childcare working hour reductions

台灣電力公司
Taiwan Power Company

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