

SASB Materiality Map for the Industry

| Topics | Accounting metric | Corresponding content |
|----------------------------|---|---|
| Activity metrics | IF-EU-000.A IF-EU-000.B | Total number of users: 14.93 million Customer power consumption (sold) by percentage: Industrial: 57% , Residential: 20% , Commercial: 15% , Other: 8% User power supply: Industrial: 135.7 billion kWh , Residential: 48.1 billion kWh , Commercial: 35.4 billion kWh , Other: 17.6 billion kWh |
| | IF-EU-000.C | In 2022, there were 18,032 circuit kilometers of transmission lines and 410,071 circuit kilometers of distribution lines. |
| | IF-EU-000.D | The total power generation of 193.7 billion kWh was composed of 155.9 billion kWh (80.5%) of thermal generation, 22.9 billion kWh (11.8%) of nuclear generation, 8.7 billion kWh (4.5%) of pumped-storage hydropower generation, and 6.3 billion kWh (3.3%) of renewable generation |
| | IF-EU-000.E | Total power purchased: 62.4 billion kWh |
| | Greenhouse gas emissions and energy resource planning | IF-EU-110a.1 |
| IF-EU-110a.2 | | CO ₂ e Emissions of 98.475 million tons of CO ₂ e in 2022 |
| IF-EU-110a.3 | | Regarding the short, medium, and long-term strategies and objectives of Taipower's management of scope 1 emissions, please refer to 2.3 |
| IF-EU-110a.4 | | Given Taiwan's renewable energy and other sources of electricity are all connected to the grid and mixed with other sources of electricity, it is impossible to distinguish renewables users independently |
| Air quality | IF-EU-120a.1 | (1) NO _x : 169 kg/GWh (2) SO _x : 84 kg/GWh (3) PM: 5 kg/GWh |
| Water resources management | IF-EU-140a.1 | The total water consumption of thermal power plants was 9,503,884 cubic meters |
| | IF-EU-140a.2 | In 2022, Taipower was involved in an incident that violated water resource regulations. On October 2021, the Taichung City Environmental Protection Bureau conducted an inspection at the desulfurization wastewater discharge outlet of the Taichung Power Plant. As the discharged water did not meet the standards, Taipower was fined 229.5 thousand NTD in 2022. Following adjustments made by the Taichung Power Plant to the methanol dosing quantity in the nitrate nitrogen treatment unit, the water quality in the November 2021 water quality test report met the discharge standards |
| | IF-EU-140a.3 | Please refer to 6.3.2 for the Water resources management |

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| Topics | Accounting metric | Corresponding content |
|--------------------------------------|------------------------------|--|
| Coal ash management | IF-EU-150a.1 | Total coal ash production in 2022 was 2.178 million tons, with a reuse rate of 94.1% |
| | IF-EU-150a.2 | For detailed reporting on coal ash accumulation, please refer to 6.3.5 for a table of "Diameter, Height, and Actual Controlled Ash Levels of Fly Ash Silos at Various Coal-fired Power Plants" |
| Energy affordability | IF-EU-240a.1 IF-EU-240a.2 | In Taiwan, users are not differentiated based on 500MWh, 1000MWh of use. The average retail electricity prices are as follows for specific groups of users: (1) residential 2.6309 (dollar/kWh), (2) commercial 3.2447 (dollar/kWh), (3) industrial 2.5571 (dollar/kWh) |
| | IF-EU-240a.3 | Taipower currently does not have statistics required to calculate this metric beyond the 2022 average duration of power outages of 14.936 minutes/household and the average number of power outages of 0.185 times/household |
| | IF-EU-240a.4 | External factors such as the COVID-19 pandemic and Russia-Ukraine war affected electricity affordability in 2022 |
| Workplace health and safety | IF-EU-320a.1 | (1) Total Recordable Incident Rate (TRIR) of 2.4%, (2) Fatality rate of 0%, and (2) Near-Miss Frequency Rate (NMFR) of 3.1% |
| | IF-EU-420a.1 | Not applicable (LRAM is the profit calculation system adopted by the US power industry) |
| User efficiency and demand | IF-EU-420a.2 | Smart meters covered 75.64% of the country's electricity consumption information |
| | IF-EU-420a.3 | A total of 2.31 billion kWh of electricity were saved in 2022 |
| Nuclear safety and crisis management | IF-EU-540a.1 | Not applicable. This metric requires that the number of nuclear power plants must be classified according to the US NRC Action Matrix Column. Currently, there are only two nuclear power plants in operation in Taiwan |
| | IF-EU-540a.2 | Regarding Taipower's measures to ensure nuclear energy safety, please refer to 3.1.1 for details |
| Grid resiliency | IF-EU-550a.1 | 4 labor penalties, 21 work safety penalties, and 3 environmental protection penalties |
| | IF-EU-540a.2 | (1) System Average Interruption Duration Index (SAIDI) of 91.285, (2) System Average Interruption Frequency Index (SAIFI) of 0.467, and (3) the SAIDI/SAIFI formula for the Customer Average Interruption Duration Index (CAIDI) may not be synchronized with the power supply reliability, and so, cannot faithfully represent the performance of power supply reliability in use. Consequently, the evaluation has not been adopted. |

GRI Standards Index

| Statement of Use | Taiwan Power Company Limited has reported content for the period of January 1, 2022 to December 31, 2022, in accordance with the GRI guidelines. | | |
|--|--|--|------------|
| GRI Standard Used | 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 | 20 |
| | 2-2 Entities included in the organization's sustainability reporting | Reporting Principles | 02 |
| | 2-3 Reporting period, frequency and contact point | Reporting Principles | 02 |
| | 2-4 Restatements of information | NA | - |
| | 2-5 External assurance | Assurance Statement | 128 |
| Activities and workers | | | |
| GRI 2: General Disclosures (2021) | 2-6 Activities, value chains and other business relationships | 1.1.1 Taipower Profile | 20 |
| | | 2.5.1 Supplier Management | 51 |
| | 2-7 Employees | 7.1.2 Human Resource Management Strategies and Structure | 102 |
| | 2-8 Workers who are not employees | | 102 |
| Governance | | | |
| GRI 2: General Disclosures (2021) | 2-9 Governance structure and composition | 1.3.1 The Sustainable Development Commission | 28 |
| | | 2.1.1 Organization Structure | 37 |
| | | 2.1.2 Board of Directors | 37 |
| | 2-10 Nomination and selection of the highest governance body | 2.1.2 Board of Directors | 37 |
| | 2-11 Chair of the highest governance body | 2.1.2 Board of Directors | 37 |
| | 2-12 Role of the highest governance body in overseeing the management of impacts | 1.3.1 The Sustainable Development Commission | 28 |
| | 2-13 Delegation of responsibility for managing impacts | | 28 |
| 2-14 Role of the highest governance body in sustainability reporting | 28 | | |

| GRI Standards | GRI Items | Reference | Page / URL |
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| GRI 2: General Disclosures (2021) | 2-15 Conflicts of interest | 2.1.2 Board of Directors | 37 |
| | 2-16 Communication of critical concerns | 1.3.1 The Sustainable Development Commission | 28 |
| | 2-17 Collective knowledge of the highest governance body | 2.1.2 Board of Directors | 37 |
| | 2-18 Evaluation of the performance of the highest governance body | 2022 Shareholders Annual Report | - |
| | 2-19 Remuneration policies | 2.1.2 Board of Directors | 37 |
| | 2-20 Process to determine remuneration | 7.1.3 Personnel Training and Assessment | 104 |
| | 2-21 Annual total compensation ratio | 7.1.3 Personnel Training and Assessment | 104 |
| Strategy, policies and practices | | | |
| GRI 2: General Disclosures (2021) | 2-22 Statement on sustainable development strategy | Statement from the Chairman | 03 |
| | 2-23 Policy commitments | 7.1.1 Human Rights and Inclusion | 99 |
| | 2-24 Embedding policy commitments | 1.3.1 The Sustainable Development Commission | 28 |
| | 2-25 Processes to remediate negative impacts | 2.2.1 Risk Management Mechanism | 39 |
| | | 2.2.2 Risk Assessment and Identification | 42 |
| | 2-26 Mechanisms for seeking advice and raising concerns | 5.2.1 Diverse Channels for Engagement and Communication | 78 |
| | 2-27 Compliance with laws and regulations | 2.4.2 Compliance | 50 |
| 2-28 Membership associations | 1.3.3 Stakeholder Communication Performance | 29 | |
| Stakeholder engagement | | | |
| GRI 2: General Disclosures (2021) | 2-29 Approach to stakeholder engagement | 1.3.3 Stakeholder Communication Performance | 29 |
| | 2-30 Collective bargaining agreements | 7.2.2 Labor-Management Communication and Collective Bargaining | 112 |
| GRI 3: Material Topics (2021) | 3-1 Process to determine material topics | 1.3.4 Key Sustainability Issues | 33 |
| | 3-2 List of material topics | 1.3.4 Key Sustainability Issues | 33 |

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| Corporate governance and sustainable management | | | |
| GRI 3: Material Topics (2021) | 3-3 Management of material topics | 1.1.2 Operational Performance | 23 |
| | | 2.2.1 Risk Management Mechanism | 39 |
| | | 2.2.2 Risk Assessment and Identification | 42 |
| | | 2.4.1 Ethical Management | 48 |
| | | 2.4.2 Compliance | 50 |
| GRI 205: Anti-corruption (2016) | 205-1 Operations assessed for risks related to corruption | 2.4.1 Ethical Management | 48 |
| | 205-2 Communication and training about anti-corruption policies and procedures | | |
| | 205-3 Confirmed incidents of corruption and actions taken | | |
| Accessibility and affordability of electricity | | | |
| GRI 3: Material Topics (2021) | 3-3 Management of material topics | 5.1.1 Demand Side Management Measures | 74 |
| GRI 203: Indirect Economic Impacts (2016) | 203-2 Significant indirect economic impacts | 1.1.2 Operational Performance | 23 |
| | | 5.1.1 Demand Side Management Measures | 74 |
| Stability and reliability of the power supply | | | |
| GRI 3: Material Topics (2021) | 3-3 Management of material topics | 5.1.1 Demand Side Management Measures | 74 |
| GRI 203: Indirect Economic Impacts (2016) | 203-1 Infrastructure investments and services supported | 3.1.2 A Robust Transmission and Distribution System | 61 |
| | 203-2 Significant indirect economic impacts | 3.1.1 A Stable Power Supply and Generation System | 57 |
| | | 3.2.1 The Transition to a New Generation of Energy | 63 |
| Transforming into a power utility group | | | |
| GRI 3: Material Topics (2021) | 3-3 Management of material topics | 1.2.1 Transformation Planning | 26 |
| GRI 2: General Disclosures (2021) | 2-6 Activities, value chain and other business relationships | | |

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| Management and financial performance | | | |
| GRI 3: Material Topics (2021) | 3-3 Management of material topics | 1.1.2 Operational Performance | 23 |
| GRI 201: Economic Performance (2016) | 201-1 Direct economic value generated and distributed | | |
| Power plant renewal and decommissioning | | | |
| GRI 3: Material Topics (2021) | 3-3 Management of material topics | 3.2.1 The Transition to a New Generation of Energy | 63 |
| GRI 203: Indirect Economic Impacts (2016) | 203-1 Infrastructure investments and services supported | | |
| | 203-2 Significant indirect economic impacts | | |
| Service and product satisfaction | | | |
| GRI 3: Material Topics (2021) | 3-3 Management of material topics | 5.2.1 Diverse Channels for Engagement and Communication | 78 |
| Digital transformation and information security | | | |
| GRI 3: Material Topics (2021) | 3-3 Management of material topics | 5.1.3 Digital Transformation | 76 |
| GRI 418: Customer Privacy (2016) | 418-1 Substantiated complaints concerning breaches of customer | 5.2.2 Guarding Information Security | 80 |
| Climate change and low-carbon strategies | | | |
| GRI 3: Material Topics (2021) | 3-3 Management of material topics | 2.3 Climate Change Management | 43 |
| GRI 201: Economic Performance (2016) | 201-2 Financial implications and other risks and opportunities due to climate change | | |
| GRI 305: Emissions (2016) | 305-1 Direct (Scope 1) GHG emissions | | |
| Renewable and clean energy development | | | |
| GRI 3: Material Topics (2021) | 3-3 Management of material topics | 3.2.1 The Transition to a New Generation of Energy | 63 |
| GRI 203: Indirect Economic Impacts (2016) | 203-1 Infrastructure investments and services supported | 3.2.2 Renewable Development | 65 |
| | 203-2 Significant indirect economic impacts | 4.1 Smart Grid General Planning | 69 |
| | | 4.2 Smart Grid Application | 72 |

| GRI Standards | GRI Items | Reference | Page / URL |
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| Environmental impact management | | | |
| GRI 3: Material Topics (2021) | 3-3 Management of material topics | 6.3 Minimizing Environmental Impacts | 88 |
| GRI 303: Water and Effluents (2018) | 303-1 Interactions with water as a shared resource | 6.3.2 Effluent Recycling | 90 |
| | 303-2 Management of water discharge-related impacts | | |
| | 303-3 Water withdrawal | | |
| | 303-4 Water discharge | | |
| | 303-5 Water consumption | | |
| GRI 305: Emissions (2016) | 305-6 Emissions of ozone-depleting substances (ODS) | 6.3.1 Response Measures to Air Pollution | 88 |
| | 305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions | | |
| GRI 306: Waste (2020) | 306-1 Waste generation and significant waste-related impacts | 6.3.3 Waste Management | 91 |
| | 306-2 Management of significant waste-related impacts | | |
| | 306-3 Waste generated | | |
| | 306-4 Waste diverted from disposal | | |
| | 306-5 Waste directed to disposal | | |
| Demand side management and energy conservation | | | |
| GRI 3: Material Topics (2021) | 3-3 Management of material topics | 4.1 Smart Grid General Planning | 69 |
| GRI 203: Indirect Economic Impacts (2016) | 203-2 Significant indirect economic impacts | 5.1.1 Demand Side Management Measures | 74 |
| Other GRI-corresponding items | | | |
| GRI 302: Energy (2016) | 302-1 Energy consumption within the organization | 6.2.1 Fuel Usage Management | 86 |
| | 302-3 Energy intensity | 6.2.2 Enhancing the Energy Efficiency of Taipower's Operations | 86 |
| | 302-4 Reduction of energy consumption | | |

Independent Auditors' Limited Assurance Report

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 the sustainability performance information identified by the Company (see Appendix 1) and reported in the 2022 Taipower Sustainability Report ("the Report"), and have issued a limited assurance report based on the result of our work performed.

Management's Responsibilities

Management is responsible for the preparation of the sustainability performance information disclosed in the ESG report in accordance with the GRI Standards published by the Global Reporting Initiative (GRI), and for such internal control as management determines is necessary to enable the preparation of the sustainability performance information that is free from material misstatement, whether due to fraud or error.

Our Responsibilities

We planned and conducted our work on the sustainability performance information in the Report in accordance with the International Standard on Assurance Engagement 3000 Assurance Engagements Other Than Audits or Reviews of Historical Financial Information, issued by the International Auditing and Assurance Standards Board to issue a limited assurance report on the preparation, with no material misstatement in all material respects, of the Report. The nature, timing and extent of procedures performed in a limited assurance engagement are different from and more limited than a reasonable assurance engagement and, therefore, a lower assurance level is obtained than a reasonable assurance.

Limited Assurance Procedures

We applied professional judgment in the planning and conduct of our work to obtain evidence supporting the limited assurance. Because of the inherent limitations of any internal control, there is an unavoidable risk that even some material misstatements may remain undetected. The procedures we performed include, but not limited to:

- Obtaining and reading the Report in 2022;
- Inquiring management and personnel involved in the preparation of the Report to understand the policies and procedures for the preparation of the Report;
- Analyzing and examining, on a test basis, the documents and records supporting the sustainability performance information.

Independence and Quality Controls

We have complied with the independence and other ethical requirements of the Norm of Professional Ethics for Certified Public Accountant in the Republic of China, which contains integrity, objectivity, professional competence and due care, confidentiality and professional behavior as the fundamental principles. In addition, the firm applies Statement of Quality Management Standard 1 "Quality Management for Public Accounting Firms" issued by the Accounting Research and Development Foundation of the Republic of China, and accordingly requires the firm to design, implement and operate a system of quality management, including policies or procedures regarding compliance with ethical requirements: professional standards, and applicable legal and regulatory requirements.

Inherent Limitations

The subject intonation included non-financial information, which was under more inherent limitations than financial information. The information may involve significant judgment, assumption and interpretations by the management, and the different stakeholders may have different interpretations of such information.

Conclusion

Based on the procedures performed and evidence obtained, nothing has come to our attention that causes us to believe that the sustainability performance information in the Report in 2022 is in all material respects, not prepared in accordance with the above mentioned reporting criteria.

Other Matters

The maintenance of the Company's website is the responsibility of the management. We shall not be responsible for conducting any further assurance work for any change of the sustainability performance information or the criteria applied after the issuance date of this report.

Crowe (TW) CPAs

Taipei, Taiwan

Republic of China

June 10, 2023

SUMMARY OF SUSTAINABILITY PERFORMANCE INFORMATION

| # | Corresponding Section | Page | Sustainability Performance Information | Applicable Criteria |
|---|---|------|--|---|
| 1 | 2.4 Integrity and compliance | 48 | <p>Taipower launched a Business Risk and Integrity Investigation Authority Communication Platform in 2019. The platform seeks to reduce integrity risks and eliminate inappropriate interference. The Company has also organized regular meetings and visits, invited prosecutors to give speeches, and held business transparency seminars to ensure smoother business operations for Taipower. In 2022, a total of 69 Taipower units visited local prosecutors or chief prosecutors in their districts. Taipower invited prosecutors to give 23 lectures to promote business transparency. The Company will continue to pursue good relations with judicial authorities and to promote business transparency.</p> <p>■ 2022 Taipower's Material Procurement and Utilization Enhancement Indicators and Relevant Performance: There were 492 ethical investigation cases dosed in 2022. They were categorized according to the source of the cases, as shown in the figure below, among them, the ratio of "anonymously reported" cases is still high at 40%. Nevertheless, as long as the content of reports is specific and has veritable information, Taipower conducts proper investigations.</p> | Taipower anti-corruption policies, communication and publicity, and handling situations |
| 2 | 2.5 Strengthening supplier management | 51 | <p>2022 Taipower's Enhanced Indicators and Relevant Achievements in Material Procurement and Utilization: In 2022, Taipower received a total of 3,328 material procurement tenders from 1,055 domestic suppliers and 45 foreign suppliers, for a total of 1,100 suppliers. A total of approximately NT\$113.3 billion in tenders was awarded. Domestic tender awards totaled approximately NT\$99.6 billion and accounted for approximately 88% of the Company's procurement of property. Among them, the selective tendering came to roughly NT\$71.8 billion and accounted for approximately 63% of Taipower's total procurement. There were 61 contracted suppliers (the tender that fell under the Localization Protection Policy came to approximately NT\$34 billion and accounted for approximately 32% of Taipower's total procurement.) The other types of tenders amounted to approximately NT\$41.5 billion which accounted for approximately 37% of Taipower's total procurement of property.</p> | Major Fuel Purchase Statistics of Taipower |
| 3 | 3.1.2 A Robust Transmission and Distribution System | 61 | <p>Increasing the reliability of power distribution As Taiwan moves towards energy transition and a new generation of power supply systems, Taipower has accelerated the automation of its distribution feeders. This not only helps to improve the quality of the power supply but also enables fault detection. Through the remote control of on-site automatic line switches, outage areas can be isolated promptly to reduce the scale of power failures. At present, a feeder automation system has been implemented for industrial, vital metropolitan, and remote areas that are difficult to repair, with a penetration rate of about 82.15%. In the future, Taipower will continue to push forward and raise the target value for feeder construction, and is expecting to achieve full feeder automation by 2025.</p> <p>■ 2022 Distribution Feeder Automation Installations Feeder Automation: 8,384 lines Switch Automation: 2,180 units</p> | Taipower Distribution Feeder Automation Performance Statistics |

SUMMARY OF SUSTAINABILITY PERFORMANCE INFORMATION

| # | Corresponding Section | Page | Sustainability Performance Information | Applicable Criteria |
|---|--|------|--|---|
| 4 | 5.1 Smart Electricity Service | 74 | <p>In order to encourage energy conservation in practice, Taipower has employed power-saving incentives since July 2008. The Company continues to introduce new measures to maintain customer motivation and prompt additional power-saving over the long term. In order to increase user interaction and the effectiveness of voluntary power saving, a registration mechanism was introduced in 2018. Customers who sign up through the website, customer service hotline, or at a service counter will receive a reward of \$0.6 per kWh of electricity saved, with a minimum bonus of \$84 per period (2 months). The same year, a Power-Saving Reward Points mobile application was launched. This allows users to collect points by participating in various energy-saving puzzle activities on the app. Points may be redeemed for prizes or used to participate in prize draws. The goal is to promote power-saving among the public and to create a power-saving culture and habits. Taipower will continue to organize power-saving promotional activities that convey power-saving concepts through innovative and amusing approaches.</p> <ul style="list-style-type: none"> ■ Power Savings Reward Performance in 2022 Amount of saved electricity: 2.31 billion kWh Reward amount for power-saving: NT\$1.7 billion Carbon dioxide emission reduction: 1.17 million metric tons Equivalent number of Daan Forest Parks (for CO2 absorption capacity) in one year: 3,016 | Deductions of electricity expenses and power-saving incentives of Taipower. |
| 5 | 7.1.2 Human Resource Management Strategies and Structure | 102 | <ul style="list-style-type: none"> ■ Taipower Training Statistics (Number of employees in 2022): Total 91,043 persons Fundamental development training: 408 persons On-the-job training (Professional training): Organized by the Training Institute (9,041 persons), Organized by other units (75,763 persons), External training (4,026 persons), total 88,830 persons. Manager training: On- the- job training for managers (904 persons), Skill cultivation for managers (898 persons), total 1,802 persons. Cooperative education: Recommendations for graduate school(3 persons) ■ Number and Ratio of Employees Covered by the Collective Agreement Total employees: 28,079 Number of employees in the union (people): 27,878 Number of employees in the union (%): 99.3% | Major Fuel Purchase Statistics of Taipower |
| 6 | 7.3 Promoting Social Co-prosperity | 113 | <p>Taipower strives to achieve symbiosis and mutual prosperity with society by continuously investing in cultural, artistic, and charitable activities. It has deeply ingrained the image of being a practitioner of corporate social responsibility into its corporate identity. In collaboration with local communities, Taipower promotes harmonious coexistence and drives electricity infrastructure development. The Company engages in neighborly initiatives, including emergency assistance, support for low-income households, welfare for elderly people and those with disabilities, educational and cultural programs, and other public welfare actions. In 2022, there were a total of 3,758 neighborhood-care cases, with a donation amount of approximately NT\$1.04527 billion.</p> | Taipower promotes social co-prosperity statistics |



台灣電力公司
Taiwan Power Company