

## 6.4 An Eco-Friendly Environment

### 6.4.1 Promoting Circular Economies

In responding to energy transition and the government's 5+2 Innovative Industries Plan, Taipower has pledged to embrace a circular mindset to create efficient and sustainable energy resource utilization, establish circular economies, and to develop a circular economic business model and improving resource efficiency. The Company hopes to transform from its traditional linear economic mindset into a circular economic model that gives increased consideration to sustainable development.

In view of this, Taipower celebrated May of 2021 as Environment Month. The Company used the event to publicly disclose its strategic blueprint for a circular economy. For the first time, the Company held an internal Citizen Cafe with the theme of circular economies. The event gathered the heads of various units to discuss and exchange ideas. At the meeting, more than 20 action plans were produced, and a strategic framework for a circular economy was established to push forward Taipower's dedicated circular economy plan. Taipower subsequently took the following specific measures to improve resource efficiency and reduce its environmental impact in 2022:



#### ✔ R&D and Promotion of Coal Ash Reuse and Recycling

Taipower's coal ash output in 2022 reached approximately 2.178 million tons. In response to the government's promotion of resource recycling and reuse, the Company actively invested in R&D and promoted coal ash reuse technology over the years. It has also reinforced coal ash production management. Moreover, coal ash from coal-fired thermal power plants can be used to partially replace cement as a concrete cementing material, so most of the Company's coal ash is sold for external reuse as a building material. The process has become an excellent example of waste resource recycling.

#### ✔ Promoting the servicification model with furniture in the underground cafeteria of the headquarters building

In 2022, Taiwan Power partnered with IKEA to successfully promote the servicification model for the furniture in the headquarters building's employee dining facilities. In 2021, the partnership with IKEA was initiated, and the two companies jointly implemented a rental-instead-of-purchase circular furniture model for the renovation of the employee restaurant, which has been in operation for nearly 40 years (since 1983). IKEA took charge of the space design, furniture, and soft furnishing planning and arrangement, as well as subsequent maintenance, refurbishment, and recycling. This approach breaks away from the traditional linear model of manufacture, purchase, use, and discarding of furniture, to embrace the concept of a circular economy. The collaboration is set for a six-year duration, during which IKEA will customize and adjust the style and arrangement seasonally, creating a cozy Nordic atmosphere for Taipower.



## Retired cement utility poles are transformed into artificial fish reefs

Taipower utilizes retired cement utility poles to create artificial fish reefs by placing them in suitable marine areas. In coastal waters near power facilities, high-value juvenile fish are released to enhance fishery resources, improve or create marine habitats, and promote fishery development and ecological restoration. Since 1997, a total of 18,517 artificial fish reefs have been deployed in 22 reef and protection areas around the island, providing habitats for coastal fish species, preventing fishery aging, and enhancing productivity in nearshore waters. By creating marine habitats, these artificial reefs indirectly prevent trawlers from intruding into coastal waters.



## Promoting an eco-friendly environment to enable efficient waste recycling

**1** The "Cherish Goods" Online Platform: In order to foster a green environmental consciousness and promote resource recycling, Taipower signed a memorandum with the Taipei City Secured Small Loans Service Office on July 8, 2015. The Company also established Guidelines for the Online Auction of Scrap Items, making Taipower the only state-owned enterprise using online auctions. To demonstrate the Company's commitment to creating an eco-friendly environment and green transformation, Taipower actively promotes online auctions and encourages participation by various units. In addition to conducting advocacy and providing training, incentive mechanisms have been implemented to recognize outstanding units. From the start of online auctions until December 31, 2022, approximately 95 units have completed 6,260 online auction transactions, with a total transaction value of approximately NT\$184 million. The auction revenue was about 2.51 times higher than the base price, indicating a significant achievement. (Note: From January 1 to December 31, 2022, a total of 81 units completed 1,006 cases with a total transaction value of approximately NT\$33 million.)

**2** Establishing contracts for the sale of reusable steel reels for cross-linked PE cables and cross-linked PE weather lines was part of the Company's resource-efficient recycling initiative to reduce waste generation. Since the 1970s, the Company has been maintaining these contracts with manufacturers of cross-linked PE cables and weather lines. After the company uses the steel reels, they are sold back to the manufacturers for reuse. The purchased steel reels are refurbished and painted before being used again for cable delivery, eliminating the need for re-acceptance (for the steel reel portion). In 2022, a total of 16,429 steel reels were recycled and reused.

