

Development of Renewable Energy Sources and Infrastructure Expansion

Direction

To create a climate-resilient Seoul and reduce greenhouse gas emissions, the city is actively promoting the development and widespread adoption of diverse renewable energy sources.

Progress in Implementation

- Renewable energy has been supplied in the following priorities: solar photovoltaic, geothermal, fuel cells, and others.

Energy Source	Total	Geothermal	Hydro	Fuel Cells	Photovoltaic	Others*
Supply Performance (cumulative, MW)	1,038	315	82	192	408	41

※ Others: Solar thermal, waste, bio, small hydropower, wind

Supply of Diverse Renewable Energy Sources

- **(Geothermal and Hydrothermal)** Expanding the deployment of renewable heating and cooling systems through the development of a thermal energy industry ecosystem.
 - Ongoing projects include the establishment of 11 sites, including an AI Support Center (9MW public) and GLAnZ in Seongnae-dong (12MW private)
 - Hydrothermal heating and cooling systems with a total capacity of 17.5MW at Hyundai Motor Global Business Center (GBC)



AI Support Center (0.6MW)



Robot Museum (0.6MW)



GLAnZ in Seongnae-dong (1.1MW)

- **(Fuel Cells)** Installation of large and small-scale fuel cells for electricity and heat supply
 - Sangbong Fuel Cell Power Plant (3MW power generation) and installations in private buildings (1.5MW for self-use)
 - The completion of a total energy station (TES) at Mokdong LPG Charging Station (0.3MW, scheduled for June 2024)

- Private investment attraction through the utilization of city infrastructure facilities (vehicle bases and wastewater treatment centers)
- **(Solar Photovoltaic) Deployment of high-efficiency solar photovoltaic systems tailored for urban settings, leveraging innovative technologies**
 - The implementation of building-integrated photovoltaics (BIPV) in private buildings (0.8MW) and the construction of the Magok E-LAND R&D Center (6.5MW)
 - Support for technology development and infrastructure creation through the promotion of a new technology demonstration complex
 - ▶ The New Photovoltaic Technology Demonstration Center has received visits from 90 companies and attracted 825 online visitors (cumulative, as of March 2024)



- **(Distributed Energy) Establishment of a Seoul-style urban energy system and the development of a basic plan for regional energy**
 - Establishment of a urban energy system, such as expansion of small-scale distributed power sources and enhancement of demand management
 - Re-establishment of a basic plan for regional energy in alignment with the enforcement of the Special Act on the Promotion of Distributed Energy
 - ▶ The formulation of the 6th Basic Plan for Regional Energy (February 2024 to April 2025, Seoul Institute).

