

A climate-resilient city, Gimhae is striving for carbon neutrality

Gimhae City has implemented carbon neutrality and climate change response projects, focusing on greenhouse gas emissions reduction under the government's declaration for 2050 net-zero emissions. The city plans to continuously strive towards becoming a carbon-neutral city by fostering a city where citizens have no worries over the climate crisis.



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Developing strategies and preemptive response to climate change for the transition to a carbon neutral society

Gimhae City aims to build a base for climate change response to attain net-zero emissions by 2050 and combat the global temperature rise to 1.5°C. The city has established three major strategies: net-zero emissions, fostering low carbon industry and technology, and strengthening climate crisis response and flexibility. The city's 18 departments have established 13 tasks and 65 sub-tasks to respond preemptively to the climate crisis.

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Key strategy 1. Net zero carbon emissions

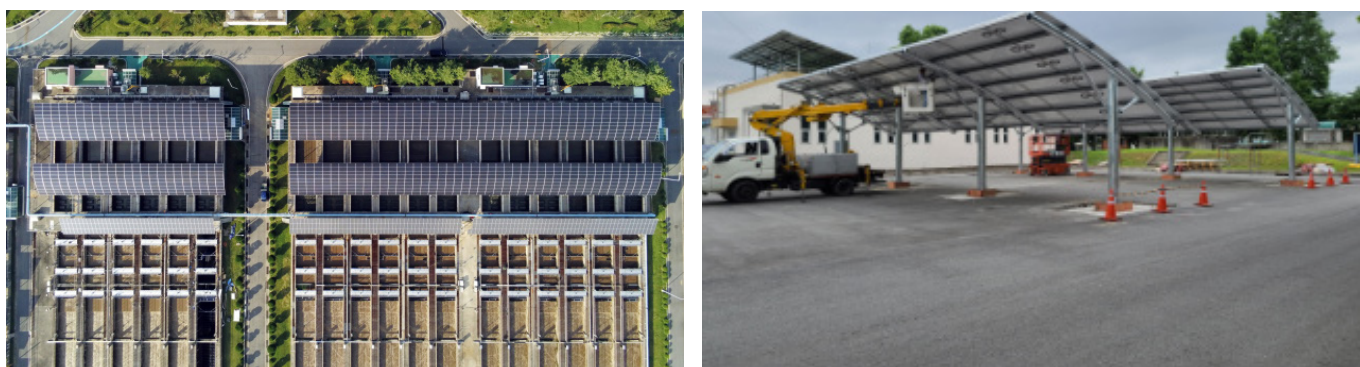
The city installed solar PV facilities at five locations of environmental infrastructure that consumes a large amount of energy, including the Hwamok Clean Water Circulation Center (sewage treatment facilities).

Gimhae City has deployed eco-friendly mass transit vehicles and set up electric vehicle charging stations to reduce greenhouse gas emissions from roads and the transportation sector.

The city converted 30 city buses into electric buses and is striving to build infrastructure to facilitate and promote the transition of internal combustion engine vehicles into hydrogen and electric vehicles. Through business cooperation with the Korea Gas Corporation, Gimhae City built and started operating the Gimhae hydrogen station in July 2021. It is also supporting the disposal of old diesel vehicles.

Gimhae City has reduced greenhouse gas emissions by about 7,800tCO₂ by installing solar PV facilities, shifting to an eco-friendly transport system, and reducing vehicle emissions. It also implemented urban forest projects, such as façade planting of urban structures and smart gardens for companies in industrial complexes to allow for carbon absorption.

To address climate and environmental problems in Jinyeong-eup, the city is also implementing a smart green city project aiming to restore a green ecosystem through the smart ecological restoration of reservoirs, non-point pollution reduction, and the environmental improvement of abandoned railroads.



Installation of solar PV facilities at environmental infrastructure

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Key strategy 2.

Promotion of low-carbon industry and technology

Gimhae City is the region where there are many small and medium enterprises. For the efficient control of air pollution, the city has supported the replacement and improvement of old air pollution prevention facilities at 105 small business sites, reducing dust by 60% and total hydrocarbon by 50%. Supporting facilities to collect oil mist at gas stations decreased precursors to ozone and fine dust to improve air quality. In addition, Gimhae City is pushing for corporate environmental facility improvement by supporting interests for the corporate environment loans.



Support for installing air pollution prevention facilities at small business sites

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Key strategy 3.

Adaptation to the climate crisis and increase of flexibility

Gimhae City strives to protect people vulnerable to climate change and enhance their ability to adapt to climate change. To help the socially disadvantaged people in the old city downtown areas of Jinyeong-eup, it installed thermal barriers on old buildings where children and the elderly reside, added heat insulation at senior citizens centers, and built cool shelters at children's playgrounds. The city introduced a cooling fog system at traditional markets to protect visitors and merchants during heatwaves. Furthermore, it implemented the installation of window air conditioners at 38 homes for the elderly who live alone and provided supplies to respond to heatwaves for 70 households.



Thermal barriers (cool roof, cool wall) facilities and a cooling fog system at traditional markets

Gimhae City has conducted promotional campaigns to encourage citizens to practice carbon neutrality. On Earth Day, public and private sectors participated in a carbon neutrality practice declaration. Various online and offline campaigns have taken place to help citizens be more aware of carbon neutrality.

The city has also implemented a “carbon neutral life practice contest,” a citizens-led project to practice a carbon-neutral life. About 60 organizations, such as apartment houses, daycare centers, and kindergartens, participated in greenhouse gas reduction and net-zero emission activities, with 12 receiving awards.

Gimhae City conducted education on climate change and carbon neutrality for 20,000 citizens at the Gimhae Climate Change Response Promotion Center and taught kindergarten, elementary, middle, and high school students about a climate saver to increase the citizens’ awareness of climate change. In addition, as the government unveiled a plan for “Living with COVID-19,” the city has introduced online programs, such as Banguseok Climate School and Eco Housewife’s Environment Class.



Carbon neutral life practice declaration to strengthen the citizens’ awareness of climate change and climate saver class

Going forward, through close public-private cooperation, Gimhae City plans to continue running a citizens-led carbon-neutral life practice campaign, play a leading role in climate crisis response and the Green New Deal by completing a climate change response plan, and implementing a net-zero emission model project at Jangyu Library and conducting other smart green city projects.