

Chungcheongnam-do leads the climate change response by implementing an effective greenhouse gas reduction policy

Chungcheongnam-do has 29 out of 59 thermal power plants in Korea, producing the most greenhouse gas emissions. In 2019, the province produced greenhouse gas emissions of 154 million tons (22.1%). The total national emissions were 701 million tons. It consolidated cooperation for climate change response with domestic and international entities, laid an institutional groundwork, and implemented various innovative carbon-neutral policies to tackle such challenging conditions.



01

Exerting leadership through broad cooperation with domestic and international institutions for climate change response

Chungcheongnam-do held international conferences on coal phaseout, unveiled innovative policies, and publicized the coal phaseout and energy transition at home and abroad since 2017.

In 2021, the province hosted the first Under 2 Coalition Asia-Pacific Forum to promote carbon neutrality in the Asia-Pacific region. The participants discussed the importance of carbon neutrality leadership and ways of implementing the energy transition under the theme of “Race to Net Zero.”

The forum was attended by Ban Ki-moon, the 8th Secretary-General of the United Nations, Nicola Sturgeon, First Minister of Scotland, Helen Clarkson, CEO, Climate Group, and Sam Kimmins, Head of RE100, who all stressed the necessity for carbon neutrality and sought the best ways to achieve goals.

In the capacity of the Asia-Pacific Chair of Under2 Coalition (appointed in December 2020), Chungcheongnam-do attended the 2021 Under2 Coalition General Meeting (Glasgow, U.K.) where it signed an MOU to limit the global temperature rise to 1.5°C, and reduce global greenhouse gas emissions by 45% from 2010 levels by 2030, and introduced its coal phaseout policy to spread carbon neutrality across the world.

Response to climate change at home and abroad

Category	Description
Accelerating coal phaseout in Korea	<ul style="list-style-type: none"> · Held international conference on coal phaseout and publicized coal phaseout and energy transition (Oct 2017) · Joined Powering Past Coal Alliance (PPCA) as the first local government in Korea (Oct. 2018) · Issued declaration for climate emergency and carbon neutrality one year earlier than the national government (Oct. 2019) · Issued declaration for coffer manager bank’s coal phaseout (Sep. 2020) · Unveiled 2050 carbon-neutral vision and strategy as the first in Korea (Sep. 2021)
Disseminating Chungnam’s policy worldwide	<ul style="list-style-type: none"> · Attended the Under2 Coalition General Assembly (Nov. 2021) · Met with UK’s COP26 envoy and Canada’s climate change ambassador (Nov. 2021) <ul style="list-style-type: none"> » Retired Boryeong Coal-fired Power Plant (No. 1 & 2) earlier and shared the results of ending the extension of power plants
Presenting suggestions on coal phaseout to the national government	<ul style="list-style-type: none"> · Joined the PPCA by obtaining consent from the Mayor of Incheon and Governors of Gangwon and Jeonnam, which host 78% of thermal power plants in Korea, and submitted suggestions on energy transition to the national government (Sep. 2021)



Chungnam joined the PPCA



2021 Chungnam International Conference on Coal Phaseout



Attended 2021 Under2 Coalition General Assembly

02

Laying an institutional base for the spread of carbon neutrality

To urge an act to respond to climate change and promote carbon neutrality, Chungnam province launched the Chungnam Carbon Neutrality Committee (87 persons) comprised of experts, civic organizations, and businesses, and organized subcommittees in eight sectors including climate, economy, transition, transport, and architecture to prepare a solid foundation for reaching net-zero emissions.

The province is building the Carbon Neutrality Training Center, the first in the nation, to allow provincial residents to better understand and learn practices for carbon neutrality. The center will offer environmental programs tailored by lifecycle stage (one night, two days) by injecting KRW 19.8 billion.

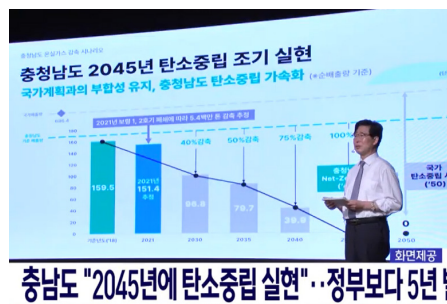
Chungnam province is accumulating a fund for a just energy transition to address the adverse impact on the regional economy and the loss of jobs after the early retirement of thermal power plants. The fund aims to collect KRW 10 billion by 2025 for reemployment training, employment succession, the attraction of energy transition businesses, residents' welfare projects, and social programs.

Institutional base for spreading carbon neutrality

Category	Description
Initiating a carbon neutrality control tower	<ul style="list-style-type: none"> · Held eight subcommittees of the Chungnam Carbon Neutrality Committee (Oct. 2021) · Held the Chungnam Carbon Neutrality Committee launching ceremony (Dec. 2021) · Unveiled "Chungnam 2045 Carbon Neutrality" vision (Dec. 2021)
Building a carbon-neutral training center	<ul style="list-style-type: none"> · Feasibility study for building a carbon neutrality training center and commissioned basic planning (Jun. 2020 - Jun. 2021) · Established the basic plan for building Chungnam Carbon Neutrality Training Center (Jun. 2021) · Deliberated on public property, local finance investment project, and public building (Jul. 2021 - Oct. 2021) · Commissioned the pre-design of the Chungnam Carbon Neutrality Training Center (Sep. 2021 - Dec. 2021) · Requested the construction of the Chungnam Carbon Neutrality Training Center (Dec. 2021)
Collecting funds for a just transition (KRW 10 billion)	<ul style="list-style-type: none"> · Enacted ordinance for raising funds (Dec. 2021) · Established a plan to collect and operate funds for a just energy transition (Apr. 2021) · Signed an agreement to raise funds for a just energy transition (Jun. 2021) <ul style="list-style-type: none"> - Chungcheongnam-do, cities, counties (Boryeong, Dangjin, Seochon, Taean) that operate power plants, and three power plants · Fundraising is underway to collect KRW 10 billion by 2025



Chungnam Carbon Neutrality Committee launching ceremony



Unveiling "Chungnam 2045 Carbon Neutrality"



Signing Ceremony for agreement on raising funds for a just energy transition

03

Implementing an innovative carbon-neutral policy with strong ripple effects on other cities and provinces

Chungnam province was the first local government to introduce the assessment of candidates' investment in coal phaseout and renewable energy for selecting a coffer manager bank that handles the funds of local governments and the Office of Education. The scheme became a model for the public sector's carbon neutrality efforts, aiming to induce financial institutions to withdraw investment in coal-fired power plants and make investment in sectors related to an energy transition. The province also made efforts to spread the system nationwide, leading to 71 financial institutions joining in diverting KRW 239.5592 trillion toward coal phaseout.

Chungnam province implemented the "Climate Crisis Safe Village Project" to increase residents' understanding and ability to better respond to heatwaves and extreme cold weather. Under the project, cool roofs were built in village facilities, and old boilers were replaced in cooperation with Korea Western Power Co., Ltd., helping save energy costs of KRW 5 million a year.

Chungnam is the only local government offering environmental education tailored to local characteristics by supplying KRW 200 million for ten regional environment education centers. The education has been provided to 18,608 people and focuses on the gravity of the climate crisis, the importance of carrying out carbon neutrality, and the efforts of Chungnam, so that residents can become aware of the climate crisis and make joint efforts to tackle it. Furthermore, the province made environment education for civil employees mandatory and conducted on-site education. As a result, a total of 18,636 civil employees received such education.

Major content of innovative carbon neutral policies

Policy	Description
Spreading coal phaseout and carbon-neutral coffer manager banks	<ul style="list-style-type: none"> · 56 local governments and the Offices of Education declared naming a coffer manager bank that invests in coal phaseout and decarbonization. (Sep. 2020) · Consulted with civic organizations to promote coffer manager banks for coal phaseout and decarbonization (Feb. 2021) · Promoted and encouraged participation in selecting carbon-neutral coffer manager banks in the local government carbon neutrality session of the 2021 P4G (May 2021) · Meeting with the Ministry of Environment to spread a coffer manager bank for coal phaseout and decarbonization (Jun. 2021) · Visited the Ministry of Education to suggest introducing a coffer manager bank for coal phaseout and decarbonization (Jul. 2021)
Building Climate Crisis Safe Villages	<ul style="list-style-type: none"> · Established a plan to implement the Climate Crisis Safe Village Project (Mar. 2021) · Implemented the 2021 Climate Crisis Safe Village Project (Jan. - Dec. 2021) · Signed business agreement with Korea Western Power Co., Ltd. to build climate crisis safe villages (May 2021)
Fostering environment education tailored for regions	<ul style="list-style-type: none"> · Established a plan to subsidize regional educational education centers with national and provincial government budgets (Feb. 2021) · Operated environment education programs at regional environment education centers (Jan. - Dec. 2021) · Reviewed the performance of regional environment education centers and received feedback



Promoting a coffee manager bank for coal phaseout and decarbonization at the special session for local government carbon neutrality in the 2021 P4G



Meeting between the Ministry of Environment, Korea Environment Corporation, and civic organizations to discuss the development of a coffee manager bank for coal phaseout and decarbonization



Installing a cool roof for climate crisis safe villages (Sandong-ri, Seochon-gun)
(before installation: 24.1°C > after installation: 14.1°C)



An education session at the Regional Environment Education Center in Yesan
(Yesan Naepo Trail)