



Building Effective Environmental Governance: Focusing on Multilevel Collaboration

Workshop 7: Strengthening Public Institutions for Climate Action

2024 UN Public Service Forum & Awards Ceremony

**Kwang Kook Park,
The Chairman of Government Performance Evaluation
Committee**



United Nations

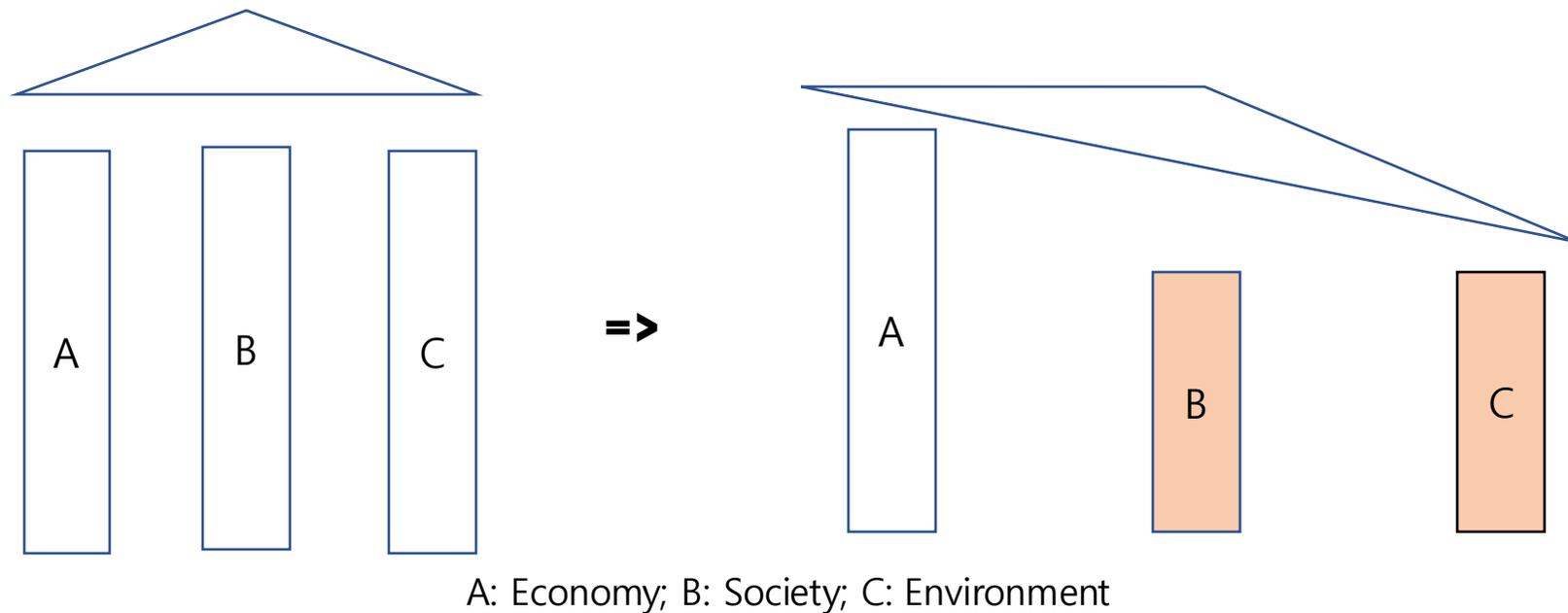
Department of
Economic and
Social Affairs



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- The Significance of Climate Action
- The Alternative to Capitalism: Sharing Economy
- Public Leaders with Entrepreneurship on Climate Action
- Multi-level Collaboration: Prospects and Challenges

The crisis of climate change: What happened in South Korea



The Balance among Three Pillars

The Imbalance among Three Pillars

Source, Lee Chang-hoon(2024)

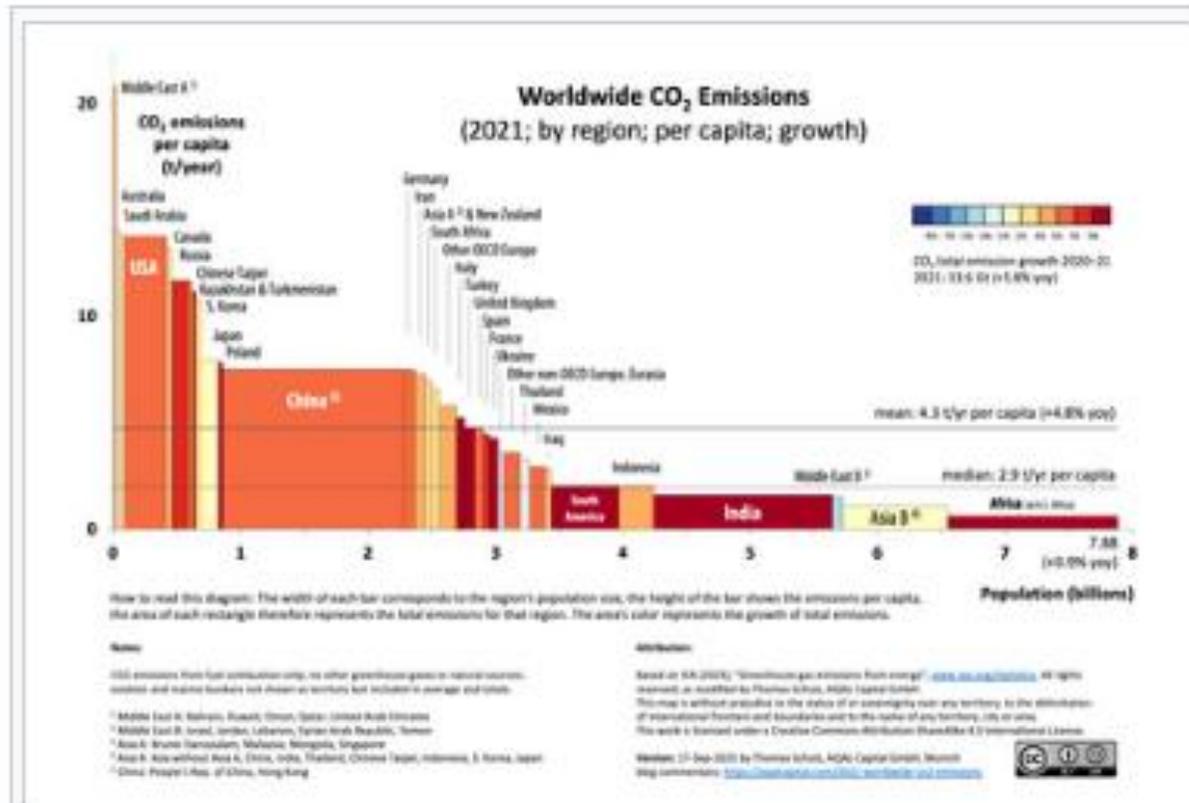
South Korea rankings by individual indicators of quality of life



Source, Lee Chang-hoon(2024)



High energy consumption in South Korea, compared to worldwide CO2 emissions



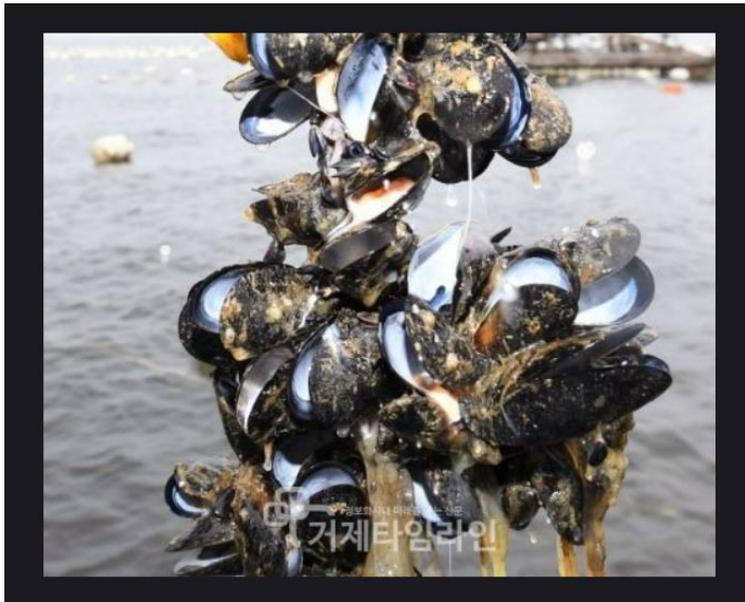
Worldwide CO₂ Emissions in 2021, by region, per capita, growth. Visualization in a variwide diagram.



Source: Wikipedia



Symptoms of a serious climate crisis caused by high energy consumption



Oyster mass mortality in the oyster farm

Source: Geojetimeline, 2020-8-15



Heavy snow in May, 2024, Kwangwon Province

Source: Civicnews, 2024-5-18



Tropical night phenomenon in Gangneung, Kwangwon Province in June: 7 days earlier than last year



Heavy snowfall in May
VS
Tropical night in June

Source: www.hani.co.kr, 2024-6-10



Gungpyeong underpass disaster that killed 14 people. 500mm of rain bomb dropped in just two days.

Source: Hankyoreh Daily News, 2024-3-27

Nevertheless, We, Koreans have a hope.

Koreans have two types of DNA.

☞ Biological DNA: hard work, self-help, and cooperation

☞ Information Technology DNA: data, network, Artificial Intelligence

Koreans have already shared their experience of achieving two miracles.

Economic Miracle & Cultural Miracle



South Korea's Economic Miracle of Han River under the Leadership of President Park Chung-hee after the Liberation in 1945

➡ His leadership was epitomized in the spirit of the Saemaul Movement

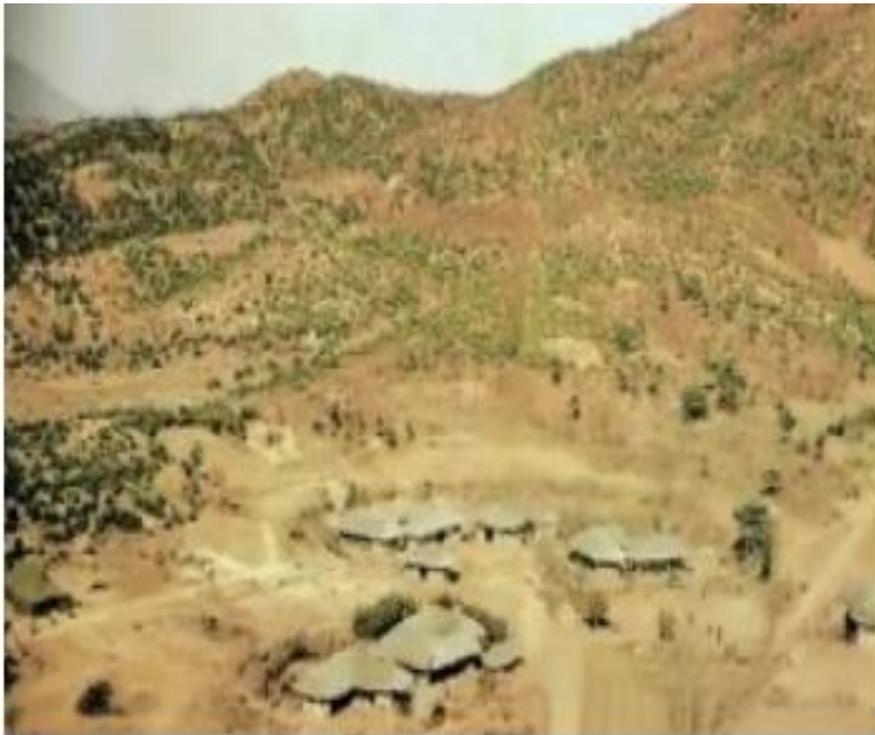
South Korea is the only country in the world that has made forest greening a success during its industrialization process.

South Korea's Cultural Miracle under the Leadership of President Kim Dae-jung after the IMF Crisis in 1997

➡ Allocating more than 1% of total budget to cultural sector made Hallyu wave and the birth of great music group, BTS possible.



Mountains in South Korea before and after reforestation



Naked mountain shortly after liberation in 1945



Wooded mountain after forest greening in 2024

Source: KBS Documentary Movies



South Korea is now preparing to make new history in the environmental sector

◇ Long Term Perspective

☞ Paradigm shift from capitalism to social ecology

- Limits of capitalism: The difficulty in SDGs
- Potential of social ecology: The possibility of SDGs(The co-existence of human and nature)

Sharing Economy in South Korea

Case 1:



Reliable second-hand transactions site, Daangon Market



Source: Daangon Market Homepage



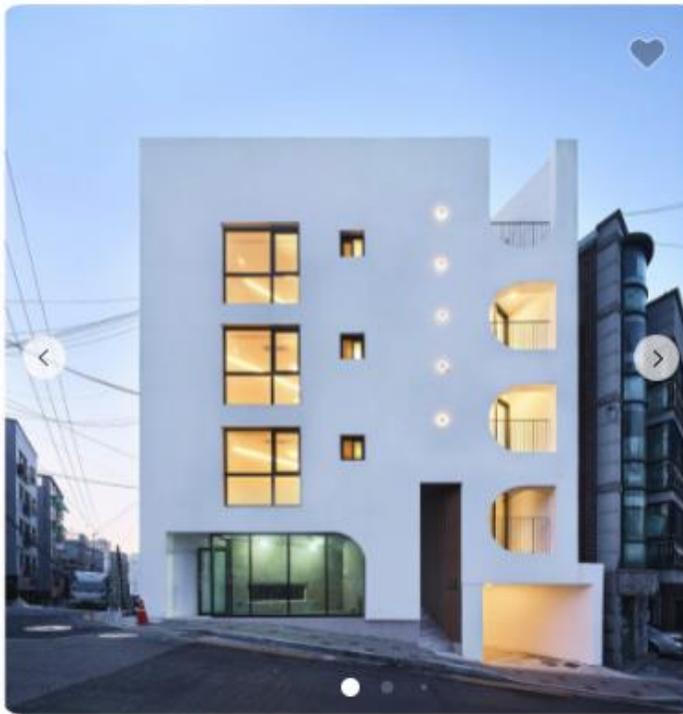
Case 2:



The car is not something to own,
it is something to use.

Source: Socar Homepage

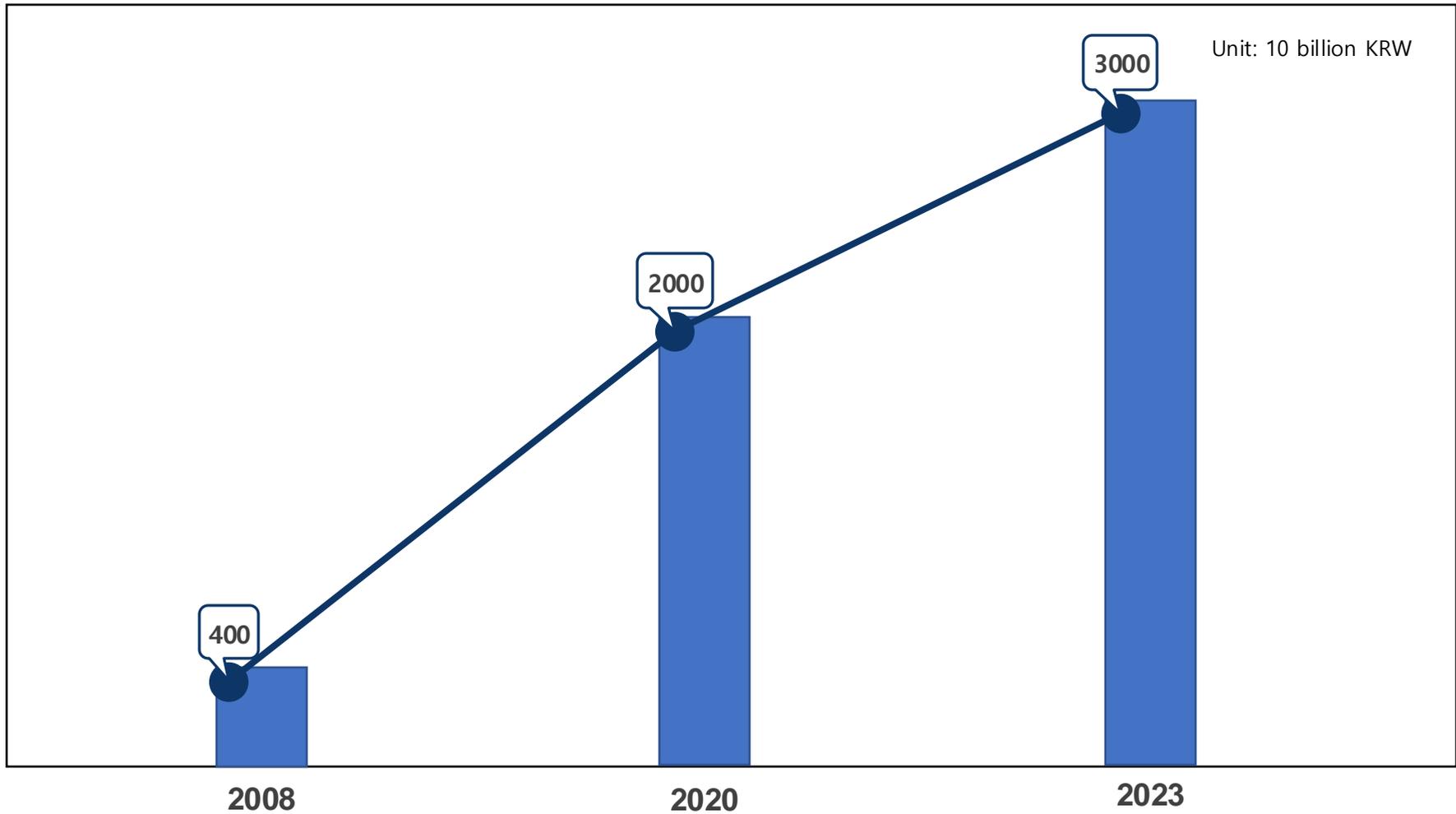
Case 3:



The house is not something to own,
it is something to use.

Source: Wehome Homepage

Trends in the Growth of the Sharing Economy Market in South Korea



Source: Korea Internet & Security Agency(2023)



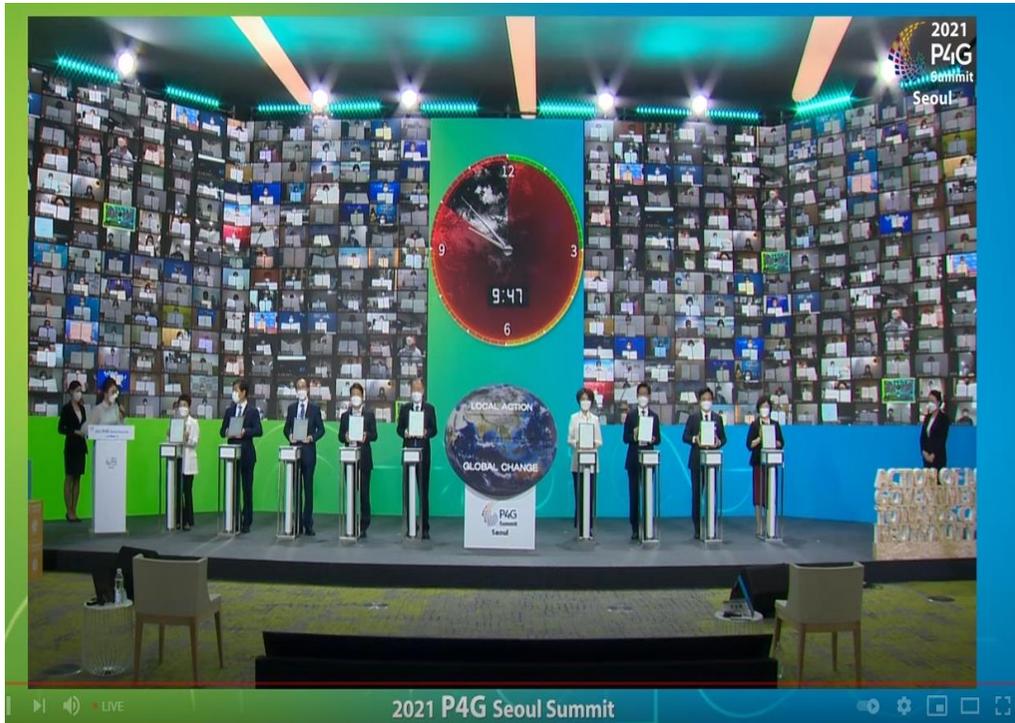
◇ Small Wins for Carbon Neutral Society

Four heroes and two heroines
struggling to realize carbon-neutral
society in the near future

👉 Public & Private Leaders with
Entrepreneurship on Climate Action

Joint Action of Central & Local Governments in Korea for Carbon Neutrality

“Realizing Multi-level Governance for Carbon Neutrality and Green Growth”



Source: 2021 P4G Seoul Summit Youtube Channel

[2021 P4G Seoul Summit cooperation case]

Central Government

- Enacting the “Framework Act on Carbon Neutrality and Green Growth” (‘22)
- Supporting local governments participation

Local Governments

- Declaration of Willingness for Active Climate Action (‘21)
- **All 17 metropolitan governments** completed their ‘**City and Provincial Carbon Neutrality and Green Growth Master Plans**’ (‘24.5)

Non-Government Organizations

- Encouraging Local government participation in Climate Action

Enhancing Cooperation Between Central and Local governments

[Cooperation between central-local governments case]

- **Spreading Best Practices Through Conference Hosting**

- Sharing Carbon Neutrality Policy Directions and Presenting local Practices



Carbon Neutrality Conference



MOU for Dissemination of Leading Climate Actions

- **MOU for Dissemination of Leading Climate Actions**

- MOU Signing Between the Ministry of Environment, Incheon City, and Businesses for Implementation of Greenhouse Gas Reduction Projects in Industrial and Transition Sectors



Central – Local Governmnets Forums



- **MoE’s Support for climate action of local government**

- Financial and Technical Supporting Regional Centers ?
- Meeting of Regional Carbon Neutrality Support Center Directors

Source: Ministry of Environment

Through collaboration, making a significant contribution to carbon reduction

Reducing Wildfire : Compared to the 10-year average, **reduction effect of 940 ktCO₂s** in this spring

- ① Enhancing prevention measures for major causes of wildfires, such as agricultural waste incineration.
- ② Expanding AI and ICT application, such as mountain weather networks and wildfire prevention ICT platforms.



Increasing Wood Product Utilization : Over the two years, **reduction of 3.3 MtCO₂s**.



- ① Collaborating with the construction sector to establish a foundation for promoting timber construction
- ② Implementing support projects for timber construction with local governments.



His collaborations with other departments or other sectors are remarkable.

International Garden Exposition Suncheon Bay Korea 2023



By creating landmark that revitalize local areas, average annual greenhouse gas reduction amounts to 387tCO₂s and total cumulative greenhouse gas reduction over 20 years amounts to 7,740tCO₂s.

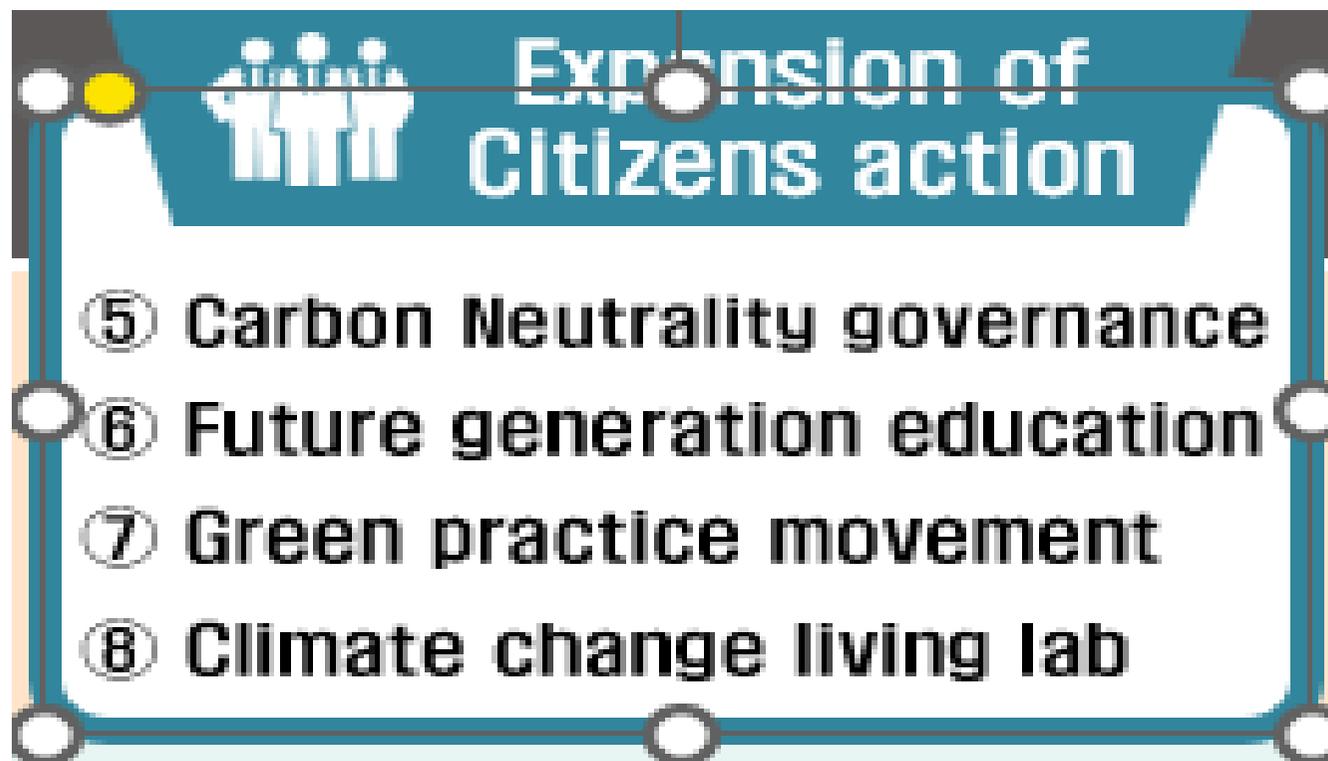
Incheon Metropolitan City declared its goal to become carbon neutral global city by 2045, five years ahead of original goal.

- ☞ We need pay attention to collaboration involving citizens, private companies, and the local government as well as the central government.



Source: 2024 Internal Report
of Incheon City

Incheon City has tried to expand citizens action as a way of promoting collaboration among diverse sectors.



Source: 2024 Internal Report of Incheon City

In order to make these goals more concrete, Incheon City operates the following systems actively.

[Governance]

- Carbon Neutrality committee
- Local government alliance
- Information share by sector

Source: 2024 Internal Report of Incheon City

Private Sector:

Woman Forestry Successor,
So Hyun-joo



We call her So d’Arc because her will and commitment resembles Jeanne d’Arc.



Over the past 10 years, Muju Bandi Farm has produced about 1,000 women foresters and carbon-neutral lifestyle instructors through forest education using digital technology.

Various activities are being carried out through Muju Bandi Farm, which was launched as an agricultural corporation in 2016, to realize a carbon-neutral society.





Konkuk University solar power generation for carbon neutral university campus in collaboration with the Ministry of Trade, Industry and Energy



Source: 2023
Konkuk Univ.
Internal Report

Total power generation scale: 8,000KW,
Total cumulative electricity cost savings: 1.95 million dollars

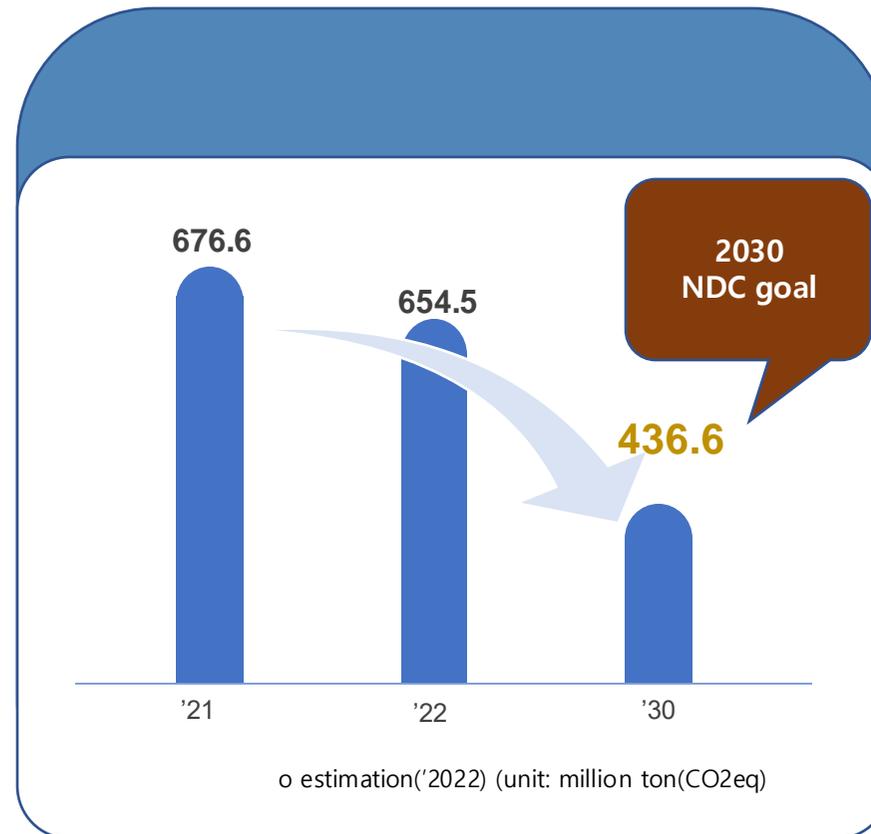
The Catholic University of Korea solar power generation for carbon neutral university campus in collaboration with the Ministry of Trade, Industry and Energy



Source: 2023 The Catholic Univ. of Korea Internal Report

Total power generation scale: 284KW,
Total cumulative electricity cost savings: 18,800 dollars

The reduction of greenhouse gas emissions by expanding carbon-free energy in South Korea



Source: 2024 Report of the Republic of Korea

In the future, we must continue to move forward to achieve a carbon-neutral society faster.

The potential for offshore wind power generation in South Korea



Source: Energy Newspaper

Conflict management through
collaboration is the best policy

Issues of Promoting Offshore Wind Power in Korea



Source: Yonhap News Agency (2019.7.2.)

[Tongyeong Yokjido offshore wind conflict case]

Fishermen

- Late information sharing and perfunctory communication leading to backlash

Developer

- Delays due to the complex permitting of individual applications for each ministry

Central Government

- Increased uncertainty in achieving government renewable energy goals due to overall projects delays

Local Government

- Conflicts among offshore wind stakeholders cause complaints and local disputes.

A new attempt to improve Korean offshore wind system

	As Is (Current System)	To Be (Special Act for the Offshore Wind Promotion)
Stakeholder consultation	Late feedback collection during the detailed design process	Collecting fishermen's feedback before designating preliminary zones (public-private council)
Government role	Conflicts and delays due to the developer handling the entire project process	The government initially identifies locations with stakeholders and operates a bidding process
Permit process	Developers apply for 29 permits separately to each ministry and agency	Centralize permitting through “ Wind Power Committee “ (One stop shops)

Multi-level Collaboration: Prospects & Challenges

The prospects for carbon neutrality are bright in South Korea.

◇ Challenges to do:

- Hard Technology: Applying ICT technology to Carbon Neutrality
- Soft Technology: Fostering Expertise and High Ethics for Collaboration
- High Evaluation of South Korea's Forest Greening Success for the SDGs: Holding the World's 4th Largest Forest Stockpile



A Hope overcomes all difficulties. It all depends on our mindset.

Nelson Mandela says,

“If we think it’s impossible, we can’t do it.

But, if we think it’s possible, we can do it.”



Thank You

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