

## 탄소중립사회 실현을 위한 기후 탄력적 발전 경로(CRDPs) 연구

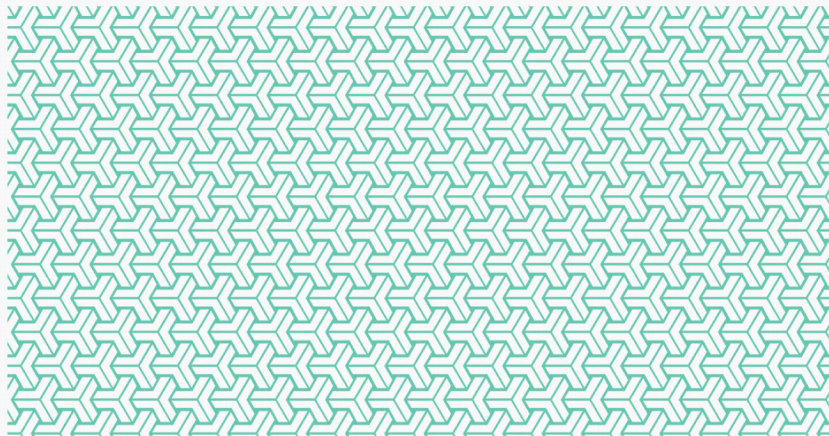
A Study on the Climate Resilient Development Pathways (CRDPs) for Carbon Neutral Society

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Summary



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The impact and the scale of damage of climate change are gradually increasing. An increase in the frequency and intensity of extreme weather due to climate change has been observed in Korea, and extreme weather phenomena such as heavy rain, drought, and heat wave are considered serious problems worldwide. According to the research, the degree of global warming is more likely to increase than previously predicted. In other words, it is expected that efforts to mitigate climate change will not be able to adequately respond to climate change in the future. Along with climate change mitigation strategies, a 'carbon neutral society' that also considers adaptation to climate change is necessary for future strategies for climate change.

Korea has established mitigation and adaptation policies to respond to climate change. However, the current climate strategy has been focused on climate change mitigation. In addition, Korea's climate policy is divided into climate change mitigation and adaptation policy, which are being pursued individually. For the efficiency of climate change response policies, the climate change mitigation and adaptation strategies needs to be integrated.

A climate-resilient development pathways is a concept that combines sustainable development, climate change mitigation and adaptation. The goal of the climate-resilient development pathways is to build a sustainable and climate-resilient society, and to respond to climate change in the form of pursuing sustainable development. A climate-resilient development pathways can be realized by achieving the Sustainable Development Goals (SDGs), achieving carbon neutrality, and maintaining the global temperature increase below 1.5° C.

A climate-resilient development pathways is not a method or strategy, but a task for mankind to constantly research. There are synergies and conflicts between sustainable development and climate strategies. A climate-resilient development pathways may appear differently depending on the spatial environment. Because the environmental conditions of countries and cities determine the conflicts and synergies between the SDGs and climate strategies, it is necessary to examine various strategies that is suitable for the spatial environment.

From the perspective of a climate-resilient development pathways, Korea's climate policy has many limitations. According to the expert survey, the degree of conformity with the Sustainable Development Goals

of climate policies was up to 60%, and overall, it was below 50%. In particular, it is considered that 'Goal 10. Reduced inequalities' and 'Goal 17. Partnerships for the goals' have hardly been reflected in current policies. Overall, the Korea's detailed carbon-neutral policy do not sufficiently consider social inequality and governance.

The European Green Deal announced by the European Commission in December 2019 is a mid- to long-term climate policy and green growth strategy to achieve carbon neutrality in Europe. The European Green Deal seeks to overcome the limitations of existing climate policies. EU tries to convince people that the policies they made are for the inclusive society. The European 「Climate Law」 is consulted and reviewed by the European Scientific Advisory Board on climate change. It emphasizes the process of fair evaluation and efficient policy. Although Korea's 「Basic Law on Low Carbon, Green Growth」 was quickly enacted in 2010, the unsuccessful results would be caused by these differences in policy systems.

The structure of the UK's 「Climate Change Act」 does not seem to be much different from the 「Basic Law on Low Carbon, Green Growth」 in Korea. However, the policy-making process in UK is different from that of Korea. By understanding the UK's legal system is horizontal, unlike Korea, which is vertical, the difference between the UK's 「Climate Change Act」 and Korea's 「Low Carbon and Green Growth Basic Act」 can be agreed. The UK's 「Climate Change Act」 not only sets clear goals, but also makes it clear to the central government should be responsible for climate policies.

In particular, it is considered that local governments are the main agents of actual policy implementation. The central government monitors the situation of each local government and responds to climate change by supplementing and managing problems caught in the process. The central government monitors the situation of each local government and responds to climate change by supplementing and managing problems caught in the process.

Limitations of Korea's climate policy are 1) Korea has a rigid institutional system and a vertical policy implementation system, 2) lack of linkage between climate change policies and existing national policies, 3) lack of governance to solve problems. In order to overcome these limitations and achieve a climate-resilient development pathways in Korea, national and local level strategy were proposed. As a strategy at the national level, 1)

monitoring and planning support to strengthen the capacity of local governments, 2) connecting with the national Green New Deal policy, and 3) operating governance at the national level and revision of related laws were suggested. As a strategy at the local government level, 1) smart green cities and 2) climate eco-city were suggested which is connected to existing plans promoted at the local level.

Recent studies related to climate change have mainly focused on individual strategies and effects rather than macro-level climate change mitigation and adaptation. In addition, the balance between adaptation and mitigation of climate change and sustainable development are being pushed out of the priorities due to the pressing issue of responding to the international community's demands of 2050 carbon neutrality. In other words, it can be seen that the possibility of achieving a climate-resilient development pathways is far-fetched.

Nevertheless, in Korea, there are already many experts in each field and the central government can establish a climate strategy from an integrated perspective by integrating these experts. In other words, it is necessary to organize an expert group and promote research to encompass the Sustainable Development Goals, climate change mitigation, and climate change adaptation in policies.

**Keywords :**

Climate Change, Carbon Neutrality, Green Building, CRDPs