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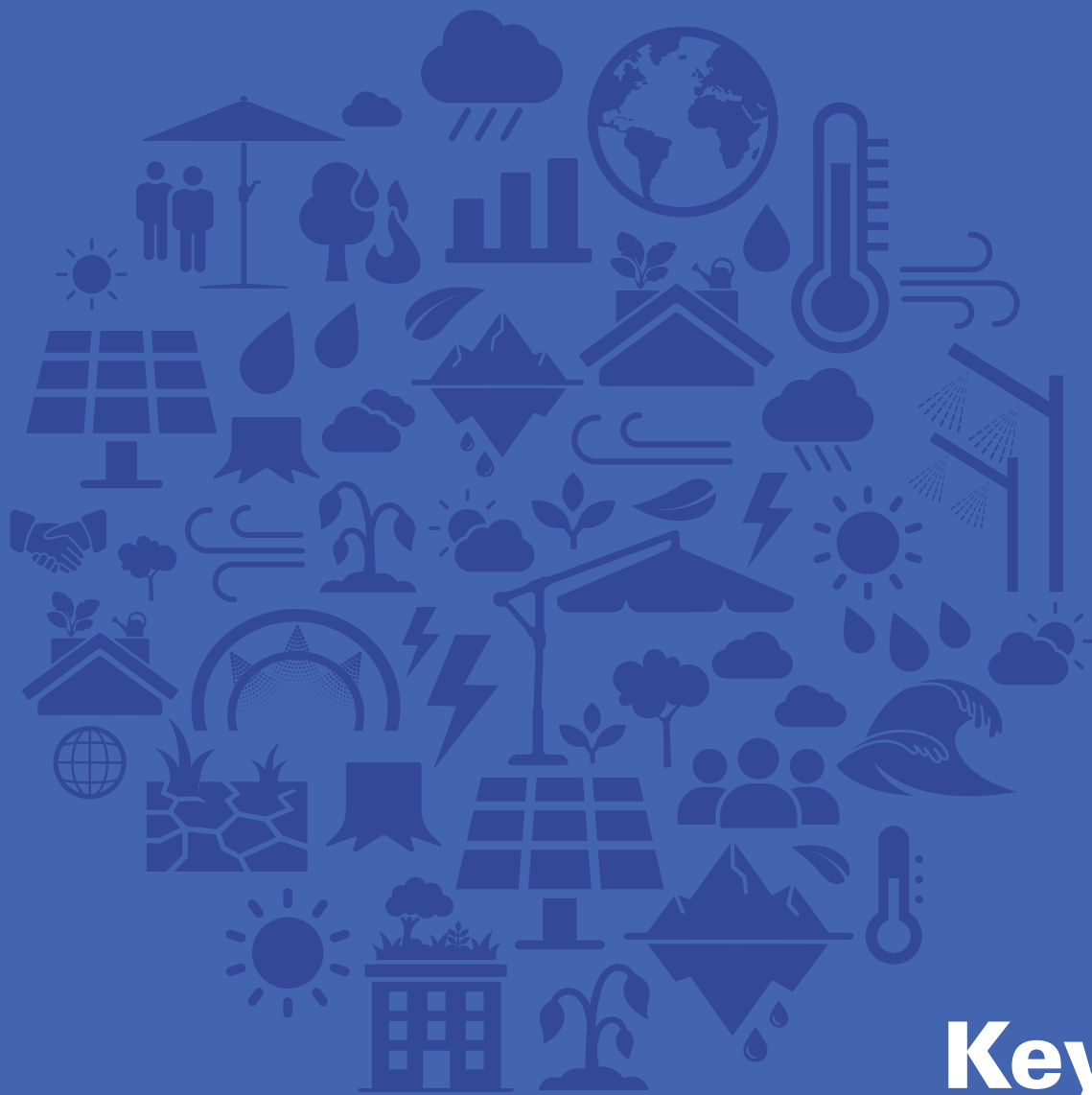
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Time	Program
개회식	
기조연설	
14:15-14:30	대상이 아닌 주체로서의 세대 : 청년 참여를 통한 적응 재설계 손유진 기후변화청년단체 GEYK 공동대표
기념촬영 및 장내정리	
14:30-14:40	기념촬영 및 장내정리
세션 1. 누구도 소외되지 않는 포용적 적응정책	
14:40-15:00	포용적 기후변화 적응 강화방안 – 독일 사례를 중심으로 Cornelia Rietdorf 독일연방환경청(UBA) KomPass 연구위원
15:00-15:20	일본의 폭염 적응과 취약계층 보호 Yuko Yoshida 일본 환경성 사무관
15:20-15:40	한국의 기후위기 적응법 추진현황 및 취약계층 보호 제도 신지영 KEI 국가기후위기적응센터 기후적응정책실장
휴식 및 장내정리	
15:40-15:50	휴식 및 장내정리
세션 2. 포용적 적응을 위한 다양한 접근	
좌장 : 송영일 한국기후변화학회장	
15:50-16:00	아·태지역의 포용적 적응 도구 및 사례 Mozaharul Alam 유엔환경계획(UNEP) 아태사무소 지역코디네이터
16:00-16:10	기후위기 취약계층 실태와 지원 사업 – 한국의 사례 조한나 KEI 국가기후위기적응센터 기후적응협력실장
16:10-17:10	패널토의 심성보 기상청 사무관 / 배치혜 전북대학교 교수
폐회	
17:10-17:15	폐회

Program

2026 기후적응 국제 심포지엄

Time	Program
Opening	
Keynote	
14:15-14:30	Generation as Agent : Redesigning Adaptation Through Youth Participation Yu-Jin Son Co-Representative, Green Environment Youth Korea(GEYK)
Group Photo & Break	
14:30-14:40	Group Photo & Break
Session I. Inclusive Adaptation Policy : Leaving No One Behind	
14:40-15:00	Approaches to Strengthen Inclusive Climate Change Adaptation – Examples from Germany Cornelia Rietdorf Research Associate, Section KomPass, German Environment Agency (UBA)
15:00-15:20	Heat Adaptation in Japan: Protecting Vulnerable Groups Yuko Yoshida Ministry of the Environment, Japan
15:20-15:40	Korea's Legislative Progress on Inclusive Climate Adaptation Jiyoung Shin Director, KEI-KACCC
Break	
15:40-15:50	Break
Session II. Diverse Approaches to Inclusive Adaptation (Moderator: Young-Il Song, Honorary Research Fellow, KEI-KACCC President, Korean Society of Climate Change Research)	
15:50-16:00	Reaching Vulnerable Groups in Asia-Pacific: Insights from the APAN Forum Mozaharul Alam Regional Coordinator for Climate Action & Head of APAN Secretariat, UNEP Regional Office for Asia and the Pacific
16:00-16:10	Climate Vulnerable Groups Survey & Support Program in Korea Hanna Cho Director, KEI-KACCC
16:10-17:10	Panel Discussion Sungbo Shim Korea Meteorological Administration Chi-hye Bae Jeonbuk National University
Closing	
17:10-17:15	Closing



Keynote

기조연설

대상이 아닌 주체로서의 세대: 청년 참여를 통한 적응 재설계

손유진 기후변화청년단체(GEYK) 공동대표

**Generation as Agent :
Redesigning Adaptation Through Youth Participation**

Yoojin Son

Co-Representative, Green Environment Youth Korea (GEYK), Korea

2026

International Symposium on
Climate Change Adaptation 2026

기후적응 국제 심포지엄

Generation as Agent, Not Subject

Redesigning Adaptation Through Youth Participation

2025 International Climate Change Adaptation Symposium
Seoul - July 24, 2025 | United Environment Youth Korea

I. FRAMING THE QUESTION

Who Are We Adapting For?



Early Warning



Resilient
Infrastructure



Smart
Technology



Data-Driven
Policy



We build strategies.
But do we ask

Who are we
adapting for,
and how?

UNEP - Adaptation to Report, April 2024

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II. DEFINING INCLUSIVE ADAPTATION

Inclusion Is Not Just "More People" It Is "Who, and How"

Distributive Justice

Who bears the burden — and who receives the benefit?

Procedural Justice

Who takes part in the decision-making process?

Recognitional Justice

Whose knowledge and experience are respected?

Adapted from: IPCC WGI WGII — Distributional, procedural & recognition justice in adaptation

IPCC: Adaptation in Report, Not Agenda

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III. THE COST OF INCLUSION

Efficiency Sees the Average. Inclusion Sees the Margins.



Efficiency

Designs policy around average conditions.



Inclusion

Looks at the lives beyond the average — and where they are excluded.

CONDITIONS THAT INTERSECT



Persons with Disabilities



Housing Insecurity



Women



Older Adults



Migrants

The more these conditions overlap, the harder resilience becomes to build.

IPCC: Adaptation in Report, Not Agenda

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IV. WHERE YOUTH STAND

The Generation That Lives Longest With Today's Decisions

Youth will live longest with the outcomes of today's adaptation choices and carry both the mitigation burden and the future economy.

39%

of surveyed youth (16–25) are hesitant to have children because of climate change

Wernsdorfer et al., *Global Planning Monthly* 2023, 1–10 (accessing 01/12/2023)

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V. FROM SUBJECT TO AGENT

The Same Three Questions Now Asked of Youth



Distributive

Are today's burdens and tomorrow's benefits shared fairly across generations?



Procedural

Can youth actually take part in shaping adaptation policy — not just attend it?



Recognitional

Is youth experience treated as valid knowledge — not just an opinion to note?

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V. FROM SUBJECT TO AGENT

Youth Participation Means Influence, Not Attendance

Attendance

- Invited to the room
- Consulted, once
- Views noted, not tracked
- One seat, no follow-through



Influence

- ✓ Access to full information
- ✓ Real deliberation, not a formality
- ✓ Decisions traceably reflect input
- ✓ A sustained, ongoing role

UNEP Adaptation to Report (2014, 2015)

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VI. ENDING

Inclusive adaptation is not
protecting more people.

**It is enabling more people to
design adaptation together.**

UNEP Adaptation to Report (2014, 2015)



Session 1

누구도 소외되지 않는 포용적 적응정책 Inclusive Adaptation Policy : Leaving No One Behind

포용적 기후변화 적응 강화방안 – 독일 사례를 중심으로
Approaches to Strengthen Inclusive Climate Change Adaptation
– Examples from Germany

Cornelia Rietdorf 독일연방환경청(UBA) KomPass 연구위원
Cornelia Rietdorf Research Associate, Section KomPass, German Environment Agency (UBA)

일본의 폭염 적응과 취약계층 보호
Heat Adaptation in Japan: Protecting Vulnerable Groups

Yuko Yoshida 일본 환경성 사무관
Yuko Yoshida Ministry of the Environment, Japan

한국의 기후위기 적응법 추진현황 및 취약계층 보호 제도
Korea's Legislative Progress on Inclusive Climate Adaptation

신지영 KEI 국가기후위기적응센터 기후적응정책실장
Jiyoung Shin Director, KEI-KACCC

Session 1

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Für Mensch & Umwelt

Umwelt Bundesamt

KomPass
Kompasszentrum
Strategien und Förderung

International Symposium on Climate Change Adaptation 2026 – Adaptation for All

Approaches to strengthen inclusive Climate Change Adaptation - Examples from Germany

Cornelia Hietdorf
German Environment Agency

24.07.2026

Content

1. NATIONAL DEVELOPMENTS
2. PARTICIPATION
3. ANPASO → FEDERAL FUNDING GUIDELINE FOR ADAPTATION TO CLIMATE CHANGE IN SOCIAL INSTITUTIONS
4. CENTER FOR CLIMATE ADAPTATION (ZKA) – TRAINING AND GUIDANCE FOR THE SUB-NATIONAL LEVEL
5. FURTHER RELATED WORK AT THE GERMAN ENVIRONMENT AGENCY (UBA) - KOMPASS

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📍 National Background - Social Dimensions on National Level

Social dimensions **historically secondary** to sectoral and technical planning approaches, but recently moved up on the political agenda.

Establishment of the Funding Guideline "AnpaSo" = "Adaptation to Climate Change in Social Institutions" in 2020

Increasing recognition in recent frameworks e.g. in:

Climate Adaptation Act (2024)

§ 1 Objective of the Act: "[...] **An increase in social inequalities resulting from the negative effects of climate change should be prevented.**"

§ 3.2 The precautionary climate adaptation strategy is to include as a minimum the following clusters and their associated areas of action: "(7) a cluster **with cross-sectoral areas of action such as vulnerable groups or occupational health and safety.**"

German Adaptation Strategy (2024)

Introduction of two action fields "social justice and vulnerable groups in climate adaptation" and "occupational health and safety"

→ To date: lack of specific and measurable targets, but now these are becoming new focus topics in the development of the updated DAS 2028



Federal Climate Adaptation Act
(Bundes-Klimaanpassungsgesetz -
KriAdG) of 20 November 2024



Source: German Climate Change Adaptation Strategy
Climate Strategy

👥 Involvement of stakeholders and citizens in strategy development

UBA designed, implemented and documented the participation of...

a) Associations, federal states, municipalities, industry, science:

- Cluster-specific expert discussions with stakeholders
- Conference with 60 stakeholders and online participation with feedback from 95 stakeholders
- Formal online consultation with feedback from 66 associations and 15 federal states (approx. 1,500 comments)

b) Citizens:

- Five regional dialog events with 331 citizens
- Online participation with approx. 2,000 citizens including young people

→ Early and integrative participation in the strategy process



Source: UBA photos during the online dialogues and UBA publications

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Citizens' dialogue as important part of our DAS 2024 development

- The randomly selected citizens developed recommendations for climate adaptation measures between November 2023 and January 2024
- Participants were selected based on demographic criteria (gender, age, migration background, level of education, employment status, household income, household size, family situation, place of residence/district) and the aim of achieving the greatest possible diversity within the group
- The recommendations are based on the action areas of the German Adaptation Strategy 2024:
 - Housing
 - Work and the economy
 - Leisure, local recreation, and travel
 - Supply and mobility
 - Health



Randomly selected people from Berlin develop policy recommendations for your adaptation plan (Jan. 2024)



Citizen Dialogues and Recommendations to the German Government

Die fünf Regionen der Teilnahmegemeinschaften repräsentieren verschiedene Klimazonen in Deutschland.



Legend: North, North-East, Central, South, West. Source: IBA, 2022, 2024

Citizens recommend (selection):

- more inner-city greenery and cooled public and accessible spaces to combat the heat;
- the unsealing of surfaces so that rainwater can seep back into the ground;
- Target-group-specific educational programs, health education, and awareness-raising efforts regarding behavioral prevention and adaptation measures.
- to protect them and especially vulnerable groups from extreme weather conditions so that performance and health are maintained and they can work and learn, etc.;
- that the transport infrastructure, especially public transport and rail, also functions reliably during extreme weather events.

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Federal Funding Guideline AnpaSo

AnpaSo is a Federal Funding Guideline strengthening "Climate Adaptation Measures in Social Institutions" in Germany

AnpaSo was established as:

- the German federal government's economic stimulus and future package to address the consequences of the COVID-19 crisis
- initially a temporary economic stimulus, for the 2020–2023 period → Focus on investment measures that can be implemented quickly

Revision of the Funding Guideline in 2023:

- Continuation of funding and adjustment to a reduced budget
- Further development and realignment of objectives toward the systematic adaptation of social institutions and the promotion of model projects

Funding Objective:

To establish systematic, integrated, and sustainable climate adaptation processes in social institutions by supporting model projects that serve as inspiring examples to be emulated.

Outlook: As the request and needs are very high BMUKI plans targeted further development to achieve the greatest possible impact with the available resources.



Funding Priorities and Distribution

Distribution of funding priorities



Source: Monitoringreport P1, AnpaSo 2020, 2021, unpublished.

Key Funding Priorities:

1. Development of Climate Adaptation Strategies
2. Implementation of exemplary, nature-based climate adaptation measures based on these strategies
3. Overarching support provided by "Climate Adaptation Officers in the Social Economy" (staff position)

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Funding Priorities

Model Projects need to:

- have conceptual requirements: an integrated and systematic approach → Analysis of vulnerability to various climate risks and a prioritized action plan
- focus on nature-based solutions, such as green roofs and land de-sealing → Contribution to adaptation and natural climate protection
- ensure a supraregional impact: funded organizations act as multipliers, raising awareness of funding measures, increasing understanding of climate adaptation, and encouraging others to follow suit

Insights:

- More than 80% of projects in daycare centers, facilities for seniors and people with disabilities, schools, and youth welfare facilities
- Successful focus on nature-based solutions (66% of project types in FSP 2)
- More than 50% of projects at nonprofit associations, federations, and foundations; 30% at nonprofit enterprises; 12% at public-sector entities

More detailed information (in German only): [Klimaanpassung in sozialen Einrichtungen | Zukunft – Umwelt – Gesellschaft \(ZUG\)](#)



Some of the funded AnpaSo projects



Erstellung eines Klimaanpassungskonzeptes für die Kindertagesstätte Kindergartenburg der Stadt Eltville am Rhein

Measures:

Development of a Climate Adaptation Plan, Involvement of the affected target group, Planning of Non-Capital Expenditure Measures, Development of a Monitoring Plan



Implementation of Integral e.V.'s Climate Adaptation Plan in Berlin

Measures:

Pavilion sunshade canopy, Water mist cooling system, Raised beds with irrigation, Dry lawn, Vertical greening/Planters

Source of all pictures and project info: [Projekte | Zukunft – Umwelt – Gesellschaft \(ZUG\)](#)

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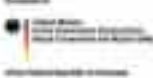
ZKA – Center for Climate Change Adaptation



ZKA at a glance



- **Founded:** 2021 by Federal Ministry for the Environment
- **Operated by:** German Institute of Urban Affairs (Difu) and adelphi consult
- **Purpose:** National hub supporting local climate adaptation through a wide array of tailored, cost-free services
- **Main target groups:** Local actors such as districts, municipalities and social institutions
- **Role:** First point of contact for all climate adaptation matters



German Government
Federal Ministry for the Environment



Difu
German Institute of Urban Affairs



adelphi

14.04.2025 13:22:19A W. Hering 24



Supporting local level implementation is key for successful climate adaptation

Germany's federal structure assigns responsibilities across the federal level, the federal states, districts and municipalities, in line with the principle of subsidiarity.

In Germany, 294 districts and 11,000 German municipalities act as key implementers of adaptation measures, as they own and manage critical infrastructure, such as:

- ✓ Roads and drainage systems
- ✓ Public buildings and hospitals
- ✓ Green spaces
- ✓ Social institutions (such as hospitals, old age homes, kindergartens, homeless shelters and social welfare organisations) have an important role as they have direct access to many of those most affected by climate change.

To strengthen the resilience and adaptation capacity, the Climate Adaptation Centre (ZKA) provides local actors practical, accessible support that fits their everyday realities.

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National Adaptation Award Blauer Kompass – Adaptation Pioneers Wanted



Wettbewerb
Blauer Kompass

Highest state award for climate adaptation projects in Germany



Photo: BfN/Photothek.net/2022

Wettbewerb Blauer Kompass | Umweltbundesamt

Applications for 2026 were accepted in five categories:

1. private and municipal companies
2. research and educational institutions
3. schools
4. municipalities
5. associations and foundations

[Factbook about the Award of Blauer Kompass](#)

- The goal of the competitions is to present innovative, effective and sustainable solutions and to encourage community engagement. In 2024, **301 applications** were received (new record). This record was again surpassed in 2026 with **488 applications**.
- The received applications were evaluated based on six criteria of good adaptation practice.
- **25 projects are currently being nominated** by the Federal Ministry of the Environment (BMUKM) and UBA.
- A jury selects one winner per category during an award ceremony.

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Tatenbank



- Suggestions for local implementation
- Best practice examples for adaptation measures
- Municipalities, companies, NGOs, schools, research and science institutions...
- More than 450 projects



[SOURCE:
www.umweltbundesamt.de/tatenbank](https://www.umweltbundesamt.de/tatenbank)



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Tools provided by KomPass e.g. during extreme heat events

HITZE-RATGEBER | UMWELTBUNDESAMT

SCHATTENSPENDER: DIE MITMACH-KAMPAGNE DES UBA | UMWELTBUNDESAMT



source: UBA Website, see links above



Recently published: Study on Social Dimensions of Climate Change Impacts

Project Duration: 2021- 2025; **Funding:** German Government Research Programme

The project examined three key aspects:

- the vulnerability of selected population groups to the impacts of climate change, particularly heatwaves and flooding
- the social factors influencing this vulnerability
- the distributional effects of climate adaptation policy

Four work packages:

1. International literature review: Social dimensions of climate change impacts and adaptation
2. In depth-analysis: the social dimensions of heat exposure and adaptive capacity in Germany and Europe
3. Analysis of policy documents on climate adaptation at the national and federal state level
4. Citizens' dialogue



Recently published, 124 pages incl. an English summary.
[Download the report here](#)
[Download the summary here](#)

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Example Berlin: Multiple env. stressors (A)

At federal state level:
More differentiated
consideration of social
aspects → Includes, for
instance, the
distributional effects of
adaptation measures
(e.g. "green
gentrification", spatial
indicator approaches)



Source: Umweltbundesamt Berlin 2011/2012 : Berlin.de

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Example Berlin: Unemployment and poverty (B)



Source: Umweltbundesamt Berlin 2011/2012 : Berlin.de

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Conclusions and policy recommendations (i)

Conceptual recommendations for action

- **Adopt an integrated, holistic perspective:** Foster collaboration among different departments/ministries and take into account the complex interactions between climate change, social disadvantage, and vulnerability
- **Improve small-scale data:** Provide small-scale data for meaningful analyses that link climatic and socio-structural factors
- **Engage those affected:** Highlight everyday practices, values, and mobility patterns that are significant for successful and widely accepted climate adaptation measures
- **Climate adaptation as a collective responsibility:** Funding and resources for the social aspects of climate adaptation should be provided on a mandatory basis
- **Environmental prevention rather than just behavioural prevention:** In addition to individual preparedness, government-led environmental prevention is also necessary to increase adaptation capacities

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Conclusions and policy recommendations (ii)

Recommendations for action to address social dimensions in heat-related health protection

- **Adopt an intersectional perspective on heat stress** (e.g., women, low-income individuals, single parents)
- **Incorporate social disadvantage into heat indices and dashboards** that clearly and practically link meteorological, health, and socio-structural data
- **Actively involve vulnerable groups** in the planning and implementation of heat protection measures
- **Break down social-structural and cultural barriers that hinder access** to heat protection measures—e.g., for migrants—through multilingual information and the use of community advocates
- **Promotion of green and blue infrastructure**, with a focus on walkability, safety, and the attractiveness of these areas
- **Consideration of rural areas**, where a predominantly older population or workers in agriculture and craft trades may be particularly vulnerable to heat, but where limited adaptation resources are available

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Why Heat Adaptation Matters in Japan

- The World Meteorological Organisation (WMO) announced in March 2026 that **2025 was the third hottest year on record**, with the global annual average temperature rising by **approximately 1.43°C** compared with pre-industrial levels.
- Addressing heat-related health risks is one of Japan's highest adaptation priorities in the health sector. Protecting lives from extreme heat is a top priority of Japan's adaptation policy.

Changes in the global annual average temperature

The graph shows a clear upward trend in global annual average temperature. A red line indicates the pre-industrial baseline, and a blue line shows the current trend. A text box states: 'Temperatures have already risen by approximately 1.1°C compared with pre-industrial levels'. A large green arrow points from the graph to the right.

More extreme heat → More heat waves

Some are more vulnerable to heat

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Japan's Policy Framework①: NAP

Decided by the Cabinet on October 22, 2021. (Partial amendment May 20, 2023)



Objective

Aiming to create a society that ensures safety, security, and sustainability by preventing or reducing damage from climate change impacts, stabilizing people's lives, promoting the sound development of society and the economy, preserving the natural environment, and building national resilience.

Period for the plan

For approximately the next five years

Basic rules

- To take the initiative to implement adapted measures
- To promote climate change adaptation
- To promote adaptation in local areas
- To promote heat adaptation
- To promote adaptation in the business sector
- To promote adaptation business
- To develop information infrastructure for adaptation
- To provide technical support to local authorities
- To raise adaptation action
- To cooperate in adaptation measures



Basic Strategies

Based on the seven basic strategies, the relevant ministries and agencies are cooperating closely with each other to promote climate change adaptation.

- Embed climate change adaptation in every relevant policy
- Promote climate change adaptation based on scientific knowledge
- Consolidate the knowledge of research institutions in Japan and develop the information infrastructure
- Promote climate change adaptation according to local backgrounds
- Deepen the understanding of citizens and promote climate change adaptation corresponding to business activities
- Contribute to enhance the adaptive capacity of developing countries
- Strengthen a system of close collaboration among relevant administrative agencies

Basic Matters Concerning Heat Illness Prevention Action Plan

The plan shall specify the goals and period of the action plan, and the measures and actions to be taken (basic roles of relevant parties, specific measures for heat illness countermeasures, promotion system for heat illness countermeasures, and review and evaluation of the action plan, etc.).

3

Japan's Policy Framework②: Heat illness Prevention Action Plan

Heat illness Prevention Action plan (Summary)

(Decided by the Cabinet on May 26, 2022)



Mid-term goal

The mid-term goal (2030) is to **halve the number of deaths** due to heat illness from the current level*.
(*5-year moving average of deaths is used; the 5-year moving average in 2021 (preliminary) was 1,293)

Duration

Around 5 years

Specific measures to prevent heat illness

- Public awareness raising and information provision to protect people's lives and health
- Heat illness prevention for people vulnerable to heat illness, e.g., elderly people and children
- Heat illness prevention in the places where personnel in charge of management are present
- Heat illness prevention by local governments and community stakeholders concerned
- Collaboration with industrial players
- Promotion of research on heat illness countermeasures

Response to extremely high temperatures

- Preparedness for extreme high temperatures
- Announcement and public awareness raising of Special Heat Stroke Alerts and prompt implementation of countermeasures

Implementation and review of action plans

The action plan will continue to be reviewed for addition and reinforcement of further measures by the situation of climate change, future trends in heat illness, and trends in public opinion. The promotion system for extremely high temperatures will also be reviewed in response to the results of the study.

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Session 1

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From Early Warning to Early Action

Heat Stroke Alert and Special Heat Stroke Alert

	Heat Stroke Alert	Special Heat Stroke Alert
Common name	Heat Stroke Alert	Special Heat Stroke Alert
Positioning	When there is a risk of damage to human health due to heat stress as a result of extremely high temperatures. (Promotes awareness of the dangers of heat stress.) Number of alerts issued by date: KJ: 413 times, KA: 389 times, WL: 123 times AG: 172 times, GZ: 174 times	When there is a risk of serious damage to human health due to heat stress as a result of especially extremely high temperatures. (All people should practice individual preventive actions through their own efforts, as well as support preventive actions through mutual and public assistance.) Implementation began in April 2024. There has not been a single alert issued.
Alert criteria	When the daily maximum Wet Bulb Globe Temperature (WBGT) is predicted to reach 33 (predicted value, rounded to the nearest whole number) at any of the locations where the WBGT information is provided within the prefecture forecast area.	When the daily maximum Wet Bulb Globe Temperature (WBGT) for the next day is predicted to reach 33 (predicted value, rounded to the nearest whole number) at all locations where the WBGT information is provided within the prefecture (excluding those listed in the column for locations where the WBGT information is provided in the Appendix Table of the Enforcement Regulations of the Climate Change Adaptation Act* 1. (Criteria for announcement regarding natural and social conditions other than the above will continue to be announced in FY2025 and beyond.)
Announcement time	Around 5:00 pm on the day before and around 5:00 am on the day	Around 2:00 pm on the day before (Judged by the predicted value around 10:00 am on the previous day)

2026 operation period: April 22, 2026 - October 21, 2026

*Since last November, a panel of experts has held meetings to review and discuss the future handling of heatstroke alerts and related matters; as a result, it was decided that, starting in 2026, data from part of locations where the WBGT information is provided would not be used when determining whether to issue a "Special Heat Stroke Alert."

5

Protecting Different Vulnerable Groups



6

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Thank you for your attention



Session 1

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(2020 Climate Change Adaptation Focus)
Adaptation For All: Leaving No one Behind in Climate Resilience

KOREA'S PROGRESS ON INCLUSIVE ADAPTATION - PREPARING FOR ADAPTATION ACT-

2026.7.24

Jiyoung Shin

Ph.D., Chief Research Fellow



1. Intro



▶ Through adaptation plans, Korea is proactively bracing for and addressing future climate risks



→ Not registered and non-registered and registered with the adaptation committee

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2014.12.15	2014.12.16	2014.12.17	2014.12.18	2014.12.19	2014.12.20	2014.12.21	2014.12.22	2014.12.23	2014.12.24	2014.12.25	2014.12.26	2014.12.27	2014.12.28	2014.12.29	2014.12.30	2014.12.31	2015.1.1	2015.1.2	2015.1.3	2015.1.4	2015.1.5	2015.1.6	2015.1.7	2015.1.8	2015.1.9	2015.1.10	2015.1.11	2015.1.12	2015.1.13	2015.1.14	2015.1.15	2015.1.16	2015.1.17	2015.1.18	2015.1.19	2015.1.20	2015.1.21	2015.1.22	2015.1.23	2015.1.24	2015.1.25	2015.1.26	2015.1.27	2015.1.28	2015.1.29	2015.1.30	2015.1.31	2015.2.1	2015.2.2	2015.2.3	2015.2.4	2015.2.5	2015.2.6	2015.2.7	2015.2.8	2015.2.9	2015.2.10	2015.2.11	2015.2.12	2015.2.13	2015.2.14	2015.2.15	2015.2.16	2015.2.17	2015.2.18	2015.2.19	2015.2.20	2015.2.21	2015.2.22	2015.2.23	2015.2.24	2015.2.25	2015.2.26	2015.2.27	2015.2.28	2015.2.29	2015.3.1	2015.3.2	2015.3.3	2015.3.4	2015.3.5	2015.3.6	2015.3.7	2015.3.8	2015.3.9	2015.3.10	2015.3.11	2015.3.12	2015.3.13	2015.3.14	2015.3.15	2015.3.16	2015.3.17	2015.3.18	2015.3.19	2015.3.20	2015.3.21	2015.3.22	2015.3.23	2015.3.24	2015.3.25	2015.3.26	2015.3.27	2015.3.28	2015.3.29	2015.3.30	2015.3.31	2015.4.1	2015.4.2	2015.4.3	2015.4.4	2015.4.5	2015.4.6	2015.4.7	2015.4.8	2015.4.9	2015.4.10	2015.4.11	2015.4.12	2015.4.13	2015.4.14	2015.4.15	2015.4.16	2015.4.17	2015.4.18	2015.4.19	2015.4.20	2015.4.21	2015.4.22	2015.4.23	2015.4.24	2015.4.25	2015.4.26	2015.4.27	2015.4.28	2015.4.29	2015.4.30	2015.5.1	2015.5.2	2015.5.3	2015.5.4	2015.5.5	2015.5.6	2015.5.7	2015.5.8	2015.5.9	2015.5.10	2015.5.11	2015.5.12	2015.5.13	2015.5.14	2015.5.15	2015.5.16	2015.5.17	2015.5.18	2015.5.19	2015.5.20	2015.5.21	2015.5.22	2015.5.23	2015.5.24	2015.5.25	2015.5.26	2015.5.27	2015.5.28	2015.5.29	2015.5.30	2015.5.31	2015.6.1	2015.6.2	2015.6.3	2015.6.4	2015.6.5	2015.6.6	2015.6.7	2015.6.8	2015.6.9	2015.6.10	2015.6.11	2015.6.12	2015.6.13	2015.6.14	2015.6.15	2015.6.16	2015.6.17	2015.6.18	2015.6.19	2015.6.20	2015.6.21	2015.6.22	2015.6.23	2015.6.24	2015.6.25	2015.6.26	2015.6.27	2015.6.28	2015.6.29	2015.6.30	2015.7.1	2015.7.2	2015.7.3	2015.7.4	2015.7.5	2015.7.6	2015.7.7	2015.7.8	2015.7.9	2015.7.10	2015.7.11	2015.7.12	2015.7.13	2015.7.14	2015.7.15	2015.7.16	2015.7.17	2015.7.18	2015.7.19	2015.7.20	2015.7.21	2015.7.22	2015.7.23	2015.7.24	2015.7.25	2015.7.26	2015.7.27	2015.7.28	2015.7.29	2015.7.30	2015.7.31	2015.8.1	2015.8.2	2015.8.3	2015.8.4	2015.8.5	2015.8.6	2015.8.7	2015.8.8	2015.8.9	2015.8.10	2015.8.11	2015.8.12	2015.8.13	2015.8.14	2015.8.15	2015.8.16	2015.8.17	2015.8.18	2015.8.19	2015.8.20	2015.8.21	2015.8.22	2015.8.23	2015.8.24	2015.8.25	2015.8.26	2015.8.27	2015.8.28	2015.8.29	2015.8.30	2015.8.31	2015.9.1	2015.9.2	2015.9.3	2015.9.4	2015.9.5	2015.9.6	2015.9.7	2015.9.8	2015.9.9	2015.9.10	2015.9.11	2015.9.12	2015.9.13	2015.9.14	2015.9.15	2015.9.16
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- Compliant with the principle of sustainable development for maintaining the balance between economy, society and environment
- Take into consideration social groups vulnerable to climate change and uplift the efficiency and effectiveness of adaptation plan**
- Manage and cope with climate change risk based on scientific bases, knowledge, and technology
- Create synergy by securing a connection with existing policies and through a comprehensive approach
- Intensify policy implementation system, expand participation of and activate communication with interested parties



- Foundation for tailored measures through surveys of distribution and characteristics by type
- Expanded vulnerable groups, including outdoor workers; prioritized support by selecting priority groups



4.4 Strengthen national protection for stressed coral submarine grass

4.4 Strengthen national protection for stressed coral submarine grass

4.1. Survey characteristics of students and subjects groups

3.1.1. *Survey of students' perceptions of small student groups, including discussion of the small group type, reasons students preferred it to other groups or having the small group experience alone (2002)*

3.2. Assessing the current availability of land for minimum cost cultivation group

© 2006 Blackwell Publishing Ltd, *Journal of Internal Medicine* 260: 105–112

[illegible]

© 2011 Blackwell Publishing Ltd *Journal of Internal Medicine* 270: 101–109

2.2. *Industry structure and world-level competition* (see Table 1)

doi:10.1017/S0022292412001611 Published online by Cambridge University Press

Session 1

누구도 소외되지 않는 포용적 적응정책 Inclusive Adaptation Policy : Leaving No One Behind

2. Inclusive Adaptation in NAP

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A Plan is a promise of actions to reach the future that people in a society want.
What do we want to achieve through NAP? Can reduce or hedge Risks, enhance capacity or resilience?



Climate-Vulnerable Groups

Build a climate-resilient safety net that leaves no one behind.

The government will expand highly effective and customized infrastructure and services based on field surveys.

- Tailored support based on field surveys of climate-vulnerable groups
- Strengthening economic support to reduce climate-related damage
- Preemptively build from previous weather events

Key Policy Issues by Sector

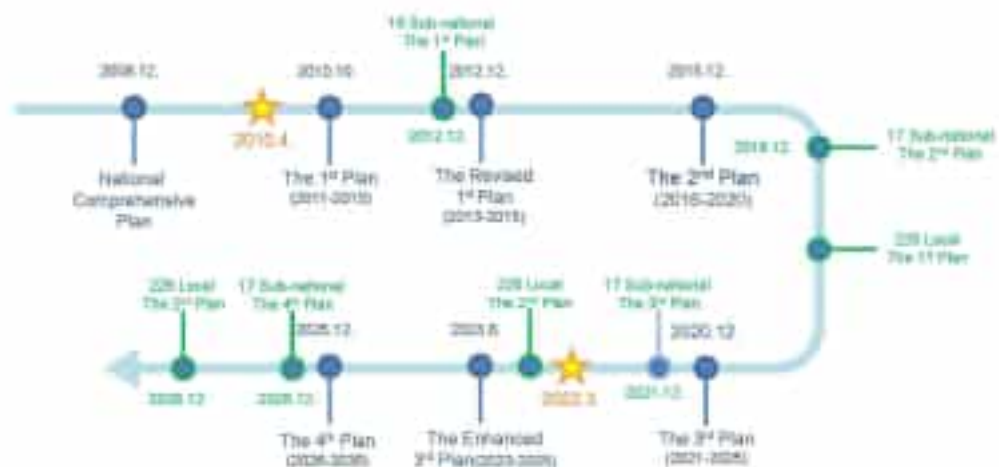
- 1. **Water** Strengthen flood resilience through integrated water resource coordination
- 2. **Disasters** Establish regionally tailored water cycle management systems
- 3. **Wildfires and Landfires** Implement all-out response to large-scale forest fires
- 4. **Heatwaves and Cold Waves** Create a safe living environment resilient to extreme weather
- 5. **Urban and Power Grids** Reinforce social infrastructure reflecting future climate risks
- 6. **Coastal Areas** Generate and protect biodiversity through climate change adaptation
- 7. **Agriculture and Fisheries** Ensure stable management of agricultural and fishery supplies amid climate crisis
- 8. **Climate-Vulnerable Groups** Build a climate-resilient safety net that leaves no one behind
- 9. **Industry and Finance** Strengthen comprehensive climate resilience across industries
- 10. **Participation and Governance** Address the climate crisis together with all stakeholders
- 11. **Empowerment Framework** Establish a science-based, whole-of-government climate adaptation framework

1

3. Legal Foundation for Adaptation in Korea

KEI

- The **legal framework** enabled continuous adaptation plans and drove tangible result
- Korea has developed 5 National Adaptation Plans and 2 revision NAP
- This process was supported by the enactment of 2 major climate laws



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Session 1

누구도 소외되지 않는 포용적 적응정책 Inclusive Adaptation Policy : Leaving No One Behind

3. Legal Foundation for Adaptation in Korea

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- **[Climate Change Adaptation]** Became mandatory for the national and local governments*, in line with Article 48, Paragraph 4 of the "Framework Act on Low Carbon, Green Growth" and Article 38 of its Enforcement Decree, effective in April 2010
- **[Climate Crisis Adaptation]** The requirement has stayed in place under the "Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis" which took effect in March 2022

Overall	[Vision] 2050 Carbon Neutral + Environment & Economic Growth			
	[Strategy/Goal] National Strategy+Mid and Long-Term GHG Reduction Targets			
	[Implementation Theme] Framework Plan for Carbon Neutrality and Green Growth+National Response Strategy+Local			
	[Executive] 2007 Carbon Neutrality and Green Growth Committee			
Sector	Mitigation	Adaptation	Just Transition	Green Growth
	- GH Emission Reduction - GHG Emission Trading System & Target Control - Carbon Neutral Cities - Local Self-Govt. Conversion - Green Building - Green Transportation - Carbon Price Policy - International Migration Project - National Green Management System	- Monitoring and Evaluation of Climate Crisis - Climate Crisis Adaptation Policy - Climate Crisis Response Policy - Water Management - Green Homeland - Agriculture, Forestry, and Fisheries - Urban Adaptation Center for Climate Change	- Social Safety Network - Special District for Just Transition - Support for Business Conversion - Minimization of Loss of Assets and Loss - Support for Conversion of Green - Participation Activation of Cooperatives - Just Commission Support Center	- Green Economy and Green Industry - Green Management of Environment - Research Development and Commercialization of Green Technology - Reaction System - Financial Support and Reutilization - Green Technology and Green Industry - Education and Communication Technology and Service - Gender Equality
	Transition to Carbon Neutral Society and Spread of Green Growth			
	Local Government Action Scheme, Institution and Community Culture for Transition Support, Education and Public Relations for Green Job Creation, Talent Mobility Support Center			
	CLIMATE FUNDS			

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3. Legal Foundation for Adaptation in Korea

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- "Framework Act on Carbon Neutrality and Green Growth for coping with Climate Crisis" in 28th March, 2022
- Structure of Framework Act : 11 Chapters and 83 Article
 - Chapter 1. General Provision
 - Chapter 2. National Vision and Greenhouse Gas Reduction Targets
 - Chapter 3. Formulation of National Framework Plan
 - Chapter 4. 2050 Carbon Neutrality and Green Growth Committee
 - Chapter 5. Greenhouse Gas Reduction Policy Measures
 - **Chapter 6. Climate Crisis Adaptation Policy Measures(10)**
 - **Chapter 7. Just Transition(1)**
 - Chapter 8. Policy Measures for Green Growth
 - Chapter 9. Transition to Carbon Neutral Society and Spread of Green Growth
 - Chapter 10. Establishment and Operation of Climate Response Fund
 - Chapter 11. Supplementary Provisions

Chapter 6. CLIMATE CRISIS ADAPTATION POLICY MEASURES

- Article 37 (Monitoring and Forecasting of Climate Crisis)
- Article 38 (Formulation and Implementation of National Climate Crisis Adaptation Measures)
- Article 39 (Preparation of Implementation Progress of Climate Crisis Adaptation Measures)
- Article 40 (Formulation and Implementation of Regional Adaptation Measures for Climate Crisis)
- Article 41 (Public Institution Adaptation Measures for Climate Crisis)
- Article 42 (**Implementation of Regional Climate Crisis Response Projects**)
- Article 43 (Water Management for Coping with Climate Crisis)
- Article 44 (Management of Green Homeland)
- Article 45 (Promotion of Conversion of Agriculture, Forestry, and Fisheries)
- Article 46 (Designation and Evaluation of Korea Adaptation Center for Climate Change)

Chapter 7. Just Transition

- Article 47 (Preparation of Social Safety Network for Climate Crisis)

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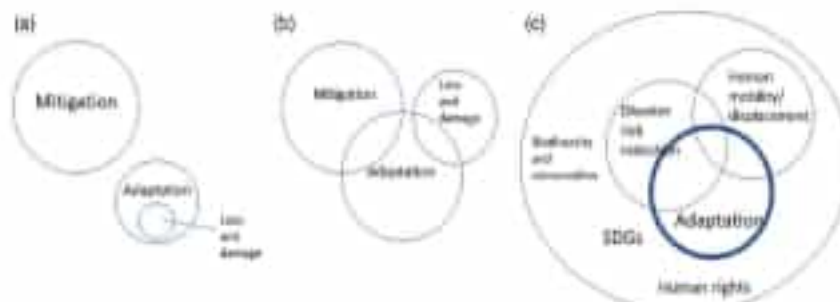
Session 1

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3. Legal Foundation for Adaptation in Korea

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The domain addressed by adaptation keeps expanding...



«Conceptual Evolution of International Adaptation Law and Policy»

(a) Mitigation and adaptation initially independent sub-fields of the climate regime under UNFCCC, with loss and damage having no formal status (note of bubble indicates relative importance). (b) Convergence of mitigation and adaptation; and adaptation and loss and damage under the Paris Agreement, with growing prioritization of adaptation and formal recognition of loss and damage. (c) At the same time as convergence within the climate regime, increased convergence of the international regimes for climate adaptation, disaster risk reduction, sustainable development, human displacement, and human rights.

Source: UNFCCC Secretariat (2019), *Adaptation in the 2020s*, p. 100.

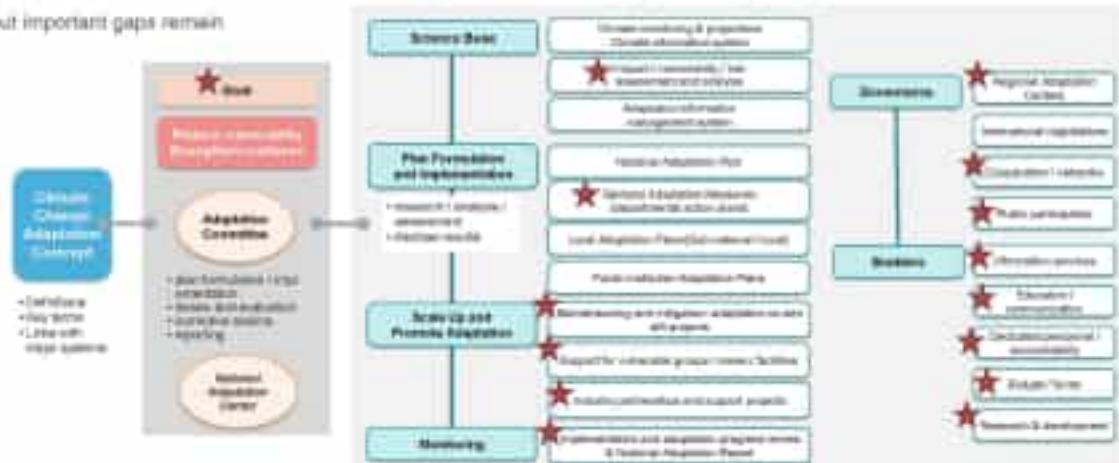
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4. Building Institutional Foundations and Systems for Inclusive Adaptation

KEI

• [Task 1] Establish a Legal Framework for a Sound Adaptation Process

- Unlike mitigation, adaptation cannot be managed through quantified, allocated targets alone. Legislation is needed to ensure a robust adaptation process and strengthen systems for proactive action through the carbon-neutral transition and beyond
- The current Framework Act (enacted September 2021, effective March 2022) expanded adaptation provisions from one to ten articles, but important gaps remain



Source: KMA, KMA, 2022, *Strengthening Climate Resilience: Capacity-Building for Climate Resilience (2020) and Comprehensive Climate Risk Assessment (2020)*, p. 100.

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4. Building Institutional Foundations and Systems for Inclusive Adaptation

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- [Task 2] Build the scientific foundation for systems approach to climate-informed decision-making
- The current Framework Act provides for a climate-crisis adaptation information management system (Article 37(2)) and an integrated adaptation-information platform (Article 37(3)), but it does not specify a concrete architecture or methodology
- Article 37-2 (Sectoral Climate-Impact Projections) is scheduled to take effect on 12 November 2026, but remains limited as an integrated scientific support mechanism for decision-making



Source: Adaptation Policy and Strategy (2022), Climate Policy and Strategy (2022), and Climate Policy and Strategy (2022).

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4. Building Institutional Foundations and Systems for Inclusive Adaptation

KEI

- [Task 3] Define and Categorize Vulnerable Groups
- In April 2026, South Korea revised its legislation to clearly define climate-vulnerable populations and established their protection as a key principle in responding to the climate change

Article 2 (Definitions) 12-2: "Climate crisis-vulnerable populations" means groups whose vulnerability to the climate crisis is relatively high and whose climate resilience is low (due to biological, social, economic, or geographical conditions), including senior citizens, children, low-income groups, outdoor workers, persons engaged in agriculture or fisheries, and residents of vulnerable facilities or areas.

Article 35 (General Principles) 3-2: Efforts shall be made to minimize the spillover effects and impacts of the climate crisis on climate crisis-vulnerable populations, and to ensure that such populations can enjoy healthy lives.

- Current Framework Act Article 38 requires the National Adaptation Plan to address disaster prevention for climate-vulnerable groups and areas, leaving detailed protection measures to the Plan (Law 2022).
- **Survey** of climate-vulnerable groups : Establish a scientific evidence base for identifying effective protection measures by defining vulnerable-group types, mapping their distribution, assessing exposure, impacts and adaptive capacity, and providing a statutory basis for surveys and cooperation with local governments

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Session 1

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4. Building Institutional Foundations and Systems for Inclusive Adaptation



- [Task 4] Establishing a legal framework to protect vulnerable groups to climate change
 - Beyond Article 42 (Regional Climate Crisis Response Projects), the current Framework Act provides few concrete instruments or means for achieving adaptation outcomes
 - **Support programs** for climate-vulnerable groups and areas: Provide support to communities and groups already affected—or at high risk of being affected—by climate change. Current Article 42 response projects primarily target regions and groups where existing industries are difficult to sustain, and are therefore oriented toward industrial transition rather than physical climate impacts
 - Climate **insurance**: provide a legal basis for supporting the development and dissemination of insurance products for climate-vulnerable groups

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4. Building Institutional Foundations and Systems for Inclusive Adaptation



- [Task 5] Enact an implementation-oriented law that specifies practical adaptation instruments and measures
 - Promote climate-adaptation **mainstreaming** by requiring major administrative plans and guidelines to incorporate adaptation considerations
 - **Support for industry**: foster the adaptation industry and support businesses in responding to climate risks
 - **Networks** for scaling up adaptation: establish and operate regional, multi-jurisdictional climate-adaptation councils

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2020-01-01					
Category	Age	Sex	Age	Sex	Age
Male (1000000)	1000000		1000000	100	
Female (1000000)	1000000	1000000			
2020-01-02					
Category	Age	Sex	Age	Sex	Age
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Female (1000000)	1000000	1000000	1000000	1000000	1000000
2020-01-03					
Category	Age	Sex	Age	Sex	Age
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Female (1000000)	1000000	1000000	1000000	1000000	1000000
2020-01-04					
Category	Age	Sex	Age	Sex	Age
Male (1000000)	1000000	1000000	1000000	1000000	1000000
Female (1000000)	1000000	1000000	1000000	1000000	1000000
2020-01-05					
Category	Age	Sex	Age	Sex	Age
Male (1000000)	1000000	1000000	1000000	1000000	1000000
Female (1000000)	1000000	1000000	1000000	1000000	1000000
2020-01-06					
Category	Age	Sex	Age	Sex	Age
Male (1000000)	1000000	1000000	1000000	1000000	1000000
Female (1000000)	1000000	1000000	1000000	1000000	1000000

Session 1

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Thank you

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Diverse Approaches to Inclusive Adaptation

Reaching Vulnerable Groups in Asia-Pacific: Insights from the APAN Forum

Mozaharul Alam Regional Coordinator for Climate Action & Head of APAN Secretariat,
UNEP Regional Office for Asia and the Pacific

Climate Vulnerable Groups Survey & Support Program in Korea

조한나 KEI 국가기후위기적응센터 기후적응협력실장
Hanna Cho Director, KEI-KACCC

Session 2

포용적 적응을 위한 다양한 접근 Diverse Approaches to Inclusive Adaptation



The 2026 International Symposium on Climate Change Adaptation

Adaptation for All: Leaving No One Behind in Climate Resilience

Reaching Vulnerable Groups in Asia-Pacific: Insights from the APAN Forum

Mozaharul Alam
Regional Coordinator, Climate Action, UNEP-ROAP and Head, APAN Secretariat

About APAN

The **Asia Pacific Adaptation Network (APAN)** serves as a knowledge platform:

- To equip adaptation practitioners in the region with the information, knowledge and tools to design, implement and monitor climate change adaptation measures,
- To foster access to technologies and finance, and
- To build capacity for integrating climate change adaptation into national development policies, strategies and plans.

With support from the Ministry of the Environment, Government of Japan, APAN was developed and launched by the United Nations Environment Programme (UNEP) in 2009 as one of the regional networks under the Global Adaptation Network.



The Global Adaptation Network (GAN) provides a worldwide platform to distribute and exchange climate change adaptation knowledge.

Session 2

포용적 적응을 위한 다양한 접근 Diverse Approaches to Inclusive Adaptation

Asia-Pacific Climate Change Adaptation Forum

The Asia-Pacific Climate Change Adaptation Forum (APAN Forum) is the flagship event of the APAN Secretariat. It is the primary regional platform for adaptation practitioners to meet, share their learning and experiences, and work together toward the pertinent outcomes and practical solutions needed to address the challenges of climate change.

Forum Target Participants



Flagship gathering for adaptation practitioners to share information, knowledge and best practices in adaptation and resilience building of the Asia-Pacific region

Asia-Pacific Climate Change Adaptation Forum

Forums (2010 – 2025)



Session 2

포용적 적응을 위한 다양한 접근 Diverse Approaches to Inclusive Adaptation

TRANSFORMATIVE POTENTIAL OF ADAPTATION

DIMENSIONS	LOW	MEDIUM	HIGH
DEPTH	Adaptations are largely separations of existing practices, with minimal change in underlying values, assumptions or norms.	Adaptations reflect a shift away from existing practices, norms or structures to some extent.	Adaptations reflect entirely new practices involving deep structural reform, complete change in mindset, major shifts in perceptions or values, and changing institutional or behavioural norms.
SCOPE	Adaptations are largely localized and fragmented, with limited evidence of coordination or mainstreaming across sectors, jurisdictions or levels of governance.	Adaptations affect wider geographic areas, multiple areas and sectors, or are mainstreamed and coordinated across multiple dimensions.	Adaptations are widespread and substantial, including most possible sectors, levels of governance, and actors.
SPEED	Adaptations are implemented slowly.	Adaptations are implemented moderately quickly.	Change is considered rapid for a given context.
LIMITS	Adaptations may approach but do not exceed or substantially challenge soft limits.	Adaptations may overcome some soft limits but do not challenge or approach hard limits.	Adaptations exceed many soft limits and approach or challenge hard limits.

TRANSFORMATIONAL ADAPTATION AS A CONTINUUM

- Adaptation exists on a continuum from incremental adjustments to transformational change, where depth, scope, speed, and limits determine when small steps are sufficient and when fundamental system shifts are required.
- Mindset shift:** not "What are we adapting to?" but "What are we adapting towards?" → building resilient societies with this end in mind.

People-Centered and Locally Led Adaptation

- Climate adaptation should not focus solely on infrastructure and technology. It must address people's livelihoods, health, food security, and social well-being.
- Vulnerable groups should be recognized as partners, co-designers, and leaders of adaptation – should not be treated only as beneficiaries of climate action
- Locally led adaptation is essential because communities understand their own risks, capacities, livelihoods, and often possess valuable traditional and indigenous knowledge.
- Resilience cannot be achieved unless vulnerable groups are empowered to influence decisions that affect their lives.

Session 2

포용적 적응을 위한 다양한 접근 Diverse Approaches to Inclusive Adaptation

Inclusive Governance and Meaningful Participation

- Need to institutionalize the participation of vulnerable groups in climate governance.
- Includes formal representation in national climate councils, adaptation committees, local planning boards, ecosystem governance bodies, and multi-stakeholder platforms.
- Meaningful participation requires moving beyond consultation toward shared decision-making, accountability, and sustained engagement.

Climate Finance and Direct Support for Vulnerable Communities

- Access to finance is identified as one of the most significant barriers to inclusive adaptation.
- The Forums call for simplified funding procedures, direct-access mechanisms, small grants, gender-responsive financing.
- Create channels that allow resources to reach community organizations, women-led initiatives, Indigenous groups, youth networks, and grassroots actors directly.

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Climate Information, Early Warning and Communication

- Vulnerable communities often lack timely, accessible, and actionable climate information.
- The Forums highlight the importance of localized climate projections, community-owned data systems, inclusive early warning systems, and communication channels such as radio, mobile phones, social media, community media, and local leaders.
- Climate information should be translated into simple, practical messages that respond to different language, literacy, disability, and livelihood needs.

Capacity Building, Leadership and Technology Access

- Building resilience requires sustained investment in local leadership, institutions, skills, and technology.
- Actions identified include climate leadership training, mentorship for women and youth, support for local organizations, digital tools for adaptation planning, and user-friendly technologies suited to rural and vulnerable contexts.
- Capacity building should strengthen both technical knowledge and community leadership.

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Social Protection and Livelihood Resilience

- The Forums recognize that climate impacts are also social and economic shocks.
- Climate-responsive social protection systems are needed to prevent climate risks from escalating into crises and to support long-term livelihood resilience.
- Examples are safety nets, climate-triggered cash transfers, livelihood recovery grants, and protection for vulnerable workers.

POLICIES, PLANNING AND GOVERNANCE

Transformational adaptation requires vertical and horizontal alignment-linking national policies with subnational and local implementation; integrating adaptation across ministries, sectors and budgets, with clear mandates and accountability mechanisms.

Governance systems must move beyond top-down planning to locally anchored, evidence-based approaches that value indigenous and traditional knowledge alongside scientific data. Governments should institutionalize participatory planning, local ownership, and free, prior and informed consent.

Integrated and participatory planning frameworks that map cross-systems risks (health-water-food-energy-cities) and make the risk data humanized and localized

Develop guiding national frameworks for LLA that align with global adaptation goals (e.g., GGA) while leaving flexibility for diverse local realities.

Governments should institutionalize **MRV (Monitoring, Reporting, and Verification)** systems to track adaptation outcomes, align finance with measurable resilience targets and enable adaptive policymaking.

Shift the governance logic!
“How do we protect our system?” to “How does our system contribute to the resilience of the entire network?”

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SOCIAL CAPITAL, EMPOWERMENT AND EQUITY

Transformational adaptation depends on local ownership and women's leadership as central pillars of resilience. Policies and programmes should institutionalise models where women, youth, and Indigenous Peoples are not just participants but decision-makers and implementers.

Equity as a performance measure: Judge success not only by indicators but by whether adaptation reduces or reinforces inequalities.

Establishing clear communication systems that bridge the gap between awareness and action is essential to enable meaningful leadership and participation of women and youth in climate adaptation processes.

Resilience grows when communities can define and measure their own priorities. Governments and partners should move toward **community co-created data**, linking lived experiences with science and policy. Local evidence must inform city budgets, infrastructure plans, and adaptation targets.

THANK YOU

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KEI Korea Adaptation Center for Climate Change



KEY FEATURES

Policy Research and Advice / Guidelines and Manuals / Tools for Analysis / Training and Education / Consulting, Networking / Disseminating Climate Data and Information

**VOICE
UP!
ACT
NOW!**
for Adaptation



KEY ROLES & ACTIVITIES

POLICY RESEARCH AND SUPPORT

National Government
Advise the National Government (Ministry)
Municipalities, Local Governments
Basic Local Government

SUPPORT MAJOR ADAPTATION GROUPS

Public Institutions
Enhance the adaptation capacity of the public administration
Private Sector
Enhance the private sector's adaptation capacity
Vulnerable Groups
Identify the vulnerable groups / Develop and operate the social support program

COOPERATION AND PUBLIC AWARENESS

Domestic and International Cooperation PR and Public Awareness

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Framework for Climate Crisis

Climate Crisis Law and Systems

- * Legal Issue
 - "Framework act on Carbon Neutrality and Green Growth for Coping with Climate Crisis"
- * Structure of Framework Act : 11 Chapters and 113 Article
 - Chapter 1. General Provision
 - Chapter 2. National Vision and Greenhouse Gas Reduction
- * Targets
 - Chapter 3. Formulation of National Framework Plan
 - Chapter 4. 2050 Carbon Neutrality and Green Growth
- * Committee
 - Chapter 5. Greenhouse Gas Reduction Policy Measures
 - Chapter 6. Climate Crisis Adaptation Policy Measures
 - Chapter 7. Just Transition
 - Chapter 8. Policy Measures for Green Growth
 - Chapter 9. Transition to Carbon Neutral Society and Spread of Green Growth
 - Chapter 10. Establishment and Operation of Climate
- * Response Fund
 - Chapter 11. Supplementary Provisions

2022. 10. 18. (월) 국회 - 대통령 & 국무총리				
Topic	Reorganized: National Strategy Framework and long-term (2050) reduction targets Implementation Plan: Framework Plan for Carbon Neutrality and Green Growth Established: 2050 Carbon Neutrality and Green Growth Committee			
Issues	Mitigation - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050)	Adaptation - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050)	Just Transition - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050)	Green Growth - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050) - Climate Change Response (2050)
Goal	Transition to Carbon Neutral Society and Spread of Green Growth Established: 2050 Carbon Neutrality and Green Growth Committee Established: 2050 Carbon Neutrality and Green Growth Committee			

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포용적 적응을 위한 다양한 접근 Diverse Approaches to Inclusive Adaptation

What do we mean by “climate-vulnerable”?

Definition under Carbon Neutrality Framework Act Article 2-12-2 :

The term “climate crisis vulnerable group” means a group with relatively high vulnerability to the climate crisis and low climate resilience due to biological and social, economic and geographical conditions, such as the elderly, children, low-income families, outdoor workers, agricultural and fishing workers, and residents of vulnerable facilities and regions.

How is this different from the usual “welfare-vulnerable” groups?

Traditional welfare criteria

Mainly income and disability status — social and economic conditions only

Climate-vulnerable criteria

Income and health, PLUS capital factors (i.e., geography and housing) — how exposed you are, how much damage you actually face, and whether you can cope and bounce back.

Source: group working documents related to climate-vulnerable and climate-resilient communities, prepared by the Climate Change Policy Group, Ministry of Environment, Republic of Korea

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Climate Vulnerable Groups Survey

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Four years of building this survey

The 2025 nationwide survey is the fourth in a series of surveys to build a common set of data



Source: Korea National Adaptation Survey (KNAS) and Korea National Adaptation Survey (KNAS)

The 2025 pilot survey

Key Results - Demand for Disaster Adaptation Policy

Urban environment The most preferred project to respond to heat waves in the living area was "creating a heat-wave walking path" (33.2%), "installing small-scale climate-control shelter" (28.3%), "moving into heat-resistant space" (19.2%), and "outdoor" (15.3%).

Welfare In order to effectively respond to the heat wave, there are high responses that energy heaters (44.3%) and heat wave supplies (33.1%) are needed in the short term.

In the long run, the response that the residential environment needs to be improved (16.1%) is high, and each group strengthens it as the most necessary service.



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The 2025 pilot survey

Key Results - Cold Wave Adaptation Policy Demand

(Urban Environment) The most preferred project to respond to cold waves in the living area was

"Creating a safe walkway for cold waves" (57.8%),

"installing a small cold wave shelter" (27.7%),

"moving to a cold wave response space" (14.3%),

and "other" (9.3%).

(Waterside) In order to effectively respond to the cold wave, there are high responses that emergency shelters (87.8%) and cold wave supplies (28.3%) are needed in the short term, and similar perceptions are seen by groups.

In the long run, the response that the residential environment needs to be improved (77.9%) is high, and each group recognizes it as the most necessary service in the long run.



The 2026 survey: going nationwide

10,000

to establish national
representative survey

16 / 16

to establish national
representative survey

3+

to establish national
representative survey

The key shift from earlier rounds



Before (2022-2023): narrow first

In the first round, we selected 16 vulnerable groups. These groups were — useful for testing questions, but hard to represent outside the country.



Now (2026): survey everyone first

This plan targets the general population nationwide. This plan aims to identify the most vulnerable groups (e.g., the elderly, disabled, and low-income).

Source: Korea National Adaptation Survey (KNAS) - Survey of National Adaptation Policy Demand (2022-2023) and Survey of National Adaptation Policy Demand (2026)

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What the survey actually asks

Source: "Surveying vulnerability" from survey, vulnerability assessment and the design approach



URL: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/600000/surveying_vulnerability.pdf

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From raw data to a vulnerability judgment

A sample process using data from a survey to make a judgment on vulnerability



Source: "Surveying vulnerability" from survey, vulnerability assessment and the design approach

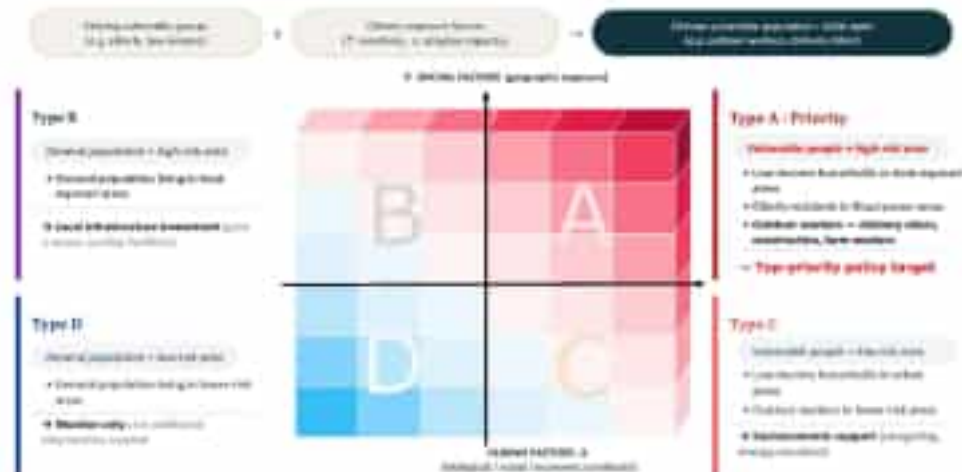
This is a copy of the 3.3.2 of the National Climate Adaptation Plan (2013-2025) and the National Climate Adaptation Plan (2013-2025) and the National Climate Adaptation Plan (2013-2025)

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The climate-vulnerability matrix



What the results will show

The 2020 results will show: (1) the extent to which the results of the assessment are consistent with the assessment, and (2) the extent to which the results are consistent with the assessment.



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The results will be a baseline study of usage and distribution — a foundation for the policies and support programs of the future.

- | | | |
|---|---------------------------------------|--|
|  | National Council Adaptive Plan | First draft in 2014, 2015-2016 to coordinate and to promote a transfer plan |
|  | Local government guidelines | Support educational integration facilities — address the barriers, poverty, and so on |
|  | Toward official statistics | 2015-2016 reflect circumstances, a regular survey will contribute to integration in a regional official statistics |

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Insurance and education

[Gyeonggi-do]
New social safety net in the era of climate crisis,
‘Gyeonggi Climate Insurance’

Details of implementation

- Gyeonggi do residents are covered by one-year insurance contract from April 2025
- Provides fair-fee coverage related to food and cold diseases, climate-related diseases, and injuries
- Addition of hospitalization, transportation and medical damage compensation for those with high climate risk exposure

Implementation performance

- Accumulated 18.6M insurance payments completed within 24 hours of implementation
- 97.7% (91,881) of the payments are concentrated to support of the vulnerable, proving the effectiveness of the policies to protect people at a social safety net



[Dongju-si, Gyeonggi-do]
Schools strengthen their ability to adapt to the
climate crisis

Details of implementation

- Improvement of school climate responsiveness by reflecting the characteristics and priority of local road building plans
- Management and dissemination of the center's first-principles-based strategy, "adapt to the climate crisis."
- Training on participatory experience and climate-related guidelines related to electricity, mobility, and high school age group

Implementation performance

- Conduct a detailed survey of 125 schools multiple in the participation and prepare to initiate a climate's green transformation in cooperation with the other existing education system for a total of 1,039 students, the related knowledge and understanding increased by about 10%



Protection of the Residential Vulnerable

[Seoul]
Prevention of Flood Damage in Semi-
Underground Houses

Details of implementation

- Installation of flood prevention facility such as water lifting device, floodline prevention facility, and waterline pump to reduce damage caused flood damage in semi-underground houses (approximately 49,400 houses, flood management team, etc. Director's 1:1 meeting)

Implementation performance

- Performance of installation of flood prevention facilities in 2024 a total of 21,298 households (72% target of 29,800 households)
- Selected as the Best Practices for Flood-Disaster Prevention Group in 2025



[Seoul, Seongnam-si, Seoul]
Smart Safety Management Service for Semi-
Underground Houses

Details of implementation

- Establishment of Smart Flooded Safety Management Service based on IoT Smart Sensor
- Installation of waterlogged, fire, carbon monoxide sensor and self-reporting function and linkage with disaster relief system
- In the event of danger, home warning sound, automatic fire, message from residents, and emergency control of the control center can be provided

Implementation performance

- Smart safety management service provided the construction of 100 smart management households in 100% completion

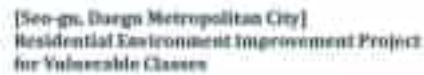


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[Gumi-si, North Gyeongsang Province]
Construction of Thermal Paint for Old Permanent
Rental Apartment

- Completed the construction of 800-pot seed and nutrient seed treatment plant in 44 buildings (total area of 3,677m²)

4. The literature used for hypothesis 4 did not point, which is a level where many residents had the effect of reducing temperature, reducing the use of air conditioning, water heaters, and other home appliances.



4. "Reinforced Safety with Doors and Fire Protection through the Improvement of Short circuits and Leakage"

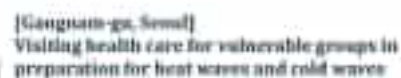
- The research is conducted in a controlled laboratory setting, which may not reflect real-world conditions, thus, etc.
- Academic community's failure in answering the demand for other instruments, changing the shape of the art, leading a crisis state
- Looking for alternative assessment, suggest for tests, technology, stress, etc. for different assessment



c) [continued] if λ -tree-decomposability is desirable, prove or find a counterexample.

- Strongly oriented to external groups (investors, government) with a high risk of doing business, such as director (study, travel) and financial
- Building and operating different management systems

• Since the working conditions target 100 possible lower degree up to 10 hours a day to students in the southern and take emergency healthcare measures if needed effectiveness is promoting healthy lifestyle and safety measures



4. Health care for vulnerable groups and emergency services in the event of an emergency

- Reflecting the role of a student helper when using a special report, etc.
- "Safe zone": the faculty should acknowledge serious, violent and harmful threats
- Special interventions: resource management of serious vulnerable persons and non-management of high-risk groups



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Support for heat wave response

[Gwangsan-gu, Gwangju, South Jeolla Province] Gwangsan Citizens' Heat Wave Escape Project

Details of implementation

- Reduction of health risks and emergency relief through resident-friendly activities to prevent damage from heat waves
- Installation and operation of low-cost water-chilling refrigerator in heat-prone facilities (e.g., offices, etc.)
- Installation and provision of "the Shady Tent" such as a tent shelter, air air-conditioning system, and a cooling fan system (event space, shops, etc., libraries, parks, etc.)
- Provision of direct relief (e.g., provision of 500ml of mineral water) at areas of vulnerability during heat wave occurrence time
- Mobile heat-shelter relief service provision



수온저장형 냉각수 냉장고 설치 / 차가운 물과 선풍기 제공 / 이동형 열대야 완화 서비스 차량

[Seongdong-gu, Seoul] Operation of heat wave damage reduction facilities

Details of implementation

- Establishment and operation of long-term type emergency water-refilling facilities
- 30 water refilling stations, 270 hot drinks, 362 instant cooling cloth for emergency relief
- The only 24-hour heat shelter in Seoul (Seongdong-gu Cheongwol-dong)
- Operation of 24-hour heat shelter, and provision of sleeping space at night when the heat wave warning goes into effect
- In addition, emergency provision of optimal heat-wave reduction facilities, including 21 emergency relief production (event) facilities, 12 spring water distribution, operation of water playground (in front of heat) and water-filling



24시간 열대야 완화 시설 운영 / 차가운 물과 선풍기 제공 / 이동형 열대야 완화 서비스 차량 / 차가운 물과 선풍기 제공 / 이동형 열대야 완화 서비스 차량

Support Program for Climate Vulnerable Groups and Areas

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Support Project Implementation System



Legal and institutional basis for the Support Program for Climate-Vulnerable Groups and Areas

Carbon Neutrality Framework Act (Article 35(1))	The Government shall formulate and implement national climate crisis adaptation measures every five years.
Carbon Neutrality Framework Act (Article 35(2))	The Government shall support relevant central administrative agencies, local governments, public institutions, private orgs, etc. in strengthening climate crisis adaptation capacity in accordance with adaptation measures.
4th National Climate Change Adaptation Plan (2023-2025)	(Task No. 2-2-1-1-2) Support tailored adaptation infrastructure for vulnerable groups and areas.

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Support Project Types and Cases

- 01 Heat-Reflective Coating for Vulnerable New schools and Facilities
- 02 Outdoor Worker Shelter Installation
- 03 Improvement of Ice-Prone Areas
- 04 Development of Climate-Responsive Real Areas
- 05 Green Space Development
- 06 Area-Based Climate Adaptation Infrastructure
- 07 Neighborhood Climate-Resilient Shelter Development
- 08 Local Government-Proposed Projects

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Support Project Types and Cases

1. Heat-Reflective Coating for Vulnerable Households and Facilities



- Application of heat-reflective coatings to vulnerable households and facilities serving vulnerable groups, such as senior centers and daycare centers.
- Expected benefits include lower indoor temperatures and reduced cooling energy consumption.

2. Outdoor Worker Shelter Installation



- Installation of rest shelters for outdoor workers during heatwaves.
- Deployment of energy-self-sufficient shelters powered by renewable energy and equipped with heating and cooling systems.

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Support Project Types and Cases

3. Improvement of Ice-Prone Areas



- Installation of road-heating systems to prevent pedestrian slip-and-fall accidents during heavy snowfall and cold waves.

4. Development of Climate-Responsive Rest Areas



Rest Area with Open and Closed Shade

Cooling facilities in Traditional Streets

- Creation of rest areas for heatwaves and cold spells using NbS and LD measures, including vegetated shade structures.
- In addition, installation of misting systems and cooling fans to reduce heatwave impacts.

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National Scale and Reach of the Support Program

Structure & Current Status of National Subsidy Programs

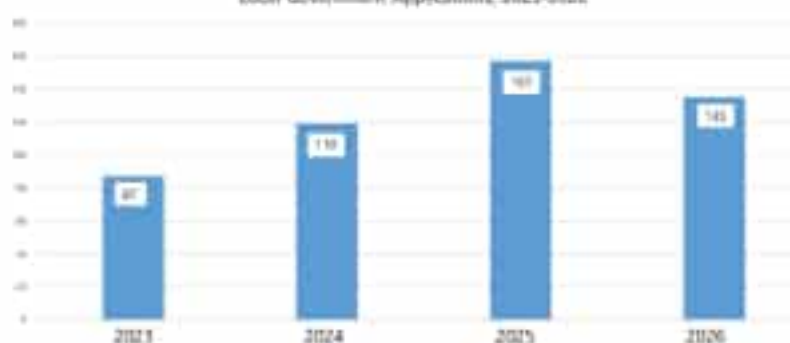
Support Mechanism	Annual Budget
Capital Subsidy to Local Governments - National Budget : 50% - Local Government Budget : 50%	• 2026 : \$7.2M • 2025 : \$6.3M * Based on an exchange rate of 1\$ = KRW200
Eligibility and Selection Status (as of 2026)	
• 77 basic local governments • 105 projects	



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National Scale and Reach of the Support Program

Local Government Applications, 2023-2026



- Applications increased substantially from 87 in 2023 to 117 in 2025 and remained high at 105 in 2026, demonstrating strong and sustained demand from local governments.

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Thank You

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주최



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