# An Introduction to the Third Round of Korea's National Climate Change Adaptation plan (2021-2025)

National Climate Crisis Adaptation Measures

Third Round of National Climate Change Adaptation Plans (Executive Summary) I 2021 – 2025 I

[Appendix] Key elements of the First Round of National Adaptation Plan (2011-2015)

Key elements of the Second Round of National Adaptation Plan (2016-2020)



# National Climate Crisis Adaptation Measures

## Legal grounds

History

- The development and implementation of climate crisis adaptation measures 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.
- \* Initially, the requirement only applied to metropolitan cities (*gwangyeoks*) and provincial governments (*do*), but later extended to all cities (*si*), counties (*gun*) and districts (*gu*), following the law's revisions in December 2012.
- 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.
- South Korea has unveiled comprehensive measures four times, starting with the "First Round of Comprehensive Measures against Climate Change (1999-2001).
  - In September 2008, the country announced the "Comprehensive Plan for Combating Climate Change," putting forward its vision to drive "Low Carbon, Green Growth."
  - In December 2008, the first set of national-level adaptation measures against climate change called the "Comprehensive Plan for National Climate Change Adaptation" was published to lay out the vision and directions for the national adaptation policy and call for the creation of the Korea Adaptation Center for Climate Change.
  - The first statutory plan on climate adaptation, or the "National Climate Crisis Adaptation Measures (2011-2015)" were introduced in October 2010 and have been updated and implemented every five years since then, in accordance with the "Framework Act on Low Carbon, Green Growth," effective in April 2010.
  - The "Second Round of National Climate Crisis Adaptation Measures (2016-2020)" was released in December 2015, and the Third Round of National Climate Crisis Adaptation Measures (2021-2025) in December 2020.
  - As for local governments, the "Framework Act on Low Carbon, Green Growth," effective in April 2010, mandated higher-level local governments to develop climate crisis adaptation measures. The law's revisions in December 2012 expanded the requirement to include lower-level local governments, making the development of adaptation measures mandatory across all levels of government.
  - Promulgated in September 2021, the "Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis" also mandated public institutions to develop adaptation measures.

#### Korea Adaptation Center for Climate Change

- (Legal grounds for establishment) Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis
- (History) Founded in July 2009 under the Korea Environment Institute (KEI) by the Ministry of Environment (MOE)
- **(Objective)** To conduct strategic research on climate change adaptation and support the formulation and implementation of climate crisis adaptation measures

#### (Key functions)

- To support climate change adaptation policies and develop adaptation tools
- To assist with climate change impact and vulnerability assessments
- To support the development of the National Climate Crisis Adaptation Measures and assist local governments with the development of detailed action plans for adaptation measures
- To facilitate international cooperation on climate change adaptation
- To build a network of professionals focused on climate change adaptation at the national and international levels



#### <Formulation of climate crisis adaptation measures in Korea>

National Climate Crisis Adaptation Measures Master Plan for Coping with Climate Change First Comprehensive plan First round Second round Second (August 2012) (December 2015) (December 2016) (October 2010) (October 2019) Target period 2009-2030 2011-2015 2016-2020 2017-2036 2020-2040 Vision To build a safe society To build a safe society To build a pleasant To create a safe societ and support green and support green and safe society resistant to climate growth through climate growth through climate through climate change anomalies Overall vision. To change adaptation change adaptation adaptation create a sustainable Overall vision: To low-carbon, green create a low-carbon societv society through efficient response to climate change Goals Short-term goal To reduce climate To mainstream change risk and (-2012): climate change To strengthen capture climate adaptation and adaptation capacity in opportunities prepare for a 2°C a comprehensive and rise systematic manner Long-term goal (-2030): To reduce climate change risks and capture climate opportunities <Four policies> Elements 1. Developing a <Seven sectors> . Preparing a scientific 1.Improving Climate Change Risk risk management adaptation capacity Health .Facilitating scientific system for climate Assessment System across five sectors 2. Disaster risk management 2.Implementing climate change 2.Ensuring advanced 3. Agriculture Building a safe change adaptation 2.Building a safe monitoring and 1. Forestrv society programs in six society resistant to prediction of 5. Maritime/ fisheries .Safeguarding areas\* climate change climate change 6. Water management industrial \*Ecosystem, water 3.Ensuring the and strengthening 7. Ecosystem competitiveness management, health sustainable adaptation .Ensuring the disaster. adaptation management of assessments <Adaptation-based sustainable industry/energy and natural resources Mainstreaming measures> management of SOC climate change natural resources Climate change 3. Laying the adaptation across monitoring and groundwork for all areas at all levels < Groundwork for prediction national and Implementation> 2.Adaptation industry/ international .Laying the energy cooperation 3. Training/ promotion aroundwork for and creating and international implementation at an institutional cooperation the national and framework international levels

<History of national-level climate change adaptation plans>

# Third Round of National Climate Change Adaptation Plan

(Executive Summary) | 2021 - 2025 |



### I. Overview

#### 1. Key elements of the National Climate Change Adaptation Plan

- International conventions on climate change adaptation
- · Improved capacity to monitor and predict climate change and provide and use relevant data
- $\cdot$  Sectoral/regional climate change impact and vulnerability assessments
- Sectoral/regional climate change adaptation measures
- Disaster prevention for populations and regions vulnerable to climate change
- Climate crisis adaptation measures
- Integration of the Green Life Campaign into climate crisis adaptation measures

#### 2. Relevant plans

- Higher-level plans: The "Third Five-Year Plan for Green Growth (2019-2023)" and the "Second Master Plan for Coping with Climate Change (2020-2040)"
- Lower-level plans: Detailed action plans for climate crisis adaptation measures by higher- and lower-level local governments

### II. General directions and roadmap

#### 1. General directions

- The measures are aimed at reducing scientifically estimated risks at the national level associated with climate change and enabling proactive response.
- Based on the feedback collected from a forum and a public debate, issues of interest to the public, such as floods and droughts, were selected as public-oriented tasks with a dedicated assessment system put in place.

#### 2. Roadmap

Vision	To b	uild a climate-safe nation with the public	
Goals	<ul> <li>To strengthen climate resilience across all sectors of society to prepare for a 2°C increase in global temperature</li> <li>To facilitate science-based adaptation by building climate monitoring and prediction infrastructure</li> <li>To mainstream adaptation with participation at all levels</li> </ul>		
	1. Enhancing adaptation capacity to climate risks	<ul> <li>Water management based on future climate risks</li> <li>Healthy ecosystem</li> <li>Enhanced adaptation capacity across the country</li> <li>Sustainable environment for agricultural and fisheries production</li> <li>Prevention of health damages linked to climate change</li> <li>Strengthened adaptation capacity in the industry and energy sectors</li> </ul>	
Three policies	2. Strengthening monitoring, prediction and assessment	<ul> <li>Comprehensive monitoring system</li> <li>Climate change scenario development and advanced prediction</li> <li>Robust assessment tools and greater information dissemination</li> </ul>	
	3. Mainstreaming adaptation	<ul> <li>Enhanced climate adaptation system</li> <li>Groundwork for strengthening climate resilience</li> <li>Climate adaptation partnerships and awareness raising</li> </ul>	
Key strategies	Strengthening climate resilience	Protecting Encouraging vulnerable populations Encouraging public new climate regime	

Eight public-oriented tasks (floods, droughts, species outbreaks, forest-related disasters, food security, infectious diseases, vulnerable
populations and governance) are subject to separate assessment

### III. Detailed tasks

#### 1. Enhancing adaptation capacity to climate risks

- Measures to respond to 84 identified climate risks\* are developed and implemented to enhance adaptation capacity across all sectors of society.
- \* Water management: Increased flood and draught risks; Ecosystem: Endangered species population decline and habitat loss; Land/ coastal: Infrastructure damage and coastal erosion; Agriculture and fisheries: Reduced food productivity; Health: Rise in infectious disease; and Industry/energy: Increased risk for vulnerable industries

#### 1) Water management based on future climate risks

- Ensuring sustainable flood management to build preparedness for climate change
- Enhancing response to droughts and diversifying water resources for water security
- Creating a healthy water environment in response to climate change

#### 2) Healthy ecosystem

- Improving monitoring of national ecosystems and strengthening the foundation for adaptation to climate change
- Maintaining healthy ecosystems through conservation and restoration
- Strengthening the management of ecosystem hazards and disasters caused by climate anomalies

#### 3) Enhanced adaptation capacity across the country

- Laying the groundwork for robust response to terrestrial and coastal climate disasters
- Strengthening region-specific climate resilience management
- Increasing the adaptation capacity of infrastructure and buildings

#### 4) Sustainable environment for agricultural and fisheries production

- Informing industry-specific impacts to facilitate climate resilience
- · Adapting agricultural and fisheries production practices to climate change
- Ensuring a safe environment for agriculture and fisheries

#### 5) Prevention of health damages linked to climate change

- Developing a system to monitor and assess the health impacts of climate change
- Ensuring effective response to climate-related infectious disease outbreaks
- Safeguarding the health of vulnerable populations

#### 6) Strengthened adaptation capacity in the industry and energy sectors

- Promoting industry-specific capacity building to adapt to climate change
- Addressing climate vulnerabilities of the power grid
- Improving energy efficiency and diversifying energy sources

#### 2. Strengthening monitoring, prediction and assessment

Science-based monitoring and prediction infrastructure is established to address growing climate uncertainties, and vulnerability and risk assessment tools are kept up to date to ensure climate risk management.

#### 1) Comprehensive monitoring system

- Integrating data from multiple sources to monitor climate change
- Advancing the capacity to monitor climate change-inducing emissions
- Strengthening monitoring-based response to extreme weather events

#### 2) Climate change scenario development and advanced prediction

- Developing and utilizing new climate change scenarios
- Leveraging advanced technologies for climate change projections
- Establishing a mechanism to utilize ocean climate forecast data

#### 3) Robust assessment tools and greater information dissemination

- Developing a climate change risk assessment system
- Updating tools for climate change impact and vulnerability assessments
- Formulating an adaptation data management system and disseminate relevant information

#### 3. Mainstreaming adaptation

Adaptation is mainstreamed through the enhanced capacity of all actors, including the national government, local governments, businesses, civil society and youth.

#### 1) Enhanced climate adaptation system

- Building momentum to implement climate crisis adaptation measures
- Strengthening the groundwork for mainstreaming adaptation
- Creating dedicated units and systems to address adaptation issues

#### 2) Groundwork for strengthening climate resilience

- Promoting climate resilience projects tailored to each region
- Focusing on the protection of vulnerable populations
- Developing adaptation technologies and fostering the industry's growth

#### 3) Climate adaptation partnerships and awareness raising

- Responding to the new climate regime in a way that matches the country's international standing
- Strengthening national and international cooperation on adaptation
- Raising and spreading awareness of climate change adaptation

### IV. Key indicators and implementation and progress monitoring

#### $\square$ 36 key indicators

<20 policy indicators>

Area	Indicator	2020	2025
Water management	Number of flood forecasting points	65	218
	National Drought Information Service (NDIS)		To be established
Ecosystem	Management of information on the impacts of climate change on national ecosystem		To be established
	Total restored area of the Core Ecological Axis of the Korean Peninsula	465	1,000
Land and coastal	Number of green-remodeled public rental housing units		225,000
	Number of points covered by a coastal erosion survey	250	300
Agriculture and fisheries	Types of disaster-resistant facility standards	68	75
	Number of crop species for which changes in areas appropriate for cultivation are forecast	17	25
Health	Climate and health impact assessment	Legal grounds established	1 <sup>st</sup> assessment
	Number of international platforms that South Korea participates to share information on infectious diseases	1	4
Industry and energy	Number of manuals for industries susceptible to climate change		10
	Number of apartment units with a smart power grid	150,000	5 million
Monitoring	Types of satellite-monitored climate change data	29 (Weather and maritime data)	96 (Weather, maritime and environmental data)
Prediction	Creation of detailed projections for South Korea	AR5-based	AR6-based
Assessment	Publication of the National Climate Change Assessment Report	AR5-based	AR6-based
Implementation system	Climate change adaptation assessment system		To be adopted
	Development of adaptation measures by public organizations		Mandatory
	Operation of units at the local government level in charge of monitoring the implementation of adaptation measures		100%
Climate resilience	Number of standard models for climate change adaptation infrastructure		5
Cooperation and awareness raising	Operation of a consultative group between adaptation research organizations	Established	Twice a year

#### <16 public-oriented indicators >

Area	Indicator	2020	2025
Floods	Flash flood forecast system		To be established
	Number of hot spots for drainage maintenance	114	180
Droughts	Number of annual users of the National Drought Information Portal	110,000	400,000
	Number of locations with a smart water supply management system		209
Species outbreaks	Database for species that have caused or are likely to cause outbreaks		To be established
	Guild lines for eco-friendly pest control		To be established
Forest disasters	Advanced landslide forecast system	An hour-advance forecast	Short-term forecast
	Map of climate change-caused wildfires		To be established
Food security	Number of climate-resistant varieties	288	363
	Number of local governments which provide an early warning system customized to farms	29	110
Health protection	Climate change-based health management platform (app)		To be operated
	Explanatory sessions on behavioral guidelines for facilities frequently used by vulnerable populations		1,000
Protection of vulnerable population	Development of methods to select climate risk hot spots		To be developed
	Number of local governments with climate change adaptation infrastructure		10 per year
Public participation	Number of living lab projects		20
	Citizen participatory platform to share disaster information		To be established

#### □ Implementation and progress monitoring

- (Establishment of action plans) 17 ministries released detailed action plans for adaptation measures in March 2021, and higher-level local governments in 2021.
- (Monitoring and assessment) A public assessment unit\* is organized to monitor the progress against the plan, centering on the public-oriented tasks. An interim assessment and a comprehensive assessment are slated for 2023 and 2025, respectively.
  - \* The monitoring and assessment processes will involve the participation of all stakeholders, including the national government, higher- and lower-level local governments, experts, civil society, youth and businesses.



10

Attachment 1. Overview of the Second Master Plan for Coping with Climate Change (2020-2040)

- (Vision and Goals) To ① make a transition to low-carbon society, ② establish a climate change adaptation system, and ③ strengthen the foundation for climate change response with an aim to meet the 2°C goal of the Paris Agreement under the vision of "realizing a sustainable low-carbon, green society"
- (Progress monitoring) Reducing greenhouse gas emissions by developing gradual and sectoral implementation plans and establishing an effective system for progress checks and assessments to achieve Korea's national determined contribution by 2030

Vision	То сі	To create a sustainable low-carbon, green society	
	Greenhouse gas emissions	To reduce emissions from 709.1 million tons in 2017 to 536 million tons in 2030	
Goals	Adaptability	To mainstream climate change adaptation and prepare for a 2°C rise	
	Enabling environment	To build capacity across all sectors to implement the Paris Agreement	

Key strategies	Main tasks
Making a transition to low- carbon society	<ol> <li>Implementing measures in eight areas to meet the nationally determined contribution (NDC)</li> <li>Allocating the total permissible emission volume in line with the NDC and increasing corporate responsibilities</li> <li>Establishing a swift and transparent system for government-wide progress checks and assessments</li> </ol>
Establishing a climate change adaptation system	<ol> <li>Enhance climate change adaptability in five areas (land, water, ecosystem, agriculture and fisheries, and health)</li> <li>Advancing climate change monitoring and forecasting, and reinforcing adaptation assessments</li> <li>Mainstreaming climate change adaptation across all areas and all entities</li> </ol>
Strengthening the foundation for climate change response	<ul> <li>① Creating future markets by fostering new technologies and markets related to climate change responses</li> <li>② Handling international negotiations on the new climate regime and enhancing international cooperation befitting the status of the country on the global stage</li> <li>③ Raising public awareness on climate change and promoting low carbon culture in everyday life</li> <li>④ Building climate change response infrastructure including necessary systems, organizations and governance</li> </ul>

#### Attachment 2. Detailed tasks of public-oriented measures in 8 areas

	8 areas	41 detailed tasks
1	Respond to floods taking into account future flood risks (4)	Expanding flood forecast infrastructure to close loopholes in areas that have not been covered by the existing observation system
		· Conducting various projects to prevent urban areas from flooding
		$\cdot$ Establishing a joint public-private system to handle and manage disaster wastes
2	2) Respond to droughts in a	· Preventing droughts and strengthening drought responses in a locally customized manner
	preemptive manner to ensure water welfare (5)	· Producing public-oriented drought information and enhancing public promotion
		· Developing an integrated drought forecast and warning system
		· Setting up an integrated management system and conservation of underground water
		$\cdot$ Developing an AI- and ICT-based real-time automatic water supply management system
3	Enhance responses to species	· Building a national climate change response system to protect ecosystem
	outbreaks due to extreme hot weather (3)	· Monitoring the sudden outbreaks of species such as insects
		Predicting species outbreaks and developing control measures
4	Strengthen responses to forest	· Establishing and advancing a forecast system to respond to landslides and wildfires
	disasters such as landslide and wildfires (2)	<ul> <li>Managing areas with steep slopes that are susceptible to collapse and performing a comprehensive project to make improvements in residential areas that are vulnerable to foods and storms</li> </ul>
5	Ensure food security against	$\cdot$ Conducting a survey on productivity in the livestock industry and creating a distribution map
	climate threats (7)	· Expanding the field utilization of an early warning system for agricultural meteorological disasters
		$\cdot$ Forecasting and assessing changes in areas appropriate to cultivate main crops
		<ul> <li>Monitoring changes in fishery resources and aquaculture varieties and enabling IoT-based real- time ocean observation and data production</li> </ul>
		<ul> <li>Developing technologies to reduce damages by extreme weather events and cultivating climate- resistant crop varieties</li> </ul>
		Devising a stable supply and demand system and improving disaster insurance
		Enhancing disaster-resistant design standards for cultivation facilities and increasing the number of such facilities
6	Protect people from infectious	Operating a monitoring system for emergency rooms for heat- and cold-related illnesses
	uiseases and innesses (0)	Conducting climate and health impact assessments
		Establishing a system to develop a dedicated platform (e.g. app) to monitor and manage the impacts of extreme weather on health     Coming up with measure to collect and utilize data for alignets and health impact accounts and the set of
		Operating on event based every lilence eveter for infectious diseases
		Operating an event-based surveinance system for intectious diseases
		Operating the comprehensive vector barro disease ourveillance autom (lenter Net) and a response system
		Operating the comprehensive vector-borne disease surveinance system (vector-net)     Promotion public behavioral quidelines and expending composing to provide relevant information
		through an early warning of heat waves and cold snaps
0	Focus on the protection of those vulnerable to climate	Selecting and analyzing climate change hot spots in urban areas
	change in terms of health, finance and work (8)	<ul> <li>Implementing projects to reduce climate change vulnerability in urban areas, and developing and expanding standard models</li> </ul>
		· Improving the residential environment of vulnerable populations
		• Expanding the operation of shelters from heat waves and cold snaps
		Broadening customized support for those vulnerable to climate change
		Strengthening and promoting guidelines to protect workers
		Planning and identifying detailed policies to facilitate climate change adaptation in outdoor workplaces
		Installing more trailer shelters for on-the-go workers

Develop inclusive adaptation measures (4)	· Increasing public participation in monitoring climate change adaptation
	· Establishing a climate disaster information platform based on citizen participation
	Implementing governance for adaptation throughout the entire process from the development of appropriate measures to implementation to assessment
	Conducting a pilot project on living labs for climate change adaptation

#### Attachment 3. National climate risk assessment for the establishment of the Third Round of National Climate Crisis Adaptation Measures

A risk assessment system was established by taking into account good international practices\*, and the following four steps were taken: 1) conduct a climate change impact analysis, 2) identify potential risks, 3) confirm risks, and 4) categorize risks.

Scientific evidence-based risk assessments based on a comprehensive literature review (UK and Germany)

- ① (Conduct a climate change impact analysis) A systematic literature review was conducted after screening and reviewing literatures related to climate change impact and vulnerability\*, creating a list of potential risks\*\* categorized based on the elements of a risk (hazard, exposure and vulnerability).
- \* 565 academic papers on climate change (260 on climate impacts, 69 on vulnerability, 59 on climate research and 177 on others)
- \*\* 131 potential risks (9 health risks, 15 land risks, 21 agricultural and livestock risks, 20 water risks, 19 ecosystem risks, 8 forest risks, 27 industry and energy risks, and 12 maritime, fisheries and coastal risks)
- ② (Identify potential risks) 115 potential risks\* were identified based on cause and effect diagrams, news articles (climate history database), matrix analyses, among others.
- \* 19 health risks, 12 land risks, 18 agricultural and livestock risks, 10 water risks, 11 ecosystem risks, 12 forest risks, 23 industry and energy risks, and 10 maritime, fisheries and coastal risks
- ③ (Confirm risks) 94 national climate risks\* were confirmed based on the adaptation capacity for each risk, the probability of the risk's occurrence, and the assessment of the size of the risk.
- \* 13 health risks, 12 land risks, 14 agricultural and livestock risks, 10 water risks, 11 ecosystem risks, 12 forest risks, 12 industry and energy risks, and 10 maritime, fisheries and coastal risks
- ④ (Categorize risks) Consistency with the Second Master Plan for Coping with Climate Change (2020-2040) was ensured. The risks were streamlined down to 84 risks in 6 areas by making necessary adjustments such as integrating similar ones. They were categorized\* based on the level of urgency and the types of measures designed to reduce them.
- \* Urgency: high or medium; Types of tasks: new, research or existing

## [Appendix]

# Key elements of the First Round of National Adaptation Plan (2011-2015)

• In October 2010, South Korea released its first statutory plan on climate change adaptation called the First Round of National Adaptation Plan (2011-2015) and started its implementation. The plan was jointly prepared and implemented by 13 government ministries under the coordination of the Ministry of Environment.

#### Vision and key measures



- A national adaptation plan set out directions for a five-year period from 2011 to 2015, and it was followed up with sectoral implementation.
- The plan initially included a total of 87 tasks across 10 sectors, such as health and disaster, but later revised to 67 tasks across 9 sectors.
- The document also offered an underlying framework to develop detailed action plans for adaptation measures at the central government ministry and local government levels.
- The groundwork was established for sectoral/regional adaptation.
- The development and implementation of detailed action plans for adaptation measures by central government ministries enabled national-level adaptation efforts and measures.
- A framework for climate change adaptation was developed to address all levels of government.
- Detailed action plans for adaptation measures were developed by 17 metropolitan cities (*gwangyeoksi*) and provincial governments (*do*) and 226 cities (*si*), counties (*gun*) and districts (*gu*).
- Scientific basis and use cases were established for climate change adaptation policy.
- High-resolution global climate projections were produced in 2012, and detailed projections for South Korea were developed in 2015.
- Vulnerability maps and vulnerability assessment tools were developed and provided to higher- and local-level governments.
- The implementation of climate crisis adaptation measures improved the nation's standing.
- The first statutory plan on adaptation followed by training and promotion raised the public's awareness of climate change adaptation.
- International cooperation projects to assist East Asian countries with their national adaptation helped elevate Korea's global recognition as a leader in climate action.

## Key elements of the Second Round of National Climate Adaptation Plan (2016-2020)

- In a follow-up to the First Round of National Adaptation Plan which expired in December 2015, 20 government
  ministries jointly announced the second round of measures, taking into account the outcomes of the first round of
  measures, climate and socioeconomic changes, and demand for adaptation policy.
- The plan included five main principles underpinning Korea's climate adaptation efforts to achieve sustainable development and highlighted stronger links between different areas based on the scientifically assessed risks of climate change.

#### Roadmap

Vision	To build a pleasant and safe society through climate change adaptation		
Goal	To reduce climate change risk and capture climate opportunities		
Adaptation principles	Aligned with sustainable developmentConsiderations for vulnerable populationsIntegrated approachImproved participation		
Four policies	1. Facilitating scientific risk management       2. Building a safe society         • Establishing a climate change monitoring and forecasting system       • Protecting and supporting vulnerable populations         • Developing Korea's climate scenarios and use cases       • Monitoring the impacts of climate change on ecosystems and health       • Minimizing damage through management of health impacts         • Facilitating integrated vulnerability evaluation and socioeconomic risk management       • Minimizing damage through management of vulnerable areas and facilities         • Building an integrated database on climate change adaptation       • Minimizing the sustainable management of natural resources         • Enhancing the adaptation capacity of each industry (primary, secondary and tertitary industries)       • Conserving and managing species         • Expanding adaptation infrastructure for industries       • Conserving and managing species         • Laying the groundwork for Korean adaptation businesses to enter overseas markets       • Managing climate risks to ecosystems		
Groundwork for implementation	<ul> <li>5. Laying the groundwork for implementation at the national and international levels</li> <li>Enhancing the effectiveness of adaptation policy</li> <li>Promoting region-specific adaptation activities</li> <li>Strengthening international cooperation, promotion and training on adaptation (Strengthening international cooperation on adaptation)</li> <li>Ensuring promotion and training on adaptation (Linking adaptation knowledge with everyday life experiences)</li> </ul>		
Progress monitoring	Key indicators for adaptation measures/sectoral performance indicators		

18

#### Key outcomes

- Momentum was created to implement the National Climate Crisis Adaptation Measures.
- Detailed action plans including a specific timeline for all 341 implementation tasks and performance indicators were developed. Progress against the plans was monitored every year, alongside an interim assessment in the third year and a comprehensive assessment in the fifth year.
- Korea laid the foundation for mainstreaming climate change adaptation across all sectors of society.
- Adaptation measures and an implementation framework were established by local governments. A number of tools were introduced to assist different actors with their adaptation efforts\*. By 2020, 110 public institutions and private businesses had received support in formulating voluntary adaptation measures.
- \* Vulnerability Assessment Tool to Build Climate Change Adaptation Plan (VESTAP, 2016) for local governments; Climate Change Risk Assessment System (CRAS, 2016) for businesses; Model Of InTegrated Impact and Vulnerability Evaluation of climate change (MOTIVE, 2020) for the national and local governments; and Climate change Adaptation Monitoring Tool for Infrastructure (CAM-TI, 2020) for public institutions
- Legal grounds on climate change adaptation were established for relevant policies on health, agriculture, fisheries and disasters (by relevant ministries). Adaptation plans were developed, implemented and expanded to include these areas.
- \* Legal grounds established for the climate and health impact assessment in 2017; the Third Comprehensive Plan on Climate Change Adaptation for the Maritime and Fisheries Sectors (2016-2020); and governmentwide Comprehensive Measures on Heat Waves and Cold Snaps developed and implemented every year
- Korea cemented its position as a leader in climate adaptation and strengthened international cooperation in relevant areas.
- A wide international network was built through a series of initiatives, such as the Korea Global Adaptation Week, the first of its kind held in 2019, annual adaptation capacity building programs for developing countries, and the ascension to the Global Commission on Adaptation in 2020.

S Jointly prepared by goverment ministries