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# Development of Water Agenda by Sectors in Korea

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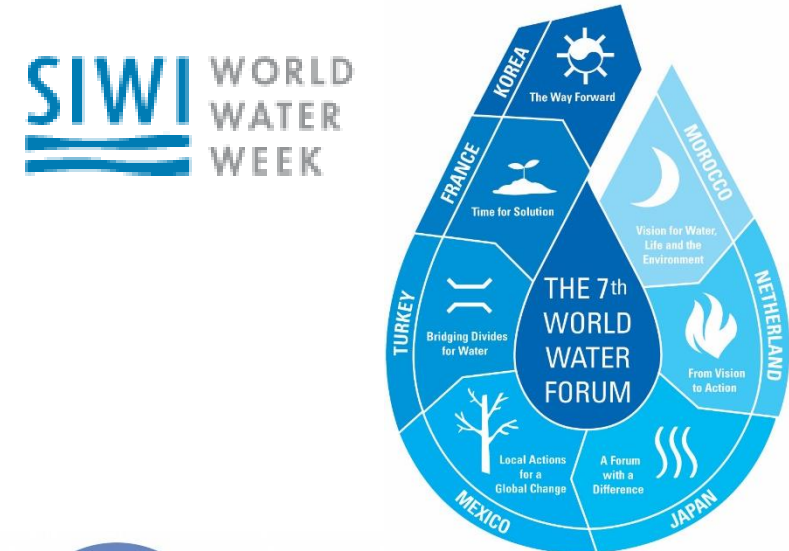
# International Cooperation Processes on Water

- Segmented water management issues
  - Min of Construction – Water Quantity
  - Min of Environment – Water Quality
  - Min of Agriculture and Food – Agricultural Water
  - Min of Ocean and Fisheries – Coastal Water Quality
- Duplication or multiplication of water projects
  - By different governmental ministries and institutions
- The 7<sup>th</sup> World Water Forum in Korea, 2015
  - Multi Sectoral Cooperation Example (2012~)
- New law for Water Management, 2018
  - Ministry of Environment (2018)
  - Need a new agenda for international cooperation

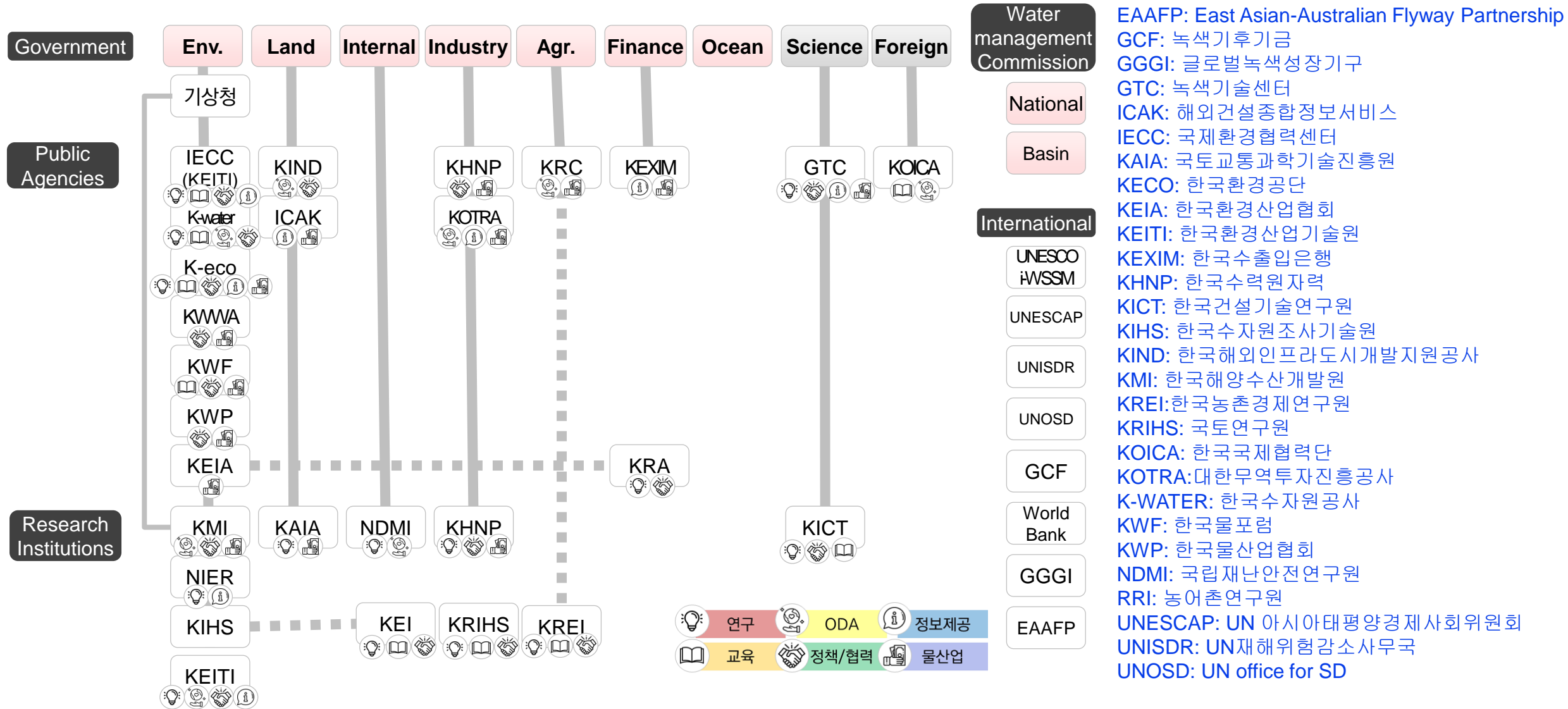


# International Water Events

- **World Water Week since 1991**
  - Stockholm International Water Institute (SIWI)
  - Annual events in Stockholm, Sweden
- **World Water Forum since 1997**
  - World Water Council (WWC)
  - Every 3 years in different cities and continent
- **Singapore International Water Week since 2008**
  - Singapore PUB
  - Every two years in Singapore
- **Amsterdam International Water Week since 2011**
  - Partner for Water
  - Every two years in Amsterdam



# Korean Agencies for International Cooperation on Water



# Concept of Water Agenda

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- Definition of Agenda
  - Cambridge Dictionary
    - a list of matters to be discussed at a meeting
    - a list of aims or possible future achievements
  - Vision, Goals, Strategies, Actions
    - program, project, target necessary
- Use of agenda for water
  - Criteria for policy makings for water management
  - Can be used for national level meetings
- Conditions of field application
  - Reflection of various demands from government, academia, industries, NGOs
  - National s support
  - Contribution to global water agenda

# Sectoral Agenda and National Agenda

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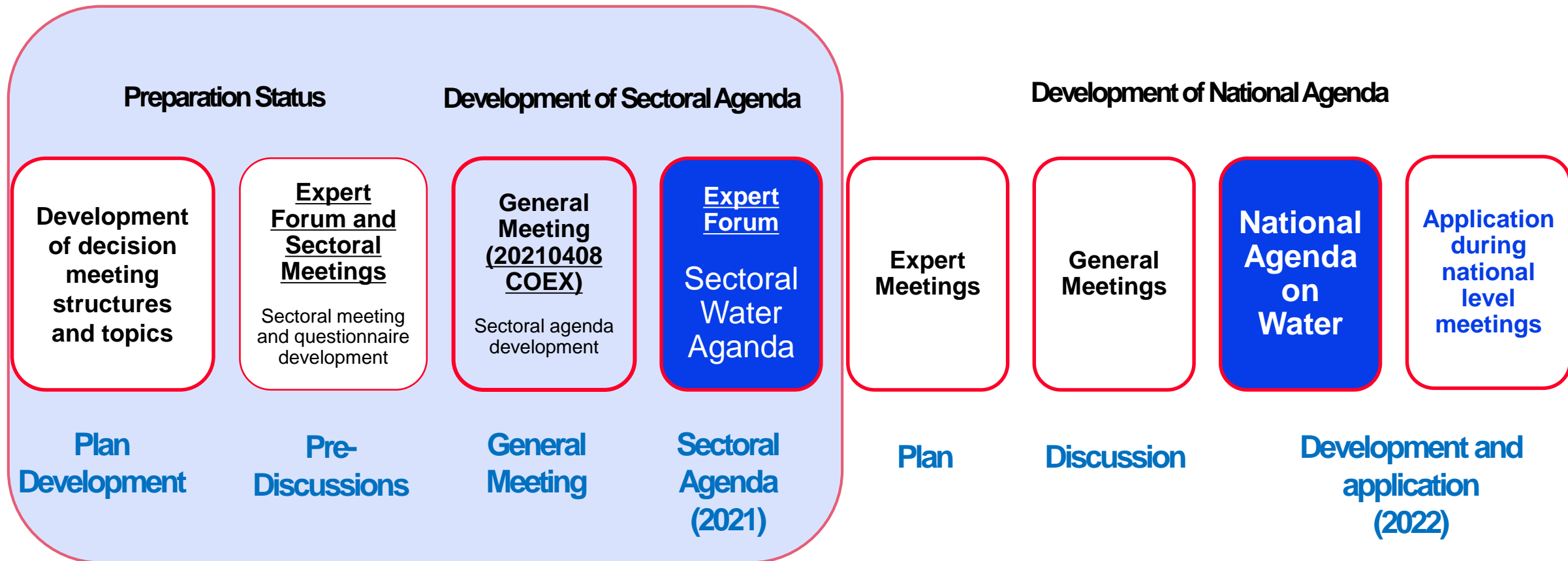
- Sectoral Agenda

- Future vision reflecting strength of Korea for global society
- Reflecting sectoral opinions
- Use for governmental level national collaboration on water for sectors

- National Agenda

- Integrated vision reflecting sectoral agenda for global society
- Application to government policy making
- Use for national level collaboration events
  - G20 summit meeting, UN High Level Panel, World Water Forum
  - Stockholm World Water Week, Korea International Water Week

# Agenda development process



# Participants

## Water Sectors

Water resources  
and disasters

Water and wastewater

Water quality management  
and aquatic ecosystem

Agricultural water and  
groundwater

Integrated water management  
and reuse

Cross cutting issues

## Chairs/Vice Chairs

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김영모, 나명호, 맹승규, 이상현, 이창하,  
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최혜자, 한정규

박다해, 박문학, 백명수, 신성우, 심유섭



# Discussions and Meetings (2021.04. 08. COEX)





# Water resources and disasters

- Key Words and Agenda

- Water and City

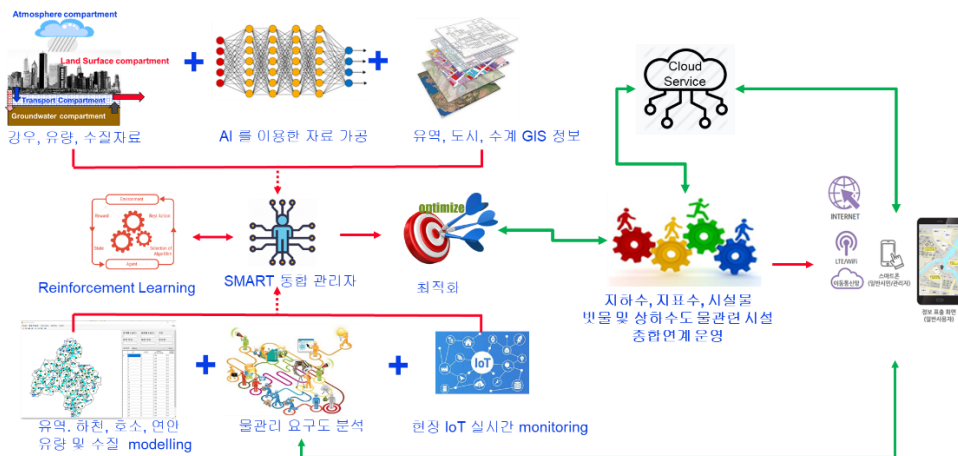
- Securing mega city water resources based on smart technology

- Climate Change

- Prevention of water disaster considering harmony of human and natural

- Water Security

- Adaptation of climate change using 4<sup>th</sup> industrial revolution technology



# Water and Wastewater



- Key Words and Agenda

- **Safe drinking water**

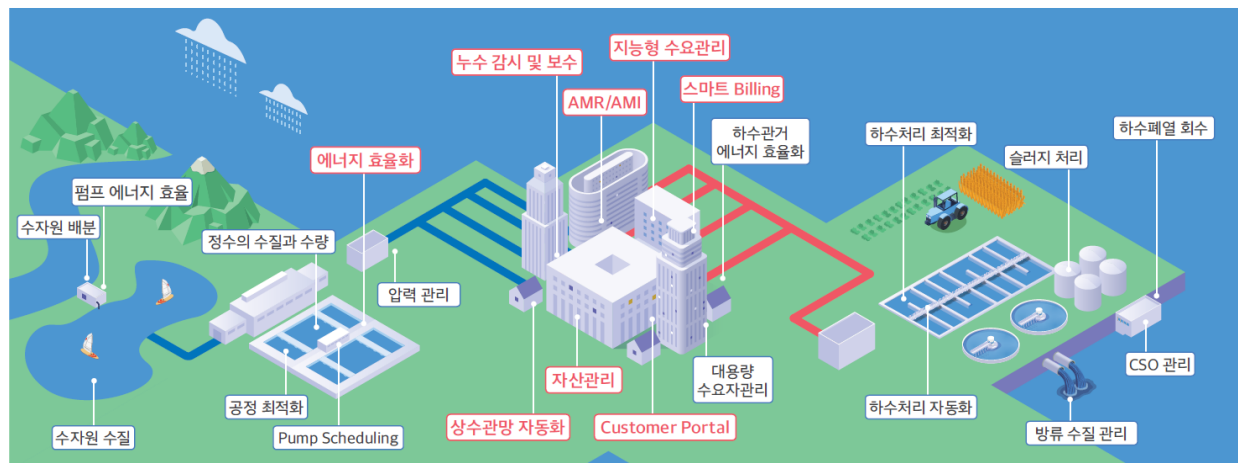
- Strengthen safe drinking water management and citizen participation

- **Carbon Neutral Treatment**

- Development of carbon neutral water treatments to prepare for climate changes

- **Smart Water and Wastewater**

- Smart Water and Wastewater for fair distribution of water



# Water quality management and aquatic ecosystem



- Key Words and Agenda

- Health of aquatic ecosystem

- Healthy aquatic system for coexistence of nature and human

- Climate change and water quality management

- Technology advances of water quality management for climate change and future generation

- Harmful algal bloom and micropollutants

- Safe and healthy water quality environment from toxic pollutants



# Agricultural water and groundwater



- Key Words and Agenda

- Smart agricultural water management

- Strengthen resilience of agriculture based on smart management

- Agricultural water environmental service

- Promoting environmental service by appropriate agricultural water quality management

- Improvement of resource and environmental value of groundwater

- Improve value of groundwater by providing stable water resources for water scare regions by appropriate management



# Integrated water management and reuse



- Key Words and Agenda

- Basin integrated water management

- Root taking of basin integrated water management for strengthening of water value

- Water Cycle

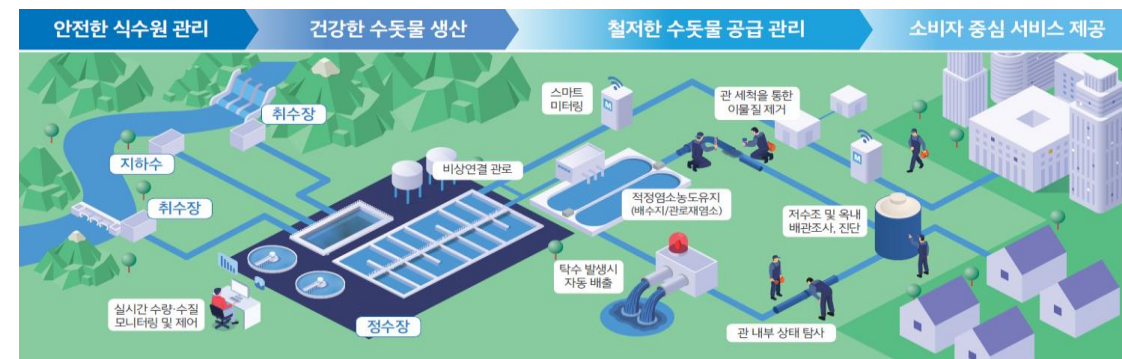
- Improvement of basin level water cycle improvement for sustainable water use and conservation

- Water Service

- Improvement of water service for water welfare

- Integrated Water Information

- Development of water information system for better decision making processes





# Cross cutting issues

- Key Words and Agenda

- **Water Governance**

- Strengthen water governance for all

- **Climate-Water Crisis**

- Prepare Climate-water crisis for improving sustainability

- **Strengthen water action and implementation**

- Improve implementation that support water policy, technology, finance and capacity building



# Summary of Key Words and Agenda

## Sectors

## key words

## Sectoral agenda

Water resources and disasters

Water and City  
Climate Change  
Water Security

**Securing mega city water resources based on smart technology**  
Prevention of water disaster considering harmony of human and natural  
Adaptation of climate change using 4th industrial revolution technology

Water and Wastewater

Safe drinking water  
Carbon Neutral Treatment  
Smart Water and Wastewater

Strengthen safe drinking water management and citizen participation  
Transformation to carbon neutral water treatment to prepare for climate changes  
Smart Water and Wastewater for fair distribution of water

Water quality management and aquatic ecosystem

Health of aquatic ecosystem  
Climate change  
HABs and micropollutants

Healthy aquatic system for coexistence of nature and human  
Technology advances of water quality management for climate change and future  
Safe and healthy water quality environment from toxic pollutants

Agricultural water and groundwater

Smart water management  
Environmental service  
Groundwater value Improvement

Strengthen resilience of agriculture based on smart management  
Promoting environmental service by appropriate agricultural water quality management  
Improve value of groundwater by providing stable water resources for water scare regions

Integrated water management and reuse

Integrated water management  
Water Cycle  
Water Service  
Integrated Water Information

Root taking of basin integrated water management for strengthening of water value  
Improvement of basin level water cycle for sustainable water use and conservation,  
Improvement of water service for water welfare  
Development of water information system for better decision making processes

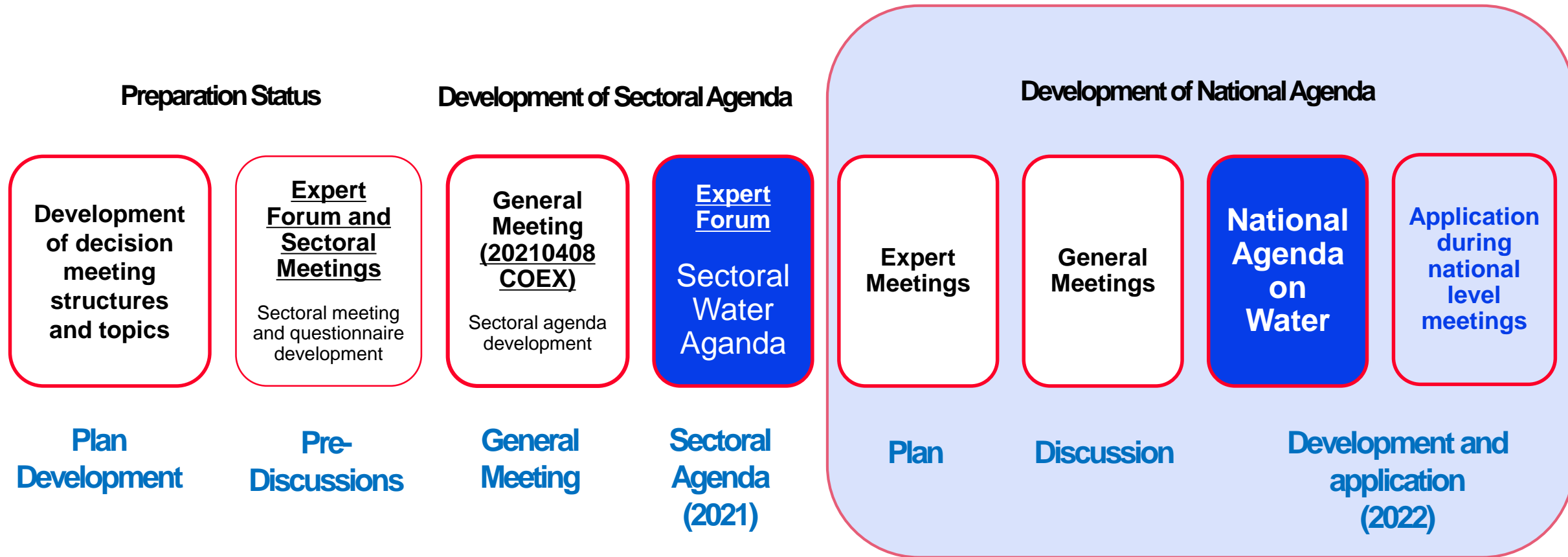
Cross cutting issues

Water Governance  
Climate-Water Crisis  
Water action and implementation

Water governance for all  
Prepare Climate-water crisis for improving sustainability  
Improve implementation to support water policy, technology, finance and capacity building



# Next Steps



# The Way Forward

- Important Common Key words

- Climate Change
- Smart
- Integrated Management
- Governance

- International conditions

- SDG by 2030
- Carbon Neutral by 2050
- IPCC AR6 due by 2022

- Domestic conditions

- Green New Deal
- New laws and regulations



O'Neill, D. W. (2020). Beyond green growth. *Nature Sustainability* (In Press). <https://doi.org/10.1038/s41893-020-0499-4>

## SUSTAINABLE DEVELOPMENT GOALS

