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ADB's co-convened session on Decarbonizing the Water Sector

# K-water's Strategy for Carbon Neutral Water Management

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# Main Businesses



## Water Resources Management

### Dams

- 20 Multi-purpose dams
- 14 Water supply dams
- 5 Flood Control dams

\* (Flood Control) 5.3 bil. m<sup>3</sup>  
95% of gross domestic capacity

\* (Water Supply) 12.5 bil. m<sup>3</sup>/year  
60% of gross domestic supply



## Water Supply Service

### Waterworks

- 48 Multi-regional waterworks
- 23 Local waterworks
- ✓ 25 Desalination (2,175m<sup>3</sup>/day)
- ✓ 30 Sewage Treatment Plant (590Km<sup>3</sup>/day)

\* (Capacity) 17.71 mil. m<sup>3</sup>/day  
48% of gross domestic capacity

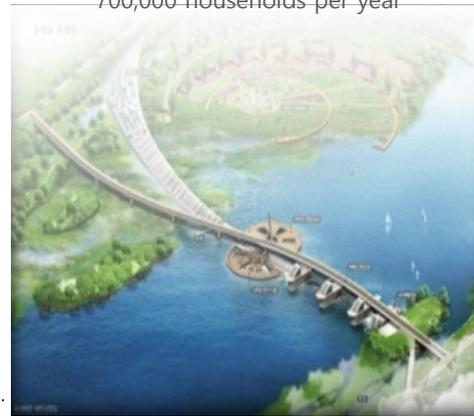


## Renewable energy

### Power Plants

- 64 Hydro power plants
- 1 Tidal power plant
- 41 Photovoltaic Power plants
- 3 Wind power plants

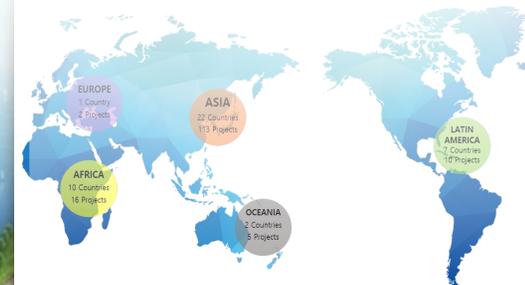
\* (Total Capacity) 1,414MW  
\* Amount that can be supplied to  
700,000 households per year



## Global Business

### Projects

- 146 Projects progressed  
\* in 42 countries since 1993
- (ODA) 115 (18 countries)
- (LGP) 25 (4 countries)  
\* LGP: Local Government Procurement
- (PPP) 6 (5 countries)



# Efforts of K-water for Carbon Neutrality

The status of the global water comprehensive company,  
**Leading the Implementation of the National Carbon Neutral Policy**

## Declaration of "Climate Crisis Management"

- Declaration of 'climate crisis management' for the first time as a public company('20)
  - Establish a new management policy from the perspective of responding to the climate crisis
- Strengthening the role of public enterprises in the transition to a 2050 low-carbon society
- Establishment of carbon neutral implementation roadmap('20)

## Introduced ESG management And joined RE100

- Introduction of ESG management('21.3)
  - Declared water-specific ESG management for innovation in water safety and water welfare
  - Issuance of ESG bonds worth 50 billion won
- Global **RE 100** Registration('21.4)
  - Efforts to continuously expand the development of renewable energy and reduce power consumption

## Establishment of K-water carbon neutrality roadmap

- Establishment of 2050 Carbon Neutral Roadmap('21. 8)
  - Reduce 888% of greenhouse gas compared to 2050 (reduction of 7.8million ton by 2050)

### Carbon Zero water management

- Wide-area water supply
- Local water supply
- Transport and Building

### Water Energy

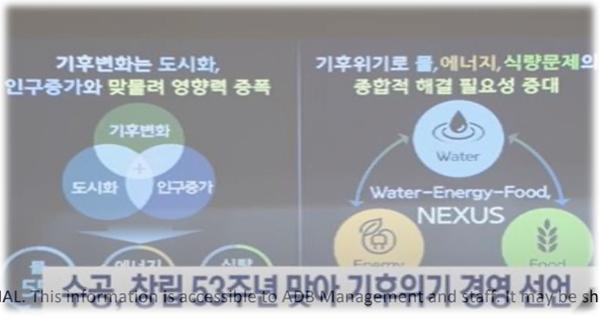
- Solar Power
- Hydrothermal Power
- Eco-friendly hydro power

### Green Hydrogen

- Green H<sub>2</sub> Activation
- Expansion of Green H<sub>2</sub>
- Commercialization

### Set a Carbon-sink

- Watershed Sink
- Green H<sub>2</sub> Sink
- New carbon sink

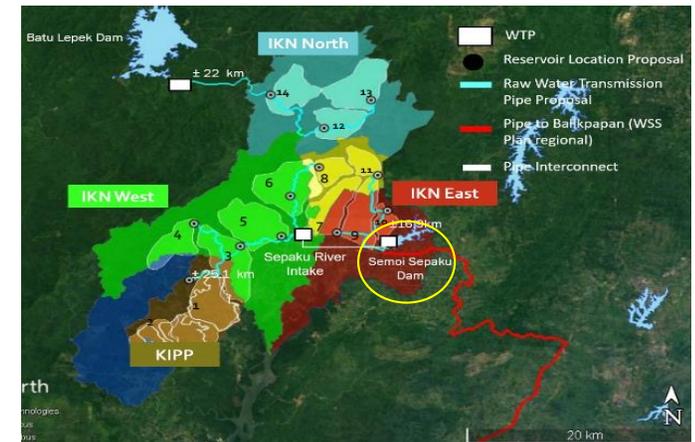


# (Best Practice 1) Net-Zero Drinking Water Treatment Plant

➤ Main concept of Net-Zero WTPs in Korea



(ODA Project) Indonesia New Capital

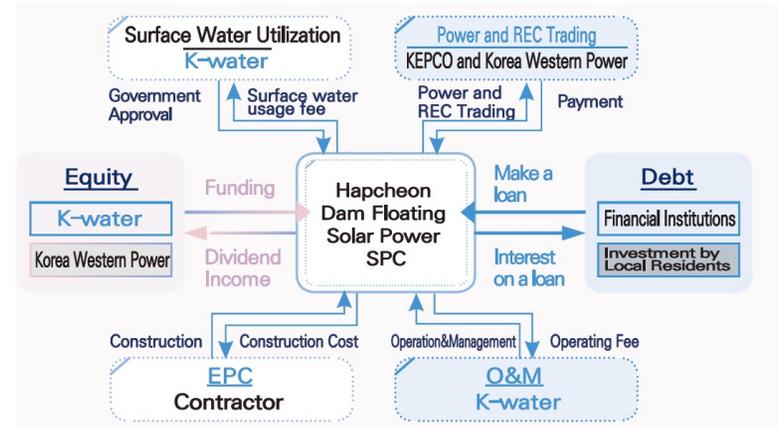


## (Best Practice 2) Solar Power Energy

< Hapcheon Dam Floating Solar Power >



< Structure of Hapcheon Dam Solar Power SPC >

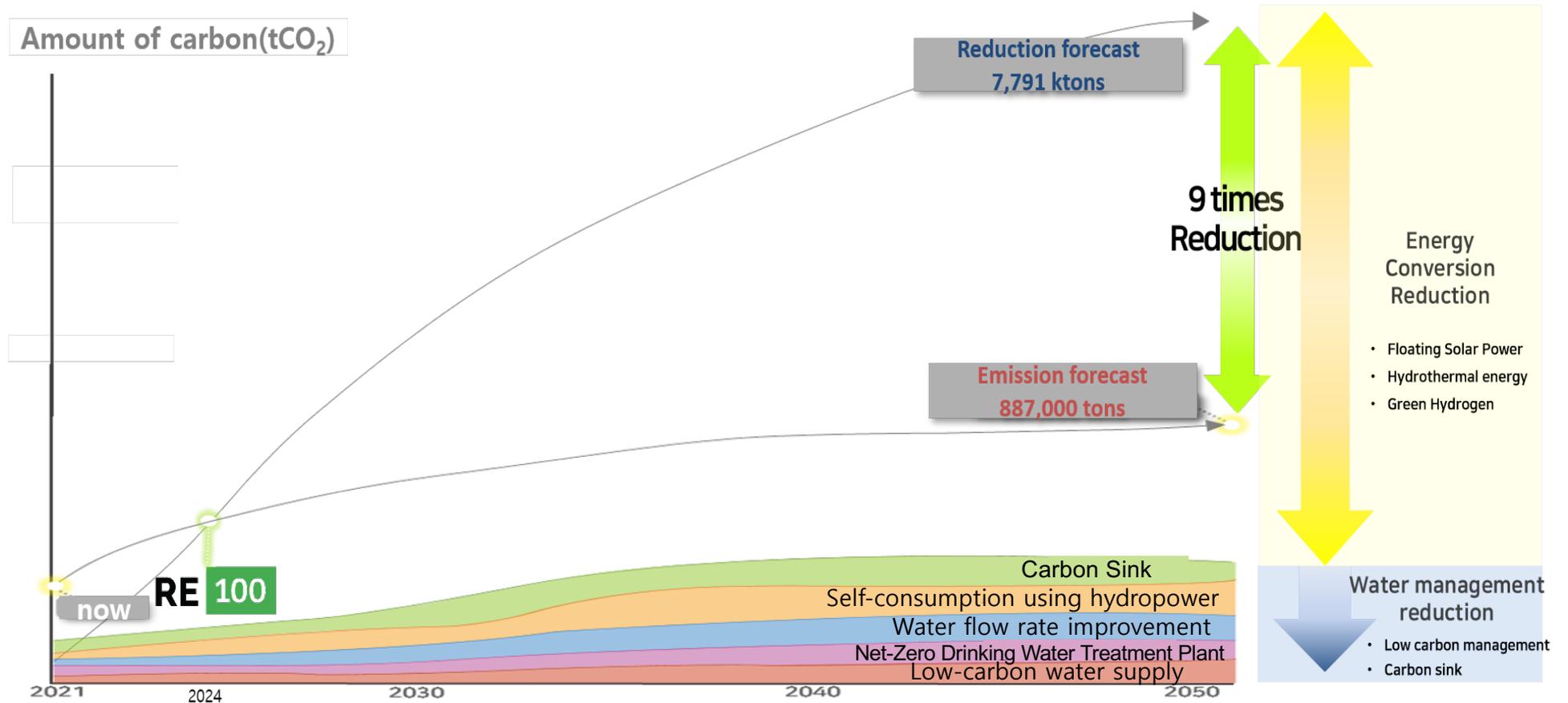


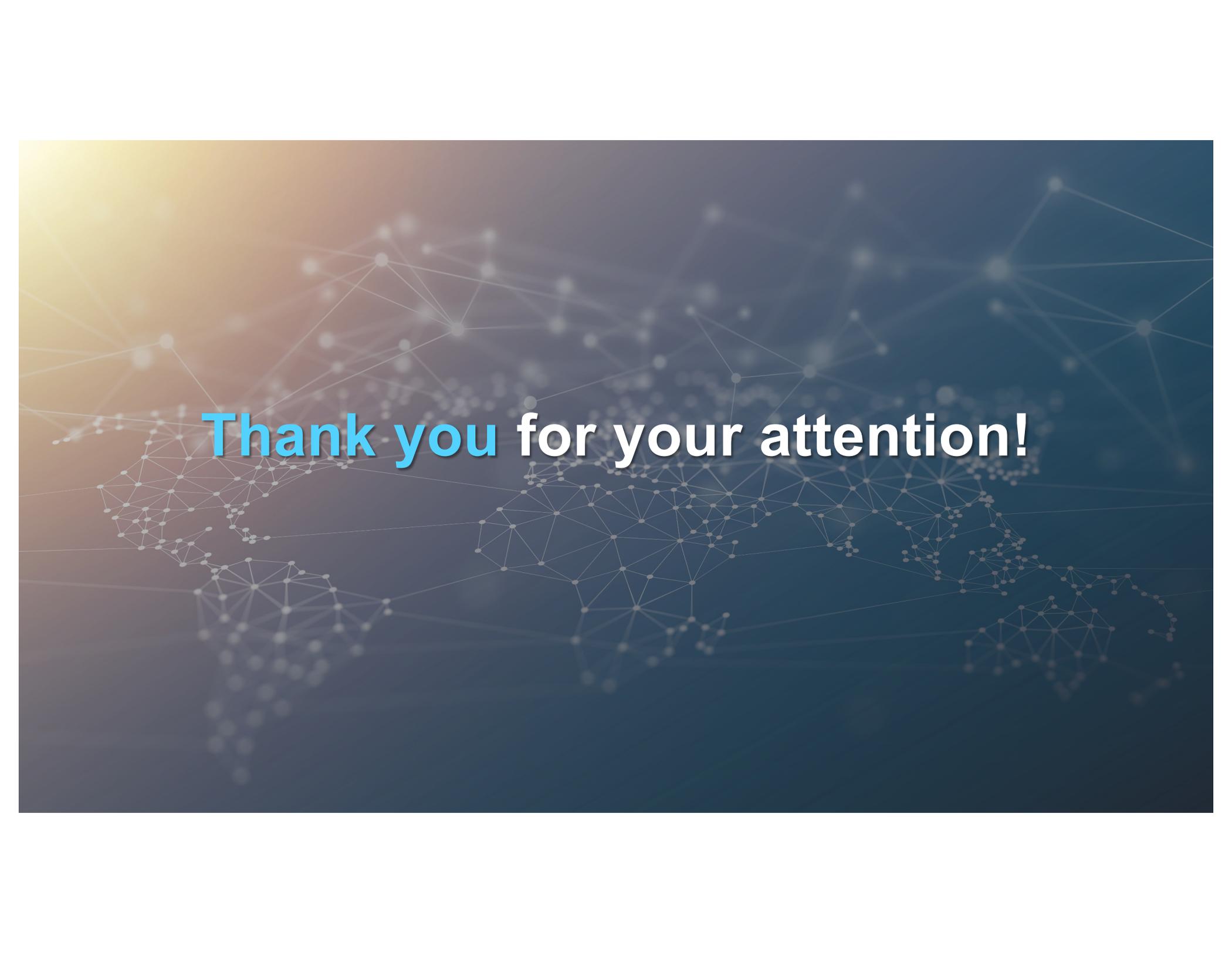
## (Best Practice 3) hydrothermal Energy

< Large-scale supply of Hydrothermal energy >



# (Expected Effect) Expectations for Roadmap Implementation





**Thank you for your attention!**