

# CJK Cooperation for Carbon Neutrality

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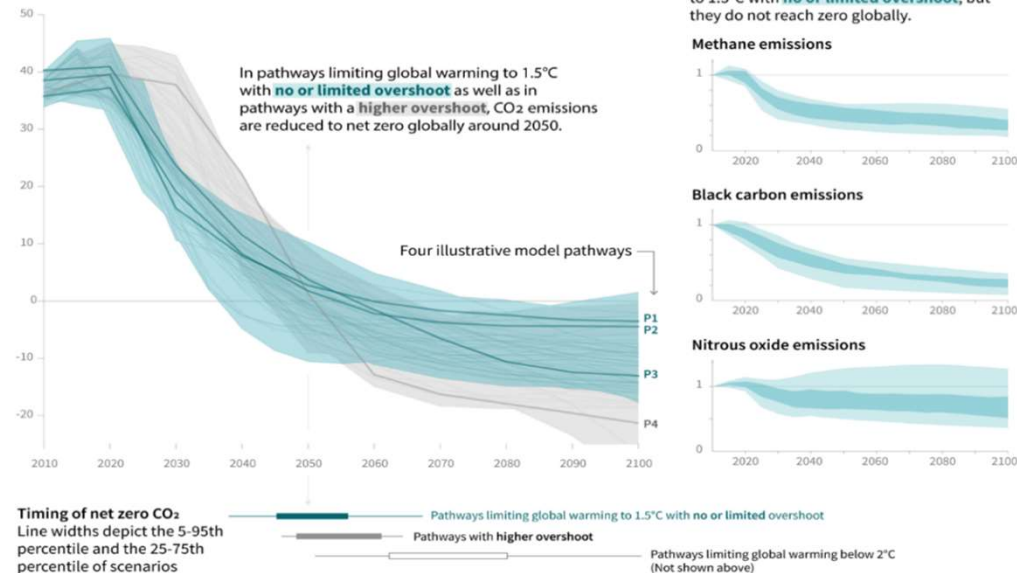
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# Carbon Neutrality

## Global total net CO<sub>2</sub> emissions

Billion tonnes of CO<sub>2</sub>/yr

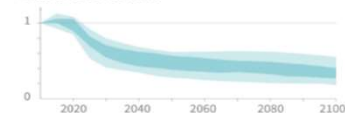


Source: IPCC(2018), Special Report: Global Warming of 1.5°C

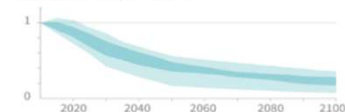
## Non-CO<sub>2</sub> emissions relative to 2010

Emissions of non-CO<sub>2</sub> forcers are also reduced or limited in pathways limiting global warming to 1.5°C with **no or limited overshoot**, but they do not reach zero globally.

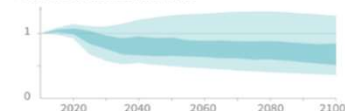
### Methane emissions



### Black carbon emissions



### Nitrous oxide emissions



## Top 10 Global Risks by Severity over the next 10 years

Economic Environmental Geopolitical Societal Technological

1. Climate action failure

2. Extreme weather

3. Biodiversity loss

4. Social cohesion erosion

5. Livelihood crises

6. Infectious diseases

7. Human environmental damage

8. Natural resource crises

9. Debt crises

10. Geoeconomic confrontations

Source: World Economic Forum, The Global Risks Report 2022

## GLOBAL NET ZERO COVERAGE



Country-level coverage only. We do not include sub-national net zero targets in countries without a target.

## NET ZERO NUMBERS

Countries

137

Cities

240

Regions

116

Companies

787

Out of 198 countries, 713 regions, 1,177 cities and 2,001 companies.

Source: Net Zero Tracker (2022.10.6)

# ENERGY : Key for carbon neutrality and national security



## ❖ Full-scale start of GHG reduction for carbon neutrality

- Expansion of decarbonization management in the industrial sector (ESG etc.)
- Creation of new energy industries and businesses through changes in the energy system



## ❖ Re-design of energy policy to global energy supply crisis

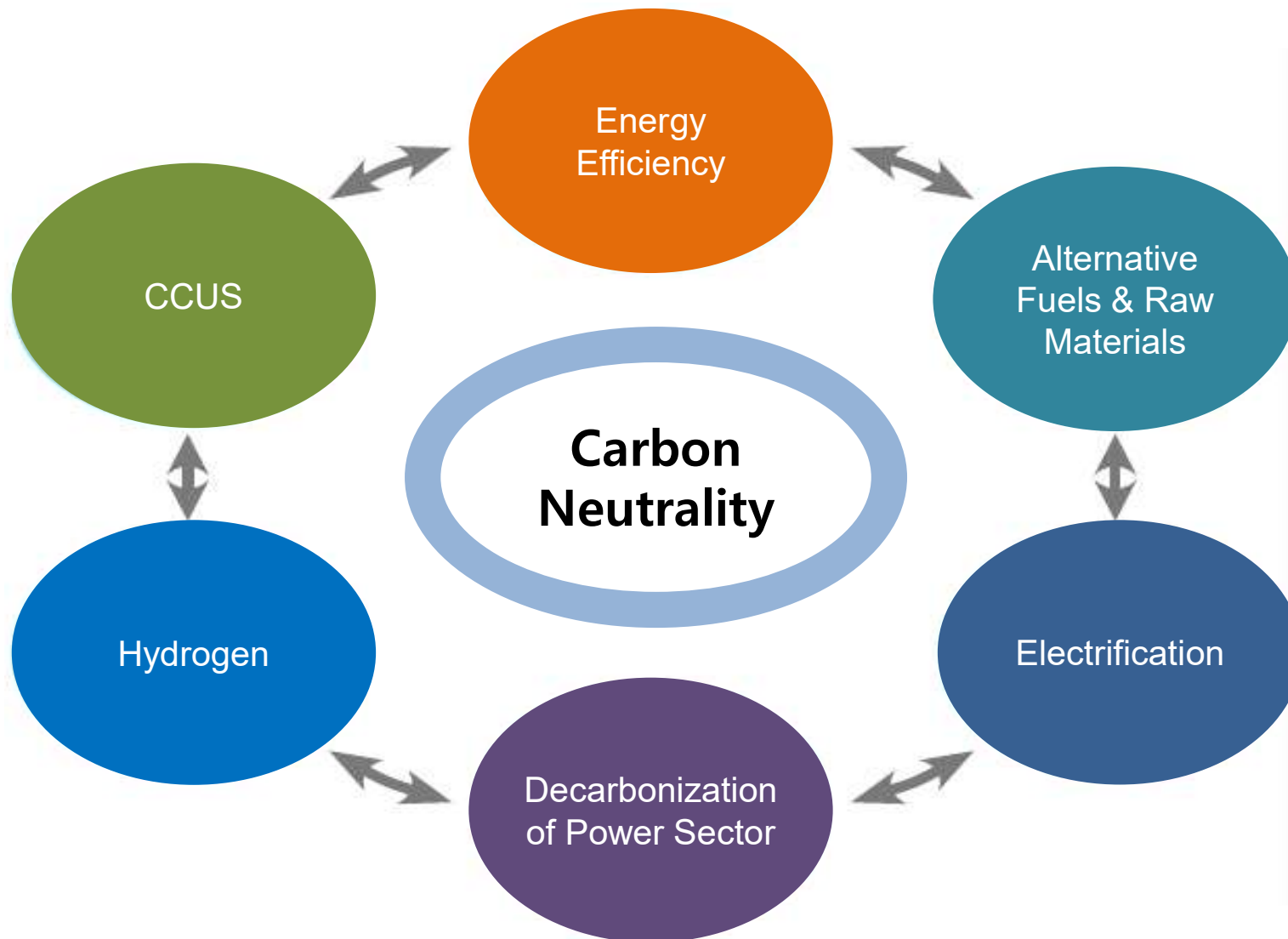
- Energy weaponization → Global energy supply crisis and increased price volatility → Unstable energy D&S system
- Re-examine the role of energy sources such as nuclear, renewables, and hydrogen under a carbon-neutral stance
- Efforts to create new opportunities through active energy policies according to national circumstances



**Carbon Neutrality** requires transformation and innovation across the energy system, including energy consumption, supply, delivery system, and industry



# Key factors for carbon neutrality in the energy sector





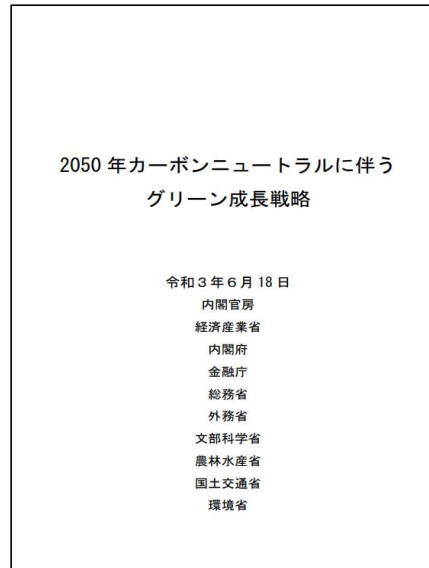
# CJK's strategies for GHG reduction & carbon neutrality

## China ('21.3)



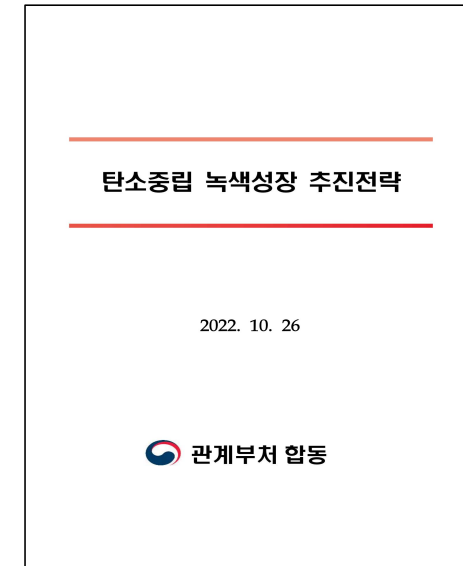
- GHG Intensity: 65% improvement by 2030 from 2005 level (CN by 2060)
- Non-Fossil Fuel: 25% in primary energy consumption by 2030 (80% by 2060)
- Wind, PV and Nuclear
- R&D for hydrogen, battery, motor etc.
- Smart power grid

## Japan ('20.12 & '21.12)



- **Green Growth Strategy**
- **14 Major Industries:** Offshore wind power, Nuclear, Hydrogen, Electric vehicle, Battery etc.
- Decarbonization of power generation
- Carbon pricing
- Promotion of tax and regulatory reform and international standardization

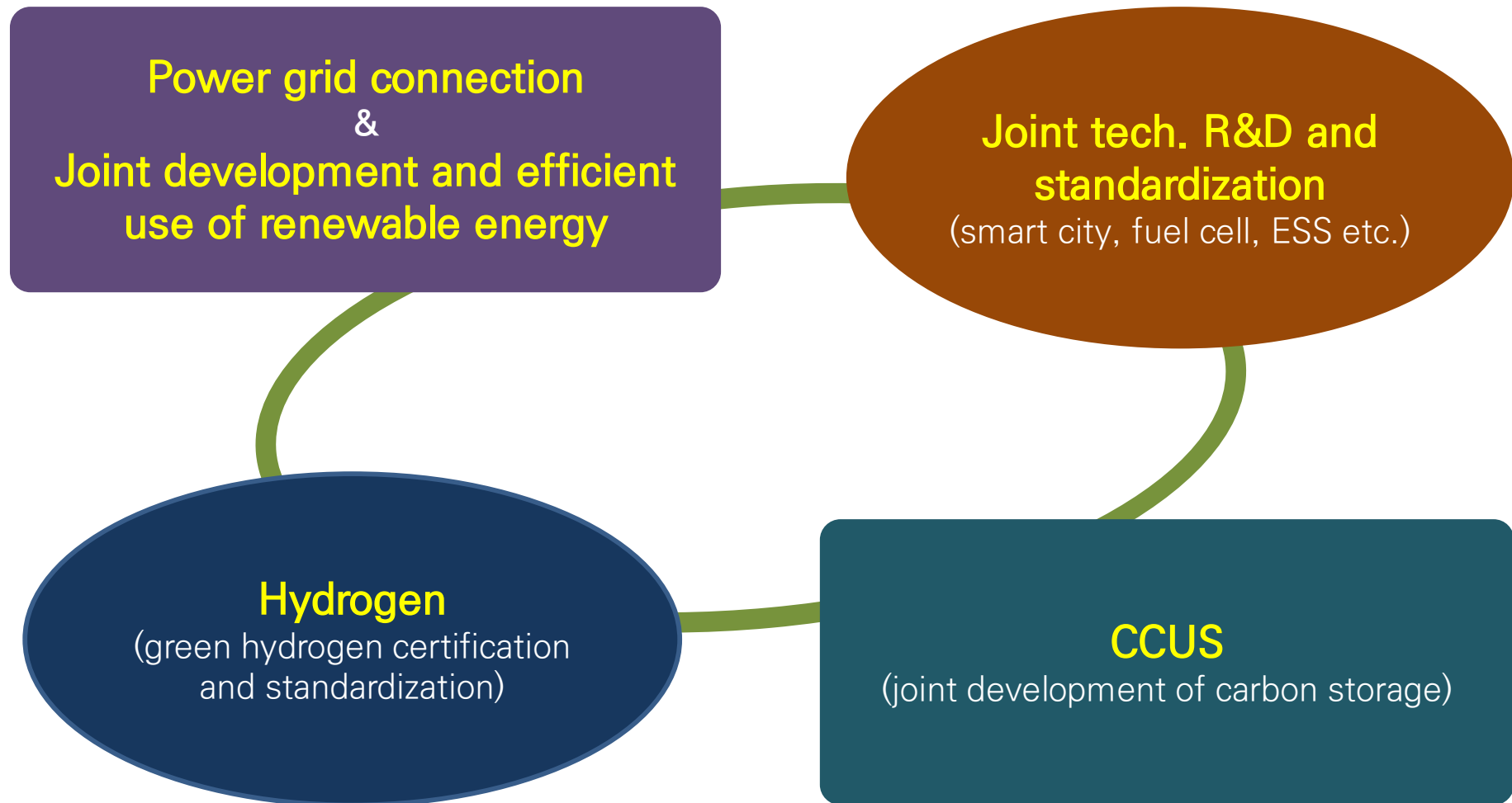
## Korea ('21.10 & '22.10)



- 2050 CN Scenarios
- Decarbonization of power generation : balance between Nuclear and RE
- Energy Efficiency
- Technology innovation: RE, hydrogen, CCUS etc.
- Environment friendly taxation & finance



# Areas of possible future cooperation



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# 감사합니다

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