# Korea's Actions for Climate Change under PA

Research Fellow /Dr. of Law Eunjung Kim Office of Global Legal Research Korea Legislation Research Institute



## The Relationships between GHG & Climate Change

KLRI



### **Economic Slowdown**



Low Level of Development since 2000



<Source: Bank of Korea>

Weak Job Creation and High Unemployment rate

### **Climate Change !**

- No only Burden, but another chance.

### Energy Consumption & New Reduction Target



에너지 소비 정점 도달의 가능성



#### 출처 : 에너지경제연구원 2016년 3월 23일자 보도자료

#### 파리협정과 한국 기후-에너지정책의 과제 25

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#### 파리협정과 한국 기후 에너지정책의 과제 28

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### 한국의 Post-2020 감축목표



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### GHG Emission Status in Korea



- GHGs Emission in Korea is on the rise, but gradually stagnated.
  - 6<sup>th</sup> largest emitter among OECD countries
  - 7<sup>th</sup> largest emitter in the world

"Korea's current policy mix is unlikely to be sufficient to achieve its target (OECD, 2017)

The need for New Policy and Legislative Strategy for new climate regime

### GHG Roadmap Revision





### **Reduction Target**

Unit: Million tons of CO<sub>2</sub>-eq



<Source: Presidential Committee on Green Growth>



- 1. Energy (Reduction 57.8 Mton)
- Improve Power Generation Infrastructure
- Shut down 10 old coal plants by 22 & replace 6 coal plants with LNG plants
- Stop constructing new coal plants and nuclear power plants (LNG and hydraulic power to be used for new power sources)
- Retrofit old coal plants in greater numbers
- Enhance low-carbon energy mix
- Promote renewable energy (20% by 2030)
- Shut down coal plants from March to June
- Introduce Environmental dispatch process



### 2. Industry (Reduction 98.5 Mton)

- Improve Energy efficiency of industrial equipment
- Introduce the certification system for highly energy efficient equipment
- Introduce Factory Energy Management System
- To be introduced to large-scale factories with policy incentives
- Streamline factory facilities to improve energy efficiency
- Develop new & innovative technologies to create added values
- Develop eco-friendly gas for processed that will replace refrigerant (expand best practice technologies to entire industry)



- 3. Buildings & Homes (Reduction 64.5 Mton)
- Enhance energy efficiency standard
- Tighten building energy standards on insulation
- Amend relevant laws for certifying zero-energy buildings
- Upgrade existing buildings and homes' energy efficiency
- Require energy-intensive public buildings to change into green buildings
- Establish mid-to long-term plan for green remodeling
- Support planning and financing for retrofitting old buildings in private sector
- Introduce energy information system and change consumption pattern
- Develop and monitor Building Energy Management System

### **Reduction Plans**



- 4. Transportation (Reduction 30.8 Mton)
- Promote low-carbon vehicles Enhance energy efficiency standard
- Public transportation electric bus, fuel-cell bus
- Up to 3 million Evs by 2030
- Upgrade energy efficiency in marine transportation
- Promote eco-driving
- Expand low-carbon logistics
- (model shift from road to railway)
- Waste (4.5 Mton), Public sector (5.3), Agriculture (1.6)



- Revised Enforcement Decree of the Framework Act on Low-Carbon, Green Growth
- To change target-setting method from relative target of 37% reduction from BAU level by 2030 to Absolute target of 536 Mtons of emission after reduction
- Establish 2050 low-carbon development strategy and revise & submit NDC by 2020



Thank you

