ETS AND POWER SECTOR IN KOREA

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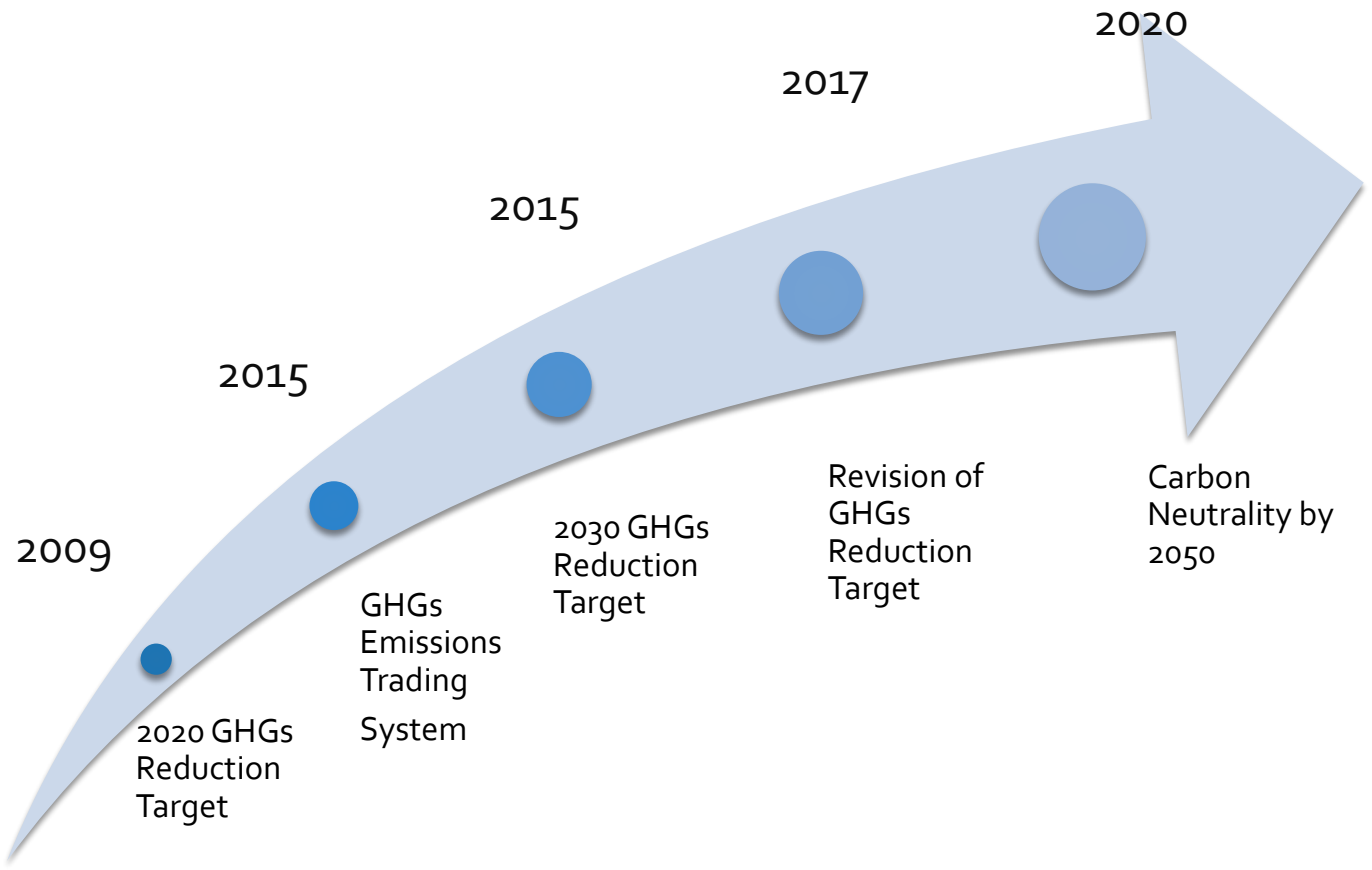
Content

1. Korea's National GHGs Reduction Targets
2. Emission Trading System
3. Tasks Ahead

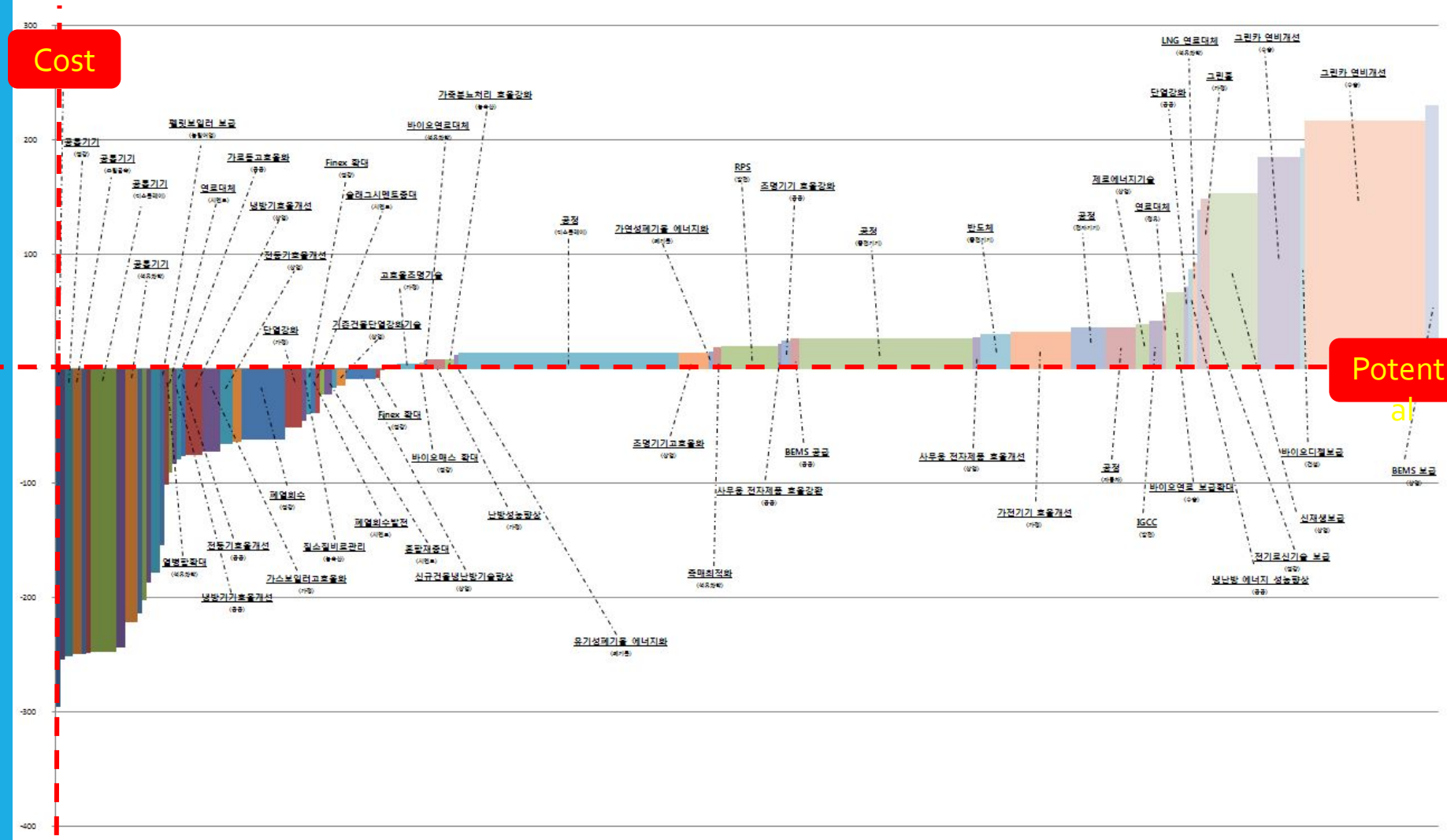
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Climate Change Mitigation Policies in ROK



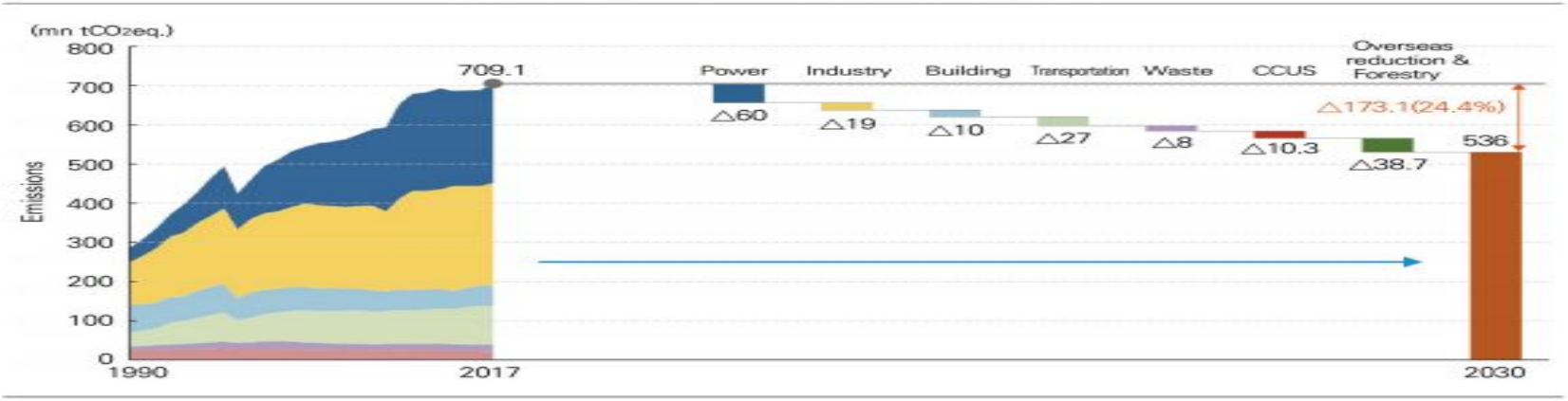
GHGs Mitigation Potentials : MAC Curve



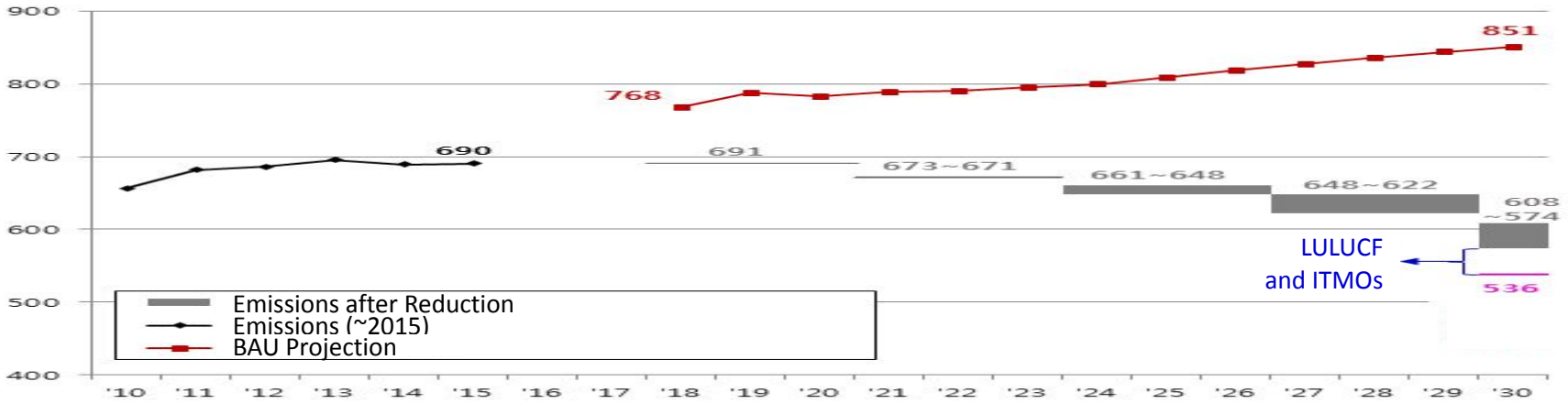
National GHGs Reduction Target by 2030 in 2018

Legal Framework	Framework Act on Low Carbon, Green Growth (2010)	Act on the Allocation and Trading of GHG Emission Permits (2013)	Implementation of Emission Trading Scheme (2015~)

[Figure 2-3] 2030 GHG reduction targets[22]



Source: The Government of the Republic of Korea, *2050 Carbon Neutral strategy*, p.35, 2020.12.



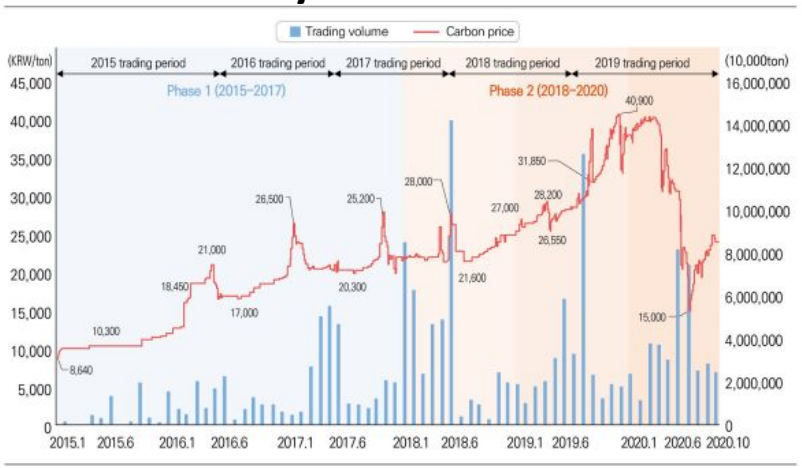
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Features of K-ETS

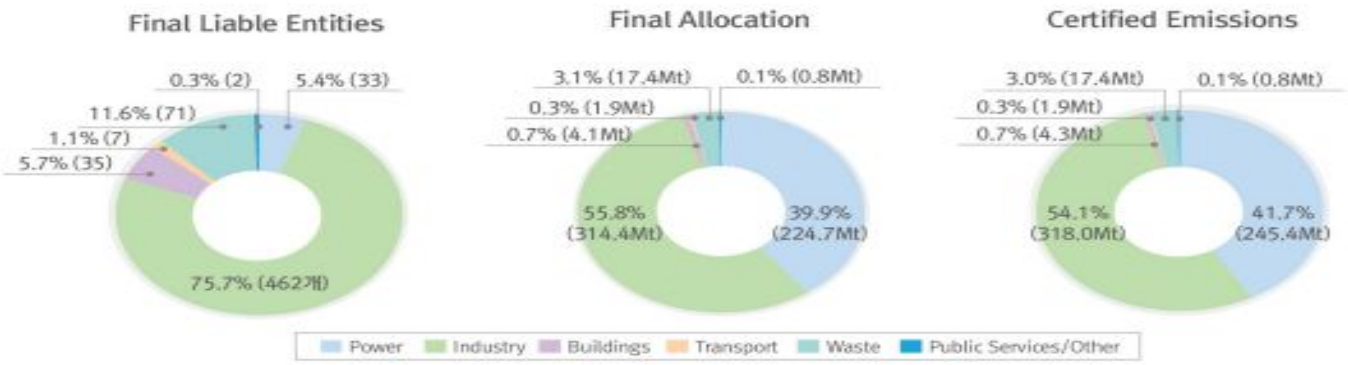
- Coverages : about 70% of National GHGs Emission
  - Six GHGs(CO2, CH4, N2O, HFCs, SF6, PFCs)
  - Direct and Indirect Emissions
  - All Sectors based upon the amount of emissions
- Foundation from Target Management System
  - GHGs Inventory Report of the Entities from 2007
  - 3rd party Auditor
  - Submission of Monitoring Plan and Reporting
- Allocation of Allowances
  - Grandfathering and BM
  - Gradual Increase of Shares of Allocation by Auction
- Cap setting
  - Consistency with National GHGs Reduction Target
- Banking and Borrowing
  - Up to 10% borrowing within each phase
  - limited banking within and between phases
- Offsets
  - Up to 5% of permits surrendered from domestic and oversea offset credits(KCUs)
- Market Stabilization Measures

Daily Permit Prices



Summary of 2nd ETS Phase ('19)

Distribution by sector



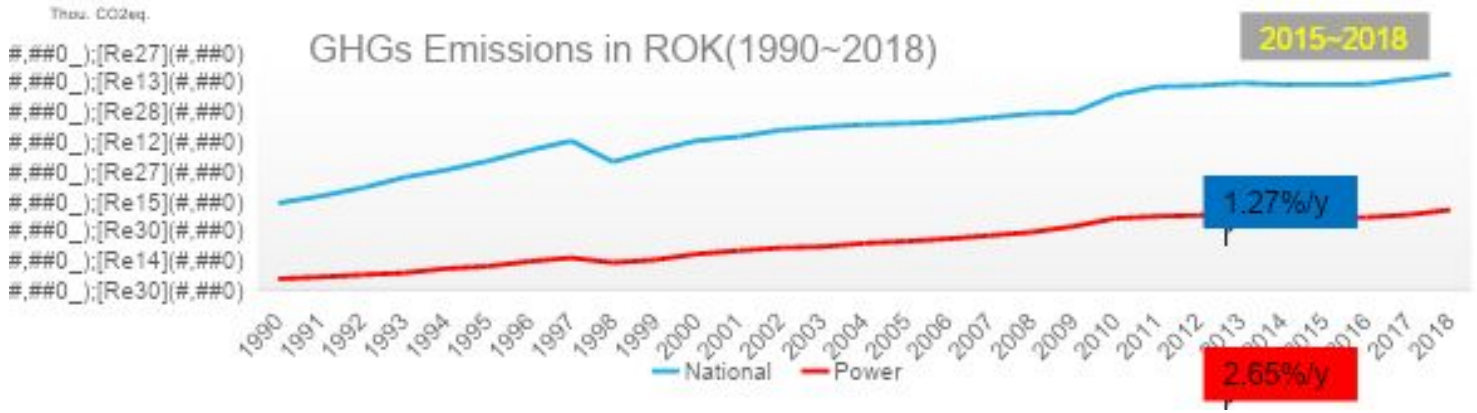
GIR(2020) K-ETS Summary Report, p.12

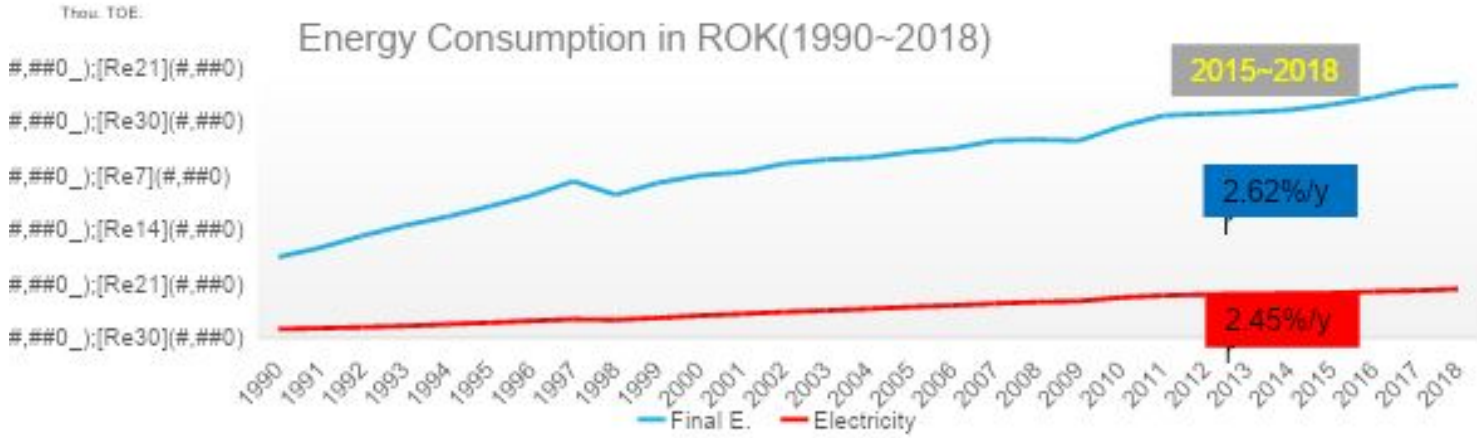
Trading Market Performance

Growth of the Trading Market 2015 - 2019: Total Trading Volume 6× / Average Trading Price 2× / Total Payments 16×

	2015	2016	2017	2018	2019
Total Trading Volume	5.7 Mt	12.0 Mt	26.3 Mt	47.3 Mt	38.0 Mt
Average Trading Price	KRW 11,013	KRW 17,056	KRW 20,951	KRW 22,122	KRW 28,440
Total Payments	KRW 62.4 billion	KRW 204.1 billion	KRW 550.3 billion	KRW 1,047.5 billion	KRW 1,083.1 billion

ETS and Power Sectors





Pass through of Carbon Price on Retail Elec. Prices

- Whole Sales Market in Korea: System Marginal Pricing
  - Economic Dispatch Order based upon the fuel cost of the generators
  - No Allowance Cost are not included in Fuel Cost
    - Separate Compensation for the cost to purchase allowances to the Generating Company

- Implementation of Carbon Pricing in Electric Power Generation
  - Announcement of Carbon Neutrality by 2050 in October, 2020.
    - Higher Ambitions in NDC by 2030 to be announced soon.
  - Legal framework made to implement Environmental Dispatch Order starting in 2022
  - Allowance costs be included in the fuel cost and no compensation to the generators
  - Full carbon cost pass through into the retail electricity price expected

- BM and Free allocation in the Future
  - BM by fuel type Single BM for all fuel
  - Allocations by Auction in Power Sector

THANK YOU FOR ATTENTIONS!!

If any questions or comments,
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