



*Does S. 2191 Mean Higher Electricity
Prices? (Of Course But How High?)*

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As Currently Adopted S. 2191 Will Dramatically Increase Electricity Cost



- ★ Cost are Driven By Tight Caps and Timelines.
- ★ Unlike SO₂ in Acid Rain Legislation, No Commercial CO₂ Capture Technology Exists for Fossil-fired Electric Generating Units.
- ★ Short Term Compliance Will be Based on Fuel Switching to Natural Gas.
- ★ Gas Prices Will be Higher, Utilities (Customers) Will Pay. (But can other industries?)
- ★ Initial (2012) CO₂ Allocations Less Than 50% of 2006 CO₂ Emissions, Decreases to Zero by 2030.



Amazingly S.2191 Adopted Without Full (Any?) Economic Analysis



★ CRA, MIT and EPA Economic Models All Show S.2191 Causes Negative GDP.



★ The Higher the Cost of Energy, the Greater the Negative Impact on GDP.



★ Economic Models Show Direction not Absolute Values

★ Important to Understand Variables that Drive the Results



CRA, MIT and EPA Are Very Optimistic



★ Nuclear Generation Increases $> 40\%$ by 2030 (CRA, EPA)

★ Renewables Increase by $> 300\%$ by 2020



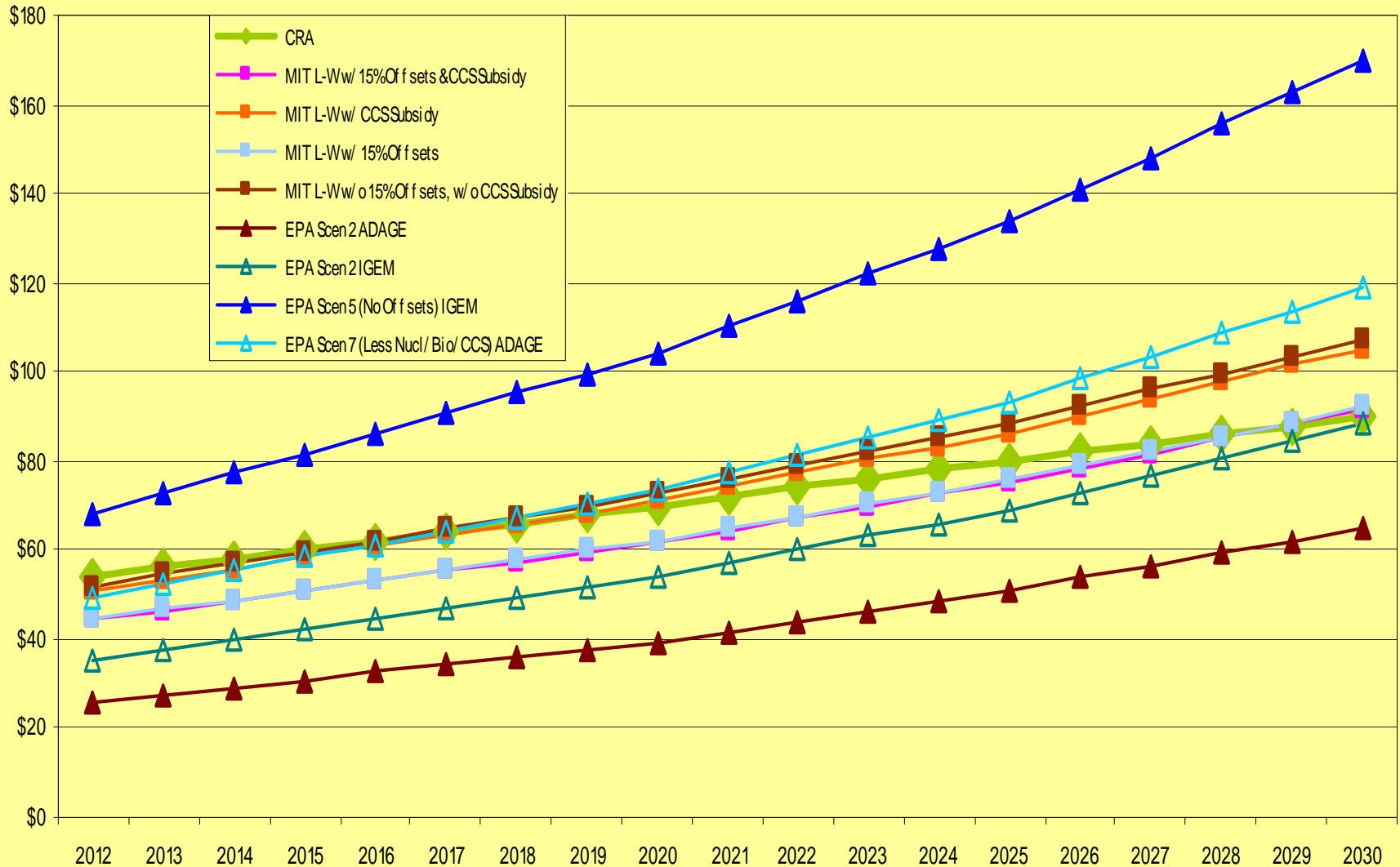
★ International Offsets Available at Below Market Price for Allowances. (EPA)

★ CCS Commercial in 2015, Deployed by 2025. (CRA, MIT, EPA)



★ Fortunately EPA and MIT Ran “What If Scenarios”

Allowance Prices in 2007\$ through 2030

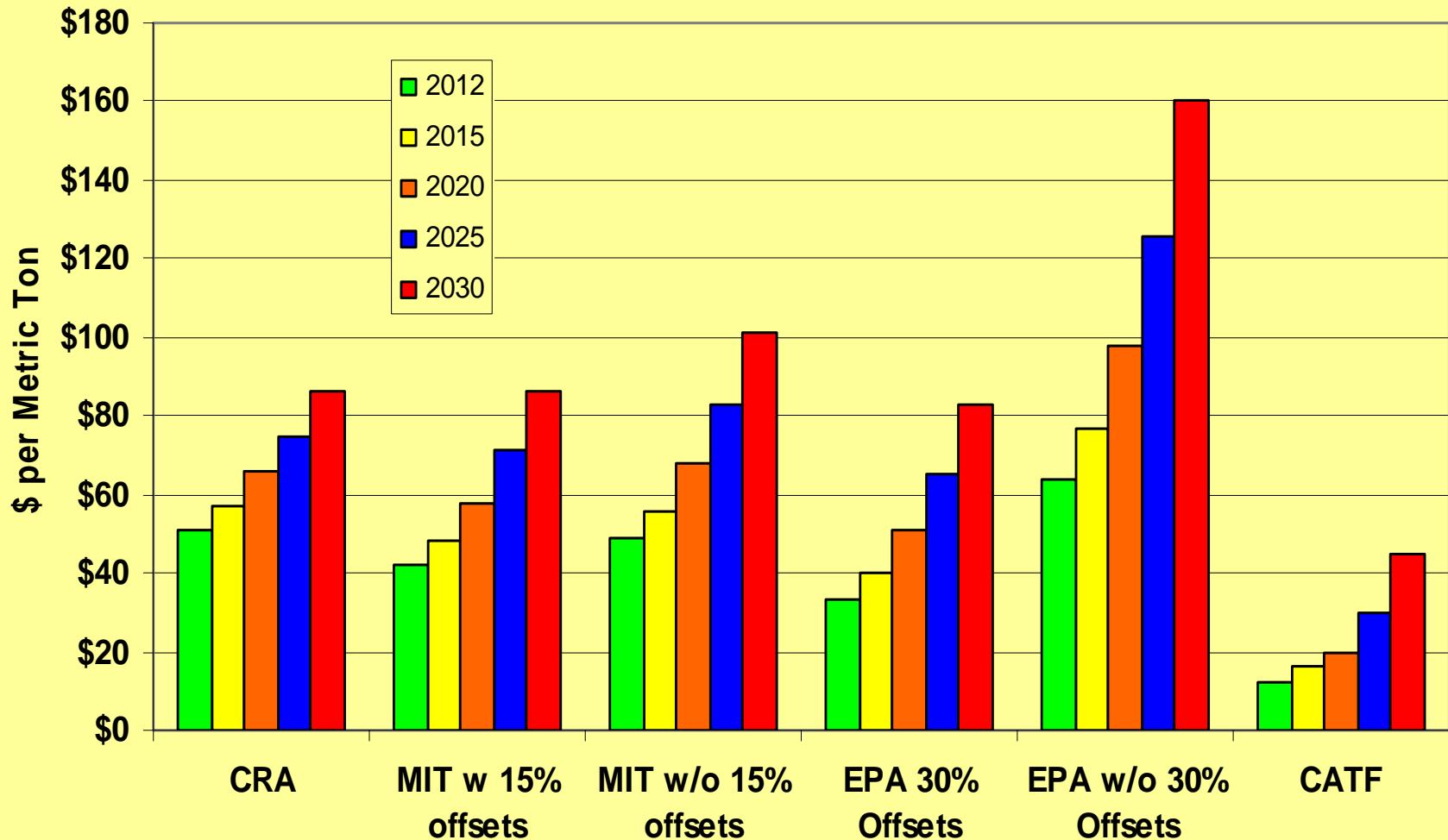


CRA Allowance Estimates Based on Their Mostly Likely Scenario, EPA Scenario # 2 Assumes 30% Off sets Available at Below Estimated Allowance Cost.

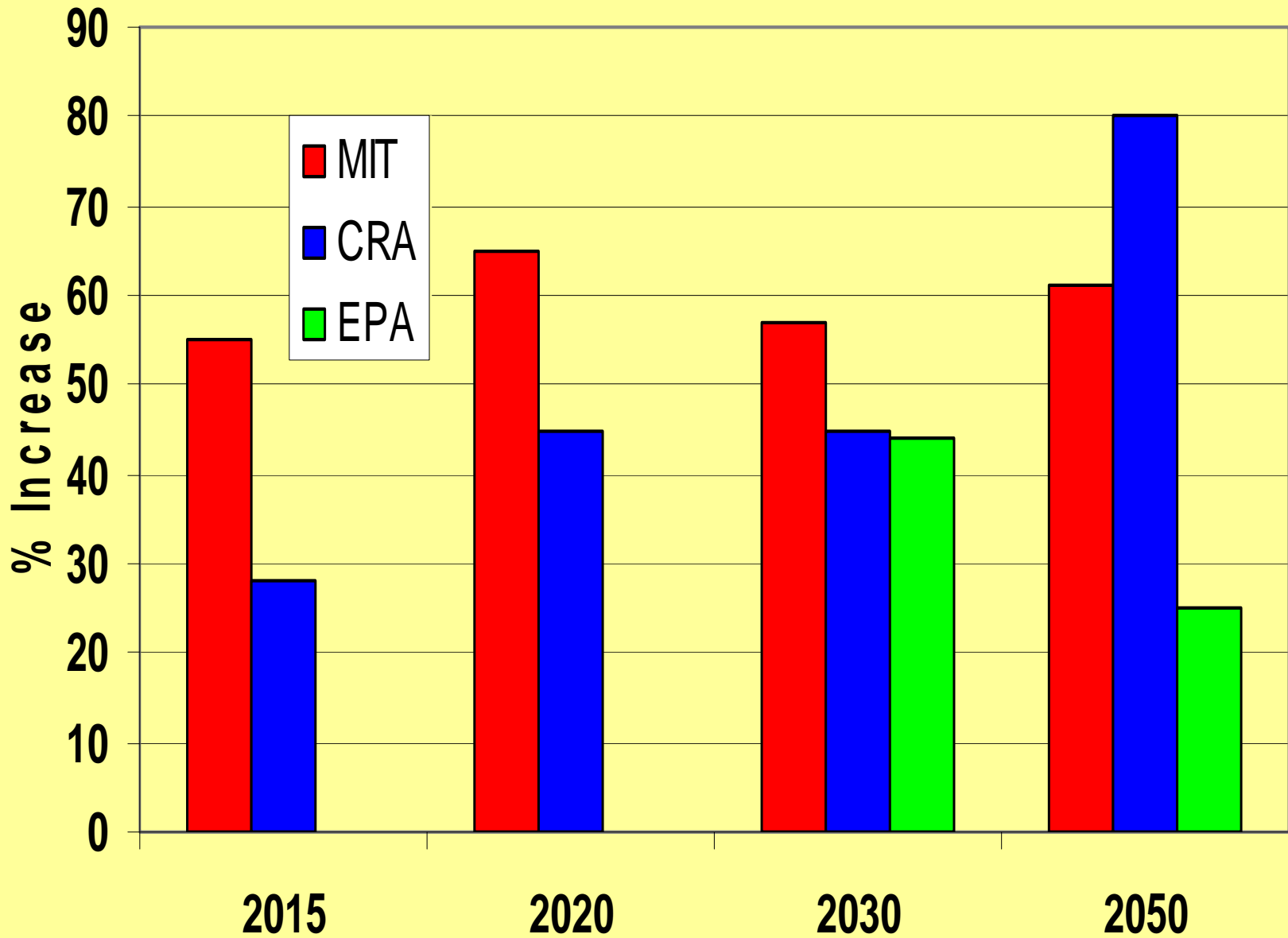


But I Heard There Would Be No Cost!

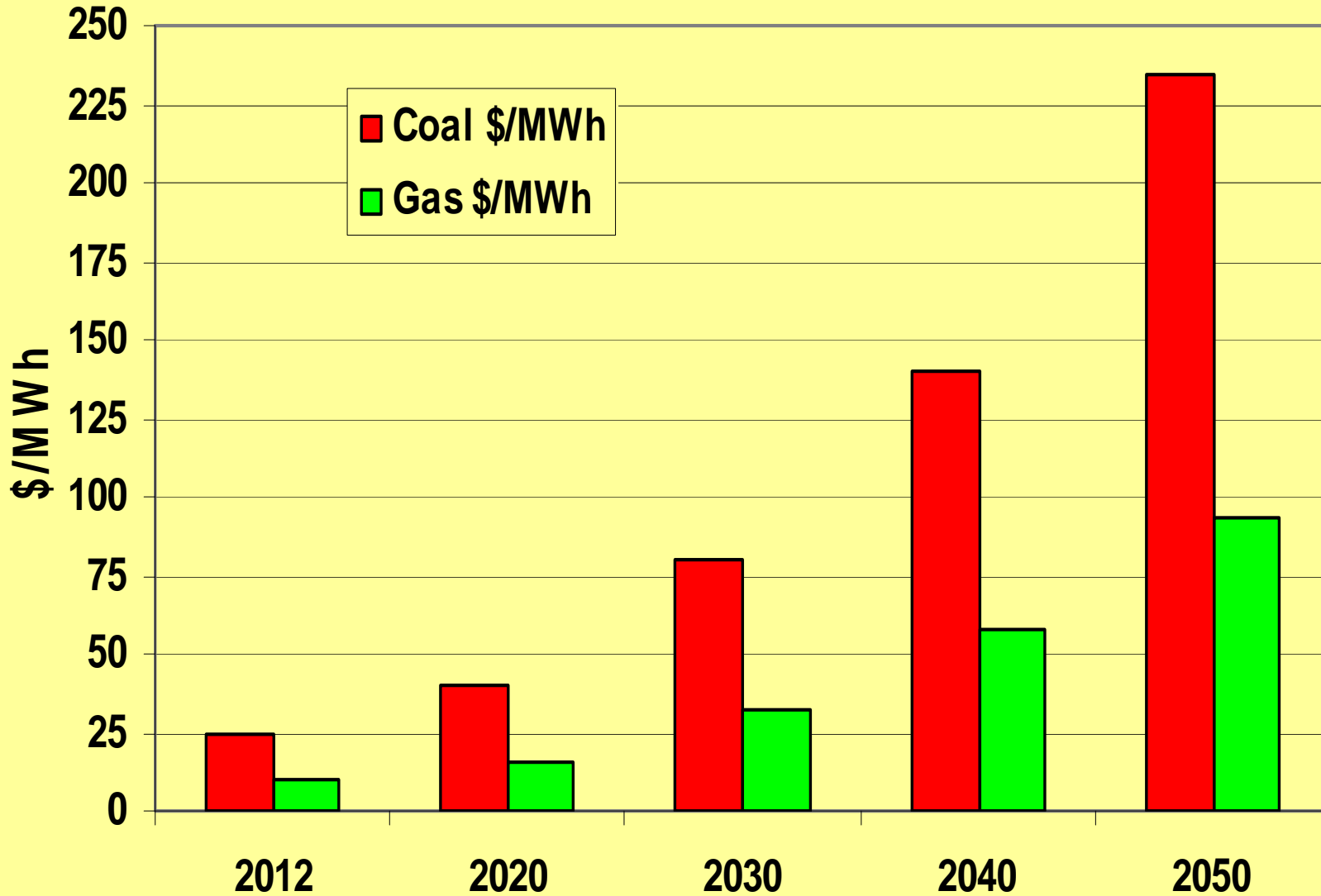
Comparison of Allowances for S.2191 With Various Economic Models



% Electric Cost Increases with S.2191



Carbon Cost Impact of S.2191 on Generation Cost



Based on NSPS Pulverized Coal Unit and Gas-fired Combined Cycle Unit. MIT Allowance Cost.



What Do You Get For the Money?



★ “Leakage” GHG Emissions and Manufacturing Overseas.

★ Lower GDP



★ Greater Dependence on Imported Natural Gas



★ ~ 25 PPM Reduction in Ambient CO₂ Concentrations in 2095 (~ 700 PPM vs. 725 PPM)



Key Improvements Needed



- ★ Realistic Emission Caps and Timelines (slow, stop, reverse) Must Be Based on Commercial Availability of CCS Control Technology and Zero Emission Generation (Nuclear)
- ★ Larger and Permanent Allowance Allocations for Energy Intensive Industries
- ★ Safety Valve Price For Allowances! (Based On Acceptable GDP Hit)



Questions

