Policy Challenge and Solutions in the Japanese context

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1. What happened after Fukushima Nuclear Accident?

1–1. Supply Side – Primary Energy Supply

 Stoppage of Nuclear power supply seems to be altered by LNG supply, at least short term.
RENs are still small though strong FIT measures.



1. What happened after Fukushima Nuclear Accident?

1-2. Demand Side - Final Energy Consumption

- Successful stabilization observed across the sectors, but not sure this trend continues long.
- Uncertainty in Transport. & Res. Com. sectors



1. What happened after Fukushima Nuclear Accident?

1-3. Energy origin CO2 emission

 Around 100Mt-CO2 additional gap between FEC and CO2 emission trends occurred due to the stoppage of Nuclear power supply



2. What will happen hereafter towards 2030 ?

2-1. Supply Side - "COAL Strikes Back"

- Electricity market de-regulation paves way for Coal fired power plants due to their low cost
- · Coal may better than Nuclear, but emission ···



2. What will happen hereafter towards 2030 ?

2-2. Demand Side - Rebound of efficiency regulation

 3 and 4 waves of mandatory efficiency standard for home appliance and automobile contributed stabilization so far, but their effect shall saturate



3. What could be possible option towards 2030 ?

3-1. Supply Side

- Re-establish "Reliable" Nuclear Power Supply
 - Strong safety governance measure necessary
- Accommodate Coal increase, with effective use of "Paris Art. 6" to minimize Climate Change impact
 - Clear initiative for Methane abatement, CCS and other cost-effective scale offsets are necessary
- Steadily prepare for REN with Natural Gas supported supply system and infrastructure
 - Reinforced Power Grids for REN and
 - Transboundary Natural Gas P/L needed

3. What could be possible option towards 2030 ?

3-2. Demand Side

- No compromise in challenge for energy efficiency innovation that enables continuous improvement
 - Clear policy commitment facilitates investment and finance by private sector and reduce costs
 - Expansion of scope, equipment, fuel types for efficiency standard might be more effective
- Flexibility for alternative policy measures such as taxation, pricing and normative regulation
 - Continuous efficiency standard policy shall cause "saturation" and "low awareness"

4. Expectation for IEA/CERT

- 4-0. Important expected role of IEA/CERT from viewpoint of ex-policymaker of Japan
 - Clearing house for Useful policy option & analysis
 - Provide unique and deep policy info., including analysis & intuitive both success and failure case
 - Lower policy development hurdles for "new" policy introduction; Bio-gas, Bio-transport fuel
 - Timely policy recommendation and advice from neutral standpoint
 - Sometimes energy policy introduction are jammed by so primitive misunderstandings

