

The background of the slide is a textured, light-colored paper. On the right side, there is a faint, dark illustration of a willow tree with its characteristic drooping branches and small leaves. In the background, there are faint, dark silhouettes of mountains or hills. The text is centered and overlaid on this background.

*IEA REWP Technology and  
Policy Seminar*

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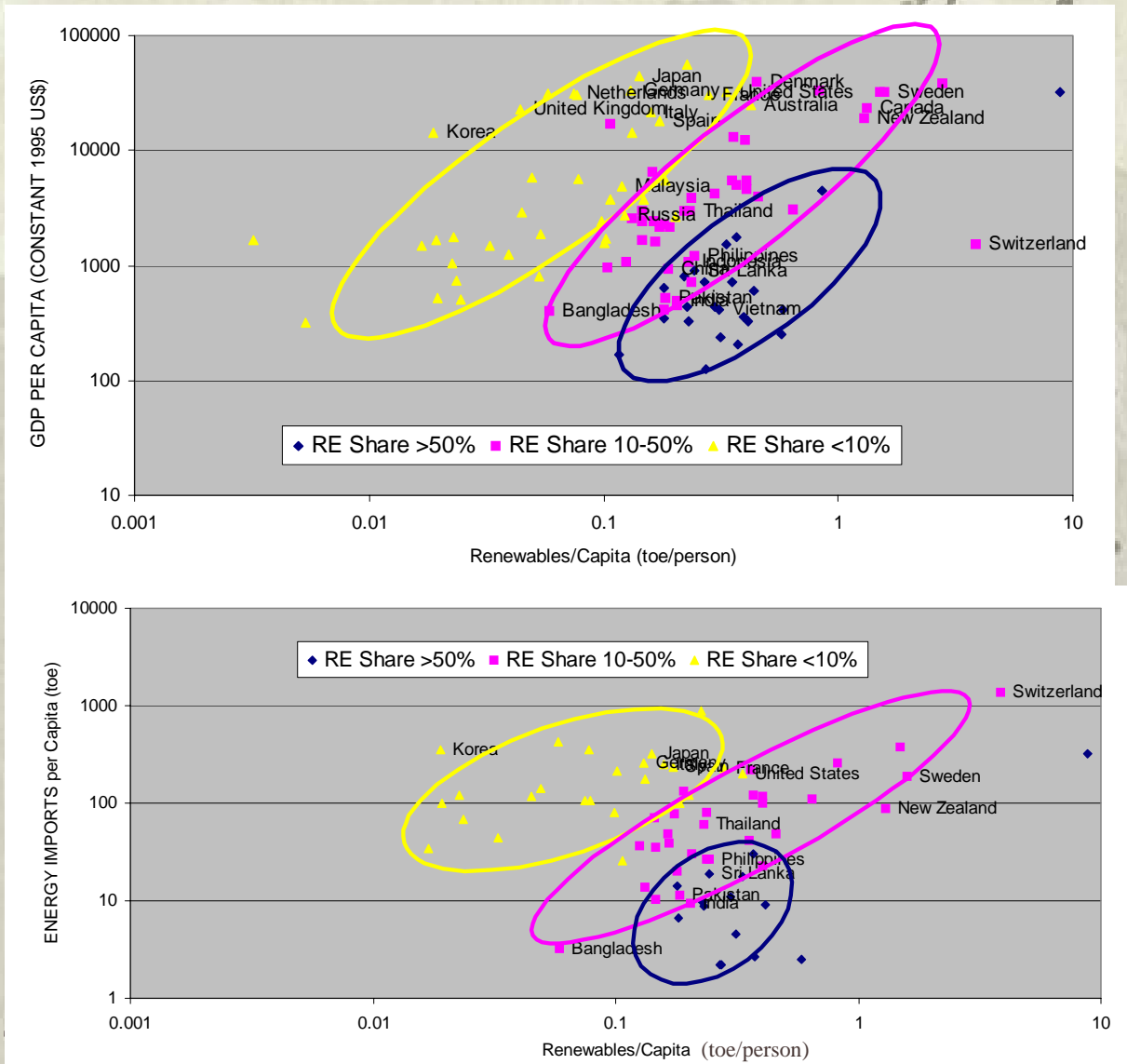
The Institute of Energy Economics,  
Japan

# *Is import dependency a driver ?*

- ❖ Import dependency is more concerned if
  - Import share is large
  - Import price is high or income is low
  - Domestic resources are not abundant
- ❖ If import dependency is not a driver then what?
  - Environment
  - Industrial/technology Development
  - Regional Development

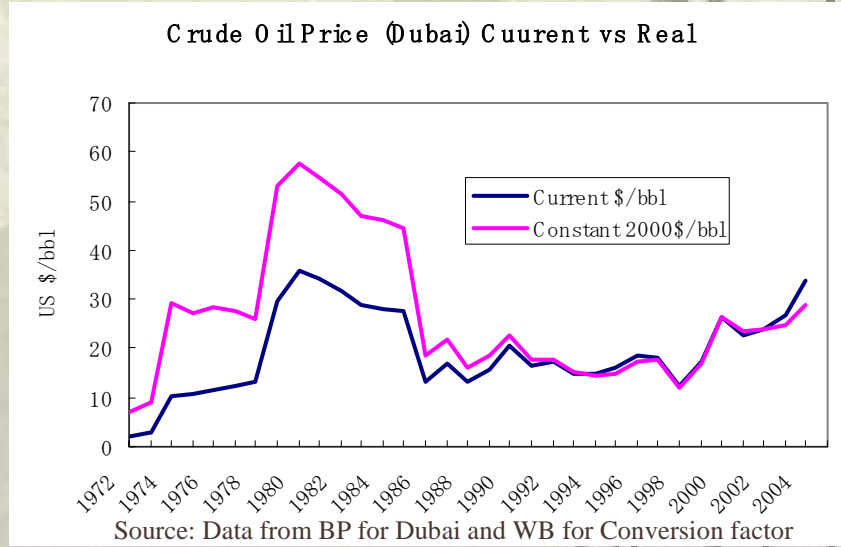
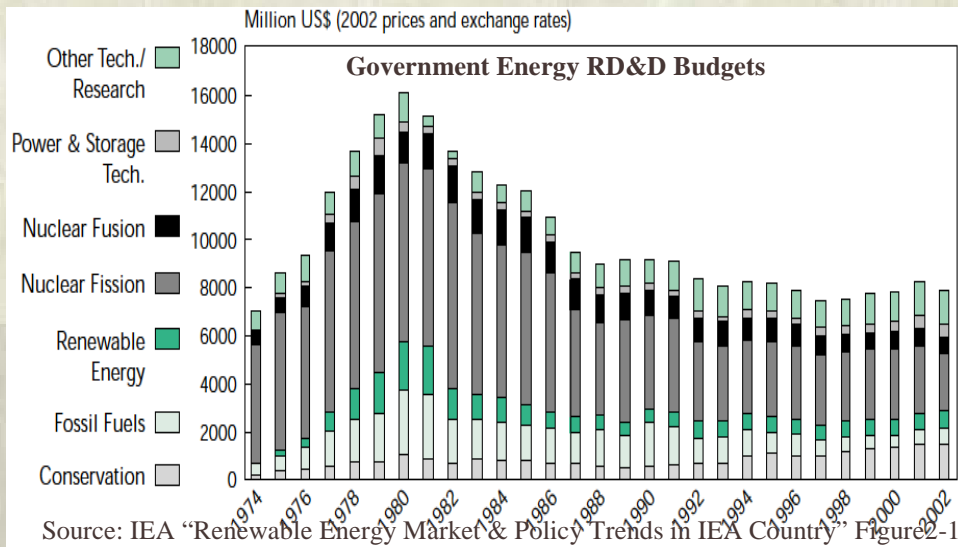
# GDP, Renewables, and Energy Imports

- ❖ Relationship between GDP and Renewables within the Cluster
- ❖ The Import dependency is important for middle income countries especially with renewables share of 10-50%

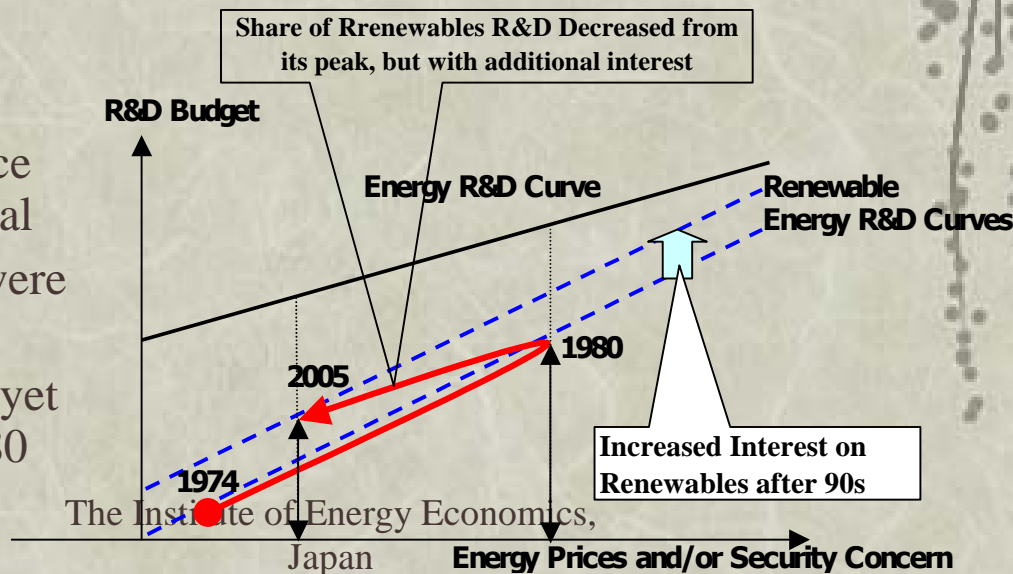


Japan

# Structure of Support for Renewable Energy

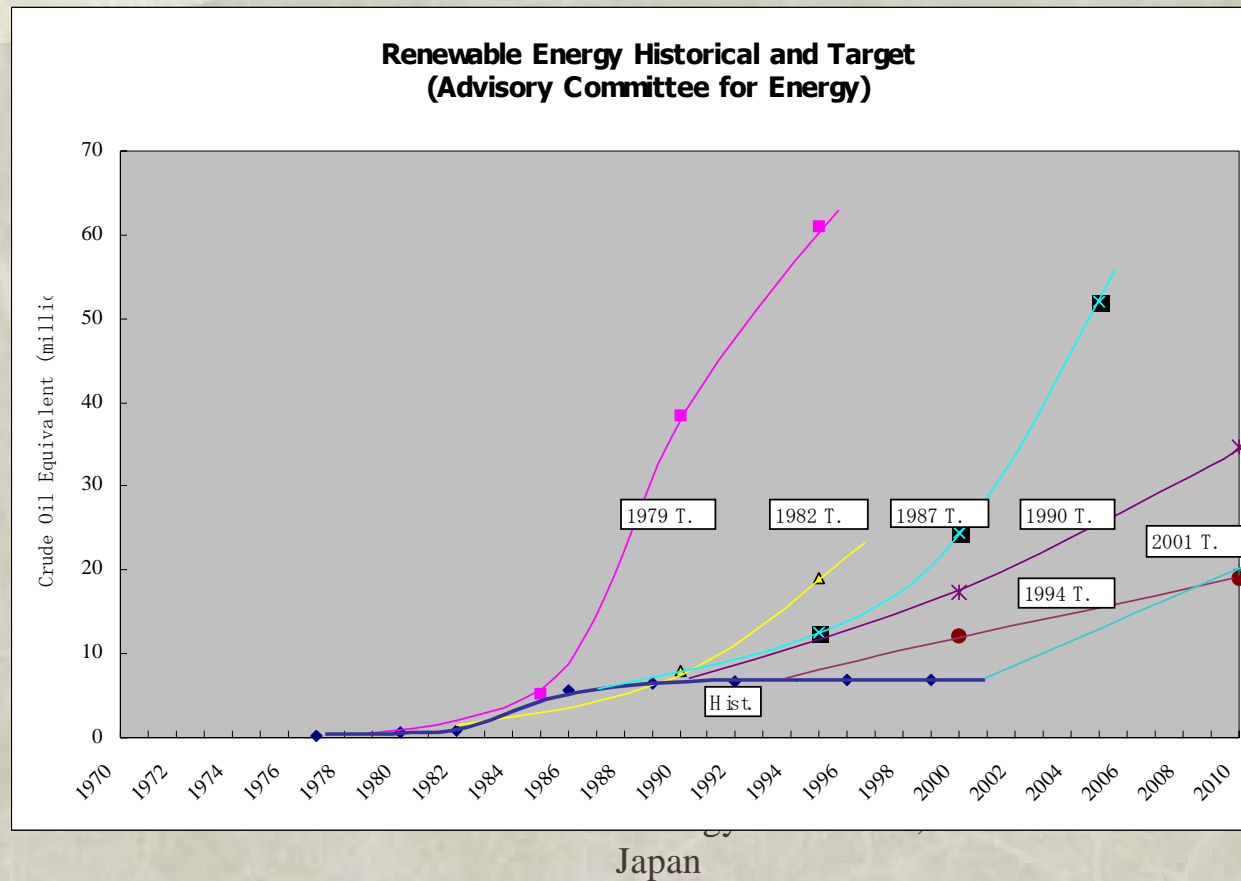


- ❖ Renewables are more price sensitive than conventional
- ❖ Some external supports were added
- ❖ Current price level is not yet comparable to that of 1980



# *Renewable Energy Outlook in Japan: Rising Environmental Driver*

- ❖ Historical (Unbinding) Targets : Always Ambitious
- ❖ Targets was lowered gradually until around year 2000
- ❖ However, after around year 2000, the target was raised to meet Kyoto commitments



# *Impacts of Drivers in Asia*

- ❖ High Oil Prices and Security of Supply>>Higher impact on developing countries
  - Indonesia, Malaysia, Thailand>> Biofuels
  - Philippines>> Geothermal
  - China>> Renewables in general
- ❖ Environmental and Others>> Developed countries
  - Japan>> utilization of untapped thermal resources

## *Ex. Cool Energy for Regional Development in Japan*

- ❖ A New integrated Driver: local development and new energy development using Seasonal differences and local differences
- ❖ Change the accumulation of snow and ice in winter season from local disadvantage to local advantage in northern Japan.
  - keep snow and ice until summer, especially to utilize for cooling and freezing of agricultural products.
  - expanding to air-conditioning of public facilities.
    - Local use promoted by METI
  - snow-and-ice distribution system to utilize the cool energy of northern Japan as cool energy sources in large cities
    - utilization of returning trailer and domestic vessel from northern Japan to transport snow and ice for utilization in large cities for cooling



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# *Policy Measures for Cool Energy*

- ❖ Framework-the utilization of snow and ice was categorized as “New Energy” in 2002
  - Background: Utilization of snow and ice becomes promising as the northern region began to utilize these energy for their local development
  - Acceleration by subsidies
    - Local public entity:
      - Implementation—up to 1/2 of Cost
      - Deployment—up to 20 million yen (150 thousand euro)
    - Private entity:
      - Implementation—up to 1/3 of Cost
      - Deployment—up to 20 million yen (150 thousand euro)