



Nuclear Energy post-Fukushima

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CENTER FOR STRATEGIC &
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Energy & National
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International Responses to Fukushima

National safety reviews and stress tests

International examinations and efforts



Food for Thought

- **Emergency preparedness: design basis vs. Probability risk assessment**
- **Peer review: scope vs. frequency**
- **Responsibility: national sovereignty vs. international accountability**

Global Reactions to Fukushima

Sustained Interest:

Belgium, China, Finland, France, India, Jordan, Pakistan, ROK, Russia, Saudi Arabia, Slovenia, Sweden, Turkey, UAE, UK, Vietnam, etc...

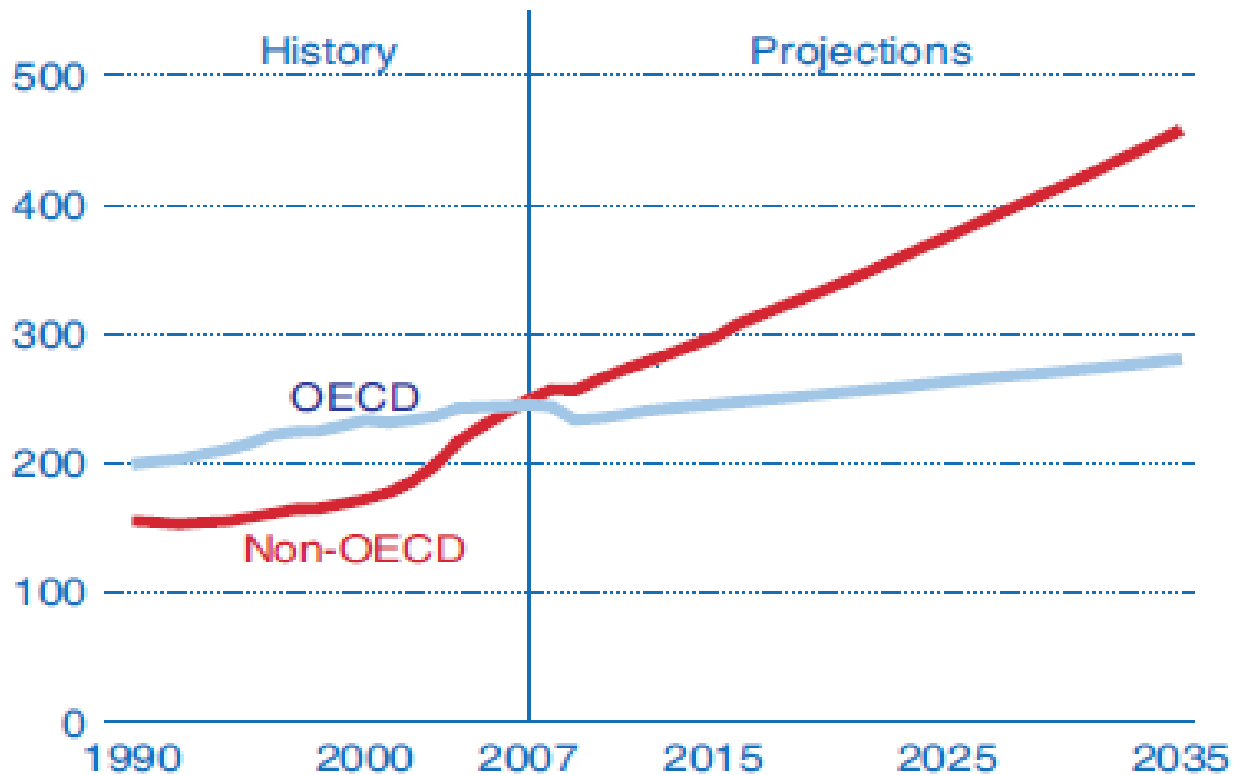
Changes to Anti:

Germany, Italy, Switzerland, and ... Japan (?)

Sustained Opposition:

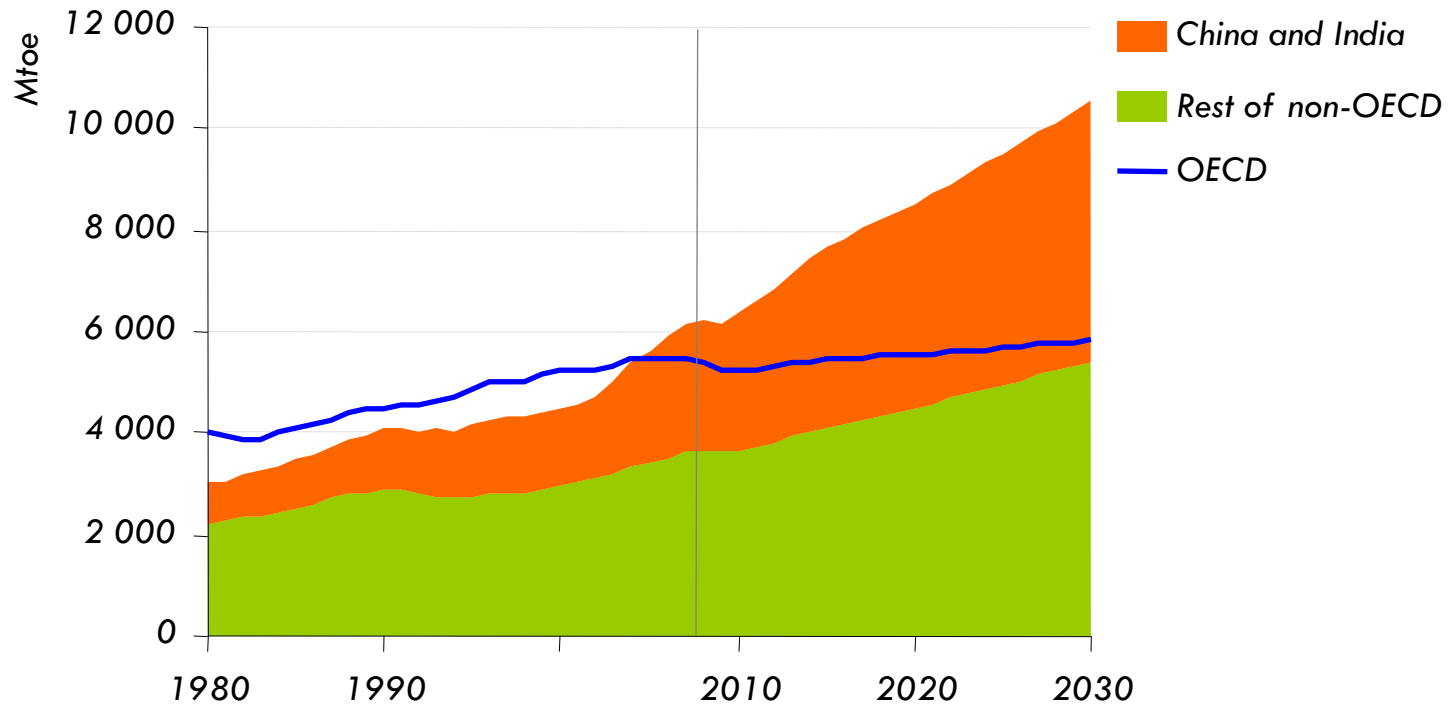
Austria, Greece, Ireland, Latvia, Liechtenstein, Luxembourg, Malta, Portugal, etc...

Figure 13. World marketed energy consumption: OECD and Non-OECD, 1990-2035 (quadrillion Btu)



Source: World Energy Outlook 2010

World primary energy demand to 2030—China and India account for over 50% of global growth



Source: World Energy Outlook 2009

Figure 10. World energy-related carbon dioxide emissions, 2007-2035 (billion metric tons)

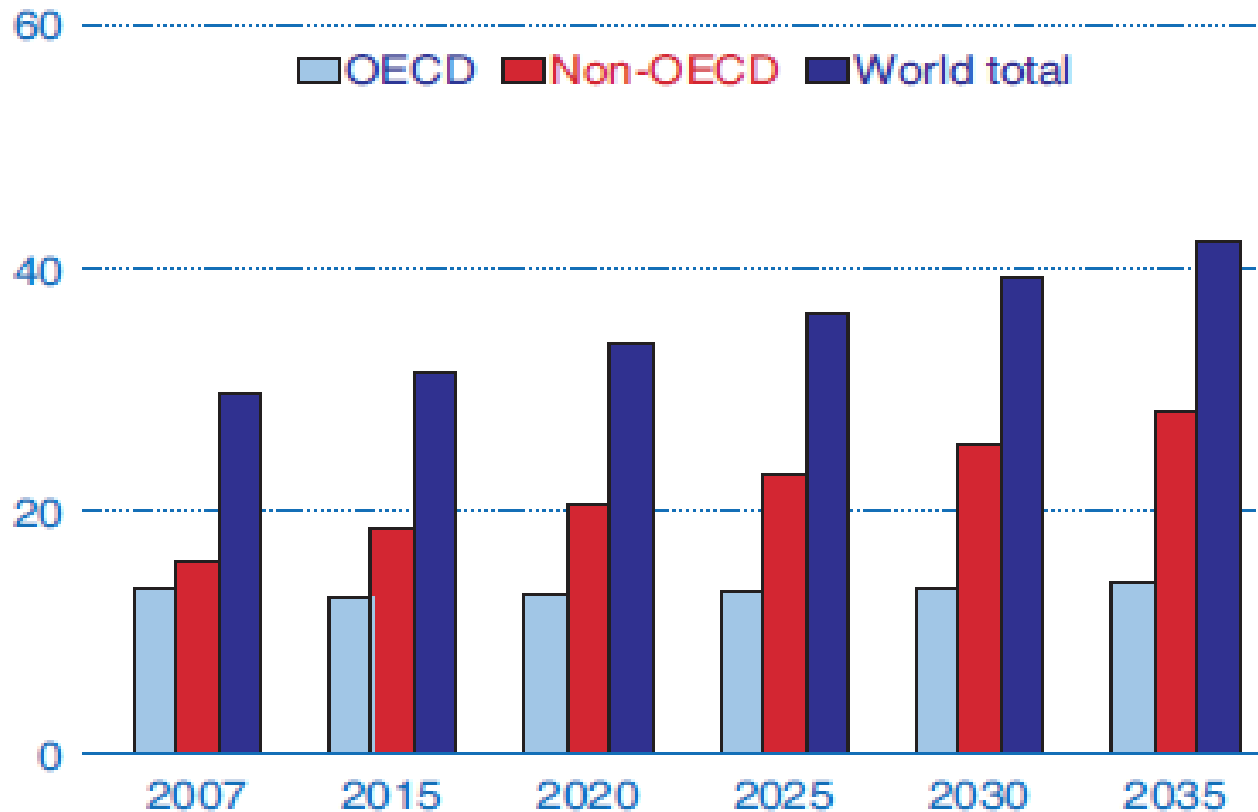
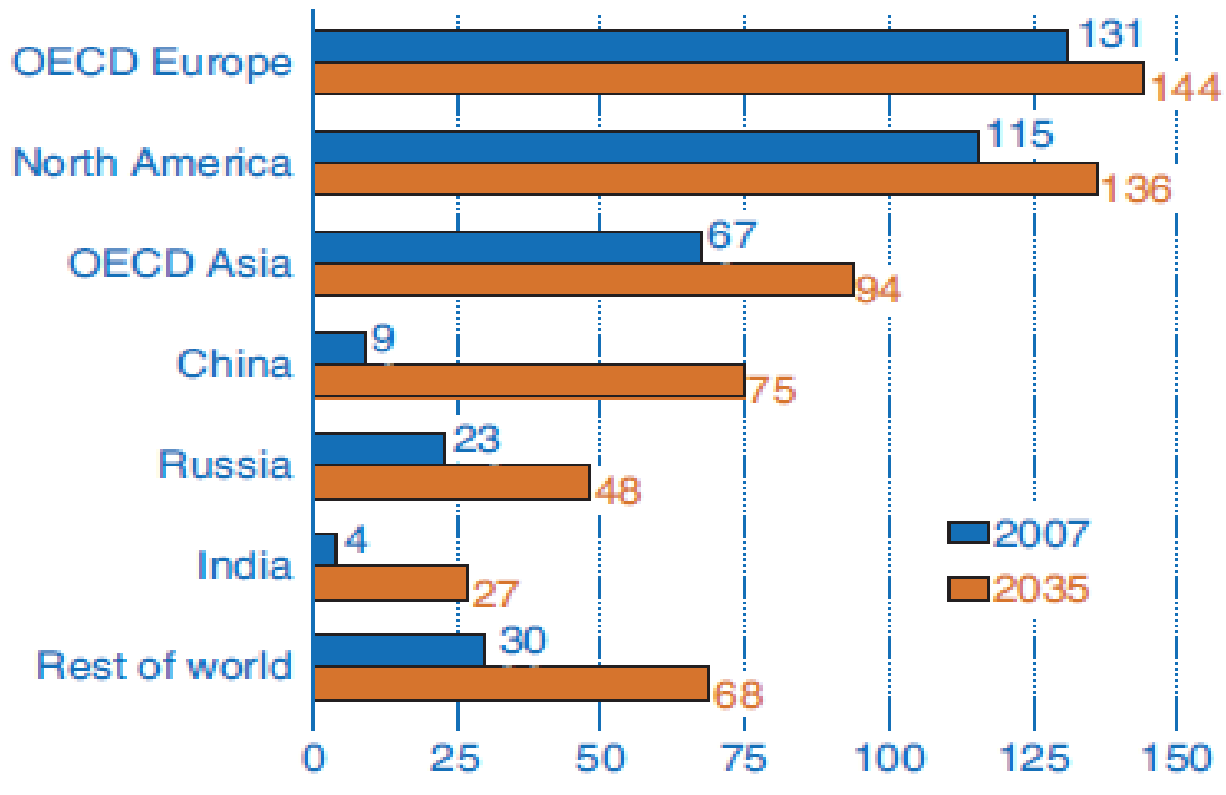


Figure 20. World nuclear generating capacity by region, 2007 and 2035 (gigawatts)



Source: World Energy Outlook 2010

Global nuclear generation is 2600 TWh (source: IEA 2011)

850,000 wind mills



*65 times electricity generated by all
current solar panels*



*When replaced by CCGTs, the combined production of
Norway, UK, the Netherlands, Australia, Qatar and Algeria*

