

## **Future World Energy Demand and Supply: China and India and the Potential Role of Fusion Energy\***

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Massive increases in energy demand are projected, over the next century, for countries such as China and India---e.g., many 100s of MWe of additional electricity capacity by 2050, with more additions later, are being considered for each of them. All energy resources will be required to meet such a demand. Fortunately, while world energy demand is projected to continue increasing, the world is well endowed with a variety of energy resources. However, their distribution does not match the areas of expected demand and there are many environmental issues. Such geopolitical issues affect China and India and make it important for them to be able to deploy improved technologies. In this regard, Korea is an interesting example of a country that has developed the capability to do advanced technologies---such as nuclear power plants. International collaborations in developing these technologies, such as ITER, may be important to all energy areas. Fusion energy is viewed as an interesting potential option in these three countries.

\* This presentation is based upon talks given at a workshop held at IPP Garching, Germany on December 10-12, 2003.