



# **World Energy Outlook -2007**

## **China and India Insights**



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Informal High Level Brainstorming Meeting, 29 May, Paris



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# Objective of the Study

- Detailed analysis of the energy and environmental prospects for China and India – providing recommendations for Chinese and Indian decision makers on energy policy
- Assessment of the implications for global energy markets, the world economy and government policy



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# Outline Book Structure

- Part A: Global Implications of Energy Development in China and India
  - Part B: China's Energy Prospects
  - Part C: India's Energy Prospects
- with detailed tables, graphs, maps, etc.



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# Approach

- Update of global energy outlook
- Scenario approach:
  - Reference Scenario
  - Alternative Policy Scenario
  - High Growth Scenario (China/India)
- Development of very detailed data-bases and models for China and India
- General equilibrium model to analyze impact on global economy and energy prices
- Cooperation with China's NDRC, India's NPC, ERI, TERI, IMF, World Bank, Asian Development Bank, etc.



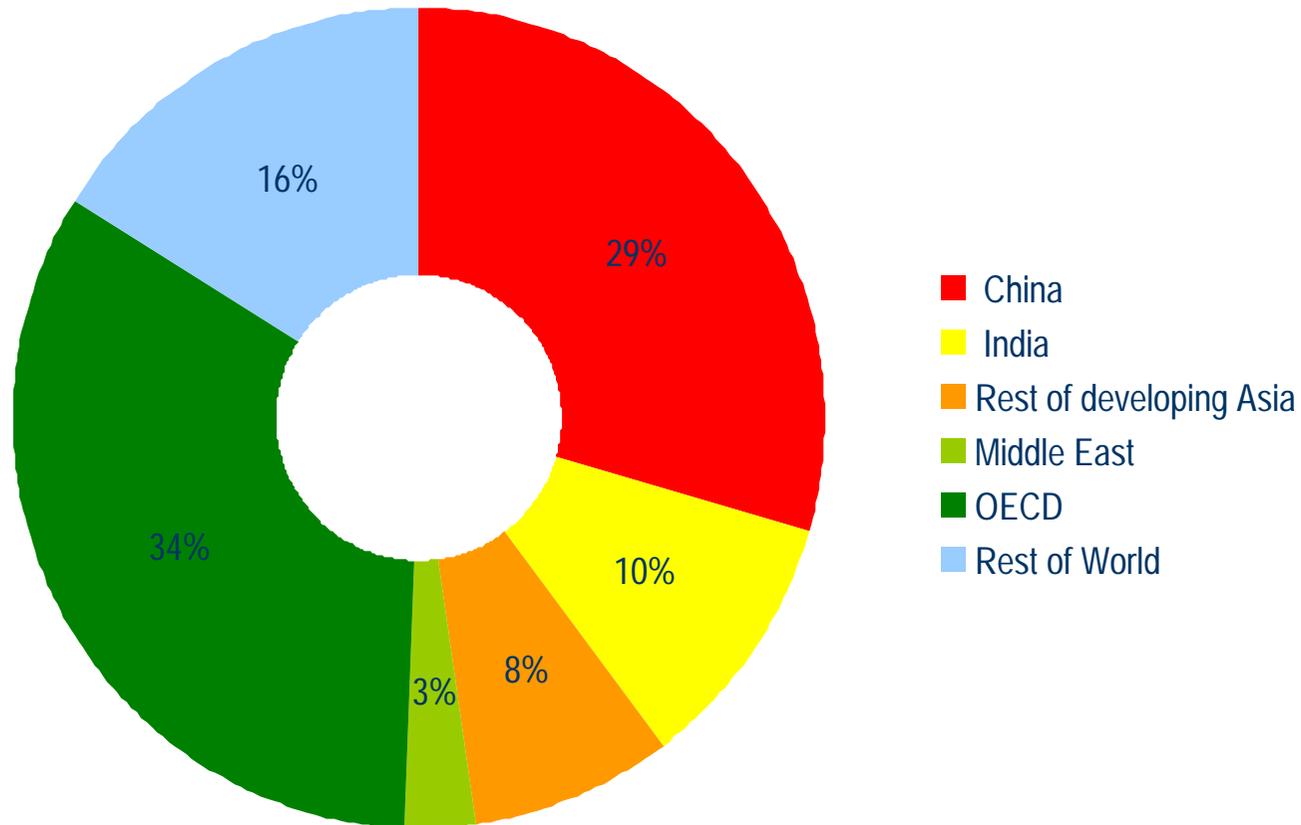
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# World GDP – Regional Shares



**Developing Asia accounts for nearly a half of the global GDP growth between 2001 and 2006, China alone for 30%**



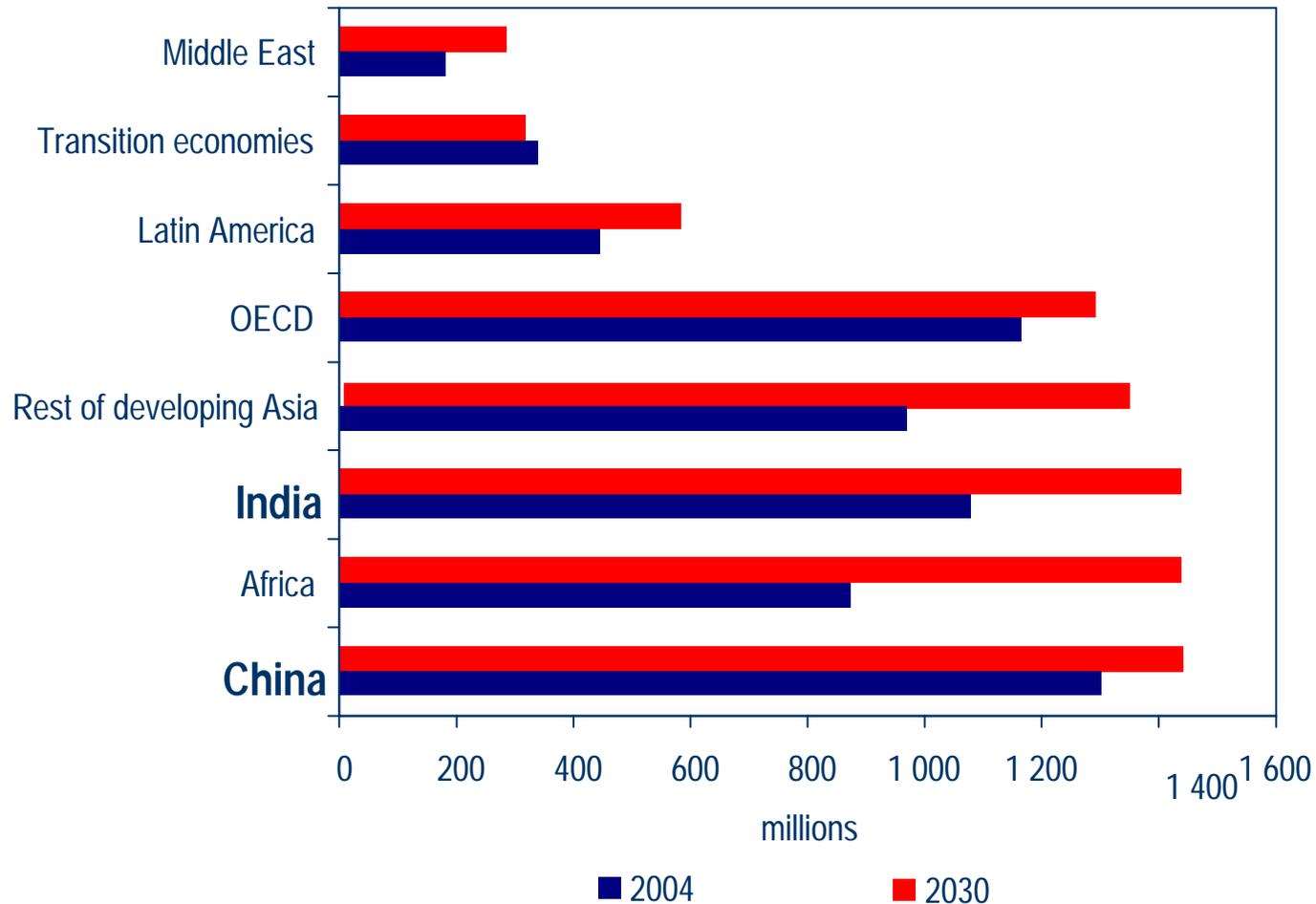
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# World Population by Region



**Developing Asia accounts for more than half of the world population, with per capita income almost tripling by 2030**

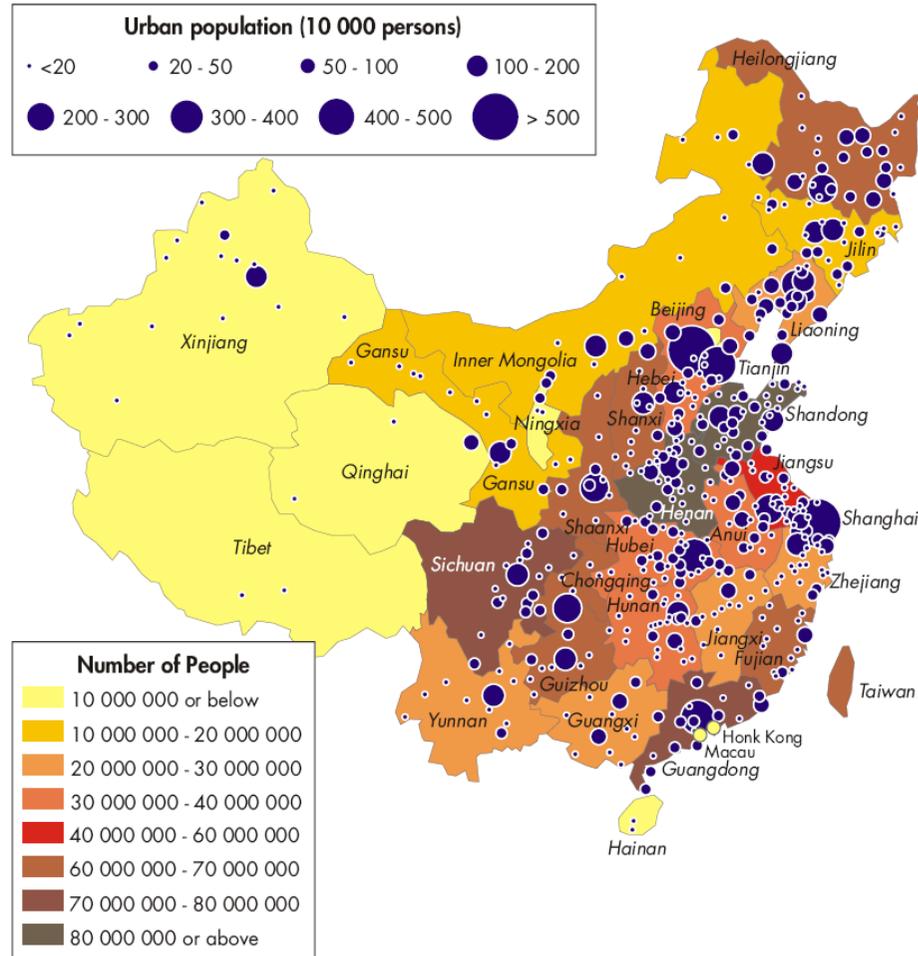


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# Urbanisation in China



Today "only" 40% of Chinese population live in urban area, by 2030 an additional 350 million people will leave in urban area



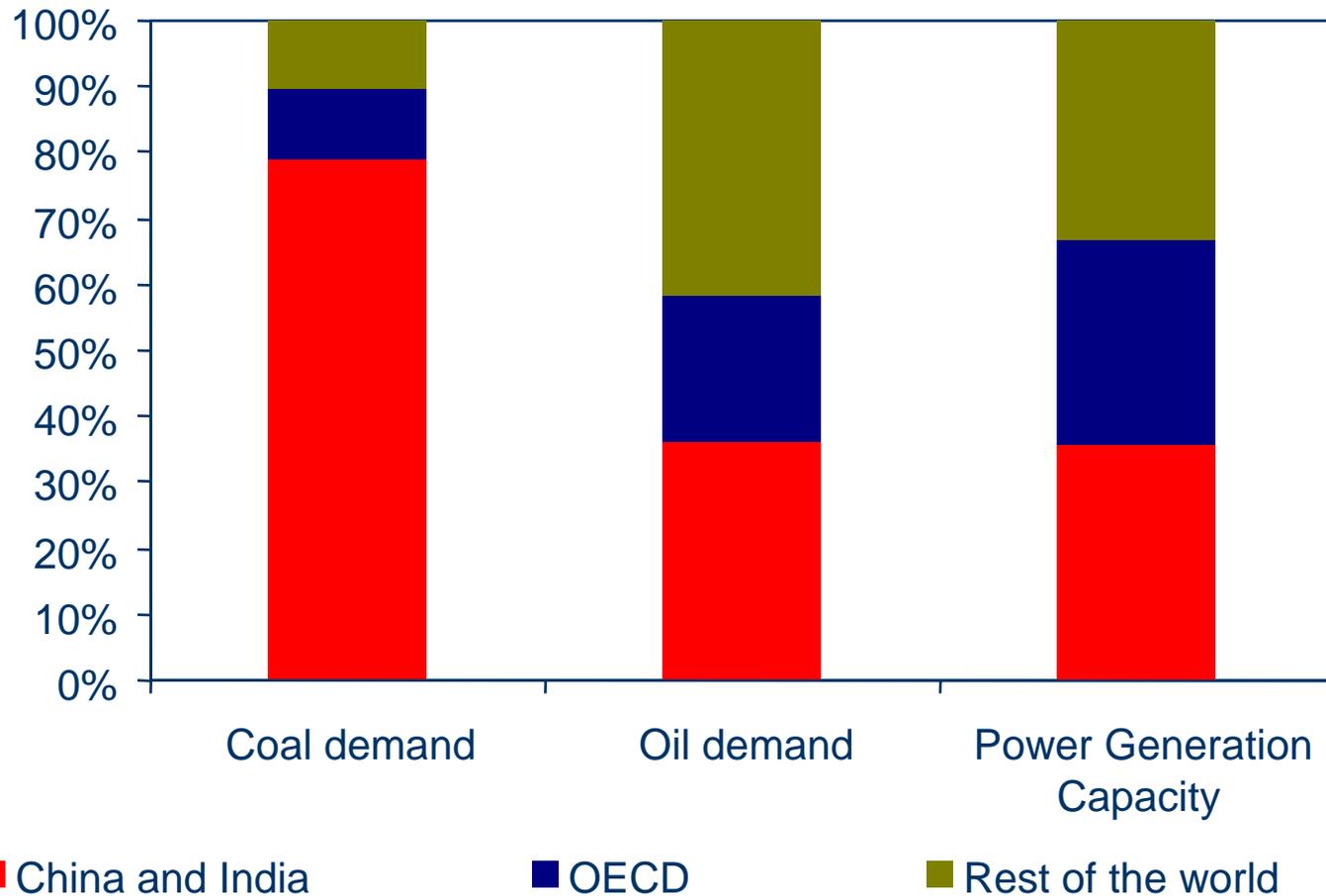
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## Reference Scenario: Share of China and India in the Global Coal, Oil and Power Capacity Growth, 2004-2030



**China and India account for a significant part of the growth in the global fuel demand and power generation capacity**



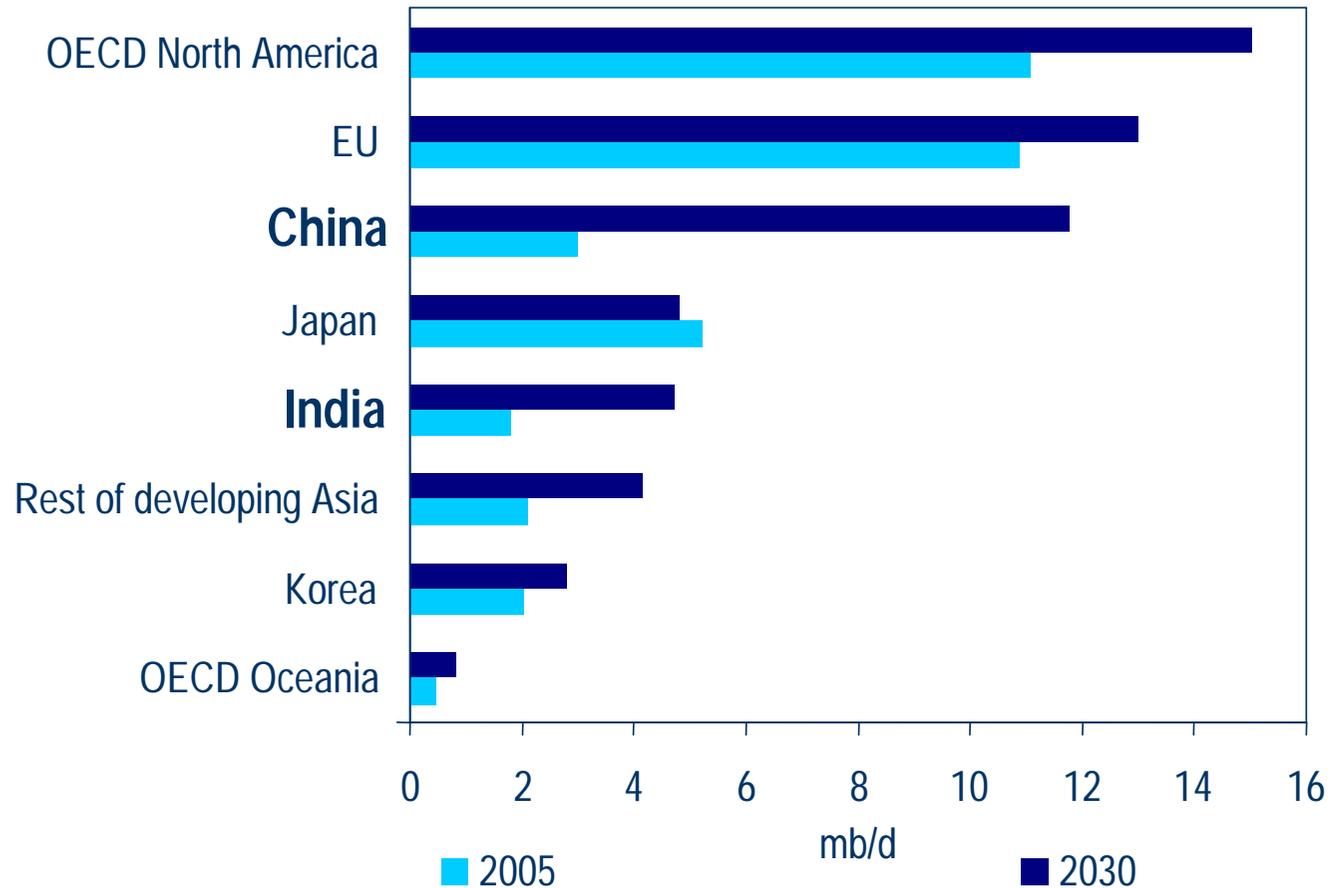
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# Net Oil Imports



**China and India see the biggest jump in oil imports in absolute terms, import dependency reaching nearly 80% in 2030**



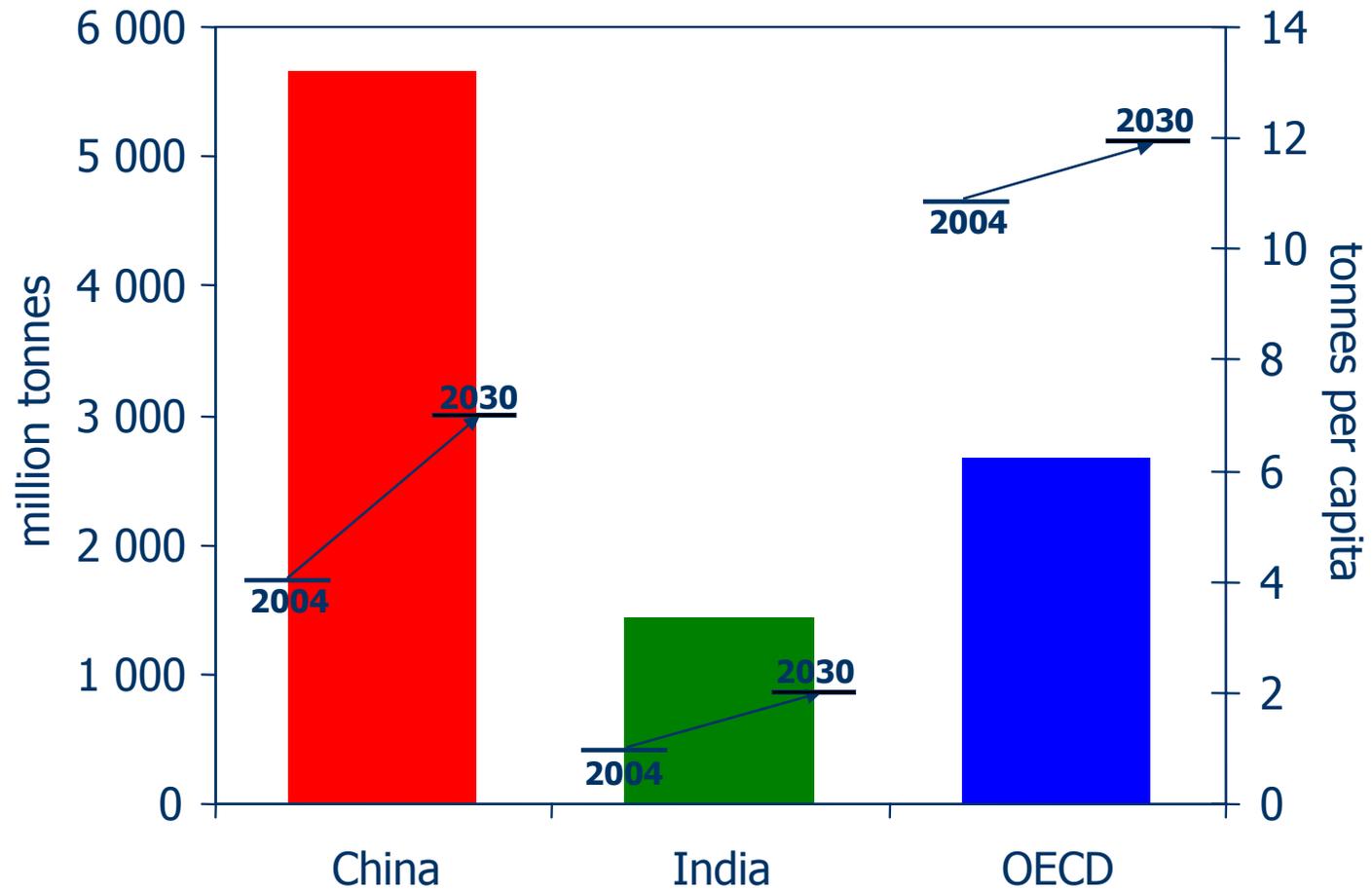
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# CO<sub>2</sub> Emissions Growth, 2004-2030



**Emissions growth in China is twice as large as in the OECD, but in 2030 per capita emissions will be lower than OECD ones in 2004**



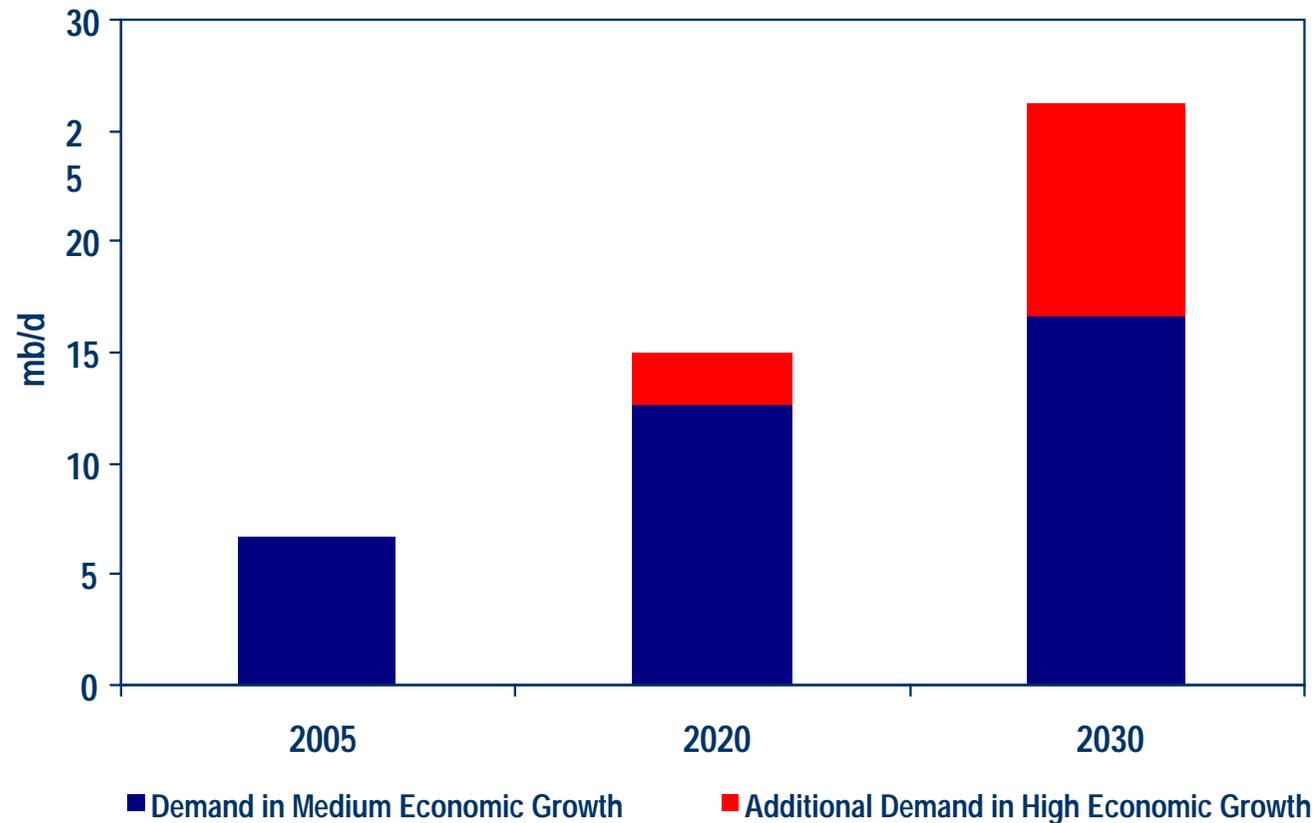
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# China's Oil Demand: Medium and High Economic Growth Scenarios



**A high economic growth path will bring substantial amount of additional oil demand growth**



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# Expected Outcomes of Today's High Level Brainstorming

- How will OECD and other developing countries economy be impacted in the long term from China and India rise?
- How will global energy/commodities markets react to the increasing import needs of China and India?
- What are the key energy and environment policy questions at global level linked to the rising importance of China and India
- Is there a role for OECD countries in assisting China and India in addressing energy-security and environmental concerns?
- What active role can the IEA take in this changing energy world?



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# Workplan

- Nov-May: Data collection, modelling and analysis
- Workshops:
  - End-March: Workshops in Beijing/New Delhi
  - Mid-May: IEA/OPEC Workshop in Bali
  - **29 May: Brainstorming meeting in Paris**
- Jun-Aug: Completion of results and drafting
- Aug-Sep: Incorporation of peer reviewer comments and fine-tuning results
- 7 November: Release to international press in London