The background features a red and blue color scheme with a network of white lines connecting various points, overlaid on a globe. The globe is rendered in shades of blue and white, showing continents and oceans.

Les Echos

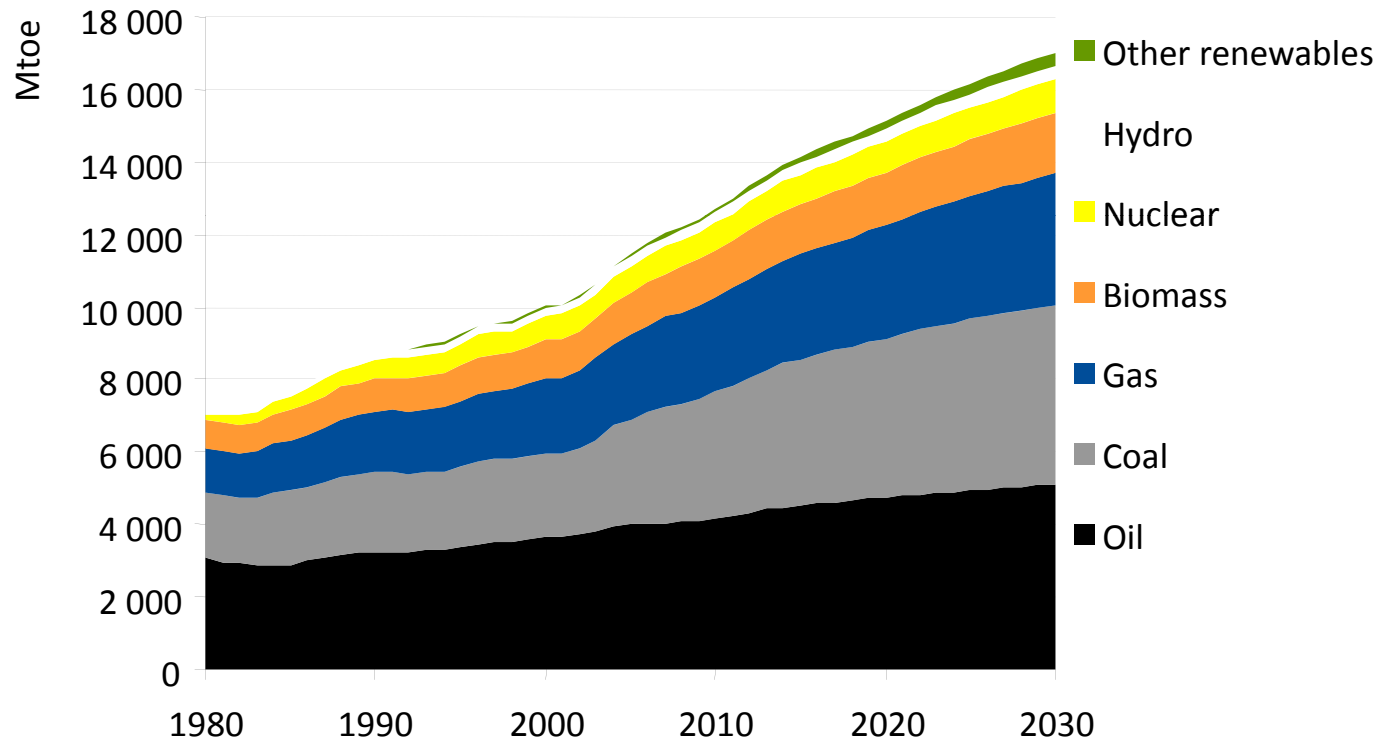
12th annual energy conference

10 February 2009

Ambassador Richard H. Jones
Deputy Executive Director
International Energy Agency



World primary energy demand in the Reference Scenario: this is unsustainable!



World energy demand expands by 45% between now and 2030 – an average rate of increase of 1.6% per year – with coal accounting for more than a third of the overall rise

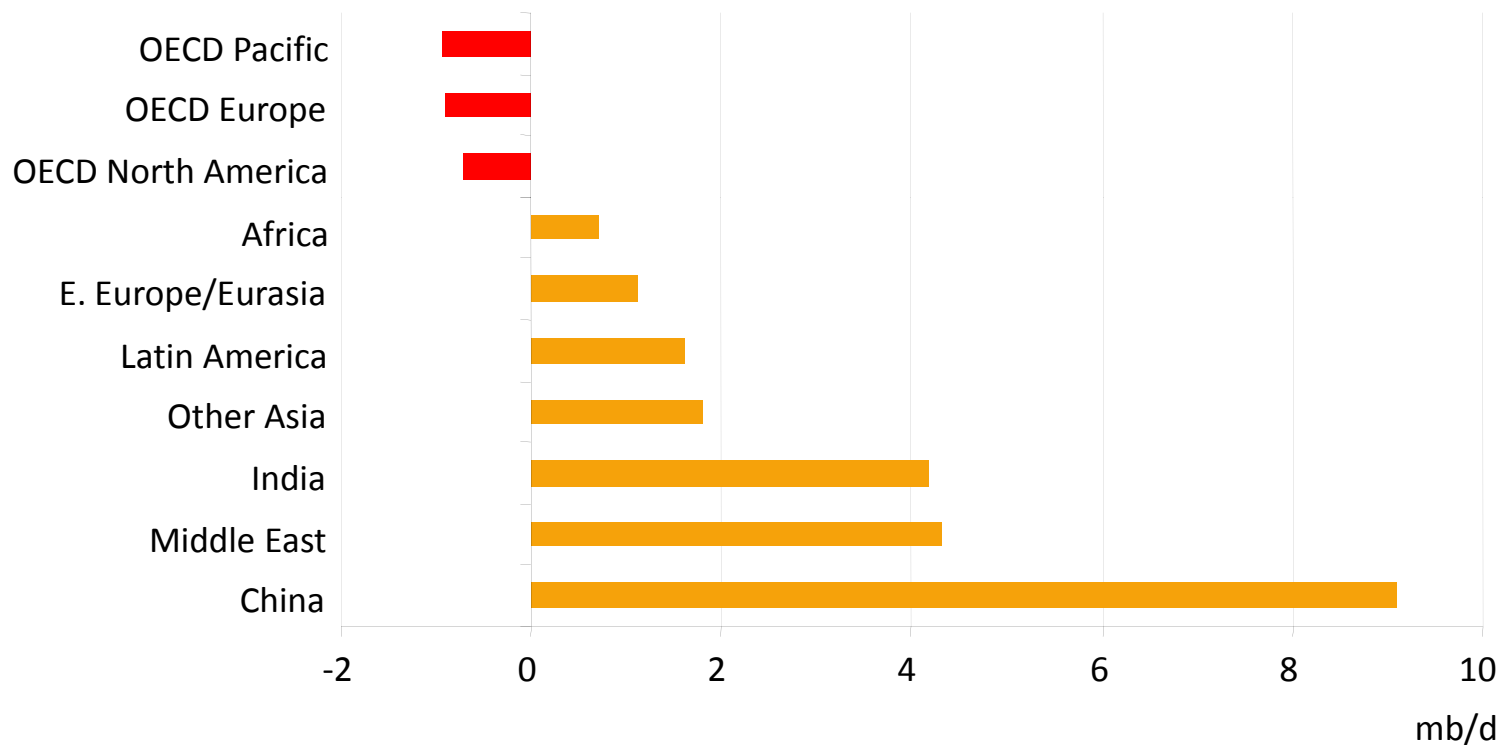
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Change in oil demand by region in the Reference Scenario, 2007-2030



All of the growth in oil demand comes from non-OECD, with China contributing 43%, the Middle East & India each about 20% & other emerging Asian economies most of the rest

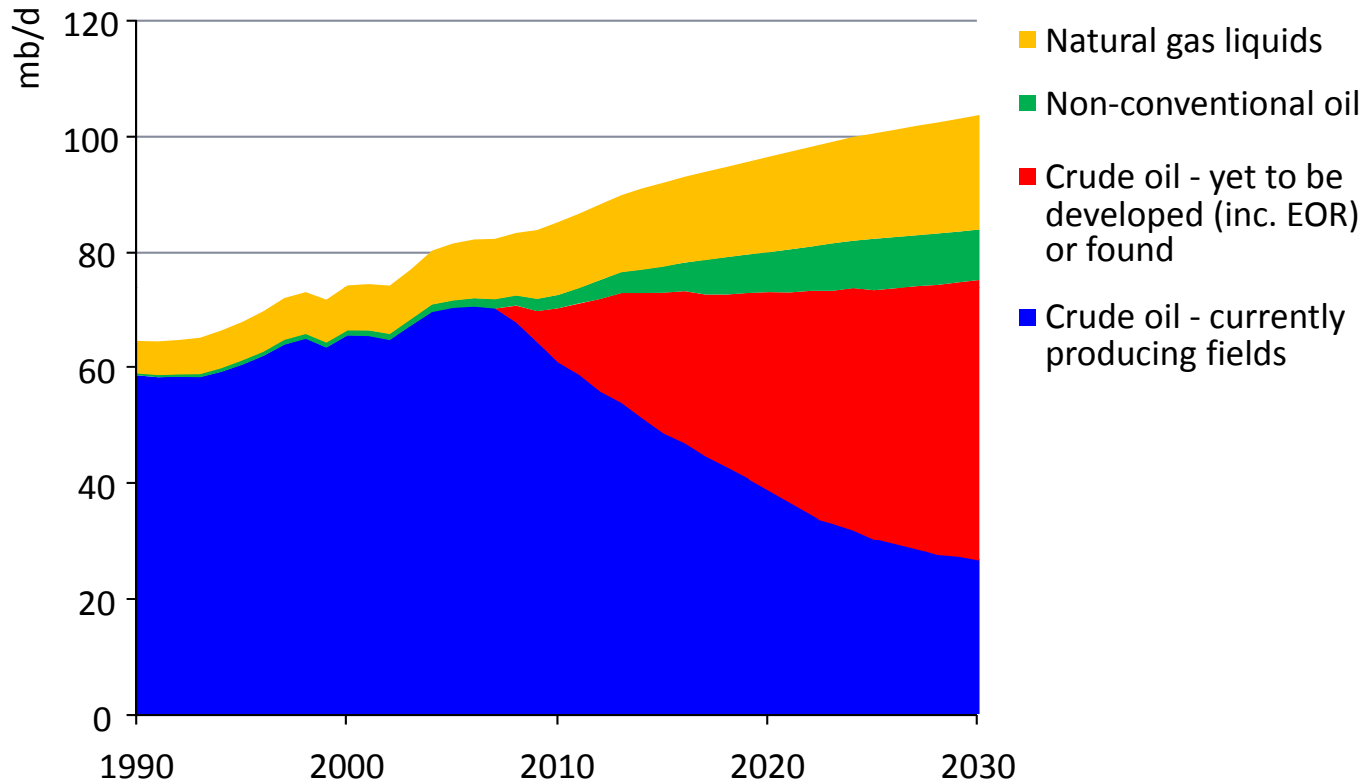
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World oil production by source in the Reference Scenario



Even if oil demand was to remain flat to 2030, 45 mb/d of gross capacity – roughly four times the capacity of Saudi Arabia – would be needed just to offset decline from existing oilfields

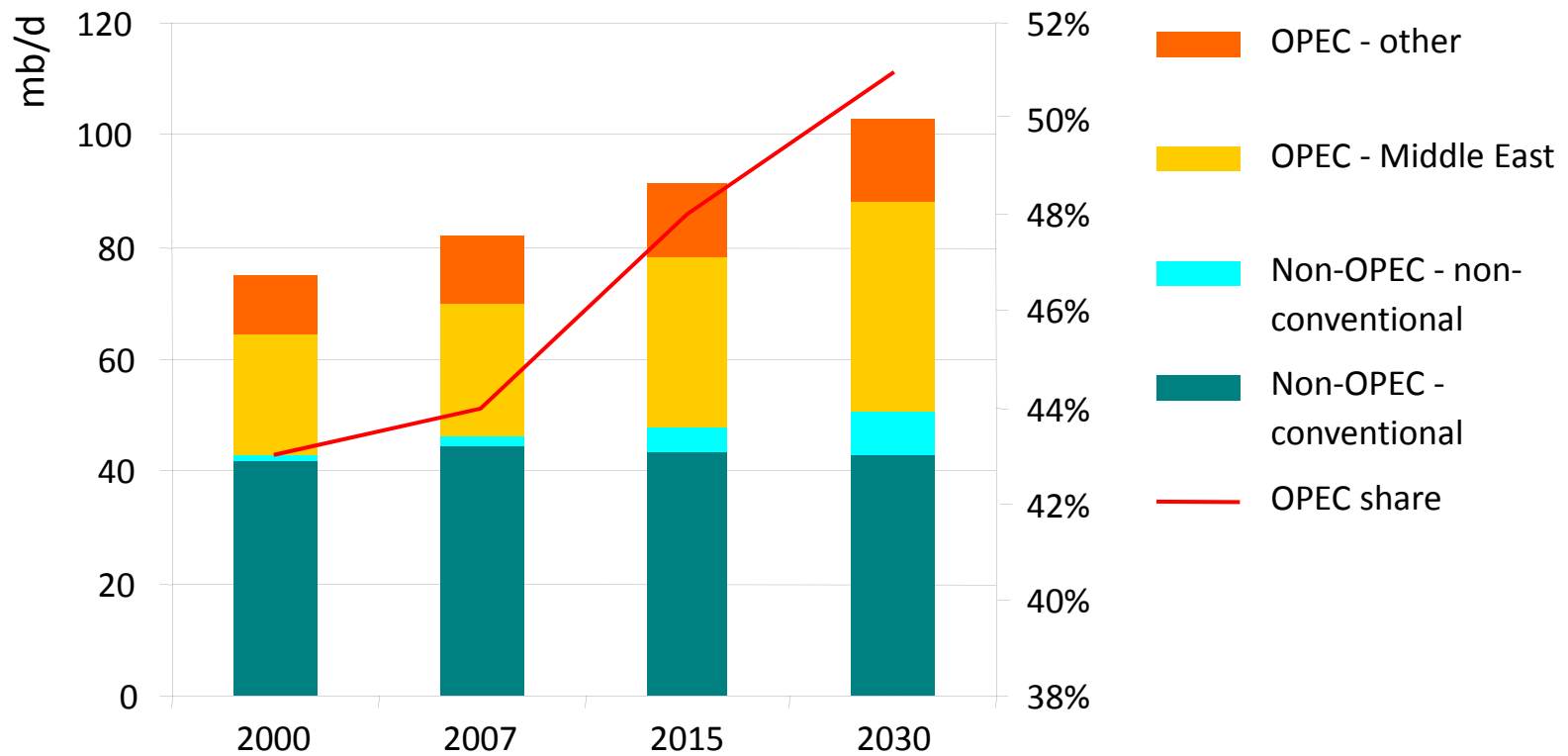
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World oil production by OPEC/non-OPEC in the Reference Scenario

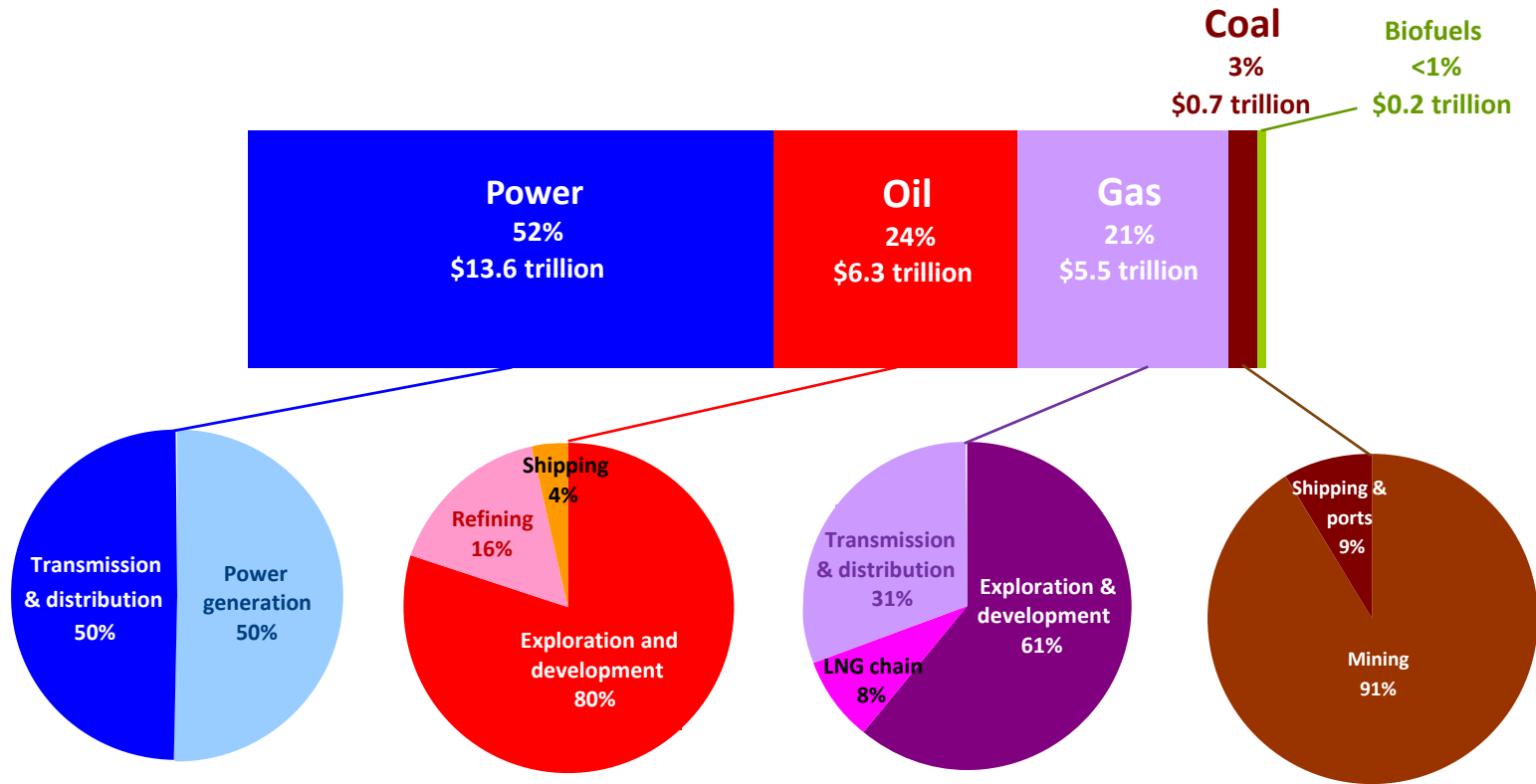


Production rises to 104 mb/d in 2030, with Middle East OPEC taking the lion's share of oil market growth as conventional non-OPEC production declines

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Cumulative energy-supply investment in the Reference Scenario, 2007-2030

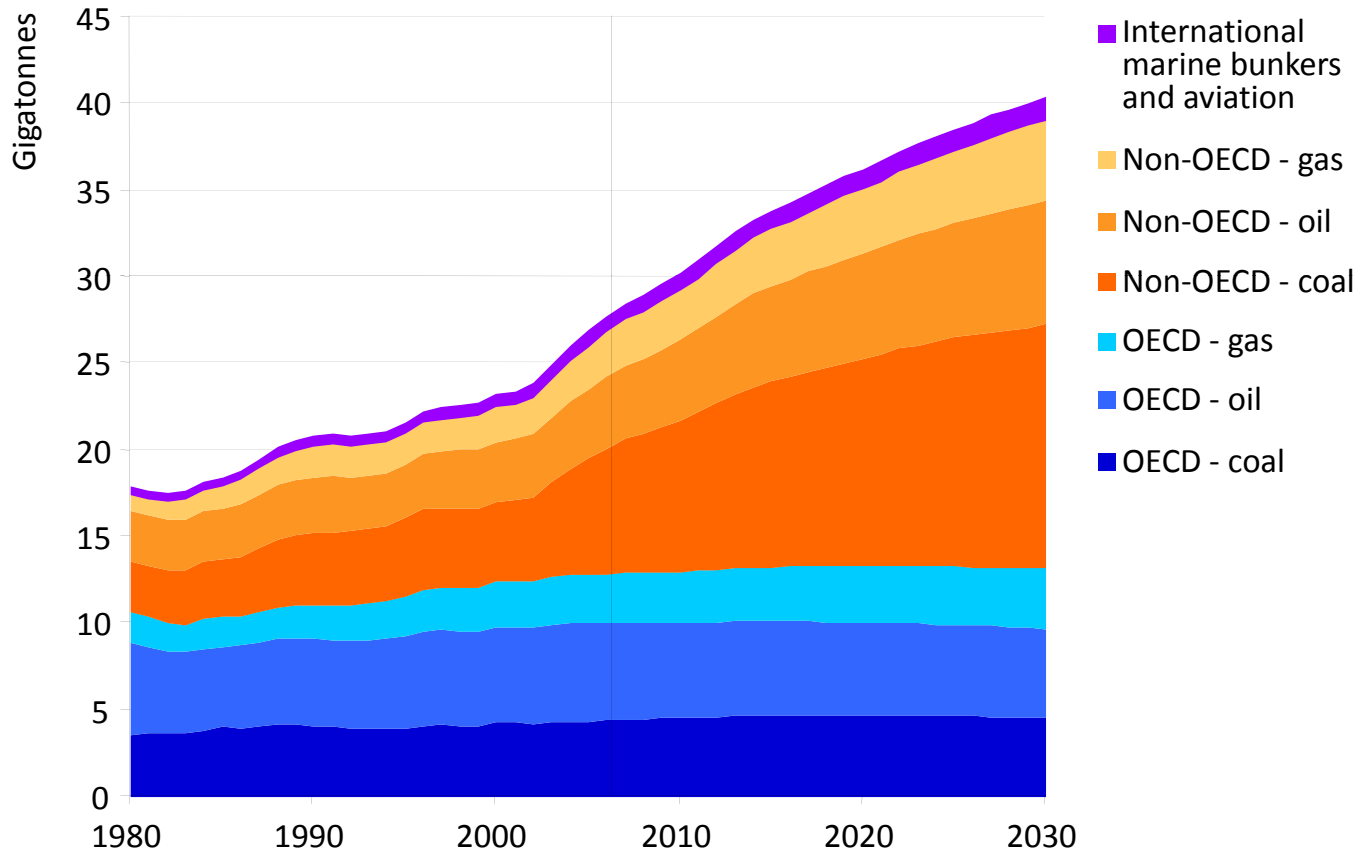


Investment of \$26 trillion, or over \$1 trillion/year, is needed, but the credit squeeze could delay spending, potentially setting up a supply-crunch once the economy recovers

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Energy-related CO₂ emissions in the Reference Scenario



97% of the projected increase in emissions between now & 2030 comes from non-OECD countries – three-quarters from China, India & the Middle East alone

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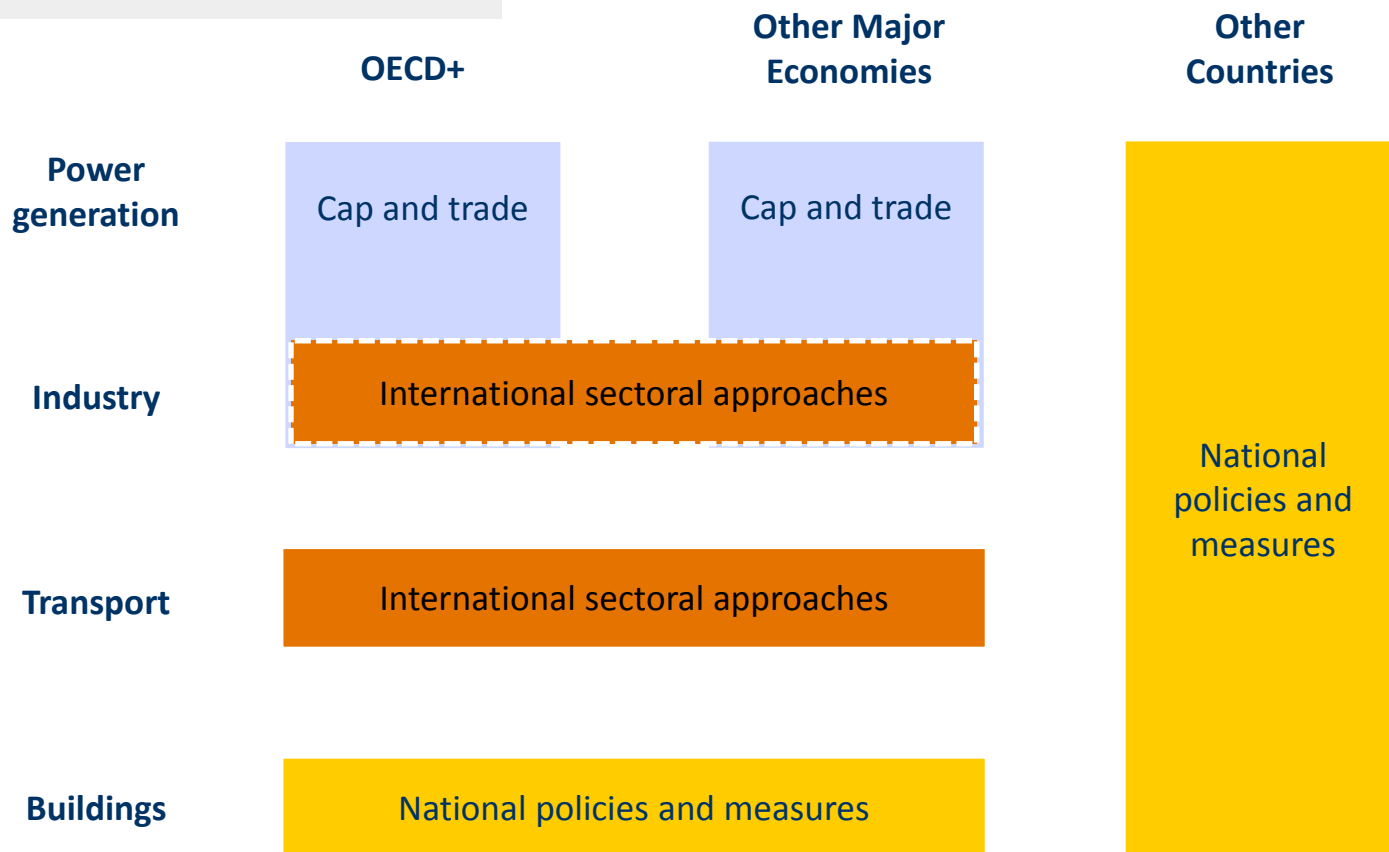
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Copenhagen: a plausible post-2012 global climate-change policy regime

The **450** Policy Scenario

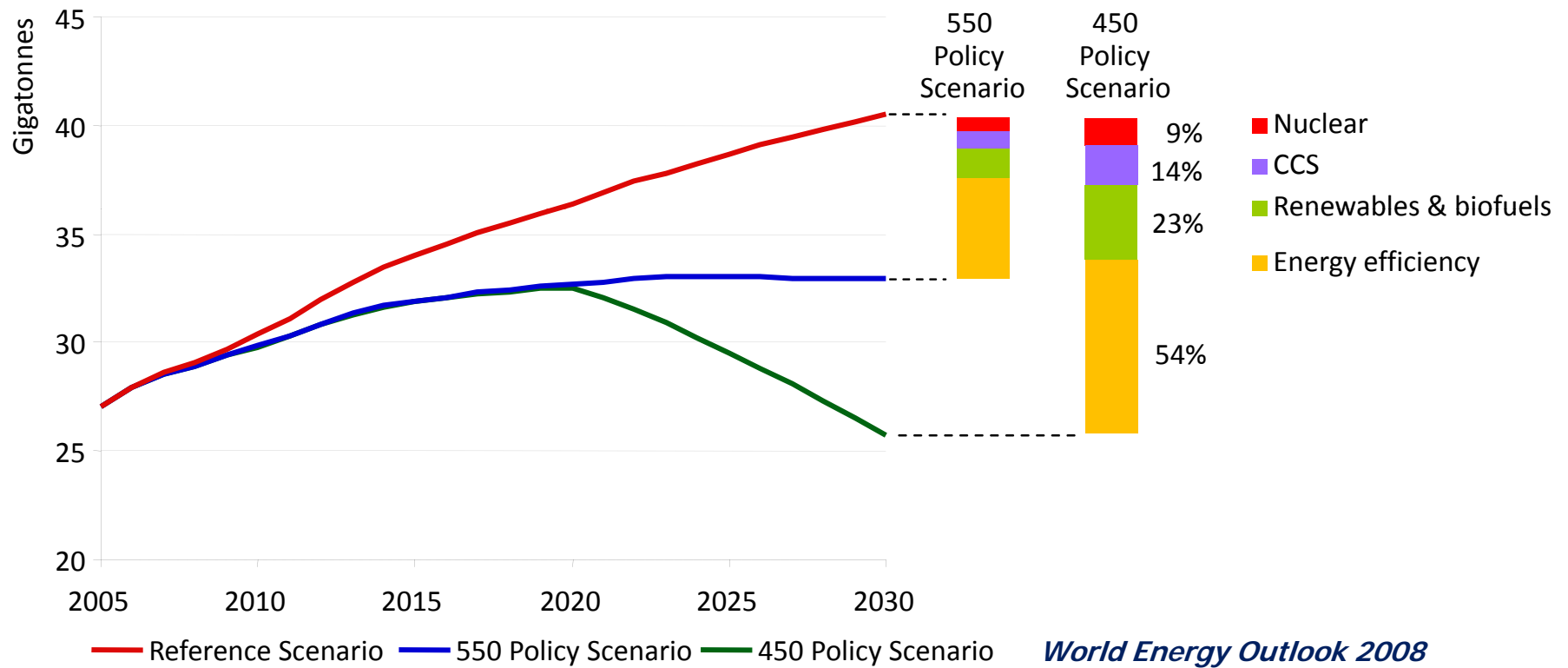


A combination of policy mechanisms – reflecting nations’ varied circumstances & current negotiating positions – is a realistic outcome at the Copenhagen COP at end-2009

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Achieving a lower energy emissions pathway



While technological progress is needed to achieve some emissions reductions, efficiency gains and deployment of existing low-carbon energy accounts for most of the savings

We need not wait!

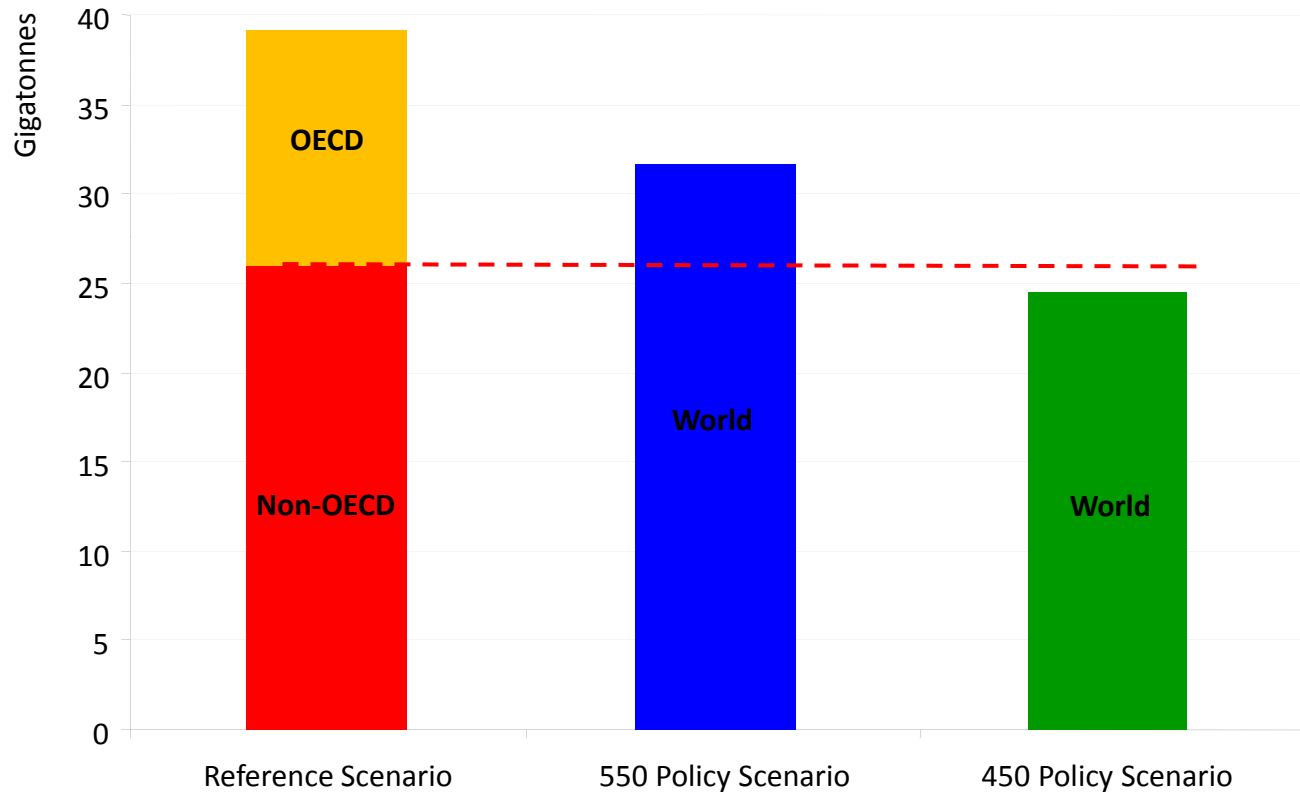
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World energy-related CO₂ emissions in 2030 by scenario



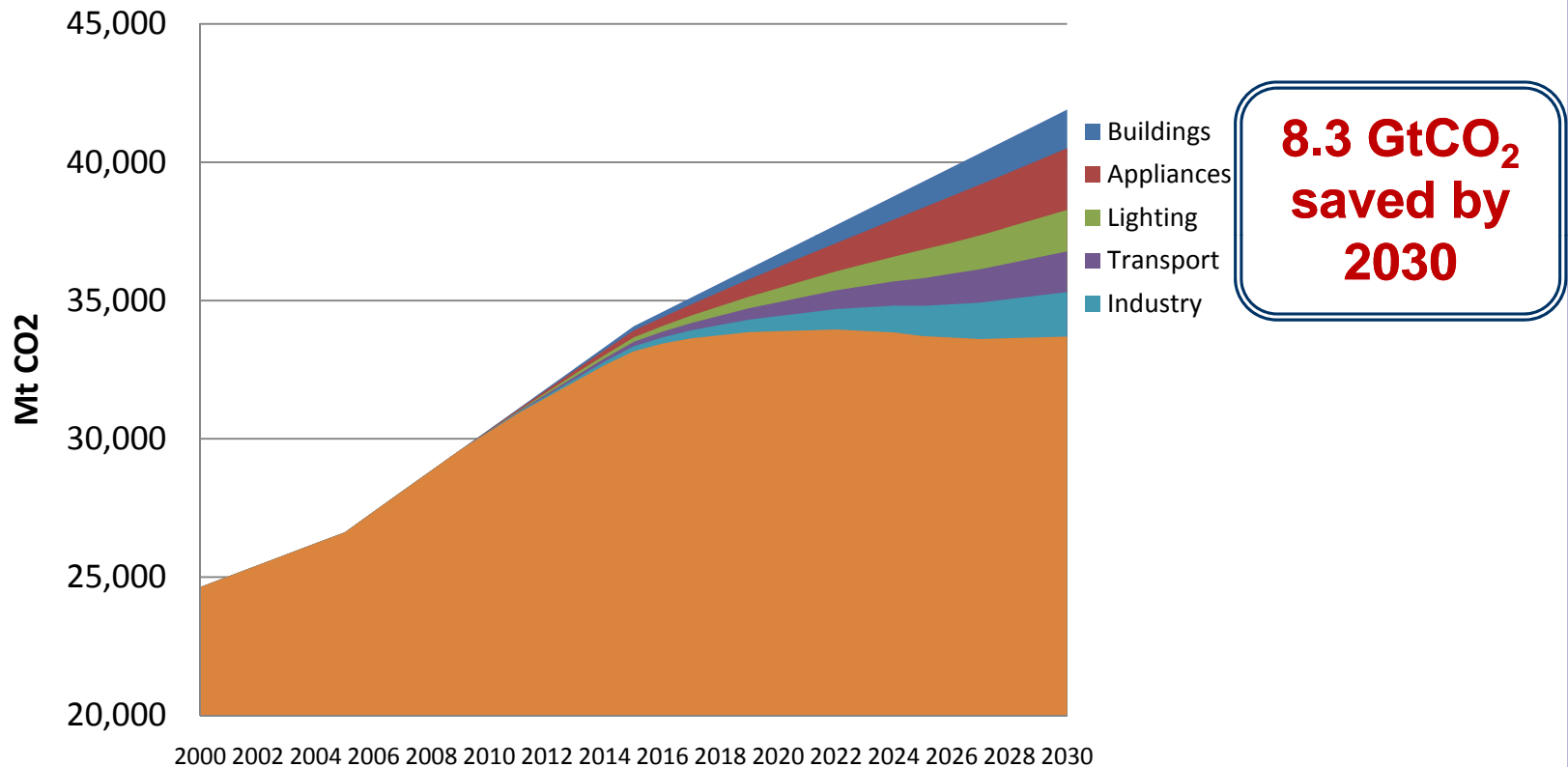
OECD countries alone cannot put the world onto a 450-ppm trajectory, even if they were to reduce their emissions to zero

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A Clean Energy New Deal (1)

G8 leaders at Hokkaido welcome the IEA's
25 Concrete Recommendations on energy efficiency



Worldwide Implementation Now

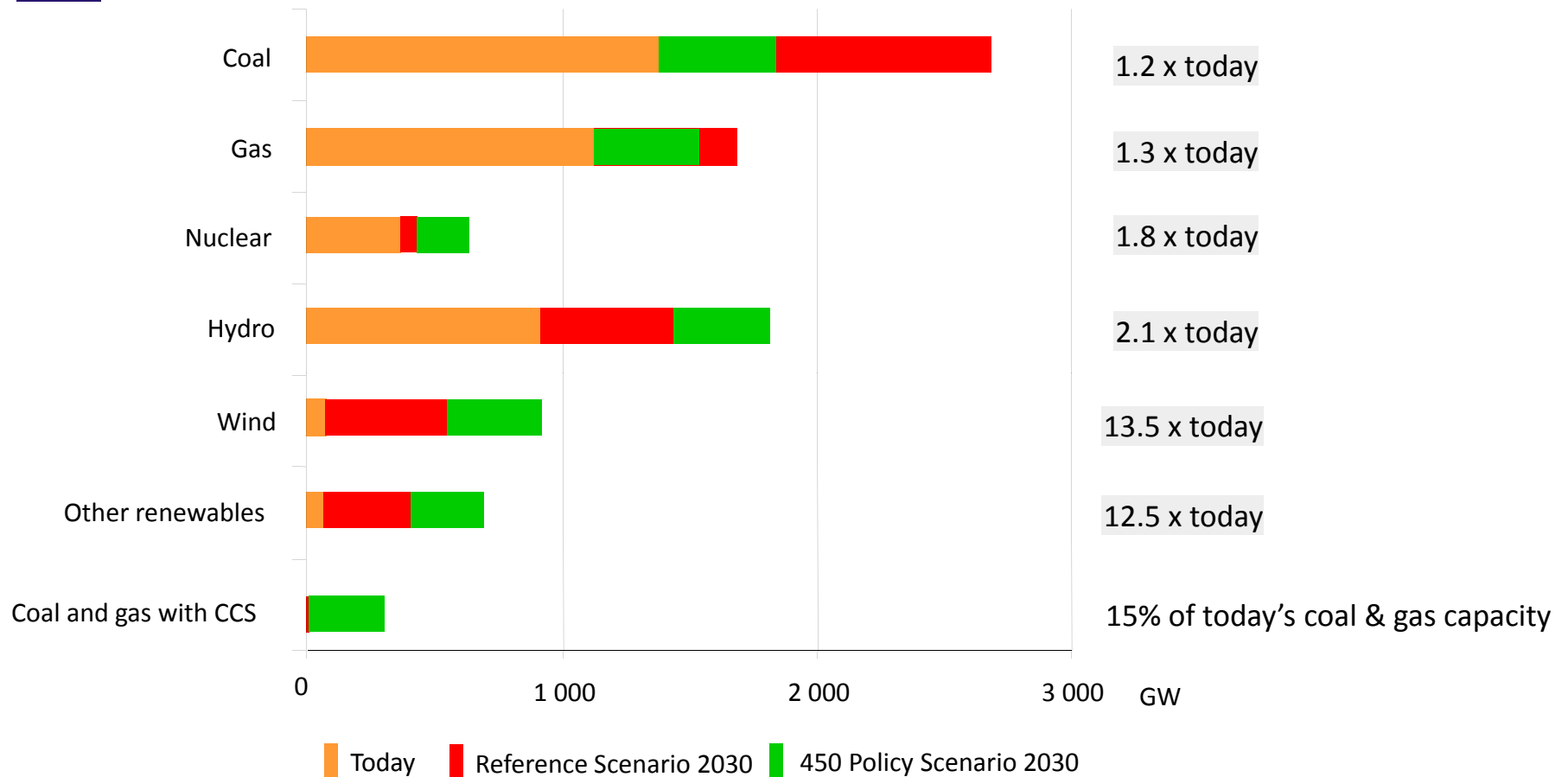
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A Clean Energy New Deal (2)



Governments must guide investment toward clean energy infrastructure and clean energy technology development



Summary & conclusions

- Current energy trends are patently unsustainable
- Era of cheap energy is over
- To avoid "abrupt and irreversible" climate change we need a major de-carbonization of the world's energy system
- The economic crisis is no excuse for delay in addressing energy & climate change challenges
- Economic stimulus packages provide an excellent opportunity for investment in a greener, more sustainable energy sector
- What can governments do? A "Clean Energy New Deal":
 1. Upfront, low cost action: energy efficiency measures
 2. Support for clean energy infrastructure projects, including CCS
 3. Ensure a price on carbon
 4. Additional expenditure and incentives for clean energy RD&D

W.I.N. = Worldwide Implementation Now!