



BP Energy Outlook NA Rail Shipper Conference

San Francisco – May 2011



- A little about me!
- Energy Outlook 2030 from a BP perspective
 - Context
 - Projections
 - BP Implications
- North American outlook from other parties
- BP's response to market changes

Jeff Foshee... a short history





- For 60 years, BP produces a Statistical Review of World Energy
- Published version: BP Energy Outlook www.bp.com/energyoutlook2030

Key messages:

- Population grew more than previous 100,000 years
- Since 1970 – population 2X, GDP 3X, Energy 2.5X
- In 1970 OECD used 70% of energy – '09 used 47%
- Emerging economies now dominate global use
- By 2030, distinctions between OECD & non-OECD will not exist



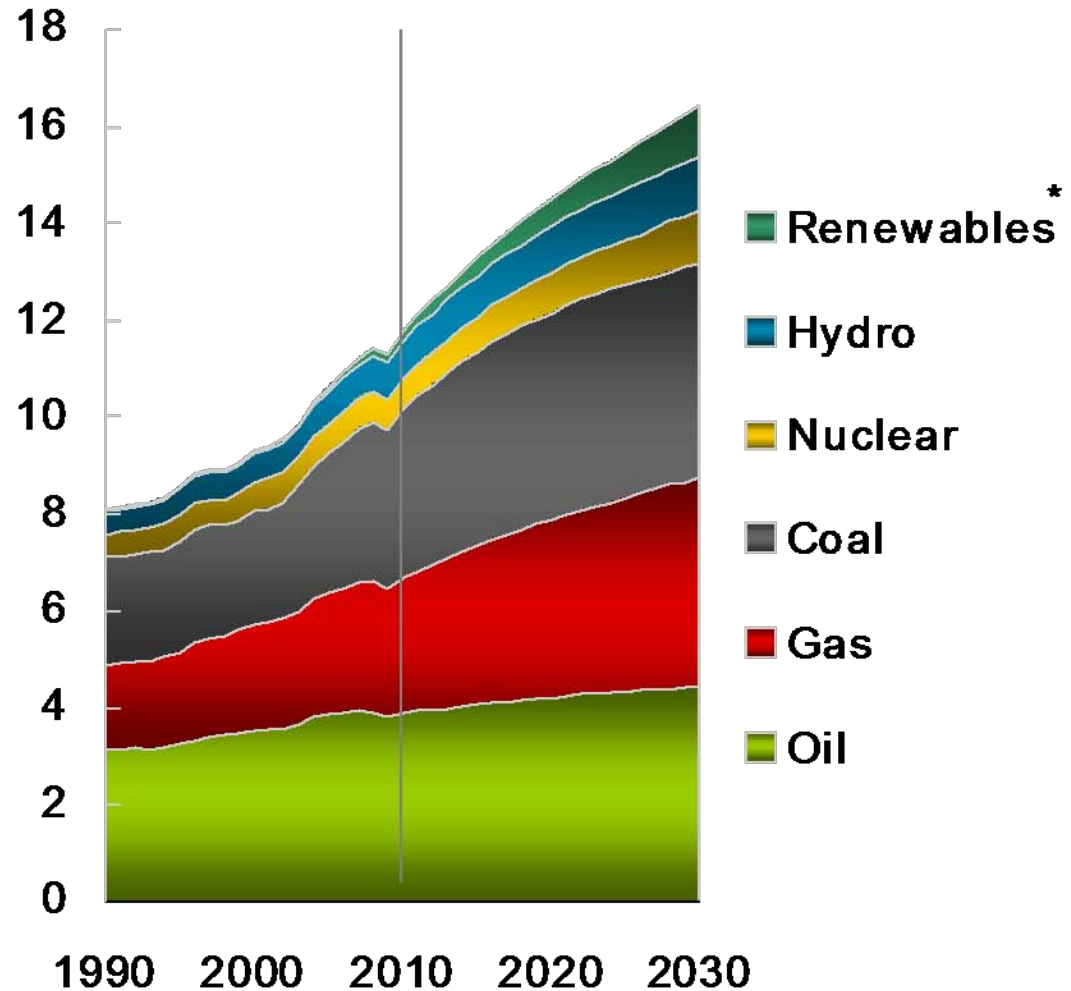
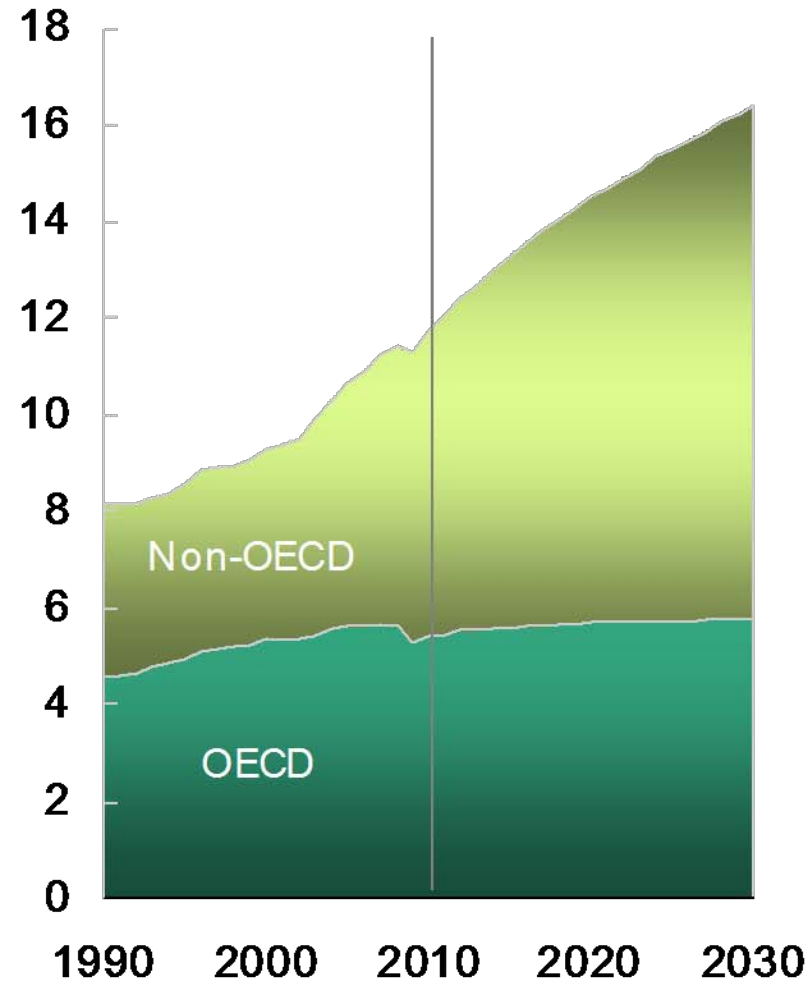
Fear continues on the supply side but the market shows it will drive innovation to avert crisis

Non-OECD economies drive consumption growth



Billion toe

Billion toe

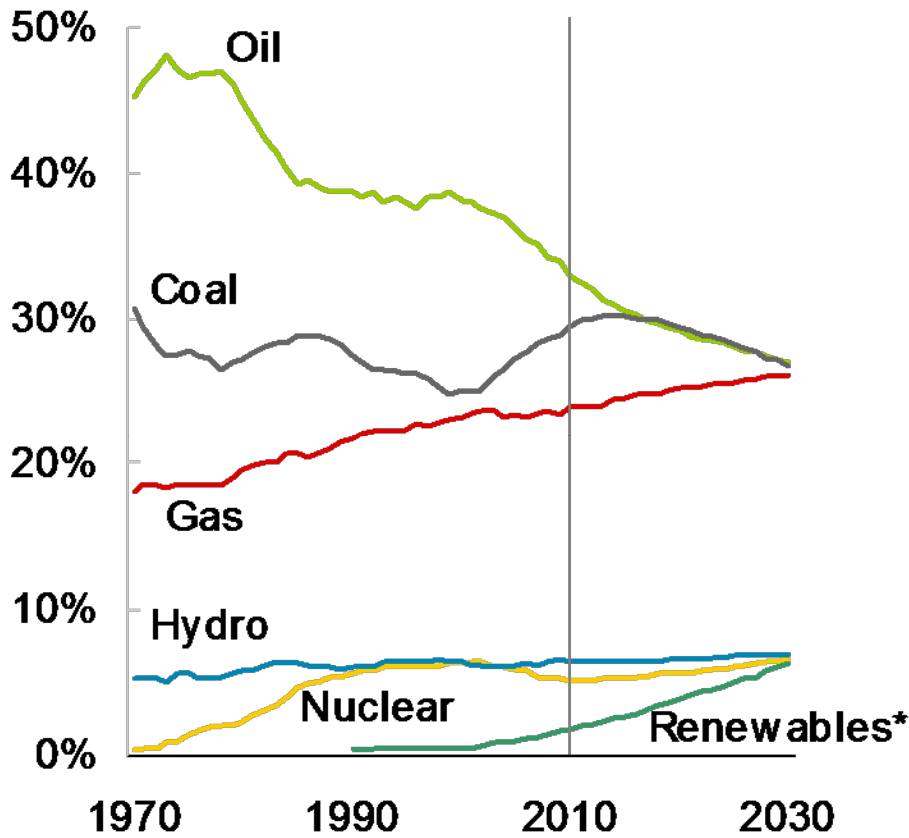


* Includes biofuels.

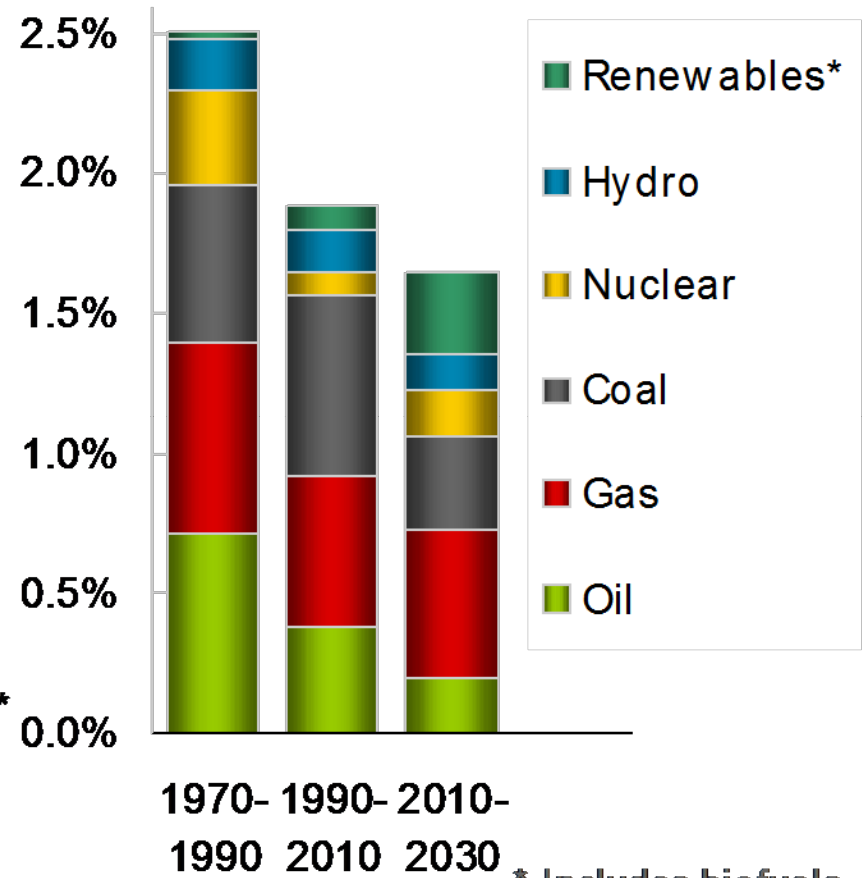
Gas and renewables win as fuel shares converge



Shares of world primary energy



Contributions to growth

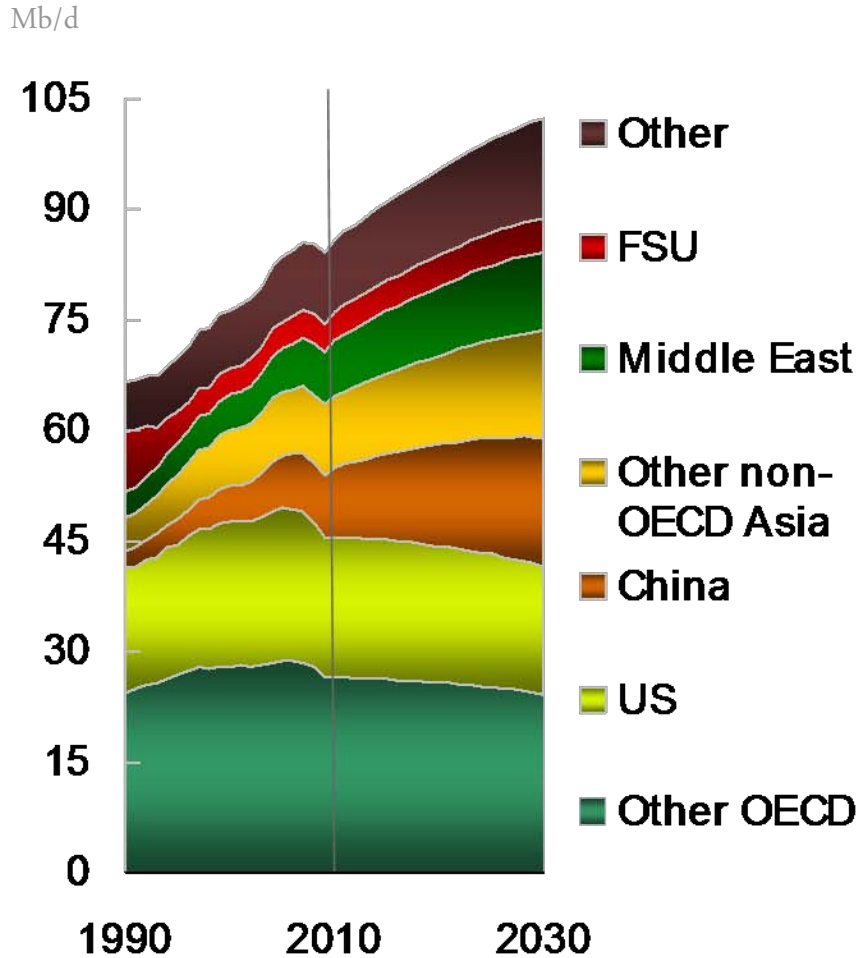


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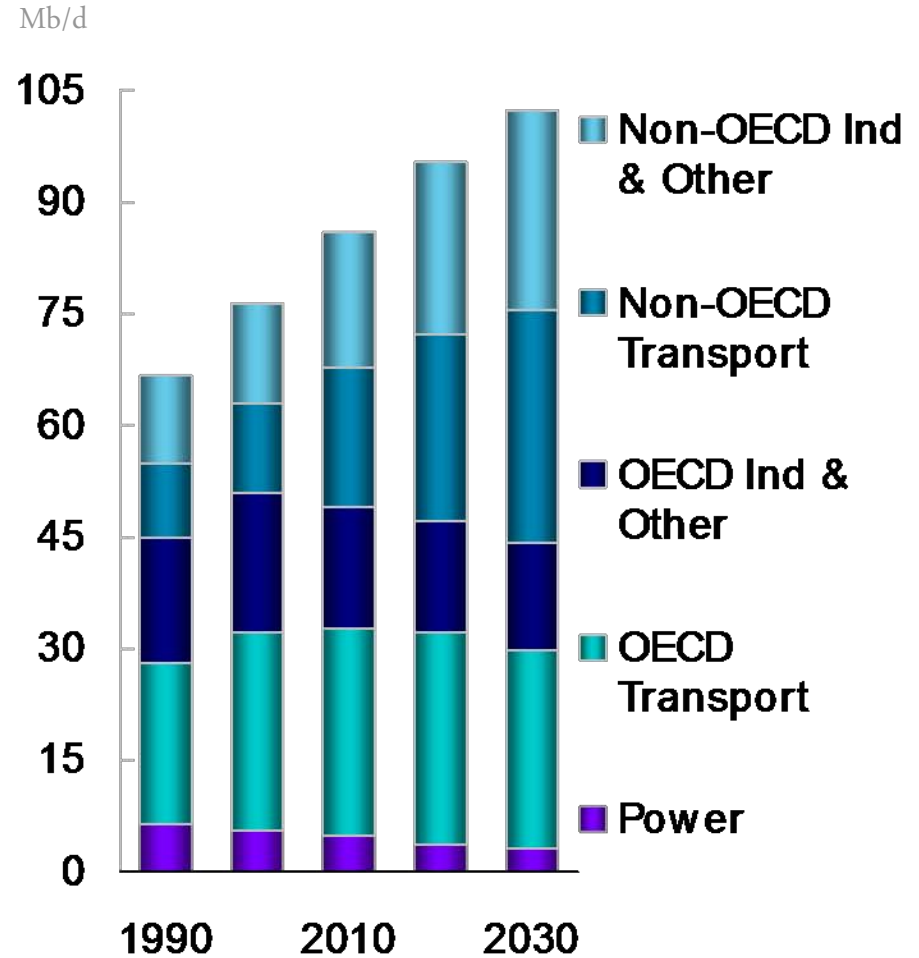
Demand growth driven by non-OECD transport and industry



Liquids demand by region



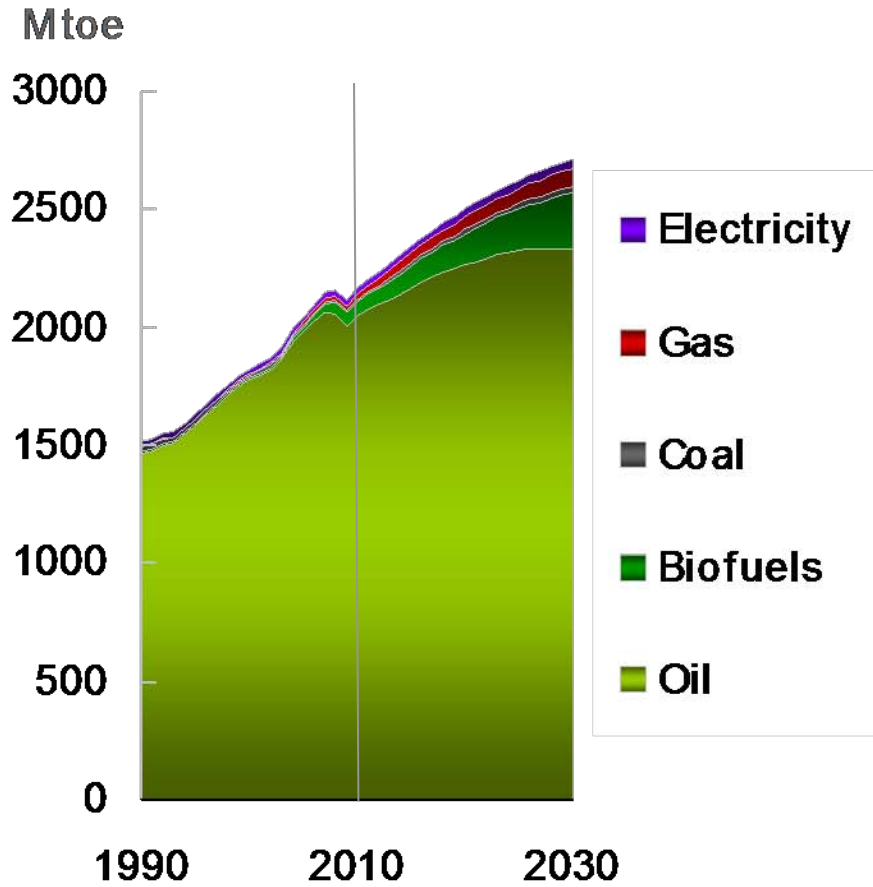
Liquids demand by sector



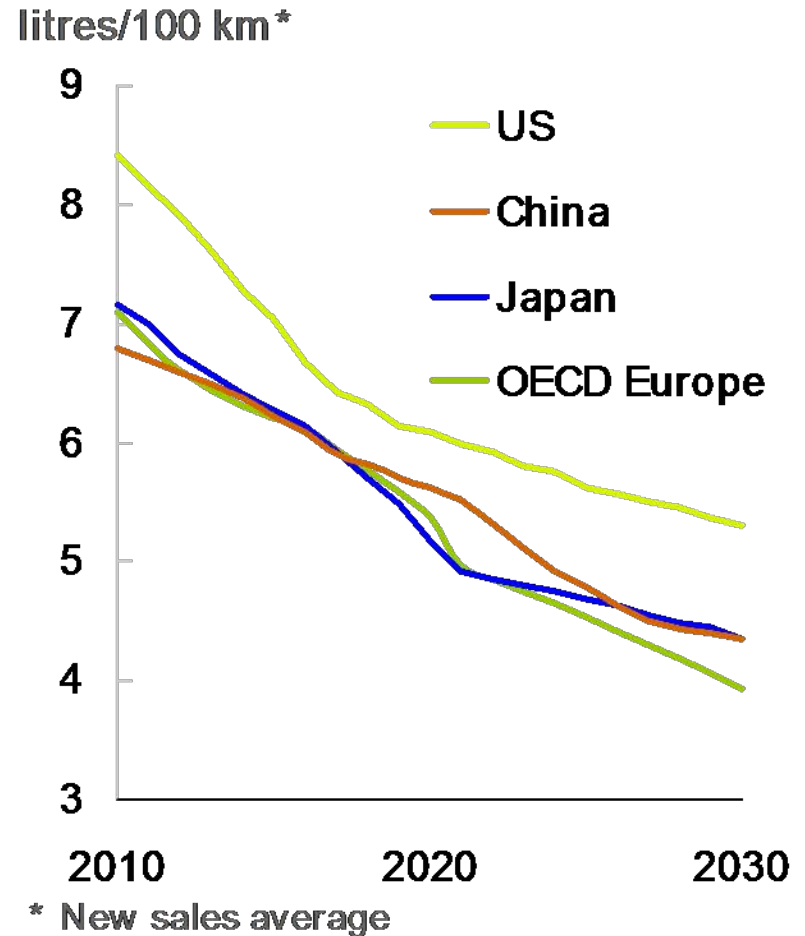
Oil growth in the transport sector slows



Energy in transport



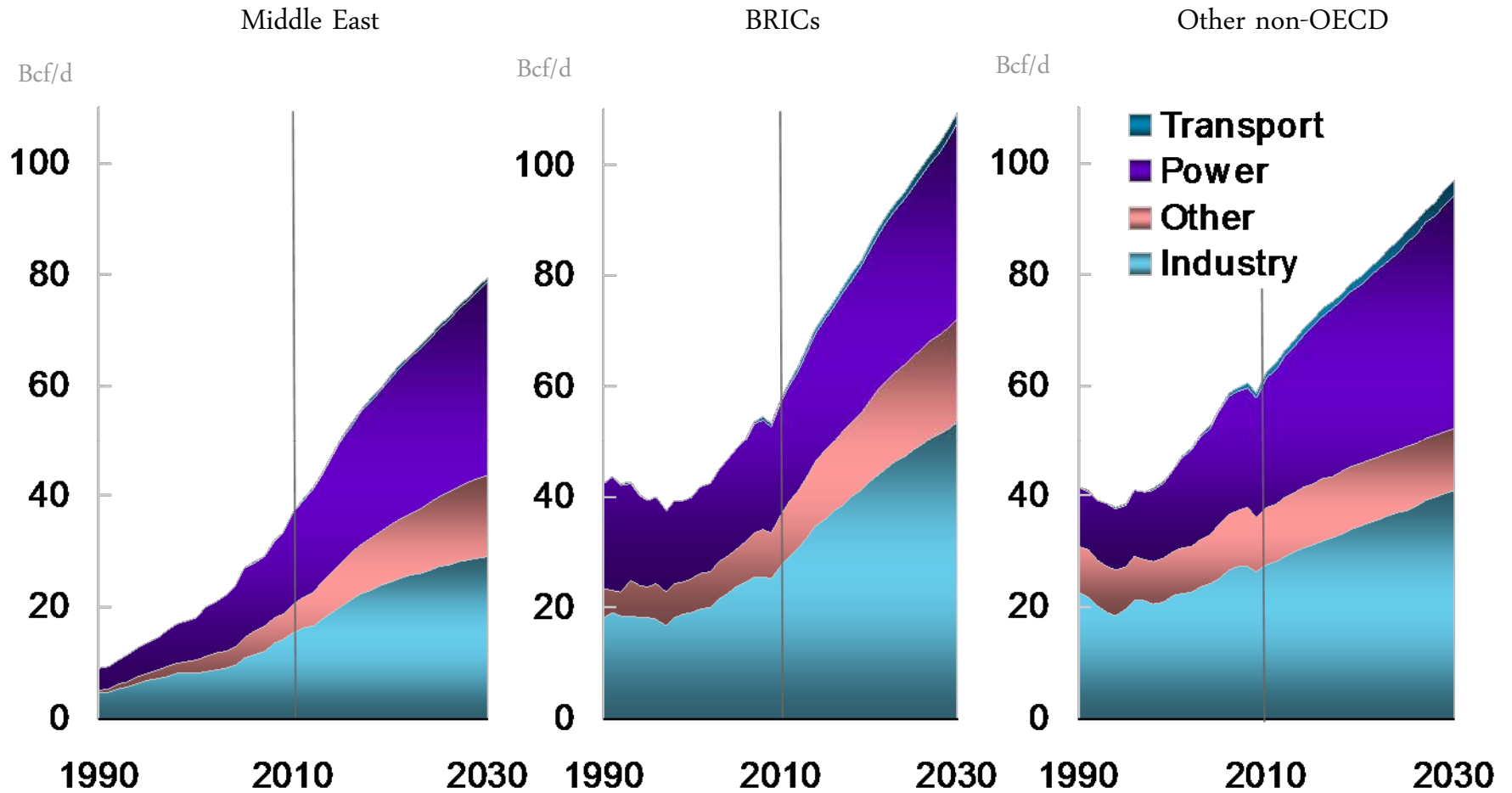
Passenger car fuel economy



Non-OECD gas demand grows for structural reasons



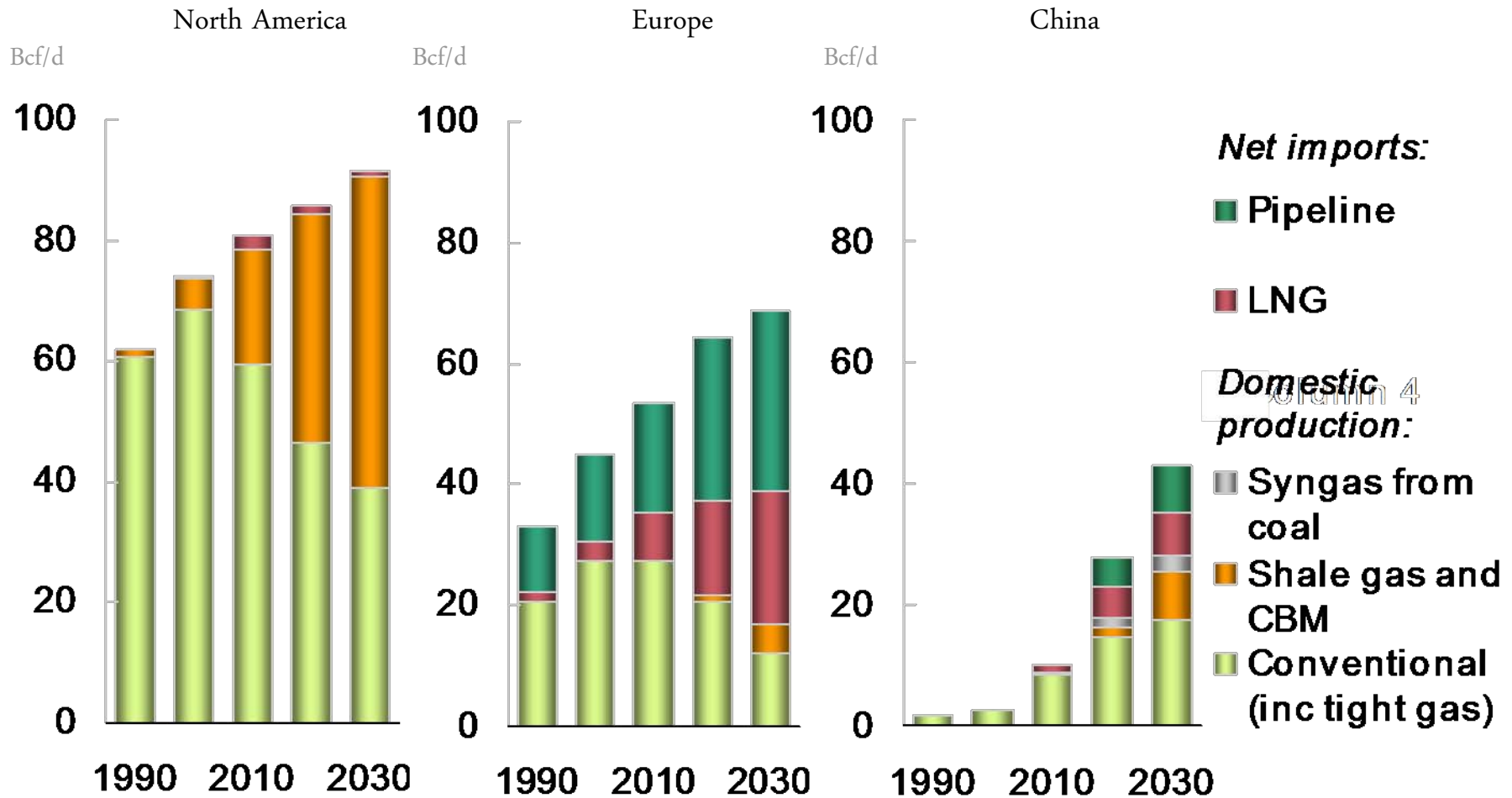
Gas demand by sector



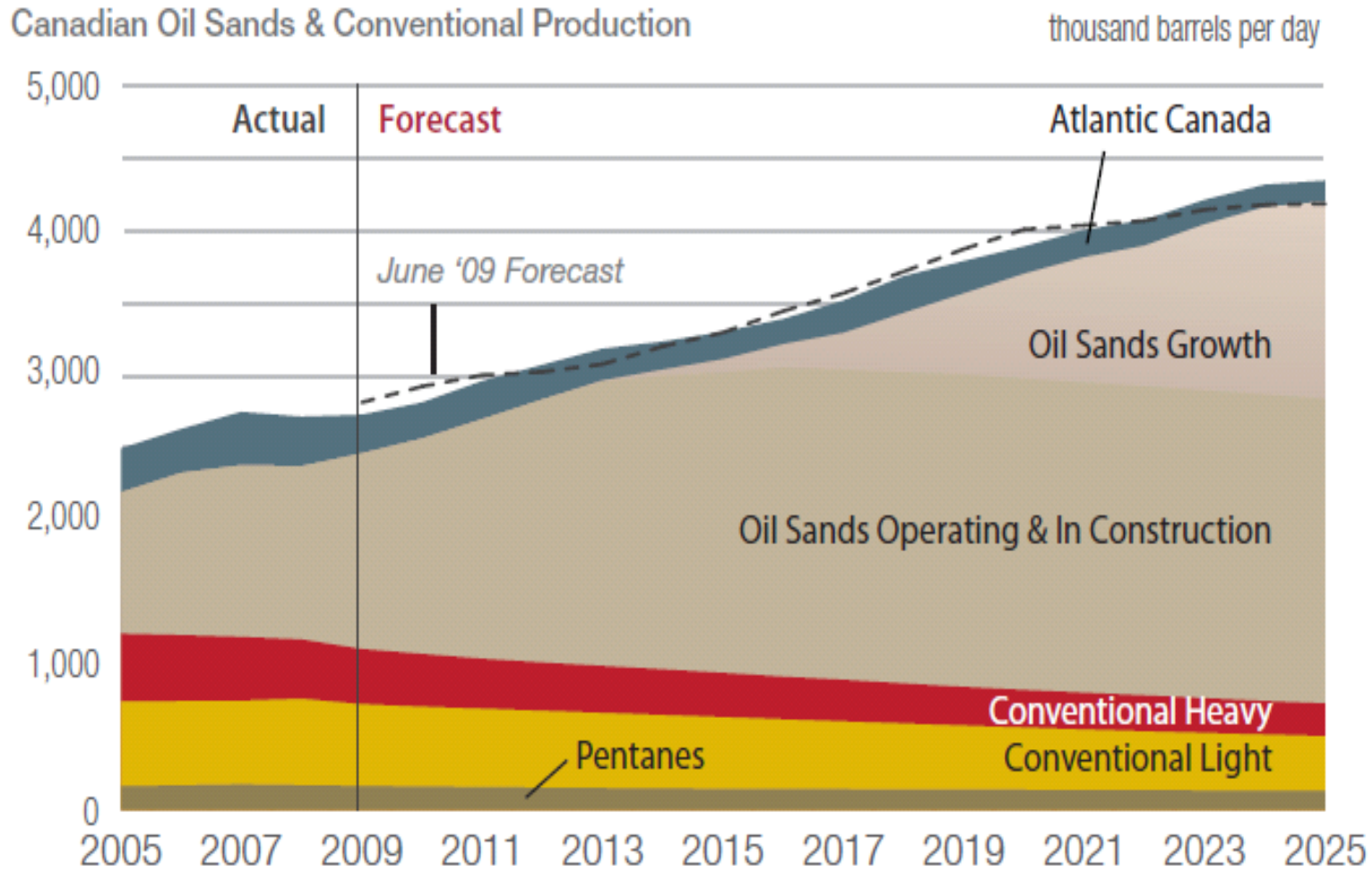
Unconventional gas will play a growing role



Sources of gas supply, by region



Canadian Oil Sands vs. Conventional Production



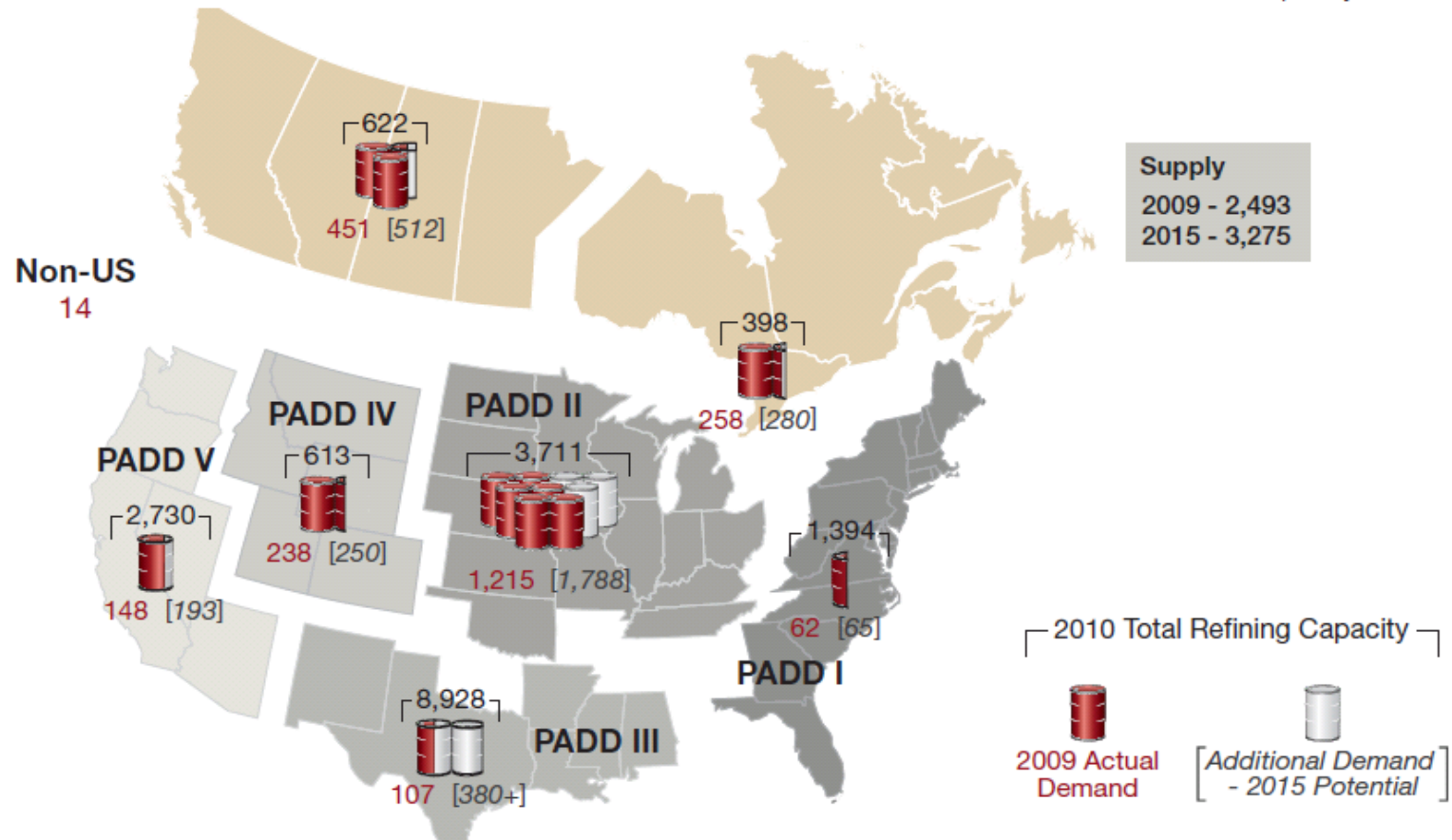
Source: Canadian Association of Petroleum Producers

Market Demand for Canadian Oil- 2009 vs. 2015



Market Demand for Western Canadian Crude Oil – Actual 2009 vs 2015 Potential

thousand barrels per day



Source: Canadian Association of Petroleum Producers

BP Whiting- Newly Installed Coker Drums



BP Whiting Refinery- Current State



- Started operations in 1889
- The 6th largest refinery in the US
- Processes 405,000 barrels of raw crude per day
- Products and Production:
 - Gasoline- 7.5 million gallons/day
 - Jet Fuel- 1.5 million gallons/day
 - Ultra Low Sulphur Diesel- 4.5 million gallons/day
 - Other- 1.5 million gallons/day (e.g. xylene, propylene, propane)
 - Produces about 8% of all asphalt in the US

BP Whiting Refinery- Modernization Project



- Multi-Billion modernization- to improve crude processing capability/flexibility and operational reliability/efficiency
- The largest private sector investment in Indiana history
- Critical infrastructure improvements include:
 - **Gas oil hydrotreater**- remove more sulphur and nitrogen from gas oil
 - **Sulphur recovery complex**- enhance our sulphur recovery capabilities
 - **Petroleum coker**- new state-of-art facility to improve process safety and increase coke production
 - **Distillation Unit**- to process heavier sour crudes to enhance flexibility of crude slate as part of changing market
 - **New Barge Facility**- 54 acre unloading facility to handle all major equipment
- Likely impact on rail- approximately 20% increase in fleet size and over 25% increase in rail shipments

BP- A Few Final Messages



- BP's recent activities in the domestic market
- Our current restructuring in our NA Rail activities
- A personal view of the relationships in the Rail Industry
- Thank you for your time and attention.

Is this a trend, a bend or just the End?



A trend is a trend is a trend.
But the question is, will it bend?
Will it alter its course
Through some unforeseen force
And come to a premature end?

(Alec Cairncross)