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*Includes biofuels
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Demand

2010 Non-OECD Growth

Supply

2010 Non-OPEC Growth Non-OPEC Declines OPEC Growth

Mb/d

80 85 90 95 100 105

2030 level

OECD Declines

Other

Mid East

China

S&C Am

India

Oil Sands

Biofuels

Brazil

US

NGLs

Other

Iraq

Saudi

Energy Outlook 2030

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Transport fuel demand is met predominantly by oil

By energy type

Billion toe

1990 2010 2030

- Electricity
- Gas
- Coal
- Biofuels
- Oil - road
- Oil - non-road

Projected car efficiency

Litres per 100 km

2000 2010 2020 2030

- EU
- US light vehicles
- China
OPEC’s critical position in the oil market grows

Liquids supply by type

- OPEC NGLs
- OPEC crude
- Biofuels
- Oil Sands
- Other non-OPEC
- Non-OPEC conventional

OPEC share (rhs)

Growth from 2010 to 2030

- Saudi Arabia
- Iraq
- US Shale Oil
- Biofuels
- Canadian Oil Sands
- Other

RoW

Energy Outlook 2030

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Natural gas demand growth is concentrated in the non-OECD

Demand

Supply

2030 level

Bcf/d

470

420

370

320

270

2010

OECD

Non-OECD

2010

LNG

Pipeline

Other

India

China

Mid East

Other

N. America

FSU

Mid East

Other

Africa

Australia

Mid East

Energy Outlook 2030

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Unconventional gas will play a growing role

Sources of gas supply, by region

North America

- Net pipeline imports
- Net LNG imports
- Syngas from coal
- Shale gas and CBM
- Conventional (inc. tight gas)
- Domestic production

Europe

China

Energy Outlook 2030
Middle East: Export growth is primarily oil

Mid East oil and gas supply

Exports as share of global demand (excl. Mid East)

Energy Outlook 2030

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Import dependence falls in US; rises in Asia and Europe

Import share of respective fuel

India  China  EU27  US

Energy Outlook 2030

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North American liquids – demand and supply

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Natural gas: North America becomes a net exporter?

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Conclusions

• Global energy demand to rise, driven by non-OECD
• Oil & gas continue to play a large role
• Supply can keep up with expected demand growth
  • Role of markets, competition, innovation & policy
  • US as an example
• US import dependence likely to improve
  • Other key regions will see import dependence rise