Emerging economies steer energy markets

Share of global energy demand

Global energy demand rises by over one-third in the period to 2035, underpinned by rising living standards in China, India & the Middle East
A US oil & gas transformation

United States oil and gas production, 1980-2035

The surge in unconventional oil & gas production has implications well beyond the United States
Oil demand by sector in the New Policies Scenario

Global oil demand increases steadily to almost 100 mb/d in 2035, up from 90 mb/d today, with all of the net growth coming from transport in emerging economies.
Car ownership is soaring

PLDV fleet in selected regions in the New Policies Scenario

The passenger vehicle fleet doubles to 1.7 billion in 2035, driven by strong growth in car ownership in non-OECD countries

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Electric vehicles need to come of age

More than 90% of new light duty vehicles need to be propelled by an electric motor in 2050.
Global biofuels production 2000-2012

Global Biofuels Supply

Biofuels supply has been soaring.

Source: Medium-term Oil Market Report 2012
Middle East oil to Asia: a new silk road

Middle East oil export, by destination

By 2035, almost 90% of Middle Eastern oil exports go to Asia; North America’s emergence as a net exporter accelerates the eastward shift in trade

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Natural gas: towards a globalised market

Major global gas trade flows, 2035

Rising supplies of unconventional gas & LNG help to diversify trade flows, putting pressure on conventional gas suppliers & oil-linked pricing mechanisms
Different trends in oil & gas import dependency

Net oil & gas import dependency in selected countries

While dependence on imported oil & gas rises in many countries, the United States swims against the tide.
The need for electricity in emerging economies drives a 70% increase in worldwide demand, with renewables accounting for half of new global capacity.
A sustainable energy system is a smarter, more unified and integrated energy system.
The multiple benefits of renewables come at a cost

Global renewable energy subsidies of $4.8 trillion, 2011-2035

- **Biofuels**: $1.2 trillion
- **Electricity**: $3.6 trillion

Renewable subsidies were $88 billion in 2011; over half the subsidies required to 2035 has been committed to existing projects or is needed to meet 2020 targets.
Energy efficiency: a huge opportunity going unrealised

Energy efficiency potential used by sector in the New Policies Scenario

Two-thirds of the economic potential to improve energy efficiency remains untapped in the period to 2035
The Efficient World Scenario: a blueprint for an efficient world

Total primary energy demand by scenario

Economically viable efficiency measures can halve energy demand growth to 2035; oil demand savings equal the current production of Russia & Norway
Natural gas will play a central role in meeting global energy needs – NZ must remain attractive to upstream investors.

Shift to low-carbon technologies has started to happen – NZ must maintain investment levels in energy infrastructure to ease this transition.

The greatest potential for emissions abatement in the region – and the most cost-effective – lies in energy efficiency measures, particularly in transport, industry and buildings.