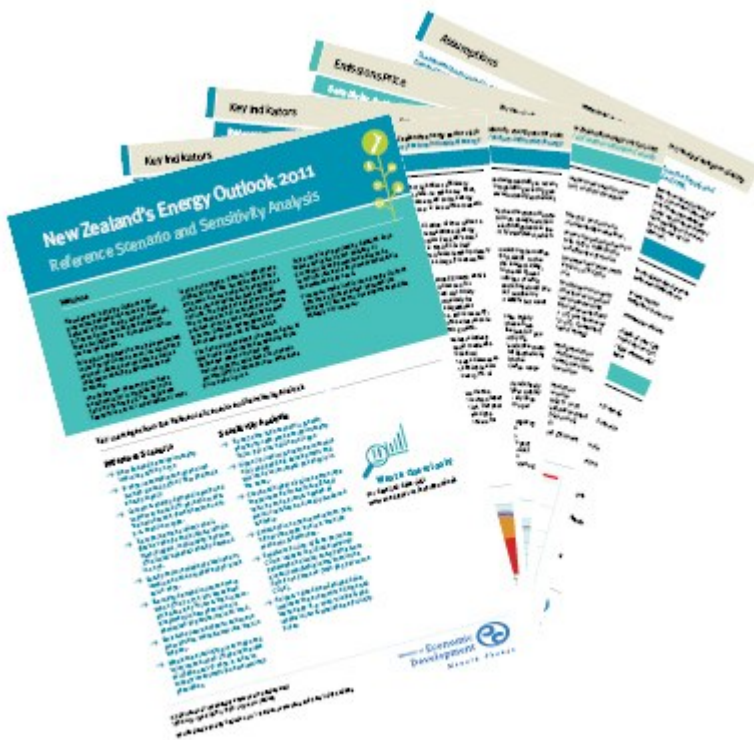


# New Zealand Energy Outlook 2011 released

On: 26 January 2012

The Ministry of Economic Development today released its latest instalment of the New Zealand Energy Outlook.



*New Zealand's Energy Outlook 2011.*

The Ministry of Economic Development today released its latest instalment of the New Zealand Energy Outlook. [New Zealand's Energy Outlook 2011](#) presents long-term forecasts of energy supply, demand, prices and energy sector greenhouse gas emissions.

The latest Outlook provides an updated 'Reference Scenario' that models future energy use if business as usual continues in terms of broad economic drivers, current energy policy, and technology and fuel choices.

There is also an updated 'Sensitivity Analysis' that explores the sensitivity of the 'Reference Scenario' to changes in economic growth, oil price, carbon price and exchange rates.

## Key highlights of this edition include

### Reference Scenario

- New Zealand's energy intensity improves 21 per cent by 2030.
- In 2030, renewable energy sources provide around 50 per cent of New Zealand's primary energy supply.
- Consumer energy demand is projected to grow at around one per cent per annum over the next decade, lower than the 1.4 per cent per annum seen since 1990.
- Transport remains reliant on oil. Electric vehicles and biofuels remain minor players contributing less than two per cent of total transport energy demand in 2030.
- Energy sector emissions stabilise but remain around 40 per cent above 1990 levels out to 2030.

- Electricity demand increases over 25 per cent by 2030, but associated emissions are seven per cent lower than in 2010. Investment in new generation is dominated by geothermal and wind.
- Emissions from transport continue to grow but at a much slower rate than in the past.
- Wholesale electricity prices may need to increase one per cent above the rate of inflation out to 2030 in order to support investment in new electricity generation.

### **Sensitivity Analysis**

- Under the scenario for high economic growth, energy intensity falls to just over half that of 1990 by 2030.
- High oil prices improve the economics of oil and gas field development and this leads to increased gas supply in the 2020s.
- Sustained higher oil prices encourage the purchase of more fuel-efficient vehicles and a greater uptake of electric vehicles and locally produced biofuels.
- Emissions in 2030 are more than 50 per cent higher than 1990 levels in the high economic growth case.
- Emissions pricing of NZ\$100 per tonne CO<sub>2</sub>-e reduces coal-fired electricity generation but total energy emissions are only marginally lower than in the Reference Case (with a NZ\$25 per tonne CO<sub>2</sub>-e emissions price).
- A higher valued New Zealand dollar improves the economics of imported technology (for example, wind turbines) and results in lower wholesale electricity prices.