

## Total Energy Consumed by Fuel Type

### HIGHLIGHTS:

- Energy consumption may affect health.
- New Zealand consumed 573PJ of energy in 2014, an increase of 4.4 percent from 2013.
- Oil was the predominant type of energy consumed in New Zealand from 2000 to 2014.



Source: <http://www.med.govt.nz/sectors-industries/energy/energy-modelling/modelling/new-zealands-energy-outlook-electricity-insight>

### Energy consumption may affect health

The consumption of energy is a major source of air pollution. The burning of fossil fuels releases particulate matter (such as PM<sub>10</sub>) and gases, which can have negative effects on health (Kjellström 2004). Furthermore, the use of fossil fuels adds to carbon dioxide in the atmosphere, contributing to greenhouse gases and potentially climate change, which has the potential to affect health.

New Zealand uses a variety of energy sources, including:

- renewable (e.g., hydro-electricity, geothermal energy, biogas, and wind and solar power)
- non-renewable sources (e.g., fossil fuels like coal, oil and gas).

### New Zealand's total energy consumption increased 4.4 percent between 2013 and 2014

In 2014, New Zealand consumed 573 PJ of total energy – a 4.4 percent increase from the previous year. Forty-four percent (254 PJ) of consumed energy was from oil, followed by 25 percent (141 PJ) from electricity.

Energy consumption from natural gas increased from 69 PJ in 2013 to 85 PJ in 2014 – the highest since 1990.

Energy demand for the remaining fuels – coal, oil, renewables and electricity – all rose between one and three percent in 2014 compared to 2013. (Table 1).

**Table 1: Total energy consumed (PJ), by fuel type, 2013-2014**

Fuel type	2013	2014	Change %
Oil	250	254	1.6
Electricity	139	141	1.2
Gas	69	85	23.4
Renewables	64	66	3.1
Coal	27	27	1
<b>Total</b>	<b>549</b>	<b>573</b>	<b>4.4</b>



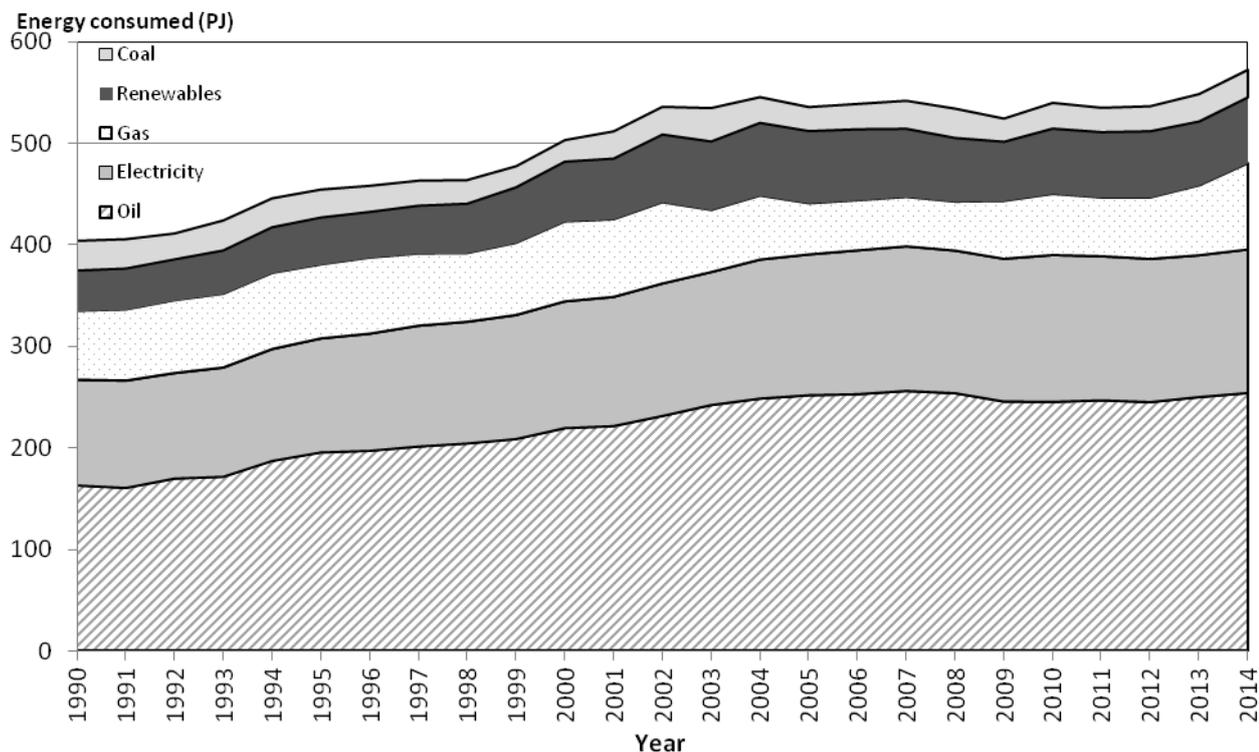
Source: Ministry of Business, Innovation & Employment (MBIE), 2015

## Total Energy Consumed by Fuel Type

### Oil is the predominant type of energy consumed in New Zealand

Oil has remained the predominant type of energy consumed in New Zealand since 1990, accounting for 45 percent of total energy consumption, followed by electricity (25%), gas (13%) and renewable (12%). Coal only made up five percent of consumer energy between 1990 and 2014 (Figure 1).

**Figure 1: New Zealand's total energy consumption (PJ), by fuel type, 1990-2014**



Note: Industrial excludes fuel used for electricity generation, as this is counted under energy transformation.

Source: Ministry of Business, Innovation & Employment (MBIE), 2015

### REFERENCES

- Kjellström T. (2004). Air Quality and Health. In: Cromar N, Cameron S, Fallowfield H. (eds.). Environmental Health in Australia and New Zealand. Melbourne: Oxford University Press:274-92.
- Ministry of Business, Innovative & Employment (MBIE). (2014). *Energy in New Zealand 2015*

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