

## Total Energy Consumed by Sector

### HIGHLIGHTS:

- Energy consumption may affect health.
- In 2015, New Zealand consumed 572 Petajoules (PJ) of energy, an increase of 0.7 percent from 2014.
- The industrial and the domestic transport sectors continued to be the main energy consumers in New Zealand.



Source: <http://www.planetizen.com/node/67041>

### 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 (Kjellström, 2004). In New Zealand, energy is consumed by a variety of sectors.

### New Zealand consumed 572 PJ of total energy in 2015

In 2015, New Zealand consumed 572 PJ of total energy – a 0.7 percent increase from the previous year (Table 1). The industrial (36.1%) and domestic transport (37.4%) sectors were the biggest consumers of energy in 2015. Domestic transport had the largest increase in energy consumption (4.1%) while energy used in the agriculture, forestry and fishing sector and the industrial sector decreased by 3.6 and 2.6 percent respectively over the year.

**Table 1: Total energy consumed (PJ) by sector, 2014-2015**

Fuel type	2013	2014	Change (%)
Agriculture, Forestry and Fishing	35	34	-3.6 ↓
Industrial	212	206	-2.6 ↓
Commercial and Public Services	52	53	2.4 ↑
Domestic Transport	206	214	4.1 ↑
Residential	63	64	1.5 ↑
<b>Total</b>	<b>568</b>	<b>572</b>	<b>0.7</b>

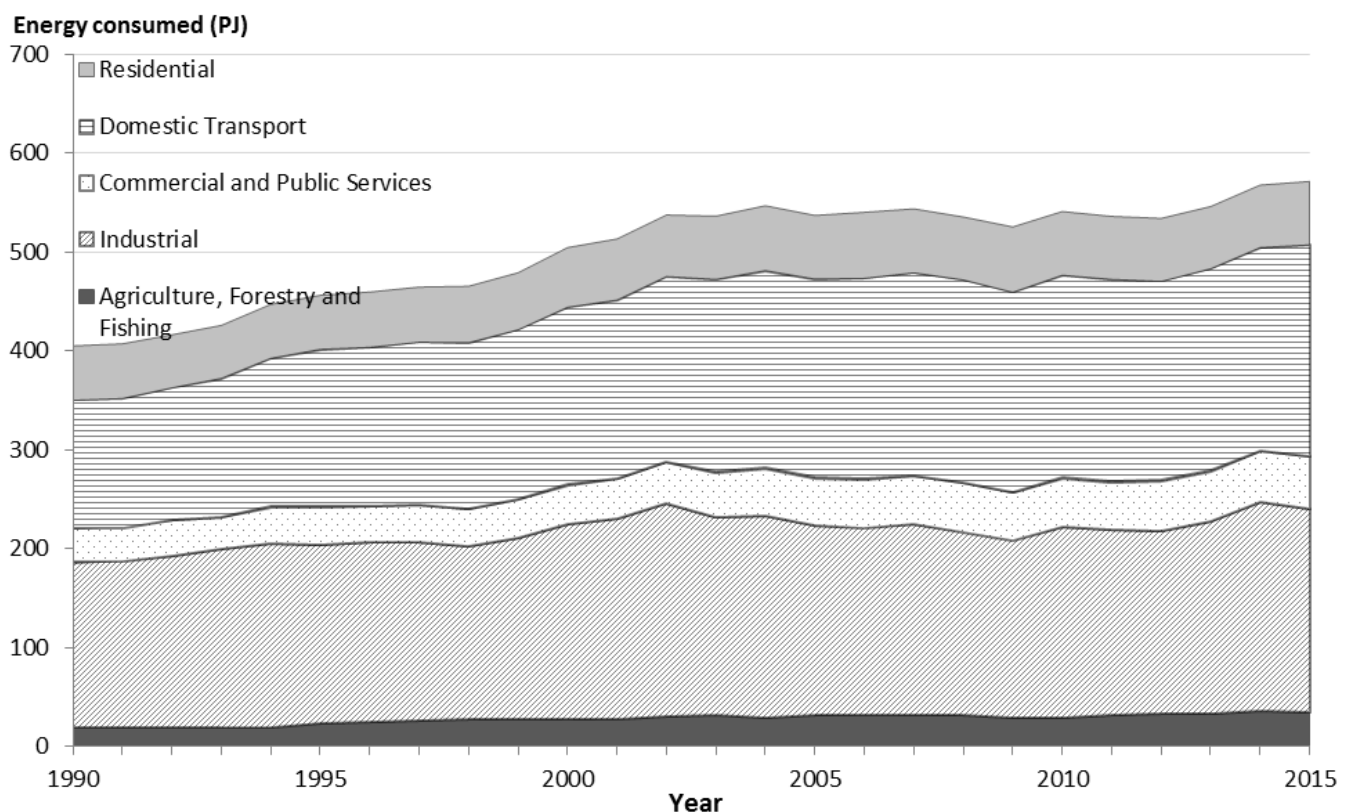
Source: Ministry of Business, Innovation & Employment (MBIE), 2016

**The main energy consumers are the industrial and the domestic transport sectors**

From 1990 to 2015, the industrial and the domestic transport sectors were the main energy consumers in New Zealand (Figure 1). These two sectors contributed to nearly three quarters of energy consumption in New Zealand.

Oil has been the predominant energy consumed in the agriculture, forestry and fishing sector as well as the domestic transport sector. Electricity played a pivotal role in the commercial and public service sector along with the residential sector. Gas, electricity, and renewables were the major sources for energy consumption in the industrial sector (MBIE, 2016).

**Figure 1: New Zealand total energy consumed (PJ), by sector, 1990-2015**



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

Source: Ministry of Business, Innovation & Employment (MBIE), 2016

**REFERENCES**

- Kjellström T. (2004). Air Quality and Health. In: Cromar N, Cameron S, Fallowfield H. (Eds.). *Environmental Health in Australia and New Zealand* (pp. 274-92). Melbourne: Oxford University Press.
- Ministry of Business, Innovative & Employment (MBIE). (2016). *Energy in New Zealand 2016*. Retrieved from <http://www.mbie.govt.nz/info-services/sectors-industries/energy/energy-data-modelling/publications/energy-in-new-zealand>

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