

Total Energy Consumed by Sector

HIGHLIGHTS:

- Energy consumption may affect health.
- In 2016, New Zealand consumed 578 Petajoules (PJ) of energy, an increase of 1 percent from 2015.
- 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 PM₁₀) 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 578 PJ of total energy in 2016

In 2016, New Zealand consumed 578 PJ of total energy – a one percent increase from the previous year (Table 1). The industrial (36.7%) and domestic transport (37.7%) sectors were the biggest consumers of energy in 2016. Industrial energy consumption had the largest increase (2.7%) while energy used in the agriculture, forestry and fishing sector and the residential sector decreased by 6.5 and 2.2 percent respectively over the year.

Table 1: Total energy consumed (PJ) by sector, 2015-2016

Sector	2015	2016	Change (%)
Agriculture, Forestry and Fishing	34.2	31.9	-6.5 ↓
Industrial	206.5	212.0	2.7 ↑
Commercial and Public Services	52.9	52.8	-0.2 ↓
Domestic Transport	213.9	218.0	1.9 ↑
Residential	64.3	62.9	-2.2 ↓
Total	571.7	577.6	1.0

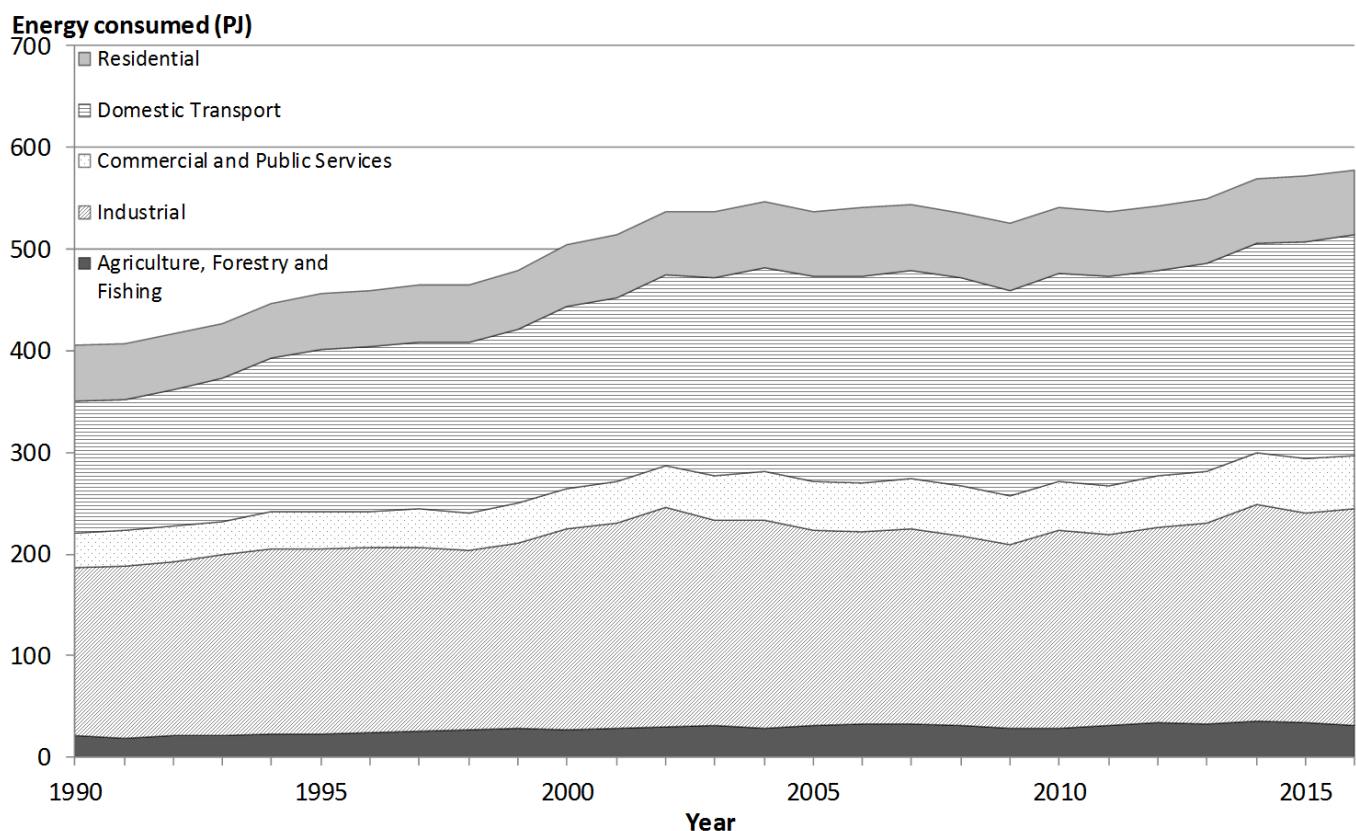
Source: Ministry of Business, Innovation & Employment (MBIE), 2017

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

From 1990 to 2016, 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, 2017).

Figure 1: New Zealand total energy consumed (PJ), by sector, 1990-2016



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

Source: Ministry of Business, Innovation & Employment (MBIE), 2017

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). (2017). *Energy in New Zealand 2017*. Retrieved from <http://www.mbie.govt.nz/info-services/sectors-industries/energy/energy-data-modelling/publications/energy-in-new-zealand>

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