Energy use in New Zealand

This report presents information about the energy consumption patterns in Aotearoa New Zealand, with analyses by fuel type and energy-consuming sector. These findings come from statistics published by the Ministry of Business, Innovation and Employment (MBIE) in August 2025.

Key facts

- New Zealand consumed 524.8 PJ of energy in 2024, a slight (3.9%) decrease relative to 2023.
- The industrial sector consumed its lowest quantity of energy in over thirty years, continuing a decline that began in 2020.
- The amount of per capita energy used in most sectors continued to decrease compared with 2000, reflecting more sustainable or efficient uses of energy.
- Oil remains the primary fuel type used in New Zealand, with nearly as much energy consumed in the form of oil as in all other forms combined in 2024, mainly in the domestic transport sector.

1 petajoule (PJ)	***30,000 cars***
contains enough energy in regular petrol to drive	***for a year***
New Zealand consumed 524.8 PJ in 2024…	*…enough to power 15,744,000 cars.*

***Source**: MBIE 2020, 2026*

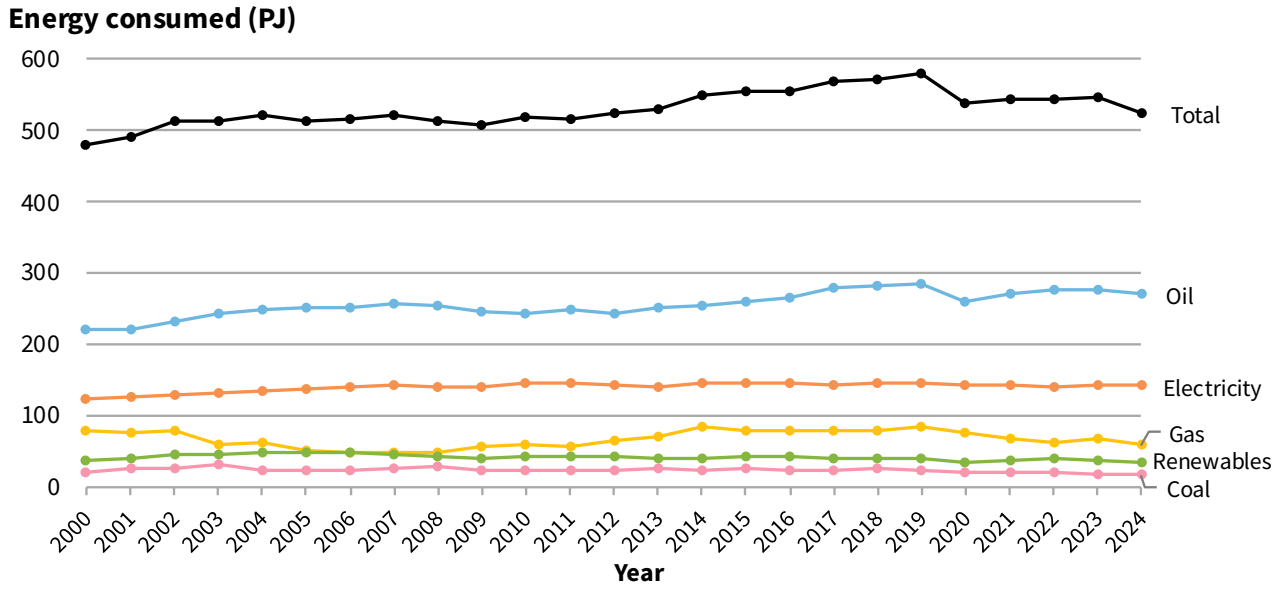
Emissions produced by the energy sector can affect our health

Burning fossil fuels (such as oil, gas, and coal) produces harmful emissions of gases and particulate matter, negatively affecting air quality and health. Furthermore, these emissions contribute to climate change, which itself impacts public health in various ways (WHO 2013). In 2022, the energy sector contributed 37% to New Zealand's greenhouse gas emissions, mainly through transport activities (MfE 2024).

Energy consumption remained lower than pre-COVID levels

New Zealand consumed 524.8 PJ of energy in 2024 (Figure 1), a slight (3.9%) decrease relative to 2023. Energy consumption has still not returned to the pre-COVID 'business as usual' levels of 2019. This is mainly due to reductions in oil, gas, and coal use in the years after 2020. Coal consumption once again reduced to record low levels in 2024, with only 17.2 PJ consumed that year, while gas consumption (58.5 PJ) was at the lowest level since 2011.

Figure 1: Total energy consumption by fuel type, 2000–2024



Source: MBIE 2025

Oil remains the primary fuel type used in New Zealand

Oil was the primary fuel type used in New Zealand in 2024, as it has been every year since records began. In 2024, 271.3 PJ of oil was consumed, just over half (51.7%) of the country's total consumption (Table 1).

The amount of oil used per capita decreased from 56.8 PJ per million in 2000 to 50.6 PJ per million in 2024, but this is largely the result of the post-COVID decline in oil use; per capita usage has otherwise been consistent since the start of the century. The per capita consumption for all other fuel types decreased slightly over the same period but showed no comparable influence from the effects of the pandemic. Accordingly, total energy consumption per capita also decreased slightly.

A decrease in per capita usage would indicate that energy is being used more efficiently, i.e. less energy is required for the same output.

Table 1: Total energy consumption by fuel type, 2000 and 2024

Fuel type	2000			2024		
	Energy used (PJ)	% of total	PJ used per million people	Energy used (PJ)	% of total	PJ used per million people
Oil	220.1	45.7%	56.8	271.3	51.7%	50.6
Electricity	124.9	26.0%	32.2	143.9	27.4%	26.9
Gas	78.7	16.4%	20.3	58.5	11.1%	10.9
Renewables	36.9	7.7%	9.5	37.9	7.2%	7.1
Coal	20.5	4.3%	5.3	17.2	3.3%	3.2
Total	**481.1**		**124.2**	**524.8**		**98.0**

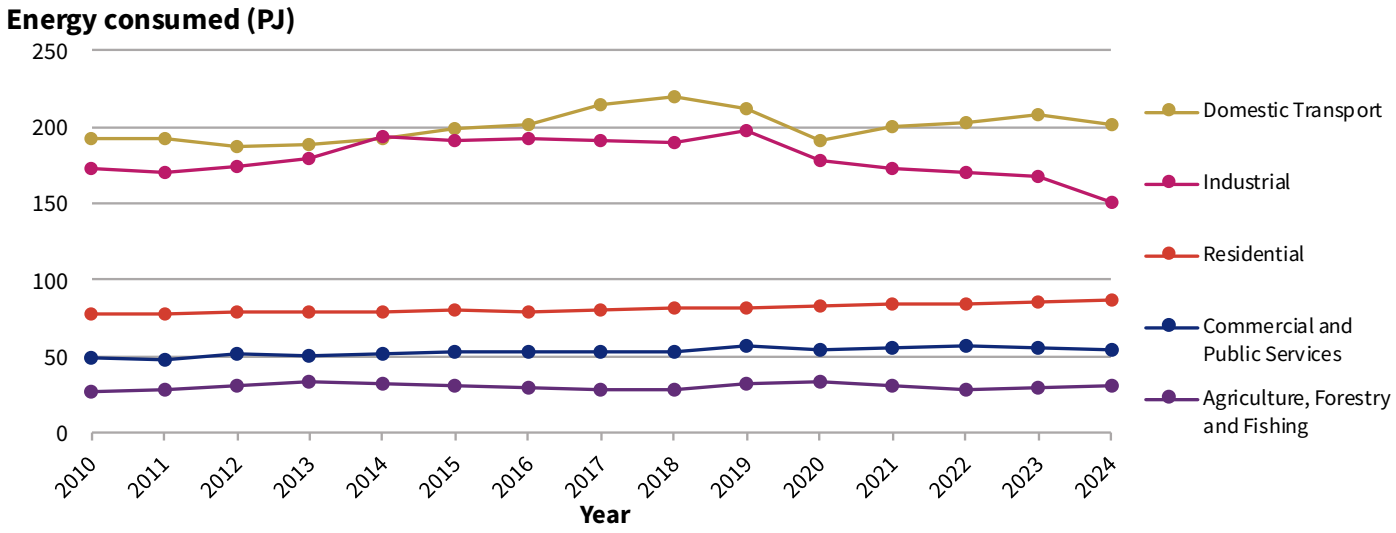
Source: MBIE 2025

The domestic transport and industrial sectors dominate the energy consumption landscape

The industrial and transport sectors alone comprise two-thirds of New Zealand's energy consumption. In 2024, the domestic transport sector accounted for 38.5% (202.2 PJ) of the energy consumed that year, while the industrial sector accounted for a further 28.7% (150.8 PJ).

While energy consumption in the industrial sector has steadily declined post-COVID, the transport sector has largely recovered from the 2020 slump (Figure 2), while all other sectors have remained largely unchanged. The especially sharp drop seen in industrial consumption between 2023 and 2024 is largely due to lower-than-expected supplies of natural gas, and industrial users reducing their consumption in response (MBIE 2025).

Figure 2: Total energy consumption by sector, 2000–2024



Source: MBIE 2025

Table 2: Total energy consumption by sector, 2000 and 2024

Sector	2000 Energy used (PJ)	2000 % of total	2000 PJ used per million people	2024 Energy used (PJ)	2024 % of total	2024 PJ used per million people
Domestic transport	167.9	43.1%	43.4	202.1	38.5%	39.3
Industrial	174.2	44.8%	45.0	150.8	28.7%	29.3
Residential	71.9	18.5%	18.6	87.0	16.6%	16.9
Commercial & public services	39.4	10.3%	10.3	53.6	10.2%	10.4
Agriculture, forestry & fishing	27.1	7.0%	7.0	31.2	5.9%	6.1
Total	**481.1**		**100.5**	**524.8**		**98.0**

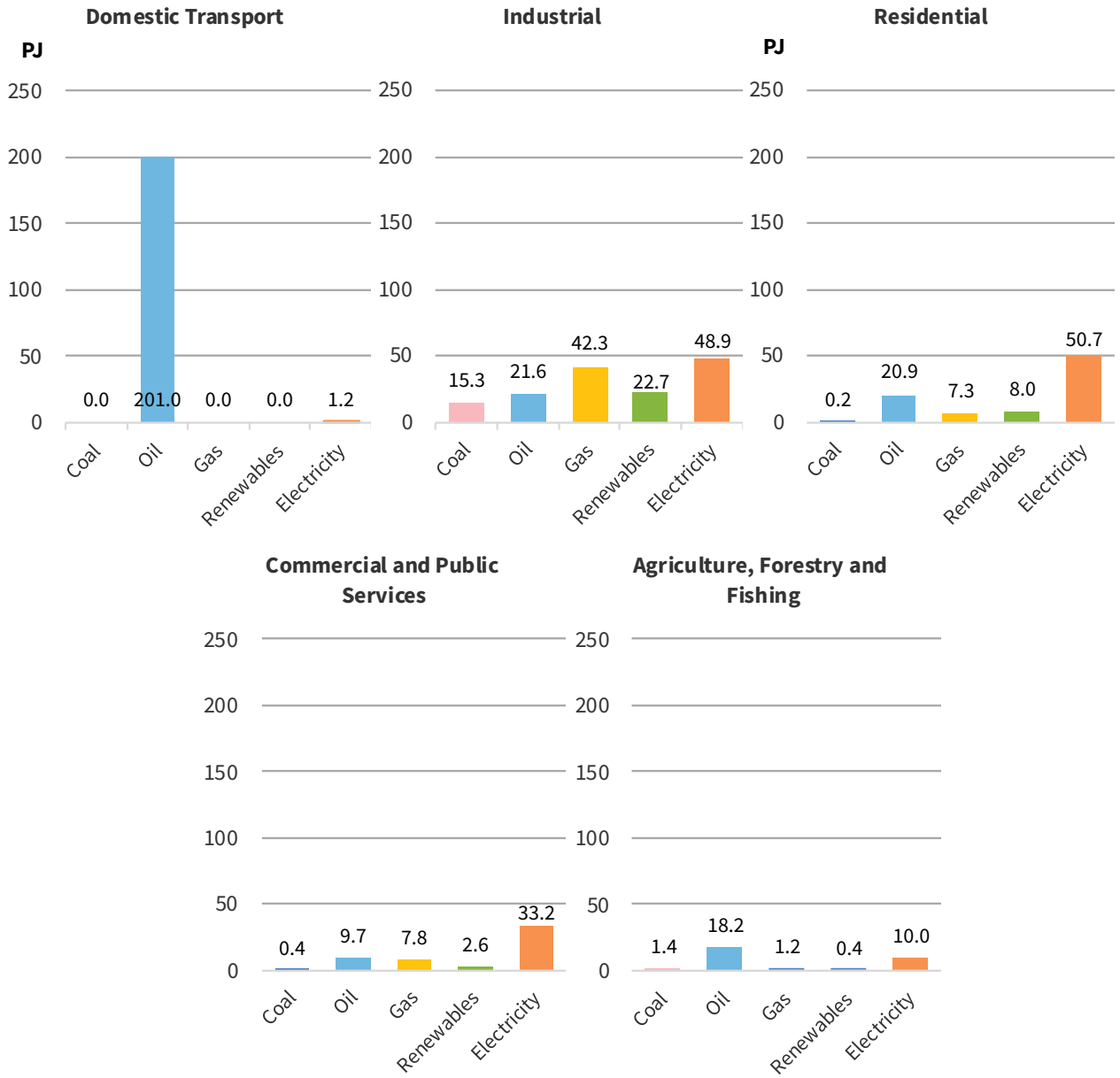
Source: MBIE 2025

Oil remains the dominant fuel type in the domestic transport sector

As in previous years, almost all energy in the most-consuming sector – domestic transport – came from burning fossil fuels (eg. diesel or petrol) (Figure 3).

While electric vehicles have begun to proliferate (see our 'Number of motor vehicles' report), just 0.6% (ie. 1.2 out of 202.2 PJ) of the sector's fuel needs were filled by electricity in 2024. This ongoing dependency on oil produces harmful emissions and greenhouse gases that affect air quality, the climate, and public health.

Figure 3: Total energy consumption by sector and fuel type, 2024



Note: Due to rounding, the sum of the fuel types shown on these charts may not match the totals presented in Table 2 above.
Source: MBIE 2025

Data for this indicator

This indicator analyses the most recent issue of the 'Energy in New Zealand' annual report and the associated data tables published by the Ministry of Business, Innovation and Employment (MBIE)in September 2024. The statistics presented here reflect the 'direct use' of energy, i.e., energy is recorded based on the form the end-user consumed in it. Energy transformed from one form to another is not counted; for example, wind power (a renewable) used to generate electricity would be recorded against the 'electricity' total once the electricity was used.

For additional information, see the Metadata sheet.

Note on the classification of energy: In all editions of the 'Energy in New Zealand' report published since 2021, the Ministry of Business, Innovation and Employment (MBIE) has altered how the use of petrol and diesel (i.e. 'oil') in recreational watercraft is classified. In earlier years, this was counted towards the domestic transport sector, but this use has since been assigned to the residential sector instead, with the change being retroactive for all years back to 1990. The consequence is that, while the figures for the total oil consumption are unchanged, the statistics for the oil consumption by sector have changed significantly.

Consequently, this report is not comparable to EHINZ reports published before 2023. For further information on the rationale for the change, readers should consult 'On road liquid fuel insights' (EECA, 2021) or contact MBIE directly.

References

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