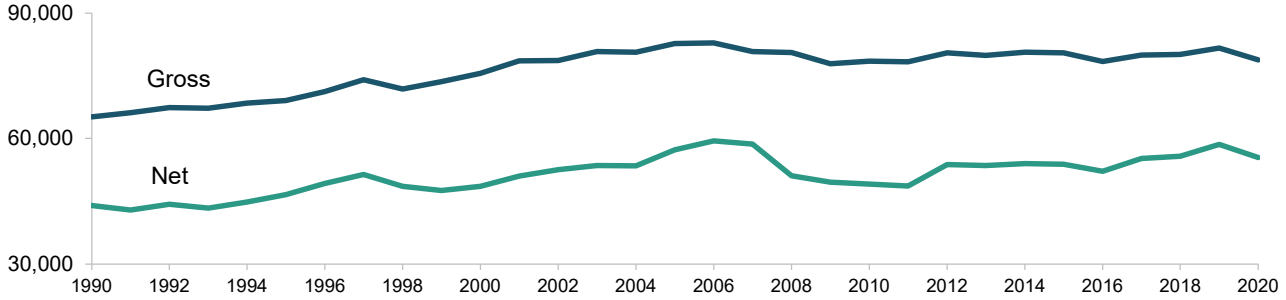
New Zealand's Greenhouse Gas Inventory on a Page 1990–2020

Ministry for the Environment
Manatū Mō Te Taiao

Emissions by sector

Sector	1990 kt CO_2-e	2020 kt CO_2-e		Change (1990–2020) kt CO_2-e	Change (1990–2020) %	Per cent of gross 1990	Per cent of gross 2020		Change (2019–2020) kt CO_2-e	Change (2019–2020) %
Energy	23,877.9	**31,461.4**	↑	7,583.5	31.8	36.6	**39.9**	↓	– 2,459.0	– 7.2
IPPU	3,579.9	**4,618.4**	↑	1,038.4	29.0	5.5	**5.9**	↓	– 242.7	– 5.0
Agriculture	33,792.9	**39,425.5**	↑	5,632.7	16.7	51.8	**50.0**	↓	– 93.1	– 0.2
Waste	3,943.1	**3,268.9**	↓	– 674.2	– 17.1	6.0	**4.1**	↓	– 43.8	– 1.3
Tokelau	3.2	**4.2**	↑	1.0	31.9	0.005	**0.005**	↓	– 0.12	– 2.8
Gross	**65,197.0**	**78,778.4**	↑	**13,581.4**	**20.8**	**100.0**	**100.0**	↓	**– 2,838.7**	**– 3.5**
LULUCF	– 21,229.2	**– 23,313.3**	↓	– 2,084.0	– 9.8	– 32.6	**– 29.6**	↓	– 278.3	– 1.2
Net	**43,967.8**	**55,465.1**	↑	**11,497.3**	**26.1**	N/A	N/A	↓	**– 3,117.0**	**– 5.3**

Gross and net emissions 1990–2020 (kt CO_2-e)



Other stats	1990	2020
Enteric fermentation as a proportion of gross emissions	42.0%	36.6%
Road transportation as a proportion of gross emissions	10.5%	15.3%
KP net emissions (kt CO_2-e)	N/A	– 29,539
KP accounting quantity (kt CO_2-e)	N/A	– 13,444

Did you know...

The key driver of emissions reductions from COVID-19 was the reduction in fuel use for transport and manufacturing.

Largest contributors to change in gross emissions 1990–2020 (Δ>1000 kt CO_2-e)

Category	Gas	1990 kt CO_2-e	2020 kt CO_2-e		Change (1990–2020) kt CO_2-e	Change (1990–2020) %
Enteric fermentation from dairy cattle	CH_4	6,147.3	14,034.7	↑	7,887.3	128.3
Road transportation	CO_2	6,659.3	11,947.5	↑	5,288.2	79.4
Agricultural Soils	N_2O	5,300.9	7,882.8	↑	2,581.9	48.7
Manufacturing Industries and Construction	CO_2	4,676.5	6,595.2	↑	1,918.7	41.0
Product Uses as Substitutes for ODS	HFCs	Not occurring	1,480.1	↑	1,480.1	N/A
Manufacture of Solid Fuels & Other Energy Industries	CO_2	1,715.3	263.8	↓	– 1,451.4	– 84.6
Enteric fermentation from sheep	CH_4	14,557.9	8,271.2	↓	– 6,286.7	– 43.2

Gross emissions by gas

Gas	1990 kt CO_2-e	2020 kt CO_2-e		Change (1990–2020) kt CO_2-e	Change (1990–2020) %	Per cent of gross 1990	Per cent of gross 2020		Change (2019–2020) kt CO_2-e	Change (2019–2020) %
CO_2	25,502.5	**34,456.8**	↑	8,954.2	35.1	39.1	**43.7**	↓	– 2,664.3	– 7.2
CH_4	32,972.5	**34,272.9**	↑	1,300.4	3.9	50.6	**43.5**	↓	– 237.5	– 0.7
N_2O	5,792.0	**8,463.8**	↑	2,671.7	46.1	8.9	**10.7**	↑	64.3	0.8
F-gases	929.9	**1,584.9**	↑	655.0	70.4	1.4	**2.0**	↓	– 1.2	– 0.1

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