AN OVERVIEW OF ANU GREENHOUSE GAS (GHG) EMISSIONS

May 2021



ANU GHG emissions by source

Total estimated emissions for BAU year: 55,712 tonnes CO_2 equivalent (CO_2e).

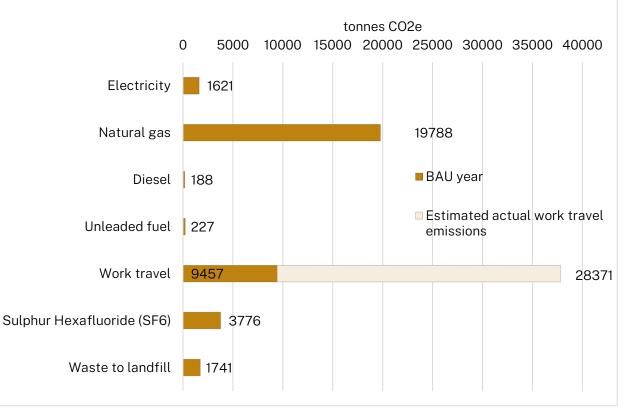
Work travel emissions are likely to be much higher (3-4x) than the available travel data set.

This means work travel is our largest source of emissions, followed by natural gas.

Acton campus accounted for 96% of emissions in 2019.

Based on scope 1 & 2 emissions & work travel. Work travel excludes commuter travel i.e. staff and students travelling to and from campus.

Emissions in a Business as Usual (BAU) year

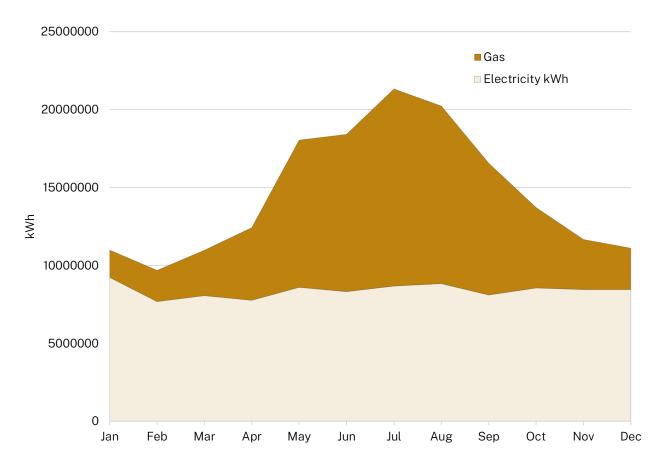


source

Emissions

Use of electricity and gas on Acton campus 2019

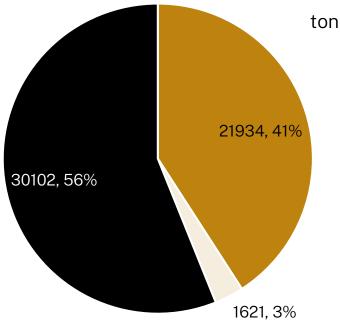
ANU is currently heavily dependent on gas as a heating source, with gas comprising 59% of the total campus load in June 2019.





Projected ANU GHG emissions by scope per year BAU

Biggest short-term opportunities to reduce emissions: transitioning from natural gas, energy efficiency, solar PV, reducing air travel, electric vehicles



tonnes CO2e by source

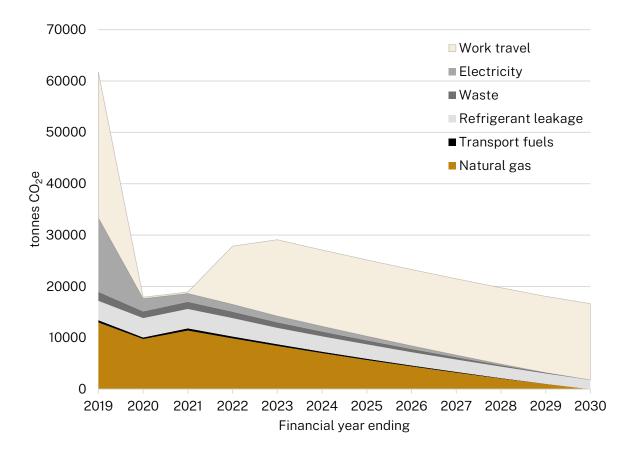
- Direct emissions: gas, fuel, SF6 (Scope 1)
- Electricity emissions (Scope 2)
- Flights & waste (partial Scope 3)



An emissions reductions pathway to 2030

This pathway is based on implementing the following opportunities by 2030: 25% increase in energy efficiency, 100% campus electrification (i.e. no gas heating or cooling), 50% increase in onsite renewables, 50% reduction in work travel emissions, zero waste to landfill, electrification of transport fleet.

In the short-term, carbon offsets could be applied to reach net zero emissions as fast as possible. To reach below zero emissions, carbon sequestration, including the development of carbon removal or negative emissions technologies, will be required.



THANK YOU

Contact Us

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