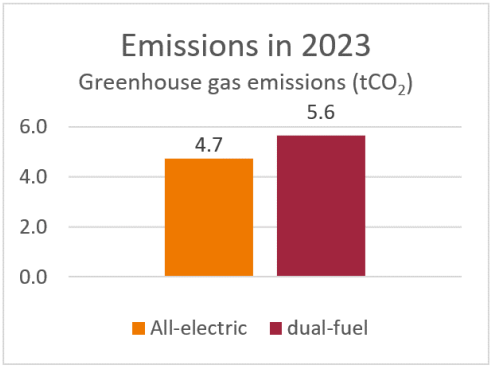
DEECA Factsheet
Victorian new build emissions forecast

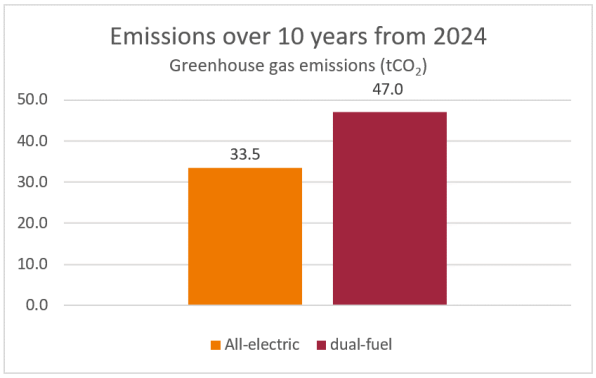
All-Electric and Dual Fuel – August 2023

Key Messages

Department of Energy, Environment and Climate Action (DEECA) analysis concludes:

- Built today, a new, all-electric home has 16% lower emissions than a new dual fuel home, saving 0.9 t CO2
- Over the 10-year period from 2024-2034, a new, all-electric home has 29% lower emissions than a new dual fuel home, saving 13.5 t CO2.





Key Inputs

Input	Energy	Emissions Factor
Dual Fuel – gas input	43.5 GJ/yr	0.056 tC02/GJ
Dual Fuel – electricity input	4.3 MWh/yr	0.748 tC02/MWh
All-electric home input	6.3 MWh/yr	0.748 tC02/MWh

Household energy inputs

- New home built with 7-star building shell
- High efficiency, multi-split air conditioning systems used for space heating (high efficiency conversion of around 400%)

Emissions factors

- Scope 2 electricity emissions based on AEMO Step Change scenario and scope 3 from DCCEEW[1]
- Scope 1 and 3 gas emissions from DCCEEW[2]

[1] Australian National Greenhouse Accounts Factors (dcceew.gov.au) Table 1
[2] Australian National Greenhouse Accounts Factors (dcceew.gov.au) Table 4 and Table 5. Table 5 notes the following "Scope 3 emission factors do not include fugitive emission leakage but do include the combustion associated with low pressure natural gas distribution pipeline networks."