



As part of our commitment to sustainability and environmental management, we've been tracking our performance to quantify our environmental footprint and annual greenhouse gas emissions (GHG) over the past 10 years.

**NATURAL STATE actively manages our 20 hectare native forest 'Land for Wildlife conservation covenant' & off-grid sanctuary on the Leven River, in NW TAS. We protect the local biodiversity, practice ecological restoration techniques and monitor our forest which sequesters +/- 14,450 tonnes of CO<sub>2</sub>-e / year \*.**

**Our total greenhouse gas emissions per person for 2024 was 4.59t CO<sub>2</sub>-e. For comparison, the average CO<sub>2</sub>-e emissions produced per person in Australia is around 21t /yr. The total combined business and 2 x household GHG for 3 people in 2024 was 13.78t CO<sub>2</sub>-e.**

METRIC	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	TREND
<b>Water consumption</b>	118,250L	N/A	101,250L	110,875L	113,125L	120,350L	115,450L	110,650L	116,400L	154,000L	↑
<b>Renewable electricity consumption</b>	1,008 kWh = 0t CO <sub>2</sub> -e	1,010 kWh = 0t CO <sub>2</sub> -e	1,144 kWh = 0t CO <sub>2</sub> -e	1,062 kWh = 0t CO <sub>2</sub> -e	891kWh = 0t CO <sub>2</sub> -e	931kWh = 0t CO <sub>2</sub> -e	967kWh = 0t CO <sub>2</sub> -e	1,012kWh = 0t CO <sub>2</sub> -e	1,153kWh = 0t CO <sub>2</sub> -e	3,484 kWh = 0t CO <sub>2</sub> -e	↑
<b>LPG consumption</b>	264L = 0.48t CO <sub>2</sub> -e	352L = 0.64t CO <sub>2</sub> -e	440L = 0.8t CO <sub>2</sub> -e	440L = 0.8t CO <sub>2</sub> -e	352L = 0.64t CO <sub>2</sub> -e	352L = 0.64t CO <sub>2</sub> -e	352L = 0.64t CO <sub>2</sub> -e	264L = 0.48t CO <sub>2</sub> -e	264L = 0.48t CO <sub>2</sub> -e	88L = 0.18t CO <sub>2</sub> -e	↓
<b>Transport x 3 vehicles</b>	11.2t CO <sub>2</sub> -e	11.2t CO <sub>2</sub> -e	11.64t CO <sub>2</sub> -e	9.54t CO <sub>2</sub> -e	9.98t CO <sub>2</sub> -e	6.74t CO <sub>2</sub> -e	9.7t CO <sub>2</sub> -e	10.81t CO <sub>2</sub> -e	8.7t CO <sub>2</sub> -e	7.59t CO <sub>2</sub> -e	↓
<b>Firewood consumption</b>	12m <sup>3</sup> = 12t CO <sub>2</sub> -e	12m <sup>3</sup> = 12t CO <sub>2</sub> -e	11m <sup>3</sup> = 11t CO <sub>2</sub> -e	11m <sup>3</sup> = 11t CO <sub>2</sub> -e	11m <sup>3</sup> = 11t CO <sub>2</sub> -e	14m <sup>3</sup> = 14t CO <sub>2</sub> -e	14m <sup>3</sup> = 14t CO <sub>2</sub> -e	12m <sup>3</sup> = 12t CO <sub>2</sub> -e	10m <sup>3</sup> = 10t CO <sub>2</sub> -e	1m <sup>3</sup> = 1t CO <sub>2</sub> -e	↓
<b>Solid waste</b>	700L	700L	600L	600L	800L	800L	800L	800L	800L	800L	↔
<b>Recycling</b>	450L	400L	650L	800L	800L	800L	800L	800L	800L	800L	↔
<b>Fuel reduction burns</b>	3m <sup>3</sup> = 3t CO <sub>2</sub> -e	2m <sup>3</sup> = 2t CO <sub>2</sub> -e	2m <sup>3</sup> = 2t CO <sub>2</sub> -e	3m <sup>3</sup> = 3t CO <sub>2</sub> -e	5m <sup>3</sup> = 5t CO <sub>2</sub> -e	5m <sup>3</sup> = 5t CO <sub>2</sub> -e	5m <sup>3</sup> = 5t CO <sub>2</sub> -e	5m <sup>3</sup> = 5t CO <sub>2</sub> -e	5m <sup>3</sup> = 5t CO <sub>2</sub> -e	3m <sup>3</sup> = 5t CO <sub>2</sub> -e	↓
<b>Diesel generator use</b>	370kWh = 0.09t CO <sub>2</sub> -e	410kWh = 0.10t CO <sub>2</sub> -e	487kWh = 0.12t CO <sub>2</sub> -e	523kWh = 0.13t CO <sub>2</sub> -e	541kWh = 0.13t CO <sub>2</sub> -e	526kWh = 0.13t CO <sub>2</sub> -e	495kWh = 0.12t CO <sub>2</sub> -e	534kWh = 0.13t CO <sub>2</sub> -e	518kWh = 0.13t CO <sub>2</sub> -e	30kWh = 0.01t CO <sub>2</sub> -e	↓
<b>TOTAL CO<sub>2</sub>-e business &amp; family x 3/yr</b>	<b>26.77t</b>	<b>25.94t</b>	<b>25.56t</b>	<b>24.47t</b>	<b>26.75t</b>	<b>26.51t</b>	<b>29.46t</b>	<b>28.41t</b>	<b>24.31t</b>	<b>13.78t</b>	↓

**Brief explanation** - The main greenhouse gases in the Earth's atmosphere are water vapour, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O) and ozone (O<sub>3</sub>). The carbon dioxide equivalent unit, or CO<sub>2</sub>-e, is used to make it easier to compare GHG emissions using the Global Warming Potential index (GWP) over 100 years.

Assumptions and formula used to calculate our GHG emissions

- The figures for Renewable electricity consumption and Diesel generator use have been downloaded from our Selectronic SP Pro inverter charger. The formula used to calculate the diesel generator emissions is based on the Australian Government NATIONAL GREENHOUSE ACCOUNTS FACTORS Emissions Factor (EF) for diesel consumption for energy use of 69.9 Kg CO<sub>2</sub>-e / GJ. 1kWh equates to 0.0036GJ.
- The figures for LPG consumption have been calculated at 88L / 45Kg bottle using the free Carbon Neutral Carbon Calculator tool available at <https://carbonneutral.com.au/carbon-calculator/>.
- The formula used to calculate our annual transport emissions is based on: **a.)** 1 petrol vehicle with a fuel consumption of 9.3L/100Km generating 222g CO<sub>2</sub>/Km, **b.)** 1 diesel vehicle with a fuel consumption of 10.4L/100Km generating 277g CO<sub>2</sub>/Km, **c.)** 1 diesel vehicle with a fuel consumption of 10.4L/100Km generating 277g CO<sub>2</sub>/Km
- The formula used to calculate the emissions related to firewood consumption and fuel reduction burns is based on 1m<sup>3</sup> of dry hardwood timber equating to 1t CO<sub>2</sub>-e.

\* Estimate based on wet forest formula in '(Carbon sequestration in Tasmania's forests: perceptions, misinterpretations and ecological reality)' (McIntosh, P.D. & Moran, A. 2014)