

# ORGANISATIONAL GREENHOUSE GAS EMISSIONS INVENTORY (CARBON FOOTPRINT) FY 2017/18

For **Cannings Free Range Butchers**

March 2019  
FINAL



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# SUMMARY

<b>ORGANISATION NAME:</b>	<b>Cannings Free Range Butchers</b>
Period:	1 July 2017 to 30 June 2018
Disclosure type:	Organisational Carbon Neutrality
Total Gross Greenhouse Gas (GHG) Emissions:	744.32 t CO <sub>2</sub> -e
GreenPower credits	-505.14 t
Carbon offset credits	-240 t
<b>Total Net GHG Emissions:</b>	<b>ZERO t CO<sub>2</sub>-e</b>

## ABOUT THE ORGANISATION

Cannings Free Range Butchers is a family owned and operated business that offers free range meats and products for retail sale. Meats supplied are sourced from 100% grass fed stock and this small business started on 18 July 2010. The business operates seven facilities throughout Victoria comprising of one head office and six outlets.

Cannings Free Range Butchers believe in supplying 'ethical' meat products to customers and only sell free range meats and products containing free range meat ingredients. Cannings Free Range Butchers also stock fresh seafood that is sustainably sourced and not in threat of overfishing.

Cannings Free Range Butchers have been offsetting their operational greenhouse gas emissions (GHG) since they opened with Carbon Neutral.

## EMISSIONS SCOPE & OPERATIONAL BOUNDARY

The emissions scope and organisational boundary for the GHG inventory has been developed in accordance with the GHG Protocol and includes GHG emitting activities considered to be under the *operational control* of the business.

Cannings Free Range Butchers' GHG Emissions Inventory includes aspects of operations that the business has operational control over, as well as activities which the business could influence. The six GHG sources covered by the Kyoto Protocol: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF<sub>6</sub>) are included and reported as units of carbon dioxide equivalents (CO<sub>2</sub>-e).

Operating locations and GHG emissions from following facilities have been included in this GHG Emissions inventory.

FIGURE 1: Facilities included in carbon footprint study



## METHODOLOGY & EMISSIONS FACTORS

Except where otherwise stated in this report, Carbon Neutral has calculated Cannings Free Range Butchers' scope 1 and 2 emissions using the Department of the Environment's National Greenhouse Accounts (NGA) Factors (August 2017).

Scope 3 emissions are generally much harder to quantify as these emissions came from various activities often with no direct way to easily measure the contribution to climate change. In these cases, in addition to the NGA Factors and Technical Guidelines, Carbon Neutral has used external, credible sources to perform our calculations.

Other references used include the UK Government's DEFRA and DECC's Conversion Factors for Company Reporting 2017, EPA Victoria's Greenhouse Gas Emission Factors for Office Copy Paper, the University of Sydney and CSIRO's Balancing Act 2005 and the National Water Commission's National Performance Report 2014-15 (Urban Water Utilities).

Cannings Free Range Butchers provided Carbon Neutral with activity data that has been used to calculate GHG emissions.

*The veracity of this data is taken to be complete and accurate and has not been audited or independently verified by Carbon Neutral.*

# 2017/18 GHG EMISSIONS

FIGURE 2: Inclusions and exclusions of 2017/18 carbon footprint

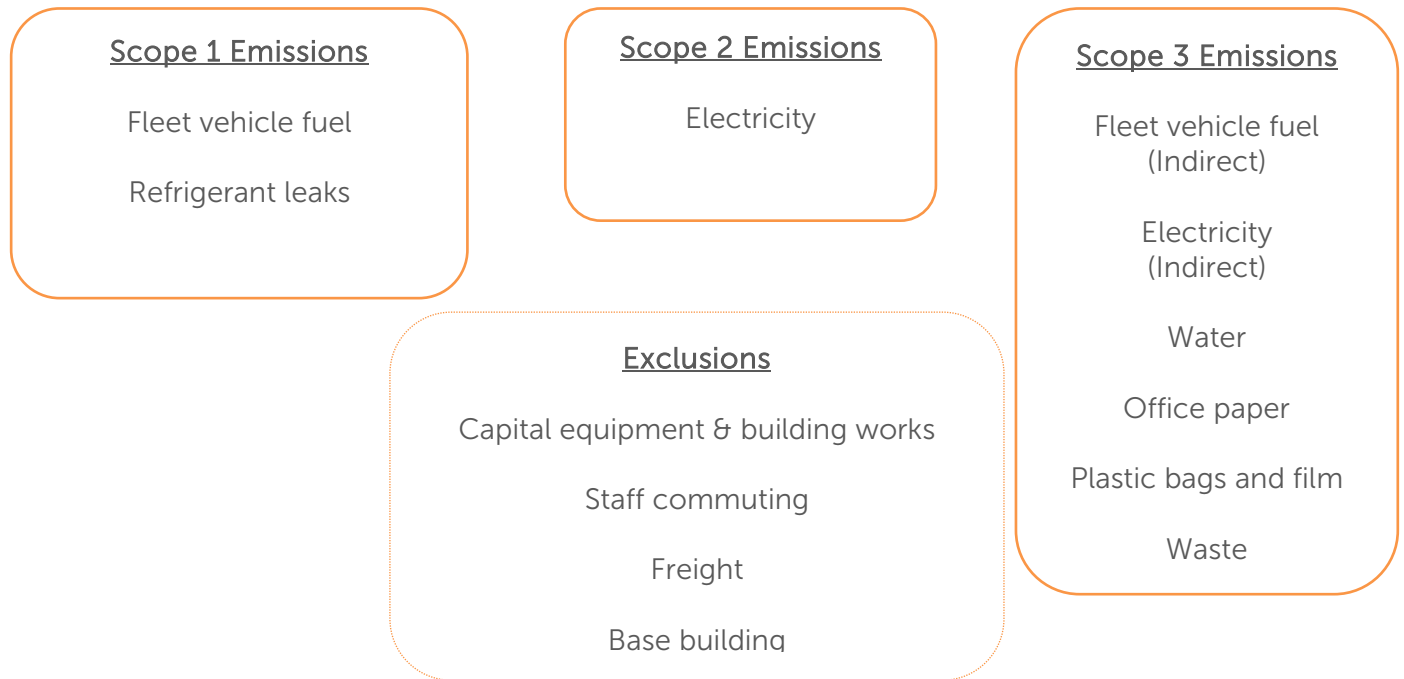
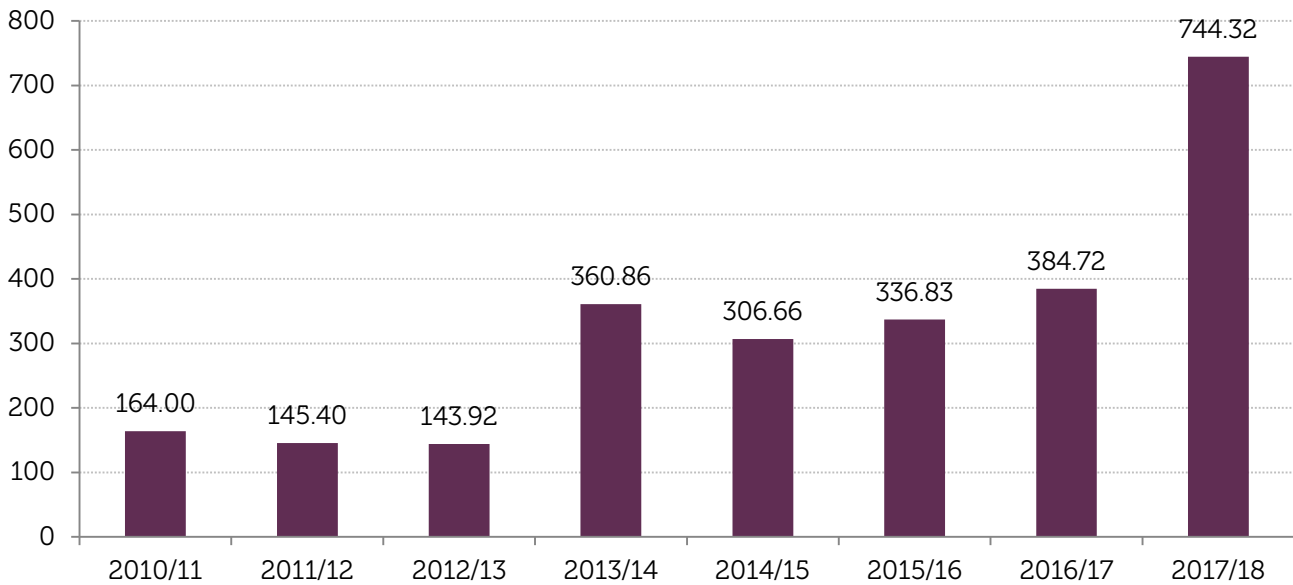


TABLE 1: Activity allowances and gross GHG emissions from activities by GHG type (2017/18)

Activity	Emission factor reference	Activity	Emission factor	TOTAL (t CO <sub>2</sub> -e)
Fleet	NGA Factors 2017	3,854 l diesel	2.86 kg CO <sub>2</sub> -e/l	11.02
Refrigerant leaks - R410A - R507	NGA Factors 2017	4 kg 213 kg	2,088 kg CO <sub>2</sub> -e/kg 3,985 kg CO <sub>2</sub> -e/kg	0.94 72.09
Electricity	NGA Factors 2017	547,510 kWh	1.18 kg CO <sub>2</sub> -e/kWh	646.06
Waste (landfill)	NGA Factors 2017	3,600 kg	1.2 kg CO <sub>2</sub> -e/kg	4.32
Office paper - Domestic virgin - Domestic recycled	EPA Victoria	12.5 kg 750 kg	1.3 kg CO <sub>2</sub> -e/kg 1.52 kg CO <sub>2</sub> -e/kg	0.02 1.14
Plastic	UK GHG Conversion Factors for Company Reporting	1,725 kg	2,577 kg CO <sub>2</sub> -e/t	4.45
Detergents & printing	Balancing Act 2005	\$5,000 \$1,000	0.5205 kg CO <sub>2</sub> -e/\$ 0.4269 kg CO <sub>2</sub> -e/\$	2.60 0.43
<b>Total Gross GHG Emissions (t CO<sub>2</sub>-e)</b>				<b>744.32</b>

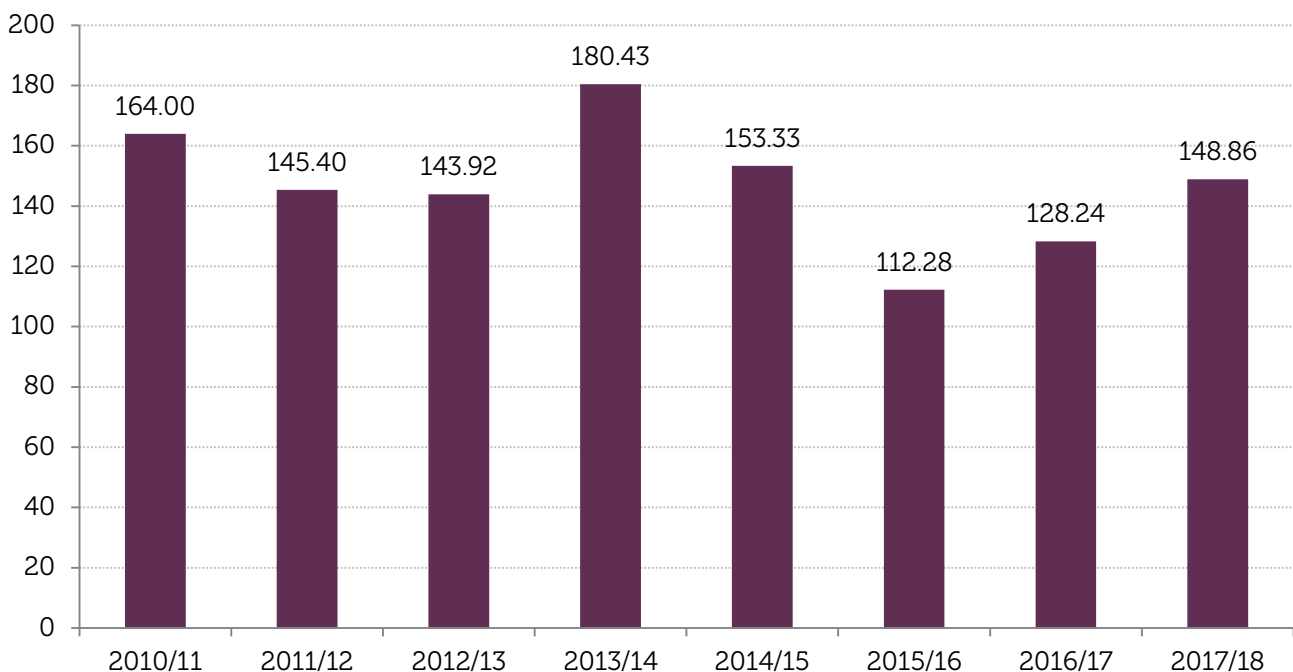
# HISTORICAL GHG EMISSIONS

FIGURE 3: Historical gross GHG Emissions for Cannings Free Range Butchers (t CO<sub>2</sub>-e)



New outlets were opened in Kew in 2013, in Malvern in 2015 in Ivanhoe in 2016 and in Tooronga and South Yarra in 2017 which has resulted in increased emissions for the business. Cannings Free Range Butcher's GHG emissions per retail outlet are shown in the following diagram.

FIGURE 4: Gross GHG Emissions per retail outlet (t CO<sub>2</sub>-e)



# 2017/18 GHG REDUCTIONS & EXCLUSIONS

**Net GHG emissions are calculated to be zero tonnes CO<sub>2</sub>-e for 2017/18.**

Net GHG emissions are achieved by the business using 100% renewable energy for its operations across all facilities as well as from the purchase and retirement of carbon offsets for unavoidable GHG emissions.

## RECYCLING

Emissions from waste sent for recycling have not been included due to its diversion from landfill. The business recycles its waste paper and cardboard where possible.

## RENEWABLE ENERGY

Five of the seven facilities used 100% renewable energy sourced from hydro schemes for their electricity. Emissions of 505.14 t CO<sub>2</sub>-e have been avoided from the purchase of GreenPower™. Scope 3 emissions from transmission and delivery losses associated with this electricity use have been included based on an emission factor of 0.01kg CO<sub>2</sub>-e/kWh.

## CARBON OFFSETS

Cannings Free Range Butchers purchase carbon credits to offset its remaining emissions.

***By offsetting the remainder of its unavoidable GHG emissions, the organisation is considered to be a carbon neutral organisation.***

Carbon offsets for 2017/18 organisational GHG emissions were purchased by Cannings Free Range Butchers and details of this are shown in the following table.

**TABLE 2: Details of carbon offsets purchased for 2017/18**

TYPE OF OFFSET	SERIAL NUMBERS	TONNES PURCHASED & ALLOCATION DATE
Biodiverse Reforestation Carbon Offsets, Australia.	12PWA84665B - 12PWA84904B	240
('stapled' and retired) VCS VCU Wind Power project by MMTC, India.	6352-297030822-297031061-VCU-034-APX-IN-1-133-01012014-31122014-0	(240)
TOTAL tonnes retired for 2017/18		240

**TABLE 3: Net GHG Emissions for 2017/18 (tonnes CO<sub>2</sub>-e)**

GROSS GHG EMISSIONS	GREENPOWER CREDIT	CARBON OFFSETS CREDIT	NET GHG EMISSIONS
t CO <sub>2</sub> -e			
744.32	-505.14	-240	<b>ZERO</b>