

CARBON CALCULATOR PROFILES

Follow the lives of Nanaimo residents and learn what changes they can make to reduce their emissions!



Casey is a retiree living in Nanaimo.



Avery is a young professional within Nanaimo.



Teri is a university student attending Vancouver Island University

Casey recently upgraded her car to an electric vehicle to save money and reduce emissions.

0.08 tCO₂e

However, she still flies to tropical destinations for vacations.

1.64 tCO₂e

She lives in an older home that is oil heated.

6.63 tCO₂e



TRANSPORTATION

Avery has a gas car that he uses for commuting to work. He like to keep his vacations local and explore Vancouver Island

1.85 tCO₂e

BUILDINGS/HOME

He decided to invest in upgrades to his older home and installed a heat pump for heating and cooling.

0.014 tCO₂e

Teri does not own a car, and instead relies on biking and public transit to get to and from the University. He enjoys staycations within the city of Nanaimo.

0.02 tCO₂e



Teri lives in an older home that relies on gas heating

1.02 tCO₂e

FOOD CONSUMPTION

Casey's diet is heavy on beef, cheese, and other animal products but has moderate food spoilage.

1.95 tCO₂e

Avery occasionally has animal products but prefers animal protein from poultry, pork and fish, avoiding beef. He has high food spoilage.

1.74 tCO₂e

Teri has a mostly plant-based diet. He always makes sure to finish his leftover food, so he has no food spoilage.

1 tCO₂e



CONSUMABLES AND GOODS WASTE

Casey tries to reduce the amount of waste as much as possible.

0.09 tCO₂e

Avery does not like waste and tries to recycle as much plastics, metals, and paper as possible

0.18 tCO₂e

Teri has a high amount of waste, but tries to recycle as much as possible.

0.3 tCO₂e

TOTAL GHG EMISSIONS

10.6 tCO₂e

TOTAL GHG EMISSIONS

3.6 tCO₂e

TOTAL GHG EMISSIONS

2.4 tCO₂e

WHAT CAN THEY DO TO REDUCE THEIR EMISSIONS?

Casey

- Choose local travel on her next vacation
- Switch to a plant based diet
- Upgrade home to renewable energy such as heat pumps

Avery

- Upgrade to an electric vehicle to reduce transportation emissions
- Work towards further reduction of waste
- Transition to a primarily plant based diet

Teri

- Upgrade home with retrofits such as a heat pump to reduce building emissions
- Reduce the amount of waste

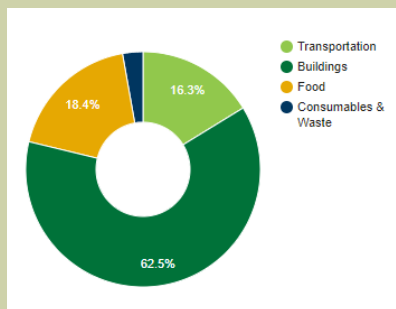
The data, methodology, and results that informed the Carbon Calculator are based on the Nanaimo Consumption Based Ecological and Carbon Footprint Assessment, conducted in 2021.

What is tCO₂e?

Short for “tonnes of carbon dioxide equivalent” this is an efficient way to describe all greenhouse gas emissions (e.g. carbon dioxide, methane, and refrigerants) in the same measurement.

Breakdown of Emissions

Casey



Transportation

Electric Vehicle 20km per day:
0.08
Flies to Cancun twice a year and
Toronto twice a year: 1.644

Buildings/Home

2500 Litres of heating oil per year
in a 1 person household: 6.63

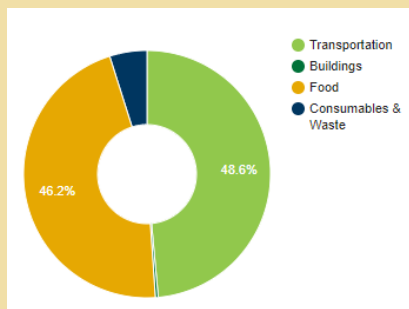
Food Consumption*

Beef/lamb once per day: 0.773
Poultry/pork/fish 1-2 times per
week: 0.044
Cheese 1-2 times per week: 0.039
10% food waste: 0.138

Consumable Goods and Waste

20L garbage bags- 1 bag: 0.075
20L plastics and metals recycling-
1 bag: 0.07
20L paper recycling- 1 bag: 0.7

Avery



Transportation

Gas car 20 km per day: 1.606
Gas car vacations 1000 km per
year: 0.220

Buildings/Home

1400 Kilowatt Hours of Electricity
per year in a 4 person household:
0.014

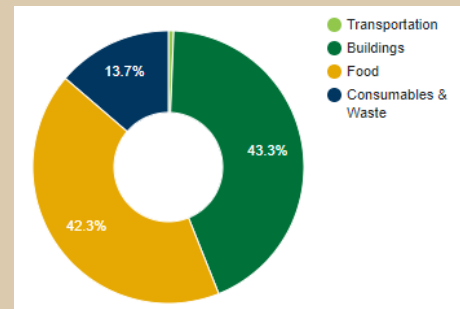
Food Consumption*

Poultry/pork/fish once per day:
0.207
Cheese 1-2 times per week: 0.039
30% percent food waste: 0.531

Consumable Goods and Waste

20L garbage bags-2 bags: 0.038
20L plastics and metals recycling-
2 bags: 0.035
20L paper recycling-2 bags:
0.035

Teri



Transportation

Cycling 15km per day: 0
Public transit 200 km per year:
0.015

Buildings/Home

82 Gigajoules per year in a 4
person household: 1.02

Food Consumption*

Cheese 1-2 times per week: 0.039
0% food waste: 0

Consumable Goods and Waste

20L garbage bags- 4 bags: 0.075
20L plastics and metals recycling- 2
bags: 0.058
20L paper recycling- 2 bags: 0.039

*even the lowest waste vegan diet has 0.96 emissions and is automatically added to the final food consumption total