

BRECON - COMMUNITY CARBON AUDIT APRIL 2022

POPULATION	8407	OFF GAS HOUSES	251
HOUSEHOLDS	4029	HOUSEHOLD SIZE	2.09

Understanding the Carbon Audit

Community Carbon Auditing creates an estimation of carbon emissions at the community scale. It has been developed using UK Government data sources. Greenhouse Gas Emissions are measured in Tonnes of Carbon Dioxide Equivalent or tCo2e. It is a widely used measurement that accounts for the warming effect of different gases.

Emissions are grouped into three sources:

Domestic energy:

Energy used in our homes and private cars. Accurate local data was used for electricity and gas. County level figures for road fuels are proportioned based on community population, adjusted by a distance-to-services factor. For homes without mains gas the number of properties using Oil, LPG and wood was estimated.

Consumption:

The goods and services we buy including carbon emitted in the supply chain from overseas manufacture and transportation. UK Government data provides a detailed breakdown of 33 various sectors, they have been condensed to 14 sectors. The data is based on the UK total and adjusted to account for lower average household spending in Wales.

Public Services:

Those services operated on our behalf including central and local government, police and NHS. As everyone in the UK benefits from these services, the total UK figure is proportioned to the community population.

NOTE THAT: This is not an audit of individual houses – each home will vary from the average.

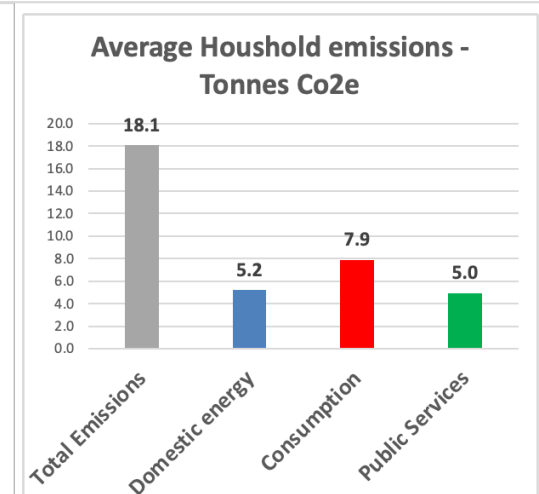
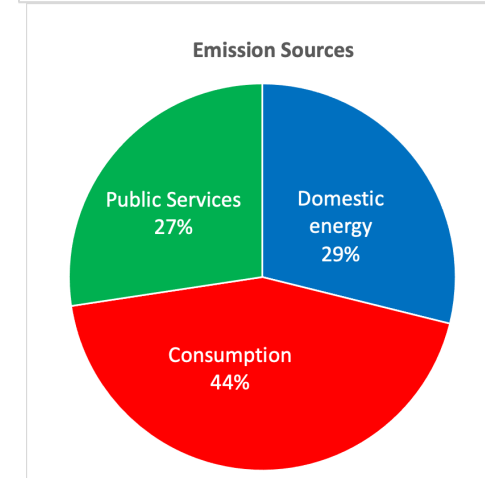
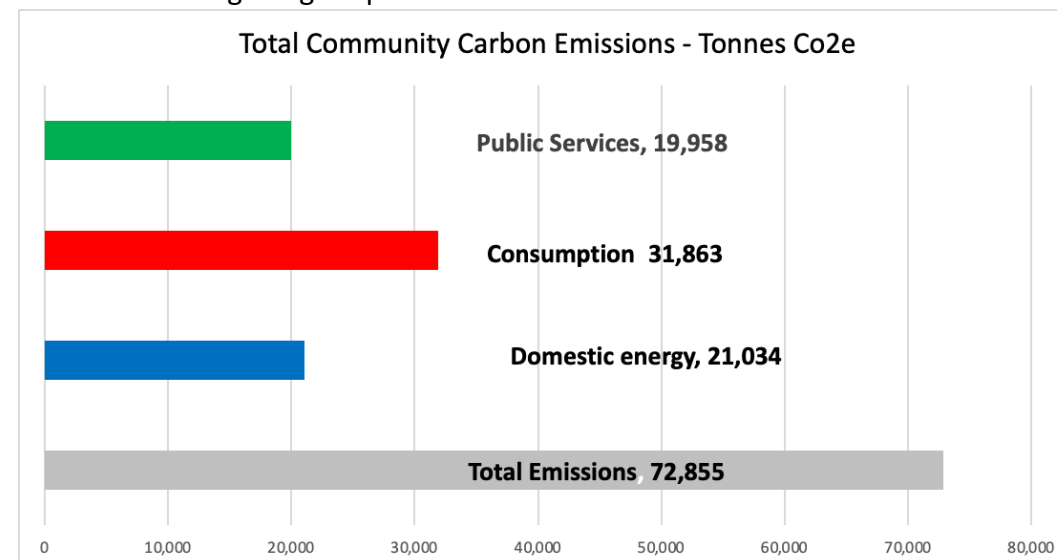
It assumes that each home has at least 1 private car

For gas, oil, wood and coal, it assumes each house is heated primarily by one of the fuel types, not a combination of fuels

TOTAL COMMUNITY CARBON EMISSIONS – 72855 tCo2e

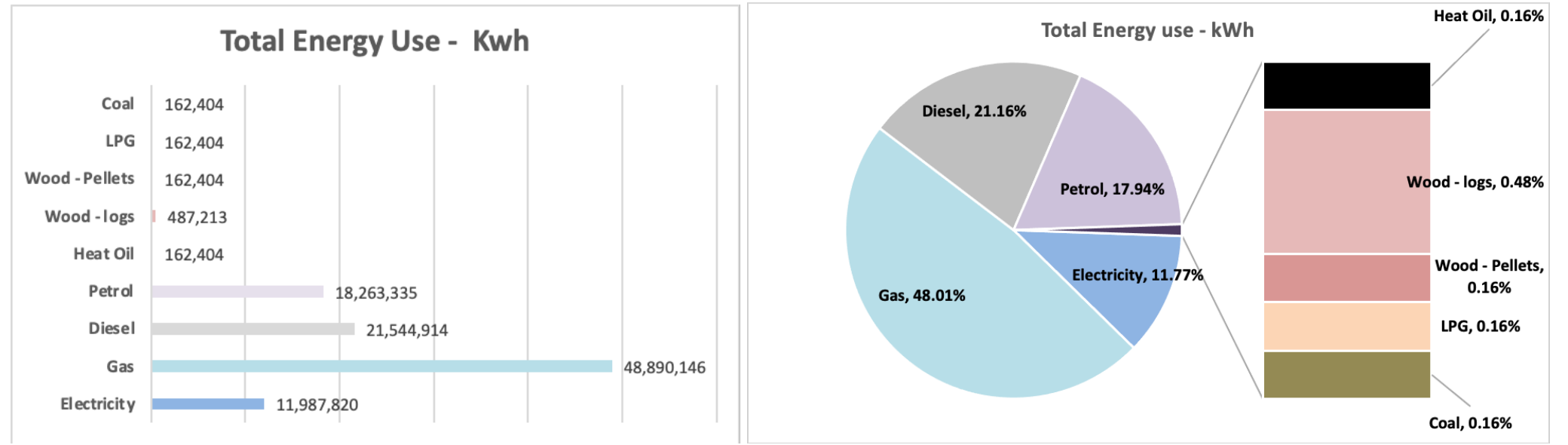
These charts show:

- The total carbon emissions from everyone in the community
- The proportion from the three emission sources
- An averaged figure per household

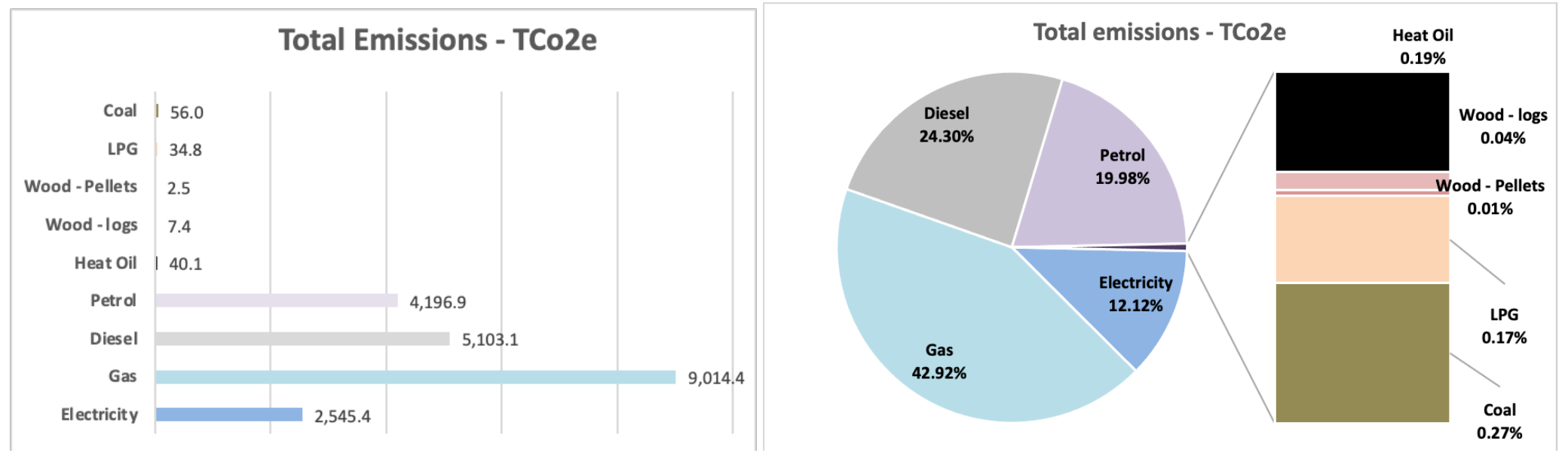


DOMESTIC ENERGY Household Emissions: 5.2 TCo2e

These charts show the **total domestic energy use** and the proportions of each fuel

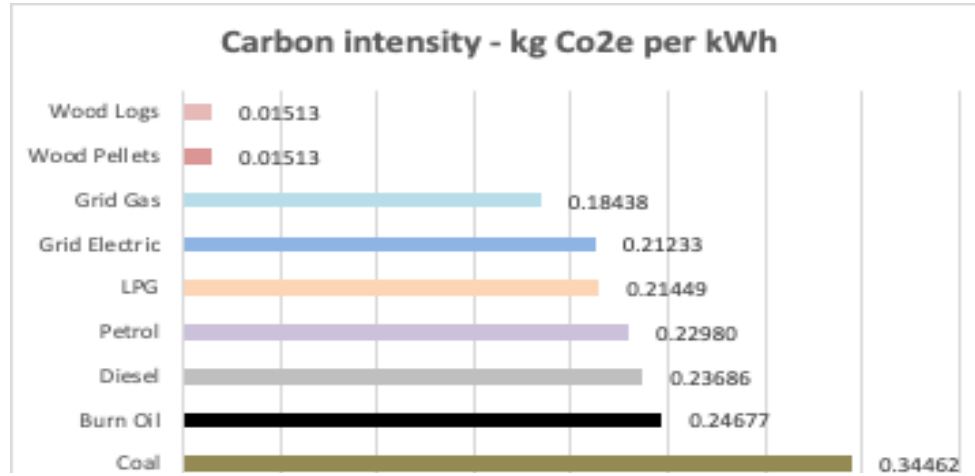


These charts show the **total carbon emissions** and the proportions from each fuel



DOMESTIC ENERGY – Carbon intensity

This chart shows the carbon intensity of each fuel type. It shows how much carbon dioxide equivalent is produced from consuming 1 kWh of each fuel. Higher carbon fuels have a higher intensity



Calculating your own household carbon emissions

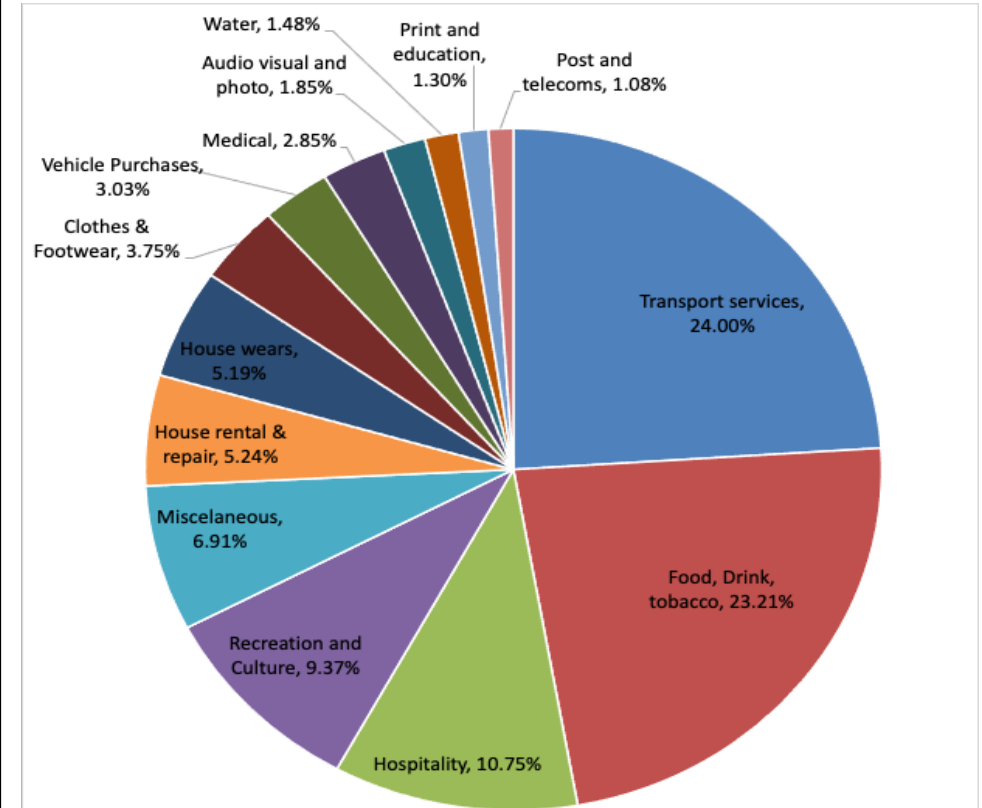
You can use the carbon intensity to calculate your own household carbon emissions with this table.

1. Record how much of each fuel you use – in the units listed
2. Multiply Column A x Column B x Column C for an answer in kg Co2e

Fuel	UNIT	A	B	C	AxBxC=
Fuel	UNIT	Annual use	Convert kWh	C intensity	TOT Kg co2e
Coal	kg		8	0.34462	0
Burn Oil	litre		10.77	0.24677	0
Diesel	litre		10.6	0.23686	0
Petrol	litre		9.45	0.22980	0
LPG	litre		7.03	0.21449	0
Grid Electric	kWh		1	0.21233	0
Grid Gas	kWh		1	0.18438	0
Wood Pellets	kg		4.8	0.01513	0
Wood Logs	Cu metre		1600	0.01513	0
TOTAL					0

CONSUMPTION Household emissions: 7.9 TCo2e

The chart shows how the total is broken down into the various categories of goods and services we consume. Individual households consume different amounts of each category. The chart will show those goods and services that have a higher carbon impact -either because they are carbon intensive, or because they are consumed in high volumes.



PUBLIC SERVICES Household emissions: 5.0 TCo2e

The public services figure included local and central government and some technical elements included in the UKs carbon footprint. The UK total is divided by the UK population and scaled to the household size to create a per household figure.



Powys Association of Voluntary Organisations
Cymdeithas Mudiadau Gwirfoddol Powys

