

# Climate Change Office



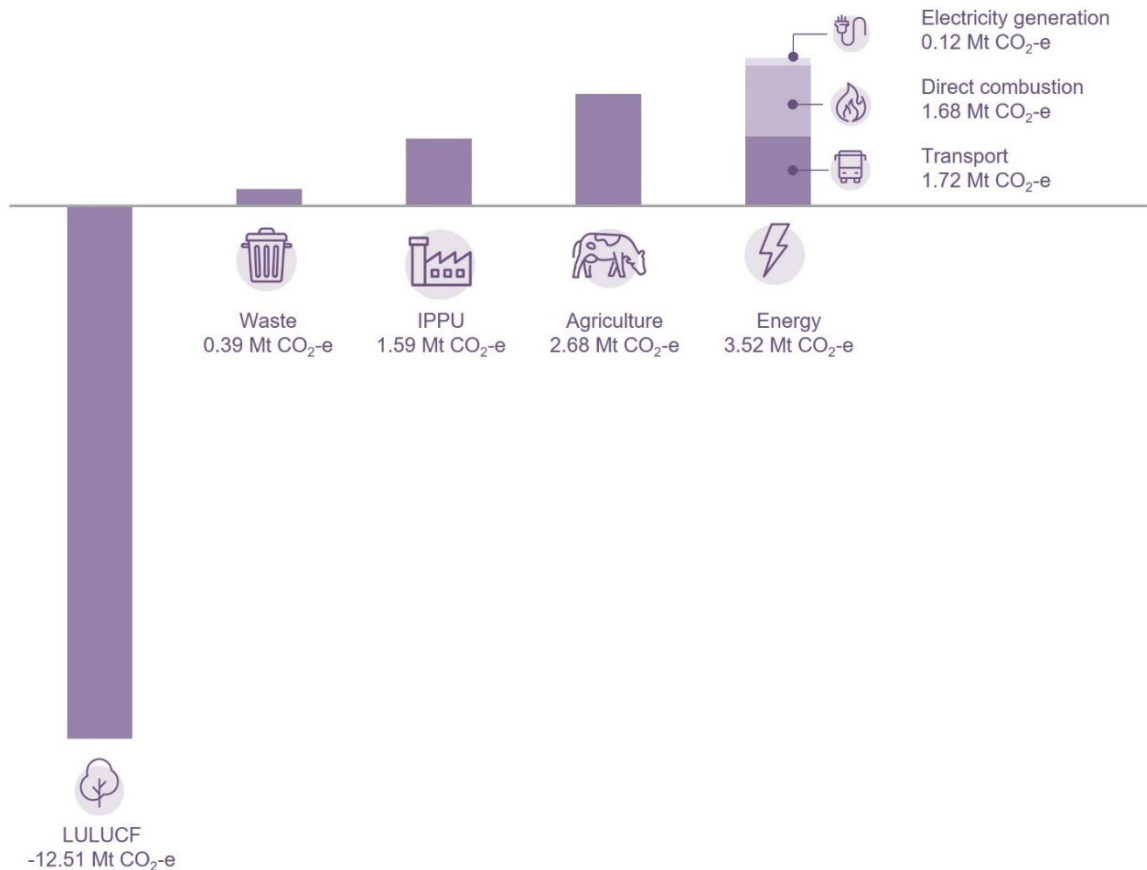
Image: Chris Crerar

## Tasmania's greenhouse gas emissions

In 2022, Tasmania's emissions were **minus 4.34 megatonnes of carbon dioxide equivalent (Mt CO<sub>2</sub>-e)**. This is a **drop of 122.2 per cent** from 1990 levels.

Tasmania was the first Australian jurisdiction to achieve net zero emissions, in 2014, and has done so for the last nine years.

### Where do our emissions come from?



## What are greenhouse gases?

Greenhouse gases are gases that trap heat in the atmosphere and make the earth warmer.

These gases occur naturally, but are also produced by human activities. For example, burning fossil fuels to power our homes, cars and factories produces the greenhouse gas carbon dioxide.

Other activities, like farming cows and sheep, and sending food and garden waste to the tip, produce methane gas.

These activities are producing too many greenhouse gases, causing climate change.

## What is a carbon sink?

Plants, soils and oceans remove carbon dioxide from the atmosphere and store it, known as sequestration. An area that stores a lot of carbon, like a forest, is sometimes called a 'carbon sink'. Tasmania's forests absorb carbon dioxide from the atmosphere and offset all our emissions.



Image Chris Crerar

## How are emissions measured?

The gases with the greatest impact on global warming are water vapour, carbon dioxide, methane and nitrous oxide. Other common greenhouse gases include ozone and chlorofluorocarbons.

Each greenhouse gas varies in terms of its contribution to climate change. Global warming potentials are used as a relative measure of how much heat a greenhouse gas traps in the

atmosphere. They compare the amount of heat trapped by a certain mass of each gas to the amount of heat trapped by a similar mass of carbon dioxide. Using this method, greenhouse gases are combined into a single, consistent value of carbon dioxide equivalent, known as CO<sub>2</sub>-e.

## How are emissions reported?

Each year the Tasmanian Government releases a report on Tasmania's latest greenhouse gas figures. The report shows the state's progress towards its emissions reduction target, and monitors emissions by sector. You can read the report at [www.recfit.tas.gov.au/climate](http://www.recfit.tas.gov.au/climate)

Tasmania's emissions are reported in accordance with the Intergovernmental Panel on Climate Change (IPCC) reporting framework for national greenhouse gas inventories.

The report is compiled using data from the Australian Government's State and Territory Greenhouse Gas Inventories, which is available online ([greenhouseaccounts.climatechange.gov.au](http://greenhouseaccounts.climatechange.gov.au)).

The Inventories are prepared from the emission estimates in the [National Inventory Report](#). The Australian Government submits the National Inventory Report to meet Australia's annual reporting commitments under the United Nations Framework Convention on Climate Change and the Kyoto Protocol.

The National Inventory Report runs two years behind the current date and represents the most recent official data in Australia on annual emissions.

Each year, the Australian Government updates how it calculates the national emissions figures, updating all the figures from 1990 to the current reporting year. The figures are recalculated to ensure that they are accurate, complete, and can be compared with reports from other countries. This means the latest accounts cannot be compared with those released in previous years.