

Scope of the NSW state-wide net zero by 2050 target

Defining the scope of the NSW net zero emissions by 2050 target

Net zero emissions are achieved when human caused emissions of greenhouse gases to the atmosphere are balanced by their removals over a specified period.

NSW's net emissions for the purposes of the 2050 NSW net zero emissions target are calculated by determining the amount of direct greenhouse gas emissions attributable to NSW in line with the Australian National Greenhouse Accounts. This includes any human caused removals of greenhouse gas emissions from the atmosphere due to activities within NSW.

To achieve net zero, NSW's net emissions are required to be zero or negative by 2050 and for each subsequent reporting period.

Accounting

When we track progress toward our 2050 net zero targets, we are tracking the State's direct emissions. These direct emissions are calculated in line with the Australian National Greenhouse Accounts.

These accounts are prepared by the Department of Climate Change, Energy, the Environment and Water. They are based on United Nations Framework Convention on Climate Change (UNFCCC) reporting and accounting rules and are aligned with Paris Agreement requirements.¹ As the National Greenhouse Accounts do not include emissions from international shipping and aviation in their reporting of Australia's emissions, these emissions are not included in the calculation of NSW's direct emissions.

The State's net emissions for the purposes of the 2050 target do not include indirect emissions.²

Global warming potential metric

NSW emissions are calculated using the 100-year time-horizon global warming potentials relative to CO₂. This is the calculation that the Commonwealth Government uses and it is in line with Australia's reporting requirements under the Paris Agreement.

¹ The Department of Climate Change, Energy, the Environment and Water publishes a series of comprehensive reports and databases that estimate, and account for, Australia's greenhouse gas emissions estimates from 1990 onwards. Together these products comprise the National Greenhouse Accounts.

² Examples of "indirect" emissions include scope 2 emissions, scope 3 emissions, and consumption-based emissions.

Greenhouse gases covered by the net zero emissions by 2050 target

NSW emissions are calculated in line with Australia's reporting through the National Greenhouse Gas Inventory. They cover sources of greenhouse gas emissions and removals resulting from human made activities for the major greenhouse gases:

- carbon dioxide (CO₂)
- methane (CH₄)
- nitrous oxide (N₂O)
- perfluorocarbons (PFCs)
- hydrofluorocarbons (HFCs)
- sulphur hexafluoride (SF₆).

In line with the United Nations Intergovernmental Panel on Climate Change's (IPCC) guidelines for national inventory reporting (IPCC 2006, IPCC 2019), Australia's, and NSW's emissions of the greenhouse gas nitrogen trifluoride (NF₃) are considered minor. Because of this, they are not estimated and not included as part of the NSW net zero emissions by 2050 target.

Emissions from all sectors of the economy are covered by the NSW net zero emissions by 2050 target, in line with the National Greenhouse Accounts.

Periodic review of the scope of the State's 2050 target

The scope will be reviewed periodically so that it remains current in light of improved information about climate science, international action, and economics.