

LIBRARY

Department of Biodiversity,
Conservation and Attractions

This PDF has been created for digital preservation. It may be used for research but is not suitable for other purposes. It may be superseded by a more current version or just be out-of-date and have no relevance to current situations.

Climate change

Reporting greenhouse gas emissions

This fact sheet provides an overview of current requirements for estimating and reporting emissions of greenhouse gases by industry and State Government agencies in Western Australia (WA).

NEED FOR REPORTING

To reduce greenhouse gas emissions, it is necessary to know the amount being generated. This will enable policies to be developed and options to be considered to reduce emissions.

Emission information must be reported if an organisation has obligations under the *National Greenhouse and Energy Reporting Act 2007* (NGER Act). Reporting will also be necessary for emissions trading under the proposed Carbon Pollution Reduction Scheme.

BUSINESS REPORTING LEGISLATION

The NGER Act came into effect in September 2007 and makes it mandatory for constitutional corporations (mainly large businesses) to report annually on greenhouse gas emissions, energy production and energy consumption if the thresholds defined in the NGER Act are met or exceeded.

WA GOVERNMENT AGENCY REPORTING

The Department of Environment and Conservation's Office of Climate Change is continuing to develop a framework for WA Government agency greenhouse gas emissions reporting. This framework is based on internationally accepted guidelines and is known as the System for Accounting and Reporting of Government Emissions (SARGE). It is intended to be compatible with the system in use under the NGER Act.

SARGE applies only to WA Government agencies that are not constitutional corporations and that emit equal to or more than 1,000 tonnes of carbon dioxide from stationary energy sources in a financial year. Some government trading enterprises may have separate obligations to report under the NGER Act.

WHAT GREENHOUSE GASSES MUST BE REPORTED?

The six Kyoto Protocol greenhouse gases or classes of gases are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulphur hexafluoride (SF₆), hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs).

HOW TO REPORT?

Step 1: Define the organisation's geographical boundary (e.g. WA operations).

Step 2: Define the organisational boundary. Refer to the 'operational control' section of the Greenhouse Gas Protocol for guidance.

Step 3: Identify any greenhouse gas producing sources/ activities within the organisational boundary. Greenhouse gas emission sources include fuel combustion in boilers, furnaces, engines, generators, turbines, pumps or compressors; fuel combustion in road, air, rail and sea vehicles; physical and chemical processes; agricultural sources such as bio-mass decay and enteric fermentation in animals; land-use change and forestry activities such as forest management, tree planting, soil disturbance/ tilling, land clearing, burning of vegetation; and decomposition of organic matter in landfills and sewage treatment.

Step 4: Define the organisation's operational boundary. According to the Greenhouse Gas Protocol, emission sources should be classified as producing either direct emissions, energy indirect emissions, or other indirect emissions.

Step 5: Estimate the organisation's emissions. Greenhouse gas emissions can be quantified using a number of different techniques including mass balance, fuel analysis, engineering calculations, sampling, direct measurement, or the use of activity data and emission factors.

WHAT NEXT?

Industries should identify and quantify emission reductions from any abatement projects, sinks and offsets as well as any strategies to reduce emissions in coming years.

Emission reductions can result from actions such as upgrading to energy efficient light fittings, installing energy efficient equipment, upgrading to fuel efficient vehicles, switching to alternative fuels such as LPG and natural gas and reducing or recycling waste.



Climate change

MORE INFORMATION

NGER Act and processes

<http://www.climatechange.gov.au/reporting/legislation/index.html>

<http://www.climatechange.gov.au/reporting/index.html>

SARGE

<http://www.dec.wa.gov.au/our-environment/climate-change/greenhouse-reporting.html>

Australia's National Greenhouse Accounts

<http://www.climatechange.gov.au/inventory/index.html>

The Greenhouse Gas Protocol — A Corporate Accounting and Reporting Standard

<http://www.ghgprotocol.org/files/ghg-protocol-revised.pdf>