



## **AUSTRALIA**

### **Estimation of Greenhouse Gases and Global Warming Potentials**

#### **Submission to the AWG-KP and AWG-LCA**

This submission provides the initial views of the Australian Government on the following options being considered for the estimation of greenhouse gas emissions and global warming potential (GWP) values for the post-2012 outcome:

- Updating GWP values with the most recent information provided by the Intergovernmental Panel on Climate Change (IPCC);
- Using different time horizons (20, 100 and 500 years); and
- Applying global temperature potentials (GTPs) as an alternative metric.

These initial views are informed by the following overarching principles:

- Coverage of anthropogenic emissions and removals should aim to be rigorous, robust and comprehensive, while finding an appropriate balance between scientific precision, practicality and policy relevance;
- Approaches should facilitate activities that deliver real climate benefits within a timeframe appropriate to achieve the Convention's goal of preventing dangerous anthropogenic interference with the climate system;
- Methodologies should aim not to restrict the flexibility of policy responses, recognising the need for a comprehensive suite of mitigation measures to achieve required levels of abatement; and
- The AWG-LCA and the AWG-KP should apply the same methodologies and metrics to post-2012 mitigation actions.

## **Updating GWP values**

Australia considers there is a strong case for adopting updated GWP values for the post-2012 outcome. These updated values should use the most recent IPCC assessment, as provided in the Third and Fourth Assessment Reports. These updated values reflect the improved scientific understanding of the international community of the impacts of covered gases. Updating the GWP values need not negatively impact time-series consistency, which can be appropriately managed.

## **Using different time horizons (20, 100 and 500 years)**

Australia considers the 100-year time horizon should be maintained for calculation of GWP-based CO<sub>2</sub>-equivalents in the second commitment period. Adoption of a 100-year time horizon for the first commitment period was primarily a policy choice, which sought to balance the need to account for both longer- and shorter-lived GHGs.

In the absence of compelling scientific or policy arguments for alternative time horizons, the 100-year time horizon remains an appropriate and practical approach. In addition, revision of the time horizon would unnecessarily introduce complexities relating to accounting and time series consistency without any appreciable general benefit.

## **Applying global temperature potentials (GTPs)**

Australia considers that GWP remains the most appropriate metric for measuring the relative contribution of various greenhouse gases to climate change. The IPCC's Fourth Assessment Report recommends that GWP remains the metric to compare future climate impacts of emissions of greenhouse gases. Australia notes a number of the assumptions used in calculating GWP apply to other metrics, including GTP. Adoption of GTP would also unnecessarily introduce issues relating to accounting and time series consistency without any appreciable general benefit.