

# Australia tops the GHG league table

A June report by the independent research centre, The Australia Institute, claims that, on a comprehensive basis, Australians actually have the highest greenhouse gas (GHG) emissions per person of all industrialised nations, 27% higher in fact than those of US citizens, and more than double the average for industrialised countries.

It is a provocative finding given an accepted view that Australia generally ranks behind other nations such as the US in emission levels. According to the report this is because ‘to date only data on energy-related emissions per capita have ever been considered. When measured on this partial basis Australia’s per capita emissions are high, but are exceeded by other industrialised countries.’

The Institute’s calculations, made on an encompassing basis for all industrialised countries, drew on data from national communications and GHG inventory submissions to the United Nations Framework Convention on Climate Change secretariat. The report ‘presents the most recent and consistent estimates of per capita emissions, covering the years up to and including ... 2001.’ Historical numbers on the per capita emissions of Annex I nations between 1990 and 2001 inclusive were also considered.

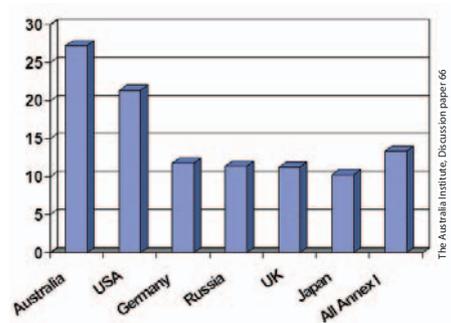
Author Hal Turton, currently a researcher at the International Institute for Applied Systems Analysis in Austria, writes that it is not the case, as has been argued, that Australia’s small population means, in absolute terms, that it is not a major greenhouse polluter. Our total emissions exceed those of major European economies such as France and Italy (each with three times Australia’s population) and are only 20% lower than those of the UK. ‘Thus if Australia’s contribution to climate change is trivial, then so are those of these countries,’ Turton points out.

The report suggests that a 7.5% decline in Australia’s per capita emissions between 1990 and 2001 due to land clearing reductions actually masked the robust increase in emissions from other sources, especially energy. According to Turton, ‘This has allowed the Australian Government to claim that it is ‘on track’ to meet its target under the Kyoto Protocol. However, as land clearing emissions stabilise at a low level in

the next few years, the underlying, and rapid, increase in energy-related emissions will see Australia’s total emissions rise.’

In assessing the factors behind Australia’s rankings, the report breaks down the activities and sectors responsible for the difference in per capita CO<sub>2</sub> emissions from fuel combustion between Australia and the EU as a whole. It concludes that the electricity generation mix, road transportation, and the production of non-ferrous metals (mainly aluminum) mostly account for the difference – the same sectors that have shown the highest emissions growth in Australia.

Compared to Europe, Australia has less capacity or willingness to accept hydro and nuclear power, and uses a more greenhouse intensive mix of fossil fuel. Where transportation is concerned, our comparably-high emissions are not in fact due to the large distances between centres, rather, urban vehicle use is more intensive, and, for road freight, emissions are higher because of additional trips and heavier loads.



Greenhouse gas emissions per capita for selected Annex I countries, 2001 (t CO<sub>2</sub>-e)

Turton reports that Australia’s smelting industry is the world’s most GHG-polluting, with cumulative emissions double the world average per tonne of Aluminum produced. Considering the industry’s annual \$210–250 million subsidy through cheap electricity, the ‘limited economic benefit’ of smelting in Australia, and its higher emissions intensity, Turton suggests that ‘reducing the size



Australians’ car use is amongst the most emissions-intensive anywhere.

of the sector by eliminating the large subsidies it receives may well be a cost-effective means of reducing Australia’s emissions.’

Head of the Australian Greenhouse Office’s International and National Strategy Branch, Dr Greg Terrill, argues that the Australia Institute’s assertions are nothing new, and that Australia in fact leads the world in its approach to emissions.

‘In general, those countries that are exporters of fossil fuels and energy intensive goods such as cement and aluminium tend to have higher per capita emissions than those countries that predominately import such goods ...’

‘While the Australia Institute’s report discussed only industrialised nations, the same is true for developing countries, some of which are the highest per capita emitters,’ he said.

In contrast to the report’s assessment of smelter emissions, Dr Terrill said, ‘From a global environmental perspective, the efficient production of these goods in terms of emissions per unit of production is more important than the country in which the emissions are incurred. Australian producers lead the world in terms of the emissions efficiency of production. The Australian Government has introduced major measures across all sectors of our economy to reduce Australia’s greenhouse signature.’

**More information:**

The Australia Institute: [www.tai.org.au](http://www.tai.org.au)  
 Turton, H. (2004) Greenhouse gas emissions in industrialised countries –Where does Australia stand? Discussion Paper Number 66.