

Please find attached the pdf file of a recent paper of mine on the environmental, or 'ecological', footprints of countries from around the world [Hammond, G.P. 'People, planet and prosperity': the determinants of humanity's environmental footprint. *Natural Resources Forum (the United Nations' Sustainable Development Journal)*, 2006; 30, 27-36]. This might be of interest to your Committee in connection with its current "Inquiry into a Sustainability Charter" for Australia.

The research behind my paper was curiosity-driven, but it has a number of policy implications for the global environmental debate, and for climate change negotiations specifically. It highlights those nations that are relatively frugal or profligate in terms of their consumption of resources and environmental impacts. My analysis of per capita national environmental footprints shows that they are strongly dependent on per capita national income and only weakly on population density. Poorer, developing countries therefore normally live well within their 'biocapacities'.

Perhaps controversially, the United States of America (USA) comes out of this study rather better than some 'environmentalists' would expect. It is shown to have no greater environmental impact than would be expected for a country of its wealth and population density. There are other nations, including the United Kingdom, who are more profligate. Likewise, although the USA exceeds its own biocapacity, there are many other nation States that have much higher overshoot ratios. Consequently, the USA might be able to utilise such insights and data to counter the international criticism that it often receives as being a superpower that contributes to global CO₂ emissions out of proportion to its population size. In the case of Australia, it is shown to be quite frugal in terms of its use of 'natural capital', and to fall some way below its biocapacity. This implies that other countries, in both the northern and southern hemispheres, might then need to take a rather different view of the environmental impact of Australia and the USA in the context of the post-Kyoto international climate change negotiations.

On a note that might be seen as more positive from an environmental perspective, the findings of my study contradict the hypothesis by the controversial environmentalist and statistician Bjørn Lomborg that societies become greener as they accumulate wealth. He based this assertion (in 'The Skeptical Environmentalist: Measuring the Real State of the World', CUP, Cambridge, 2004) on a comparison of the now largely discredited 'Environmental Sustainability Index' (ESI), developed at Yale Center for Environmental Law and Policy for the World Economic Forum at Davos, with the Gross National Income of countries from around the world. In reality, my paper shows that the environmental impact of nations rises with economic wealth.

General insights derived from environmental footprinting, such as the need for humanity (and, more debatably, individual countries) to live within biocapacity limits, might usefully be incorporated into post-Kyoto discussions. National biocapacity-related constraints could be included within a modified 'contraction and convergence' quota allocation scheme of the sort advocated by the Global Commons Institute and others. It would put into perspective future GHG burden sharing arrangements between the wealthy nations of the northern hemisphere and the Majority South.

I would be happy to respond to any queries that you might have on this work. Regards.

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