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Submission to the House Standing Committee on Industry and Resources Inquiry into Inquiry into the development of the non-fossil fuel energy industry in Australia: Case study into selected renewable energy sectors

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## Introduction.

Over the last two decades, Greenpeace has actively worked to move the world away from human-induced climate change. A major part of this work has been promoting a move way from fossil fuels to clean energy alternatives, such as renewable energy. We would like to provide the committee with expert evidence on the case for renewable energy both internationally and domestically.

Greenpeace appreciates the opportunity for Mr Sven Teske of Greenpeace International to present to the committee on Thursday 31 June 2007. Sven is the Director of the Renewable Energy Campaign for Greenpeace International. Sven is ideally placed to cover the terms of reference in regards to the global development of these sectors and their prospects for economically viable electricity generation, storage and transmission.

At a later hearing, Ms Catherine Fitzpatrick, Team Leader for the Energy and Climate Campaign for Greenpeace Australia Pacific and Mark Wakeham, energy campaigner for Greenpeace would like to provide additional evidence to the Committee from an Australian perspective.

In Australia, Greenpeace has campaigned for the extension of the Federal Mandatory Renewable Energy Target (MRET) program, and, in the absence of an increase to the target, has also worked at the state government level for the introduction of state based renewable energy targets. We have provided the committee with several detailed reports on renewable energy that we have recently produced.

To preface this we would like to make a few points about renewable energy policy. To reduce our greenhouse emissions levels we need a strong renewable energy industry in Australia. To support the deployment of renewable energy projects which reduce our need for fossil fuels Australia needs the following:

- 1) a price on carbon which forces polluters to pay for the negative externality produced by their pollution. A price on carbon would go some way towards levelling the playing field between fossil fuels and renewable energy, but alone is insufficient to guarantee the deployment of new renewable energy projects.
- 2) the removal of all government subsidies to fossil fuel industries and the redirection of subsidies so that they support zero emissions technologies, like renewable energy and energy efficiency. The Institute for Sustainable Futures at the University of Technology Sydney, recently prepared a report for Greenpeace entitled "Energy and Transport subsidies in Australia". The report found that fossil fuel industries received between \$9.3 billion and \$10.1 billion in subsidies from state and federal governments each year in Australia (or 97% of total energy and transport subsidies). By comparison the renewable energy industry receives between \$317 million and \$334 million each year (just 3% of energy and transport subsidies). We have included copies of these reports as part of our submission.
- 3) A market mechanism that provides the incentive to invest in renewable energy projects until such time as renewable energy projects are cost competitive with their fossil fuel counterparts. The Federal Government's MRET program was highly successful in delivering new renewable energy projects ahead of schedule and below the estimated cost. Unfortunately the target set for the MRET program was too low, and therefore MRET has ceased to act as a driver for new projects. While it is pleasing that some states are moving ahead with their own renewable energy targets, this is a poor substitute for an effective national scheme that supports renewable energy. Greenpeace, along with the Australian Conservation Foundation and the Climate Action Network of Australia, recently published a detailed report looking at what a 25% renewable energy target would deliver for Australia in terms of emissions reductions, investment, jobs and impact on electricity prices. We have enclosed copies of this report as part of our submission.

In addition to a mandatory renewable energy target, newer or higher cost technologies such as solar photovoltaics may need additional mechanisms like a solar feed-in premium.

4) To ensure that greater uptake of renewable energy delivers manufacturing and export markets for Australia it is critical that we support both the research and development of new renewable energy technologies, as well as create the conditions for the manufacture of renewable energy project components in Australia.

While there is some funding support for renewable energy commercialisation and deployment in Australia, research and development budgets have been slashed in recent years. The Renewable Energy CRC was defunded in 2002, and the Energy R&D Corporation was closed in 1996. Whilst small amounts of funding are available for research under Australian Research Council grants, and larger amounts of funding are available at the demonstration and commercialisation phase, there is a funding gap with no funding available for technologies in the development phase. This has already seen us lose projects internationally. For instance, in the solar industry alone the University of New South Wales has lost buried contact solar cells and crystalline silicon on glass technologies to Spain and Germany respectively. The Australian National University has lost development of solar concentrator technology and is set to lose the sliver cell manufacturing technology to overseas. Sydney University has seen Trough Concentrator Technologies shift to California, and evacuated tube solar hot water technologies move offshore to China.

The most effective way to support domestic manufacturing of renewable energy technologies is to ensure that Australia has a strong market for renewable energy products and to ensure that mechanisms that encourage investment in renewable energy are long-term and predictable, providing the incentive to invest in capital intensive plant.

Additionally to these points, Sven will cover much of the material in the international reports that he has led or been involved in producing.

We enclose the following briefings or reports:

- 1. "Energy Revolution A sustainable energy outlook" http://www.energyblueprint.info
- 2. A Bright Future 25% Renewable Energy for Australia" http://www.greenpeace.org/australia/resources/reports/climate-change/a-bright-future-25-renewable
- 3. ISF Report commissioned by Greenpeace "Energy and Transport Subsidies in Australia" http://www.isf.uts.edu.au/whatwedo/ISFsubsidiesreport2007.pdf
- 4. Solar Generation: Solar Electricity for over 1 billion people and 2 billion new jobs by 2020 http://www.epia.org/documents/Solar\_Generation\_report.pdf
- 5. "Global Wind Energy Outlook", Greenpeace/Global Wind Energy Council, 2006 http://www.gwec.net/index.php?id=65
- 6. Baseload Discussion Paper "Renewable energy can replace coal"

We look forward to meeting with the committee and hope that this inquiry delivers new incentives for climate change action, and renewable energy support and deployment in Australia.

Yours sincerely

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