EPA Report Finds WA Pays Environmental Cost For Resources Boom

he WA State of the Environment Report 2007 released in July by the Western Australian Government's Environmental Protection Agency (EPA) outlines the biggest causes for concern in terms of the Western Australia's environmental health. "Fundamental pressures are", according to the report, "the EPA's biggest causes for concern." With increasing pressures on the environment from WA's economic boom and consumption of natural resources are causing climate change, according to the report.

The greatest factor in climate change is claimed to be greenhouse gas emissions and according to the report "74% of the State's emissions in 2004 came from the energy sector, due to its heavy reliance on fossil fuels for energy supply and transport.

"Emissions from the energy sector alone increased by 58% between 1990 and 2005. The state also has a large number of energy-intensive industries, including oil and gas, minerals, bauxite refining, and iron and steel production.

"Rapid growth in several of these industries over the past decade has contributed significantly to growth in greenhouse gas emissions. Unless significant changes are made, greenhouse gas emissions from the energy sector will continue to grow rapidly."

The report claims that in 2005, Western Australia generated about 12% of Australia's emissions, using greenhouse accounting methods, WA's net annual greenhouse gas emissions increased by 17% between 1990 and 2005, to 66.6 Mt of carbon dioxide equivalent (CO_2 -e).

Australia as a whole contributes around 1.5% of global greenhouse gas emissions, but it is the greatest emitter in the industrial world on a per capita basis the report reveals.

The state government has suggested combatting this by establishing Greenhouse legislation and a 20% renewable energy target, to force the oil and gas industry out of using and producing greenhouse gas causing, fossil fuels. It also recommends a comprehensive review of energy subsidies and the removal of subsidies that increase greenhouse emissions.

The WA Greenhouse and Energy Taskforce has suggested deterents for industry including the removal of government funded subsidies such as the deduction of expenditures on oil and gas projects and exploration subsidies. Including decreasing funding to public departments such as Geoscience Australia. The task force suggested in a strategy report, "Geoscience Australia is effectively a subsidy to the coal, oil and gas industries in Australia. If these fossil fuel subsidies were removed then it



Energy consumption by transport contributes 14% of WA's greenhouse gas emissions

would improve the competitiveness of the renewable energy and energy efficiency industries. All subsidies that do not perform an environmental or social welfare function should be removed."

The WA State of the Environment Report 2007 states the rapid increase in WA's greenhouse gas emissions has been masked to some extent by the decrease in emissions from land use and forestry sectors. Greenhouse gas emissions from these sectors decreased significantly

between 1990 and 2005, from 9.8 Mt $\rm CO_2$ -e to -1.6 Mt $\rm CO_2$ -e. This was due to a decrease in vegetation clearing for agriculture and an increase in plantations. If the greenhouse gas emissions from these sectors are excluded from the accounting methods, the State's greenhouse gas emissions have effectively increased by 45%.

Alcoa, who recieves government energy subsidies, smelts their aluminum product in WA and uses an "extremely high amount of energy", the report found. Alcoa makes such a contribution to WA's greenhouse gas emissions that the report listed it as one of the "main reasons" for the state's high level of CO₂.

The report warns that, "WA is therefore in a challenging situation for reducing emissions, particuarly when considered in a global context. This challenge is exacerbated by the nature of WA's economy which is primarily focussed on trade exposed export industries, mostly with high emission intensities."

However, the report concludes in regards to reducing the greenhouse gas emissions, that, "WA is well placed to take action reducing greenhouse gas emissions through development of alternative energy sources like wind and solar, improving energy efficiency and offsets"



An industrial site in Geraldton (B.Jakowyna)

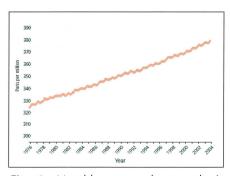


Fig. 1. Monthly averaged atmospheric concentrations of carbon dioxide at Cape Grim Tasmania

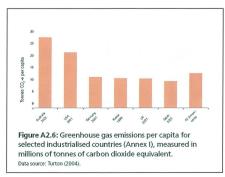


Fig. 2. Greenhouse gas emissions per capita for selected industrialised countries (Annex I), measured in millions of tonnes of carbon dioxide equivalent.