

CITIZEN COAL: Australia and its neighbours

Australia is 'the king of coal' and the number one greenhouse gas emitter, per capita, in the worldⁱ. It is failing to take any action on climate change by rejecting the Kyoto Protocol in order to protect its vested interests – including coal exports. The Australian Government is making developing countries a scapegoat for not having concrete commitments to reduce carbon dioxide emissions under the Protocol.

While it is using this as an excuse for not ratifying, it is also locking these countries, like Thailand, into coal-based energy futures. If developing nations become addicted to Australian coal they will never be able to address carbon emissions from growing energy use.

- Coal is used to meet nearly 40% of the world's current energy demand,ⁱⁱ creating over 40% of annual global carbon emissions.
- Global coal consumption is expected to rise by 1.9% to 4.2 billion tonnes by 2010.
- Australia is the world's largest exporter of black coal, a position it has held since 1984.ⁱⁱⁱ

Coal remains a dominant fuel source on world energy markets but brings with it a host of environmental and social costs. It inflicts a range of impacts at the local level including water contamination around mines and air pollution from power plants. Coal is also a highly carbon-intensive fuel and it contributes significantly to global warming.

Many industrialised countries are still cleaning up after years of coal-fired economic development. Indeed, the nations that led the industrial revolution, like Britain and Germany, are moving towards cleaner energy now, including renewable systems such as wind, wave and solar power.

As we enter the 21st century, developing countries around the globe are making decisions about how to meet their energy needs. But the world is a very different place from the 19th and 20th centuries. There are new, clean technologies that can be used instead of coal to meet these nations needs. Furthermore, we now know the true cost of coal – dangerous climate change – that will end up harming Thailand, Australia and all our neighbours.

Australian coal is exported to more than 30 countries around the world. Since 1984, Australia's annual exports have grown from 76 million tonnes a year to more than 166 million tonnes in 1998. The Asian market accounts for 80% of Australian coal exports, with the top three markets being Japan (47%), Korea (12%) and Taiwan (9%) in 2001.^{iv}

Significant tonnages are also exported to Europe, India, North Africa, the Middle East and South America.^v

Australia is aiming to remain the world's dominant coal exporter over the next decade.

Exports are forecast to increase by 21% by 2012.^{vi} Australia is expected to remain the major coal exporter to Asia until 2020 meeting half the region's coal import demand.^{vii}

The table below shows the financial value of Australia's coal exports to South East Asia in 2000. These imports of Australian coal rose steadily from 1993 - peaking in 1999.^{viii}

Australian Steaming Coal Exports to South East Asia, 2000^{ix}

Country	Quantity (t h o u s a n d tonnes)	V a l u e (AUD\$million)
Philippines	1,820	76.88
Malaysia	976	38.03
Thailand	136	4.28
Indonesia	134	5.52
TOTAL ASIA STEAMING COAL	78,433	3,298
TOTAL WORLD STEAMING COAL	87,062	3,628

In 1998-99 employment in the Australian coal mining industry fell by 14% with 3,636 jobs shed, the largest employment fall in any mining industry.^x In 1996-98, employment in coalmines fell by 24%, while output rose by 8%.^{xi}

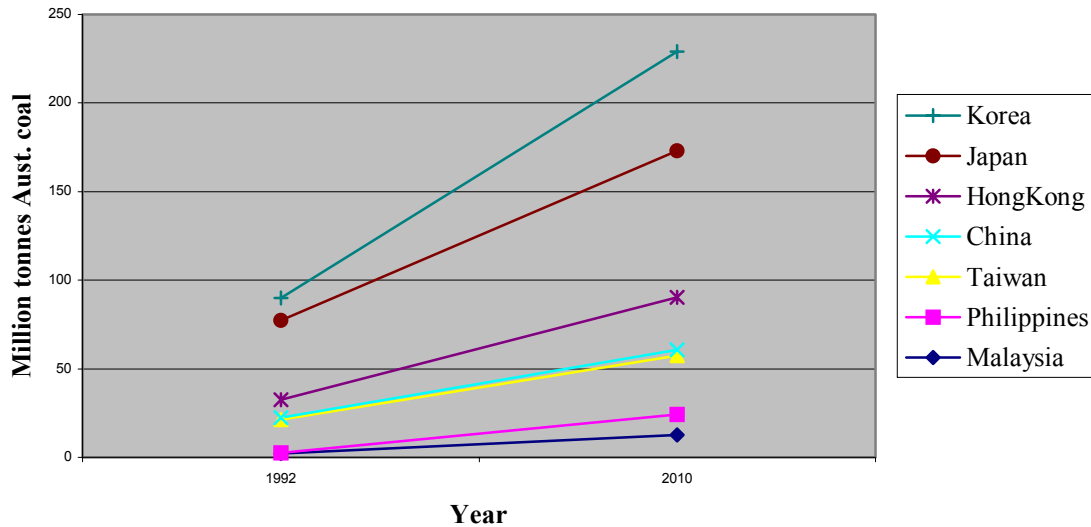
THE GREAT COAL SWINDLE: Selling it to South East Asia

There is growing community resistance in Australia to new coal-fired power stations, as people call for cleaner and climate-friendly renewable energy alternatives there. Yet, in 2002, as many as eight Gigawatts of new coal-fired power stations are planned in Asia, mostly in Japan, Korea and Taiwan but also Thailand and the Philippines. This growth is expected to boost coal imports by 20 million tonnes and will increase greenhouse gas emissions enormously.^{xii}

Asia is a very important market for Australian steaming coal. In 2000, steaming coal exports to Asia formed over 90% or nearly AUD\$3.4 billion worth of the 8.7 billion

tonnes of total coal exported by Australia.

Australian Coal Imports to Asia, 1992- 2010



This chart shows the projected increase in Australian coal imports to 2010 in South East Asia. Coal consumption in South East Asia is forecast to rise annually by 9.5%, on average. Consequently coal imports to these countries are expected to rise by 14% per year to 30 million tonnes in 2010, with total coal consumption totaling 75 million tonnes.^{xiii} Note the unprecedented increases expected over this 18-year period in the Philippines of 3767% , and over 250% in Malaysia, China, Korea and Hong Kong.^{xiv} These sales are dependent on the success of the coal industry embedding itself in these countries' economies, but in countries like the Philippines resistance is growing.

The Australian government is trying to force these sales to Asia by providing various subsidies – using taxpayers' money – to coal corporations. Subsidies, and aid, should go instead to support climate-friendly renewable energy. Some forms of 'corporate welfare' include:

WB

Australia contributes to the World Bank, supposedly for poverty alleviation. Yet the World Bank has been a primary funder of fossil fuel projects, notably coal. For example in 1998, over \$1.3 billion was invested in four major coal burners in China, which will eventually release more than 2 billion tons of carbon dioxide into the Earth's atmosphere. From 1993-1998, the World Bank's US\$4 billion worth of investments in coal-fired power plants emitted 7 billion tonnes of carbon dioxide, and its US\$2 billion worth of investment in coal extraction will emit a further 6 billion tonnes of carbon dioxide.^{xv}

ADB

The Asian Development Bank's (ADB), another multilateral financial institution that Australian taxpayers support, is reported to have loaned US\$5 billion to companies promoting coal-fired power capacity and coal mining development from 1994 to 2000.^{xvi} Its recent records show that the ADB's energy portfolio has favoured fossil-fuel projects over renewable sources greatly: In 1995, the ADB lent US\$444 million for coal-fired

power stations but provided no finance for renewables. In 1996, ADB spent US\$742 million on coal projects, and \$278 on renewables and demand side management.^{xvii}

AusAID

The Australian Agency for International Development (AusAID) has been a major form of the government's financial support to coal use in South East Asia. From 1994-96, AusAID spent \$20.78 million on coal projects, in contrast with \$2.3 million on renewables and energy efficiency. A number of projects have been critical in opening up markets for Australian coal and coal technology.^{xviii} Increasing emphasis by AusAID was given to coal related projects and electricity distribution from the mid-1990s.^{xix}

EFIC

Financing and insuring coal and energy development continues to be of specific interest to Australia's export credit agency, the Export Finance and Insurance Corporation. In 1996, \$15.5 million was invested into coal-fired power stations and supporting infrastructure. In 1997, this amount was \$27 million (12% of EFIC's investments for that year), and it was \$17.5 million in 1998. Most of these projects were in China or other Asian nations.^{xx}

Industry-Government Collaboration

There are a variety of other forms of industry assistance provided by the government, through industry-government alliances, grant programs, tax exemptions, research and development, geological exploration, technical databases and management services.

CASE STUDY

Thailand

Thailand has recently become a purchaser of Australian coal, with a large initial order in 2000 of 136,000 tonnes.^{xxi} Due to increased coal-fired power stations and lobbying by Australia to purchase 'clean coal', Thailand is expected to increase coal imports to more than 50 million tonnes by 2020.^{xxii} Independent Power Producers (IPPs) are expected to increase their national share of energy generation to two-thirds, with coal as the dominant fuel, although imported coal will only make up 8% of total fuel. Thai government officials have discussed the opportunity of using Australian 'clean coal', and further securing of long-term contracts between Thailand and Australia.^{xxiii}

During the 1980s, the principal Australian aid project concerned with coal production was the Mae Moh lignite mine and the adjacent power plants in Thailand. The mine and plants released acidic sulfur gas, and after two months of operation, half of the surrounding rice fields were damaged by acid rain, and 42,000 people were suffering from breathing ailments. Australian expenditure on Mae Moh over the 12-year project was AUD\$26 million. AusAID has acknowledged that the impact of the project has been negative, but contends that the impact of Australian aid on the project was positive.^{xxiv}

Another example, of how the Australian government plays an active role in the promotion of Australia's 'clean coal' to overseas markets, is the proposed Gulf Power project to develop a coal-fired power plant in Prachuab Khiri Khan, Thailand. Local people, national and international environment and human rights groups as well as representatives of the local government have actively opposed this proposal for eight years. This project would have used coal from the PT Adaro mine in Indonesia, owned

by Australian company, New Hope. The Australian Ambassador to Thailand, Mr. William Fisher, wrote press releases and letters to newspapers and the Thai government promoting the cleanliness of the coal, claiming that it posed ‘no problems’.

Asian nations don’t need to repeat the mistakes of the past, made by countries that were dependent on coal for their electrification. But if Australia has its way, it will lead Thailand and others down this path.

Since April, 1999, when an Austrade conference held in Bangkok promoted the benefits of ‘clean’ Australian coal for the local community and the Thai government, it has seemed that this is the direction Thailand is headed. In June 2000, 14 middle managers from Thai Government departments were brought to Australia under a joint AusAID-Thai government tour to coal-fired power stations in the Hunter Valley, New South Wales.^{xxv} And to promote the use of coal, the Thai government reduced the import tax from 25% to zero, making coal appear cheaper than other fuel sources and adding obstacles to clean energy now.^{xxvi}

The real costs of pursuing these policies will be borne by our children and the environment through coal’s environmental and climate impacts. If the health and other “externalized” costs imposed on the community were incorporated into the price of coal-fired power, coal would be much more expensive than renewable energy, as the table below shows.

Real Costs of Coal and Alternative Electricity in South East Asia^{xxvii}

Energy Source	Current cost which excludes externalities (US cents per kWh)	Potential cost if externalities included (US cents per kWh)
Coal	4.8	9.4
Wind	5.0	5.0
Biomass	6.25	8.7
Solar Steaming	8.0	8.0
Gas Turbine	6.9	9.9
Diesel	4.8	7.8

The good news is that there is a choice. There are renewable energy technologies that will work much better in Thailand and for Thai business, and cost less to consumers, society in general and future generations facing climate change. Our challenge is to choose positive energy.

By 2020, over one third of Thailand’s electricity demand could be met from renewable sources. Working on a minimum 35% renewables mix, a quarter of the country’s electricity could be derived from biomass, 5% from mini-hydro and 2.5% from solar, with the remaining 2.5% divided between geothermal and wind^{xxviii}.

ⁱ Australia Institute Media Release, 7 August 2002; see www.tai.org.au for full report based on UN figures.

ⁱⁱ International Energy Agency (2000), *Key World Energy Statistics*, quoted in Sustainable Energy And Environment Network (2002), *King Coal: Still a Power to be Reckoned With [Draft]*, Washington DC.

ⁱⁱⁱ Department of Industry, Science & Resources (1999), *Australia’s Export Coal Industry*, Energy Minerals Branch, Department of Industry, Science & Resources, Australia.

-
- ^{iv} Commonwealth Department of Industry, Tourism and Resources (2001), *Australian Black Coal Industry Factsheet*, Coal Industries Section, Department of Industry, Tourism and Resources, Canberra.
- ^v Department of Industry, Science & Resources (1999), *Australia's Export Coal Industry*, Energy Minerals Branch, Department of Industry, Science & Resources, Australia.
- ^{vi} Moullakis, J (2002), 'Coal to continue firing economy', *Australian Financial Review*, Commodities section, January 23.
- ^{vii} International Energy Agency (2001), *Coal Information 2001*, International Energy Agency, Paris.
- ^{viii} Asia & Pacific Review (1999), 'Australia: Review 1999', *Asia & Pacific World Of Information*, October 21.
- ^{ix} Joint Coal Board and Queensland Department of Natural Resources and Mines (2000), *Australian Black Coal Statistics 2000*, Joint Coal Board and Queensland Department of Natural Resources and Mines, Brisbane.
- ^x Australian Bureau of Statistics (2000), *Themes- Mining*, Australian Bureau of Statistics website, www.abs.gov.au (accessed January 8, 2002).
- ^{xi} Resource Information Unit (2001), *Register of Australian Mining 2000/01*, Resource Information Unit, Western Australia.
- ^{xii} Australian Bureau of Agricultural and Resource Economics (2001), 'Minerals and Energy- Coal', *Australian Commodities*, vol. 8, no. 4, December quarter, pp598- 602.
- ^{xiii} Melanie, J, Curlotti, R, Saunders, M, Schneider, K, Fairhead, L, Qian, Y (2002), *Global Coal Markets: Prospects to 2010*, Australian Bureau of Agricultural and Resource Economics and Federal Department of Industry, Tourism and Resources.
- ^{xiv} Sustainable Energy and Environment Network (2002), *King Coal: Still a Power to be Reckoned With [Draft]*, Washington DC.
- ^{xv} Institute for Policy Studies (1999), *The World Bank and the G-7: Still Changing the Earth's Climate for Business, 1997-1998*, Institute for Policy Studies, Washington, USA.
- ^{xvi} This figure is based on material obtained from Asian Development Bank annual reports.
- ^{xvii} Imhoff, A. (1996), *Aiding Global Warming: An Analysis of Official Development Assistance for the Coal Industry*, AIDWATCH, Sydney.
- ^{xviii} Imhoff, A. (1996), *Aiding Global Warming: An Analysis of Official Development Assistance for the Coal Industry*, AIDWATCH, Sydney.
- ^{xix} Economic and Energy Analysis Pty Ltd and Sinclair Knight Merz (1994), *Coal and Climate Change: Opportunities for Australian Industry to Contribute to Reducing International Greenhouse Gas Emissions*, Commonwealth Department of Primary Industries and Energy, Australia.
- ^{xx} Export Finance and Insurance Corporation (1997, 1998, 1999), *Export Finance and Insurance Corporation Annual Reports*, Export Finance and Insurance Corporation, Sydney.
- ^{xxi} Cummings, L. (ed) (2002), *Australian Coal Report*, January, Vol. 24, No. 1.
- ^{xxii} Johnson, C.J. (2000), 'Impacts of GHG Constraints on the Long-Term Competitive Position of Coal in Asia', 6th *APEC Coal Flow Seminar*, APEC Energy Working Group, Kyongju, Korea, March 14-16.
- ^{xxiii} Curran, B (1997), 'NTIOC 1996: Turning Contacts into Contracts', *Coal Development*, Department of Industry, Science and Resources, Issue 104, January.
- ^{xxiv} Law, M. (2000), 'Facts and Fiction: Coal and Clean Coal', *Watershed*, Vol. 5, No. 3, pp29-38.
- ^{xxv} Alternative Energy Project for Sustainability (AEPS) and Towards Ecological Recovery and Regional Alliance (TERRA) (2001), *Campaign Update on the coal-fired power plants proposed for Prachuab Khiri Khan, Thailand*.
- ^{xxvi} Towards Ecological Recovery and Regional Alliance (2001) 'Responding to Climate Change', *Watershed*, Vol. 7 No. 1, pp 10-17.
- ^{xxvii} Greenpeace International (1999), 'Restructuring the Southeast Asian Electricity Sector using Sustainable Energy', *Renewable Independent Power Producers Seminar*, APEC Energy Working Group, quoted in Toward Ecological Recovery and Regional Alliance (1999), *Exposing the Myths of the Clean Coal Industry*, Towards Ecological Recovery and Regional Alliance, Thailand.
- ^{xxviii} Greenpeace Southeast Asia and Sustainable Energy Network of Thailand (2002), "Positive Energy Choices: Greenpeace Energy Scenario for Thailand's Future Generation", Bangkok, Thailand.