

This publication has been researched and written by members of Friends of the Earth Australia. Although we make reference to 'climate' and 'environmental' refugees, Friends of the Earth is fully aware that there is no legal recognition of this category of refugee. The United Nations Convention Relating to the Status of Refugees defines a refugee as "A person who is outside his/her country of nationality or habitual residence; has a well-founded fear of persecution because of his/her race, religion, nationality, membership in a particular social group or political opinion; and is unable or unwilling to avail himself/herself of the protection of that country, or to return there, for fear of persecution".

The fact that there is no legal recognition for climate refugees highlights the lack of protection given to these incredibly vulnerable people and the need for them to be afforded the same rights as refugees have under the UN Convention. In addition, the term 'climate refugee' generates a great deal of popular sentiment and is an extremely useful phrase for raising awareness and encouraging discussion and debate on this issue.

Revised and updated version April 2007

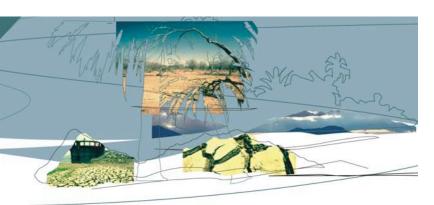


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CLIMATE CHANGE

EMISSIONS



Section One Climate change and historical emissions

While the Earth has always endured natural climate variability, we are now facing the possibility of irreversible climate change¹, as a result of human activity. The increase of greenhouse gases in the Earth's atmosphere from industrial processes over the past 150 years has accentuated the greenhouse 'trap' effect, causing greenhouse gases to form a blanket around the Earth, inhibiting the sun's heat from leaving the outer atmosphere. This increase of greenhouse gases is causing an additional warming of the Earth's surface and atmosphere. As global surface temperature increases, polar ice sheets begin to melt and thermal expansion of oceans occurs. Both of these processes induce sea-level rise.

In their latest report, the 2,500 scientists on the United Nations' Intergovernmental Panel on Climate Change (IPCC) provide as a best estimate a rise in the global average surface temperature from the 1990 figure of between 1.8 and 4.0°C by 2100. As a consequence, human-induced climate change will have deleterious effects on ecosystems, socioeconomic systems and human welfare².

Historical Emissions

Historical measures of greenhouse gas emissions clearly identify highly industrialised countries as the most significant contributors to human-induced climate change. Over the past 150 years, industrial economies have generated steadily increasing amounts of greenhouse gas emissions, particularly carbon dioxide (CO2). This has predominantly come from fossil fuel use in energy generation, extraction and processing of minerals, industrial agriculture and motorised transport. While the USA was

responsible for 29% of global greenhouse gas emissions between 1850 and 2000, Australia remains the greatest per capita emitter of greenhouse gases in the industrialised world. In the year 2004, Australians emissions per capita were at 28.2 tonnes of carbon dioxide equivalent³. In light of the estimation that in order to avoid global warming of more than 2°C by 2050, every person on the planet would be entitled to less than 3 tonnes per capita⁴, it is clear that Australians, on average, are living far outside of the sustainable carbon footprint.

How do we measure the severity of climate change? In 2004, the European Climate Forum (ECF) held a symposium to examine the risks associated with climate change, outlining three categories of danger⁵.

First was 'determinative dangers', associated with very serious levels of climate change and recognised as inevitable if steps to early intervention were not taken. Indicators of determinative dangers include the extinction of 'iconic' species, loss of ecosystems, loss of human cultures and large numbers of climate refugees.

The second category was 'early warning dangers' – those likely to become more severe with increased warming. Early warning dangers include greater frequency of drought and the retreat of Arctic sea ice.

The final category referred to 'regional dangers'. These concern threats to food security, water resources, infrastructure, and ecosystems.

¹ Climate Change Secretariat Bonn, 2002, A Guide to the Climate Change Convention and its Kyoto Protocol.

² Intergovernmental Panel on Climate Change. Fourth Assessment Report 2007: The Physical Science Basis. Summary for Policy Makers

February 5 2007

³ Australian Greenhouse Office, National Greenhouse Gas Inventory 2004

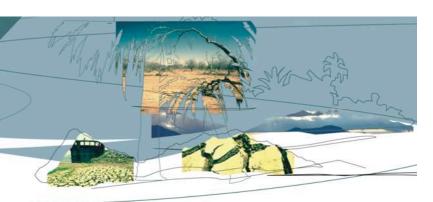
Meinhausen, M < 2°C Trajectories – A Brief Background Note Potsdam Institute for Climate Impact Research, September

European Climate Forum. What is Dangerous Climate Change?" Initial Results of a Symposium on Key Vulnerable Regions, December 14, 2004.



CLIMATE CHANGE AND HISTORICAL

EMISSIONS



Section One continued

Global efforts to address climate change: the United Nations' Framework Convention on Climate Change

The United Nations Framework Convention on Climate Change⁶ (UNFCCC) is a non-binding agreement aimed at reducing the consequences of climate change. It entered into force on 21 March 1994, following ratification by 50 governments ('states parties'). Australia ratified on 30 December 1992.

UNFCCC responsibilities

The UNFCCC's primary objective is to achieve the 'stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system...within a time-frame that is sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner' (emphasis added).

The UNFCCC requires states parties to be guided by five primary principles when acting to implement the Convention: a lead role for developed countries in the struggle against climate change; full consideration of the special needs of developing countries; precautionary measures to avert or minimize the causes of climate change and to ease its impacts; policy development in line with each country's specific needs; and cooperation to promote an open international economic system.

Setting targets for reducing greenhouse gas emissions—the Kyoto Protocol A number of conferences have been held by parties to the convention to negotiate targets and timetables for the reduction of greenhouse gas emissions. The third Conference of the Parties (COP3) was held in 1997 in Kyoto, Japan. A key outcome from COP3 was an implementation plan known as the Kyoto Protocol, issued on 11 December 1997. Under the Kyoto agreement, Annex 1 Parties ('developed' nations and those with economies in transition) are required to accept legally binding targets for greenhouse gas emissions over the first commitment period, 2008–2012⁸.

Emissions targets under the Protocol were set at the equivalent of approximately 95% of the 1990 emissions level of the nations involved. Policies to meet emission targets were designated as the responsibility of individual nations. Those that failed to do so would be under pressure to further reduce their emissions in the period following 2012.

In 2002 the Australian Government announced that it would not be ratifying the Protocol, even though it had negotiated an increase to 108% of 1990 emissions levels rather than a cut. Australia has continued to hold to this stance, thereby distancing itself from this important international effort to address a truly global problem. Instead, it has continued to push for voluntary emissions reductions, initiating the so-called Asia-Pacific Partnership on Clean Development and Climate (AP6), recruiting the USA, Japan, China, India and South Korea as participants.

In terms of addressing global climate change impacts, the Kyoto Protocol represents, in reality, no more than a small beginning. However, its significance lies in the fact that it is the first binding international treaty on this critical issue, and provides the basis for further efforts.

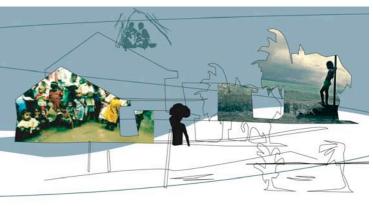


⁶ United Nations, *United Nations Framework Convention on Climate Change*, 1992

United Nations, Kyoto Protocol to the United Nations Framework Convention on Climate Change, 1997
http://unfccc.int/resource/docs/convkp/kpeng.html]

WHAT CAUSES PEOPLE TO

BECOME CLIMATE REFUGEES?



Section Two What causes people to become climate refugees?

It is now widely accepted in the scientific community that climate change will lead to both incremental and rapid ecological change and disruption. The impacts of climate change, which include increased droughts, desertification, and sea-level rise, along with the more frequent occurrence of extreme weather events, will lead to a growing number of climate refugees around the world. In determining which nations are most likely to encounter the displacement of citizens, a complex assessment of geographical vulnerability to climate change, as well social, economic and political structures, must be considered.

Although climate change is a global phenomenon that will impact upon critical life support systems such as weather and hydrology cycles everywhere, certain regions of the world have already been identified by the Intergovernmental Panel on Climate Change (IPCC) as extremely vulnerable to climate change. These include low-lying and small island developing states, North Africa and the Bay of Bengal. Because of geographical proximity and Australia's political relationships with the Pacific Islands region, FoE Australia is focusing on the very real potential for significant numbers of climate refugees from this region.

Climate Change and the Pacific Islands Comprising 21 island countries, with a combined population of approximately 7 million people, the Pacific is recognised as one of the most culturally and linguistically diverse regions of the world. Like many Indigenous peoples elsewhere, Pacific Islanders have been living in this region for over 10,000 years.

Pacific Islanders contribute the least to global

greenhouse gas emissions – a mere 0.03 percent of global totals.¹

Threats to Food Security In several of the small inhabited atolls throughout the Pacific, rising sea-levels have meant that king tides, spring tides and sometimes high tides are increasingly washing through crop gardens. Saltwater intrusion reduces the land's productive capacities. It has already affected communal crop gardens on six of Tuvalu's eight inhabited islands. In addition, the increased incidence of coral bleaching from rising ocean temperatures is depleting artisanal fisheries². Coral reefs provide an environment for subsistence fishing across the Pacific, especially coastal fishing, and are therefore critical to the survival of small island states.

Threats to Water Security Rainwater is the main water source for many small island states, including Tuvalu, Kiribati and the Cook Islands. Across most island states, water shortages have been experienced as rainfall patterns, influenced by inter-annual variations or El Nino Southern Oscillation (ENSO), have become more variable³. Recent severe droughts in Papua New Guinea, the Federated States of Micronesia, the Marshall Islands and Fiji are a direct consequence of variations in climatic and oceanic conditions. Underground reserves of fresh water in the Pacific are also showing signs of vulnerability to climate change, further contributing to water insecurity.

In coral atolls, a thin layer of fresh groundwater sits atop the saltwater lens and is used as a fresh water reserve. These underground reservoirs are threatened by reduced precipitation rates linked to changes in climate, as well as saltwater intrusion from sea-level rise.

Hay, J., Small Island States and the Climate Treaty, Tiempo, Issue 33, 1999 http://www.cruluea.ac.uk/tiempo/portal/archive/issue33/t33a1.htm

² Rising Waters: Global Warming and the Fate of the Pacific Islands; video produced by Andrea Torrice, 2000. See http://www.itvs.org/

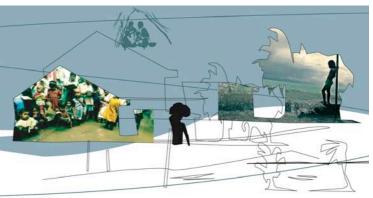
The El Nino Southern Oscillation is an abnormal warming of surface ocean waters in the eastern tropical Pacific.

ENSO weather events appear to be becoming more intense and more frequent due to climate change.



WHAT CAUSES PEOPLE TO

BECOME CLIMATE REFUGEES?



Section Two continued

Increase in Vector and Water -Borne Diseases

Warmer temperatures are leading to the increased incidence of malaria. In the highlands of Papua New Guinea and the Solomon Islands, which previously were too cold for mosquitoes to survive, there have been reports of malaria. In addition, El Niño cycles have been linked to cholera, and over recent years there have been outbreaks of cholera in the Federated States of Micronesia and Marshall Islands⁴.

Infrastructure and Land Losses
Previously attributed to unsustainable coastal development, coastal erosion is now increasingly exacerbated by severe storm and wave action. This is of particular concern to island states where coastal areas constitute a large proportion of their total land area. There have been reported losses of sandbanks (*motu*) and shorelines in Tuvalu (eg. the *motu* of Tepuka Savilivili), and in the Carteret Islands of Papua New Guinea since the 1960s. Some islands in Fiji have retreated 30m in the past 70 years⁵. In Kiribati, the *motu* of Tebua Tarawa, once a landmark for fisherman, is now under water.

Also, coastal roads, bridges and plantations are suffering increasing erosion, even on islands that have not been the site of inappropriate coastal development. Moreover, the more frequent occurrence of extreme weather-related events such as more intense storms and increased incidence of floods are impacting on housing and community infrastructure, including culturally significant sites. In Majuro, the capital of the Marshall Islands, sea walls have been

constructed to try to protect existing infrastructure and halt the impact of erosion⁶.

Sea-level Rise

According to the IPCC, sea-levels are predicted to rise worldwide by 0.18 to 0.59m between 1990 and 2100. However, these figures do not take into account recent increases in ice sheet flow rates from Greenland and Antarctica⁷. Within the framework of such scenarios, Pacific Islanders are 6 to 8 times more likely to be affected by coastal flooding than people in Australia and New Zealand. Taking into account the high population density of their homelands, this means that Pacific Island peoples, especially those in countries comprised of atolls, are extremely vulnerable to sea-level rise.

In 2001 the then Tuvaluan Deputy Prime Minister and Minister of Finance and Economic Planning, Mr Lagitupu Tuilimu, told a UN conference that scientists had predicted that countries like Tuvalu would be totally submerged in around fifty years⁸.

Examples of the potential impacts of sea-level rise can be identified all around the world. Around half of Bangladesh's population lives in areas less than five meters above sea-level. It is estimated that a one metre rise in sea-level would affect 67% of the Netherlands' population. The mega cities of London, Shanghai, Hamburg, Bangkok, Jakarta, Bombay, Manila, Buenos Aires and Venice are all built on low-lying coastal areas. The city of Manhattan in New York is another example of an island under threat from sea-level rise.

⁴ Simpson, V., Australian Conservation Foundation, Climate Change and the Pacific, January 2003.

⁵ Nunn, P.D. and Mimura, N. *Vulnerability of South Pacific nations to sea level rise* in Leatherman, S.P. (ed) Island States at risk, global climate change development and population. J Coastal Res Spec Issue 24:133-151, 1997.

Barnett, J. and N. Adger, Climate Dangers and Atoll Countries, Working Paper 9, Tyndall Centre for Climate Change Research, October 2001.

Intergovernmental Panel on Climate Change, Ibid

⁸ Tuilimu, Lagitupu, Government of Tuvalu Statement to Third UN Conference on LDC, May 17, 2001,

[[]http://ro.unctad.org/conference/address/tuvalu17_e.htm]

^{9 &#}x27;Rising Waters' Ibid

Section Three Case Study of Tuvalu and New Zealand's Pacific Access Category

Climate change is already having devastating effects on humans around the world. In the tiny island nation of Tuvalu some residents have already been forced to flee their homes in search of a less vulnerable environment. As environmental refugees, people in these circumstances deserve the assistance of countries like Australia.

Tuvalu

Located in the Pacific Ocean 3,400km northeast of Australia, Tuvalu is a nation made up of eight tiny coral atolls with a total land area of 26 square kilometres. It is one of the world's lowest-lying countries, with its highest point standing a mere four and a half metres above sea-level. Approximately half of its population of 11,636 live just three metres above sea-level, making them extremely vulnerable to effects of climate change such as sea-level rise¹.

On December 8, 1997, the former Prime Minister of Tuvalu, Bikenibeu Paeniu, presented a speech at a meeting of states parties to the UNFCCC in Kyoto, Japan. He highlighted the suffering that the people of Tuvalu were experiencing as a result of sealevel rise, strong winds, increased frequency of cyclones, flooding and tide surges. He described the effects as 'almost unbearable'. Vegetation, food crops and whole villages had been destroyed, threatening the health and very survival of the Tuvaluan people². Nearly 3,000 Tuvaluans have already left their homelands.

In 2000, the Tuvaluan government appealed to both Australia and New Zealand to take in Tuvaluan residents if rising sea-levels reached

the point where evacuation would be essential.

New Zealand's Response - the Pacific Access Category

The Pacific Access Category (PAC) is an immigration arrangement that was negotiated in 2001 between the governments of Tuvalu, Fiji, Kiribati, Tonga and New Zealand³ to enable people from these nations, which are already experiencing the effects of climate change, to move to a less vulnerable location. Each country has been allocated a set quota of citizens who can be granted residency in New Zealand each year. The PAC allows 75 residents each from Tuvalu and Kiribati, whereas Tonga and Fiji have a quota of 250⁴.

Although New Zealand's immigration policies are far more supportive towards environmental refugees than Australia's, Pacific Islanders still face a number of impediments to reaching safer ground. Principal applicants must meet set requirements before being eligible to enter the PAC ballot.

These requirements exclude part of the Tuvaluan population by stipulating that: applicants possess citizenship status for Kiribati, Tuvalu, Tonga or Fiji; are aged between 18 and 45; have an acceptable offer of employment in New Zealand; have a minimum level of skills in English language; have a minimum income requirement if the applicant has a dependant; exhibit certain health and character requirements; and have no history of unlawful entry into New Zealand since July 1, 2002.

¹ Tuvalu seeks new home, The Sydney Morning Herald, July 20, 2003, [http://www.smh.com.au/articles]

² Paeniu, B., *Tuvalu and Global Warming*, Speech to the United Nations Framework Convention on Climate Change, December 8, 1997. [http://www.tuvaluislands.com/kyoto-panieu.htm]

Tuvalu premier gets sinking feeling over immigration deal with New Zealand, Tuvalu News, AFP, May 6, 2004,

Ituvalu premier gets sinking feeling over immigration deal with New 2 [http://www.tuvaluislands.com/news/archives/2004/2004-05-06b.htm]

New Zealand Immigration Service, Registration Form for Pacific Access Category, http://www.immigration.govt.nz.



Section Three continued

In short, this means that the elderly and the poor – those most vulnerable – may have trouble being accepted as principal applicants. Furthermore, an 'acceptable' offer of employment is defined as 'permanent, full-time, genuine, and paid by a salary or wages'. Considering their location and level of access to required resources, Tuvaluans may have difficulty gaining employment in New Zealand before they arrive in the country, thereby excluding them from access to the program.

Australia's response

While the New Zealand government set up the Pacific Access category, the Australian government refused to implement a program to grant residency to Tuvaluans in Australia. Immigration Minister Phillip Ruddock stated that accepting environmental refugees from Tuvalu would be 'discriminatory'⁵.

Commenting on Australia's response, a senior Tuvalu official, Mr Paani Laupepa, observed that, while New Zealand had helped out its neighbours, 'Australia on the other hand has slammed the door in our face'⁶.

In October 2006, at the annual meeting of the Pacific Islands Forum in Fiji, the Tuvaluan government requested a meeting with John Howard to discuss the crisis facing the country, but the request was denied⁷.

At the beginning of 2006, the federal opposition party, the Australian Labor Party (ALP), released a discussion paper about climate change in the Pacific entitled *Our Drowning Neighbours*⁸. This discussion paper

proposes that Australia establish an international coalition to accept climate refugees and work at the United Nations to ensure international recognition of climate refugees. It also outlines how Australia should provide assistance for those who will have to relocate within their countries, as well as assist in adaptation and emergency response efforts. While this is a positive step, it is yet to become policy.

Global Responsibilities

While the government of Tuvalu has made a claim for recognition of its citizens as environmental refugees in the face of climate change, its request to other countries is, first and foremost, for climate change to be taken seriously. It wants urgent action taken to address the underlying causes by those countries most responsible for the problem. This is illustrated in the statement of the Tuvaluan Governor-General, Sir Tomasi Puapua, to the 57th Session of the UN General Assembly in September 2002 'Taking us as environmental refugees is not what Tuvalu is after in the long run. We want the islands of Tuvalu and our nation to remain permanently and not be submerged as a result of greed and uncontrolled consumption of industrialized countries. We want our children to grow up the way we grew up in our own islands and in our own culture'9.

As Tuvalu's leaders have been advocating for several years now, the potentially disastrous consequences of climate change for vulnerable peoples will be avoided only if world leaders accept their global responsibility for implementing policies that will restrict greenhouse gas emissions.



⁷ PM rejects Tuvalu on sea level, The Age, February 20, 2007 [http://www.theage.com.au]

Sercombe, Bland Albanese, A. Our Drowning Neighbours: Labor's Policy Discussion Paper on Climate Change in the Pacific 2006

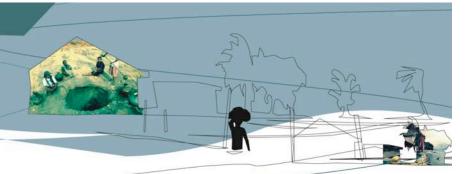
Puapua, Tomasi. *Tuvalu Statement*, 57th Session of the UN General Assembly.





PREDICTIONS

CLIMATE REFUGEES



Section Four Predictions of climate refugees to 2050

At the time of the Tampa crisis in 2001, when 460 Afghan asylum seekers arrived in Australian waters by boat from Indonesia, former US president Bill Clinton commented on the Australian government's reaction: 'If you're worried about 400 people, you just let the world keep warming up like this for the next 50 years and your grandchildren will be worried about 400,000 people.¹

According to World Disasters Report 2001² of the International Federation of Red Cross and Red Crescent Societies. more people are now forced to leave their homes because of environmental disasters than war. At the time of the report, there were approximately 25 million people who could be classified as environmental refugees, representing 58 per cent of the world's total refugee population.

This figure is far from exact as there is no set definition of what constitutes an environmental refugee and hence no central tally kept through the UN system. The likelihood is, however, that the figure has significantly increased since the report was issued. In China, for instance, the government estimates that some 30 million people are already being displaced by the impacts of climate change. Some authorities have set the figure as high as 72 million. Whatever the case, these estimates clearly indicate that significant numbers of people are already being displaced by climate change.

Regardless of fluctuating estimates, it is certain that the numbers of environmental refugees will continue to grow in the coming decades. A study by Norman Myers of Oxford University predicted that, at a conservative estimate, the number of environmental refugees due to climate change would increase six-fold over the next fifty years to 150 million³. This would equate to 1.5 percent of the predicted global population in 2050 of 10 billion. Importantly, Myers' estimate was based on the study of more than 2,000 sources of information. He has since increased his figure to 200 million⁴.

In developing his initial scenarios, Myers worked from the assumption that nothing would be done to slow global warming. He projected that displacement would occur because of a variety of climate-related factors, and that the numbers of people affected by country/region by 2050 would occur as follows⁵:

COUNTRY/REGION	PEOPLE (millions)
China	30
India	30
Bangladesh	15
Egypt	14
Other delta areas and coastal zones	10
Island states	1
Agriculturally dislocated areas	50
TOTAL	150



¹ CNN Newsroom, 2001, Transcript, Aired September 10, 2001, [http://transcripts.cnn.com/TRANSCRIPTS/0109/10/nr.00.html]

Red Cross/ Red Crescent Society, World Disasters Report 2001. http://www.ifrc.org/publicat/wdr2001/

³ Myers, N., Environmental Refugees in a globally warmed world, BioScience, 43 (11), December 1993 Myers, N., 2005. "Environmental Refugees: an emergent security issue". Organisation for Security and Co Operation in Europe www.osce.org.

⁵ Myers, N., "Environmental refugees: a crisis in the making". In *People & the Planet*, 3(4), 1994.

PREDICTIONS OF CLIMATE REFUGEES TO



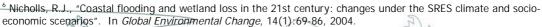
Section Four continued

Myers is regarded as an expert source of information regarding climate-induced displacement. Other researchers are increasingly agreeing with his figures, with some suggesting even larger numbers. Here are some other examples of climate refugee projections:

- Richard Nicholls of Flood Hazard Research Centre, Middlesex University, United Kingdom, suggested in 2004 that between 50 and 200 million people could be displaced by climate change by 2080:6
- The International Organisation for Migration estimated that eventually one billion people could be 'environmentally displaced from their original habitat'⁷.
- The Intergovernmental Panel on Climate Change (IPCC), the international science body that regularly produces assessment reports on climate change, recognised in its 2003 report that 150 million environmental refugees would exist by 2050. It was noted that the impacts of climate change – including coastal flooding, shoreline erosion and agricultural degradation – are major factors contributing to the majority of environmental refugees.

With predictions of climate refugees at 200 million worldwide – and 1 million from small island states – by 2050, there is a pressing need to address this issue. Yet there is as yet no legal recognition for climate refugees, either in the international arena or in Australia. Part of our responsibility in addressing climate change lies in recognising climate refugees as a group with a rightful claim to our protection and sanctuary.

The draft of the soon to be released second part of the IPCC's Fourth Assessment Report, 'Impacts, Adaptation and Vulnerability', indicates its endorsement of Myers' figure of 200m potential environmental refugees by 2050. It refers in particular to people forced from their lands by rising sea levels, floods and droughts, all due to climate change. The threat of extreme drought alone would lead to the destruction of farmland and basic water resources, generating mass migrations of vulnerable people⁸.



⁷ Lonergan, S and A. Swain, *Environmental Degradation and Population Displacement*. Global Environmental Change and Human Security Project, Research Report No. 2, Victoria, BC, Canada, May 1999.

"Climate change 'could create 200m refugees", The Sunday Times, April 1, 2007





POLICY DECISIONS THAT NEED TO BE MADE



Section Five Policy issues

Recognising environmental refugees 'By recognising environmental refugees you recognise the problem. By recognising the problem you start on the road to accepting responsibility and implementing solutions', Jean Lambert, Greens Member of the European Parliament¹.

As the growing problem of environmental refugees, and specifically climate refugees, becomes apparent, countries like Australia will have to acknowledge that they are disproportionately responsible for the crisis. In Australia, we constitute only about 0.03% of the world's population, yet we produce about 1.4% of the greenhouse gases created by human activity worldwide².

One way Australia can seek to redress this is to recognise those displaced by climate change as a separate category of refugee.

Australia must develop an official program allowing for an annual intake of those already under serious threat of displacement. This program should be created without any reduction in Australia's current commitments to refugee and other humanitarian programs. Andrew Bartlett of the Australian Democrats suggested in 2002 that, on a proportional basis, if Australia contributed 1-2% of global greenhouse gases, it should be considered directly responsible for roughly 1.2 to 2.4 million people displaced because of climate change³.

While New Zealand's Pacific Access Category (PAC) is a good initiative, the program has inherent flaws. As mentioned in Section Three, many Tuvaluans are excluded under the scheme from applying for residency as a 'principal applicant'. This illustrates that

immigration policies for environmental refugees need to embrace the wider community of populations under threat. Only then can they adequately address the range of needs of those affected by the current and intensifying impacts of the climate change crisis.

The Australian government should also be working within the UN system to advocate for appropriate recognition of climate refugees through new or existing conventions.

Collecting information on environmental refugees

Policy makers need to get a sense of how big the problem is, and how big it is likely to become. The first step is to collate the existing information on environmental, and especially climate, refugees. This needs to include a re-examination of existing climate change research at the global, regional and national levels.

Raising public awareness of Environmental Refugees

There has been considerable national debate around asylum seekers over recent years, and it has taken the concerted efforts of refugee advocates to raise levels of awareness about refugee issues. Despite recent positive changes in community sentiment, the creation of an environmental refugee program has the potential to generate fears or concerns in the broader community. It would be necessary, therefore, for a new federal government policy initiative in this area to be accompanied by a high profile educational program. Such a program should aim to educate the Australian people about environmental refugees, why they need to move, and what our responsibilities to them are.



¹Lambert MEP, J., *Refugees and the environment: the forgotten element of sustainability*, The Greens/European Free Alliance 2002 [http://www.greenparty.org.uk/files/reports/2002/refugee.pdf].

² Australian Bureau of Statistics (ABS), 4613.0 – Australia's Environment: Issues and Trends, 2006, [http://abs.gov.au]

³ Bartlett, Andrew, 2002, Refugees & Climate Change: CHOGM Must Prepare to Meet A Changing International Climate, Australian Democrats Press Release, 25 February 2002,

[http://www.democrats.org.au/news/index.htm?press_id=1769&display=1]



POLICY DECISIONS THAT NEED TO BE MADE



Section Five continued

Increasing and modifying foreign aid to account for changed conditions
As part of a strategic response, Australia should also consider the levels of foreign aid it provides, and investigate whether there needs to be increased funding allocations for communities who are severely impacted by changed climate and weather patterns. As a matter of urgency, all donor governments, including Australia, should integrate climate risk factors into all their Overseas
Development Assistance (ODA) program planning and evaluation.

Australia's overseas aid budget for 2006 - 2007 will represent only 0.3% of Gross National Income (GNI) and will be increased to 0.36% by 2010. Such a contribution is inadequate compared to the United Nations target of 0.7% of GNI, which was agreed by donor countries in 1970, long before the impacts of climate change needed to be taken into consideration. In comparison, seventeen industrialised nations have already met, or have committed to meet, the 0.7% target by 2015⁴.

Overall, any increase in aid levels should occur after a thorough review of *how* Australia's aid program currently assists recipient communities to adapt to the changed conditions generated by global warming. This includes providing funding for people who need to relocate within their own countries.

Over and above the 0.7% of GNI, Australia should contribute to the voluntary adaptation funds under the UNFCCC, the Least Developed Countries fund and the Special Climate Change Fund.

Of course, as mentioned earlier in this guide, recognising the causes of the displacement of climate refugees remains a critical issue.

Therefore, appropriate policy to mitigate greenhouse gas emissions within Australia and internationally is an essential part of an overall response.

Key Decision Makers and how to contact them

As Australian citizens we need to pressure our government to be proactive about climate refugees. Contact these Ministers and Shadow Ministers to let them know what you think about climate change and climate refugees:

Australian recognition of climate refugees

Minister for Immigration & Citizenship, The Hon. Kevin Andrews Kevin.Andrews.MP@aph.gov.au

Shadow Minister for Immigration, Integration & Citizenship Mr. Tony Burke Tony.Burke.MP@aph.gov.au

Review of Australia's ODA

Minister for Foreign Affairs and Trade The Hon. Mr. Alexander Downer minister.downer@dfat.gov.au

Shadow Minister for International Development Assistance Mr. Bob McMullan Bob.McMullan.MP@aph.gov.au

Shadow Minister for Foreign Affairs and Trade, Mr Robert McClelland R.McClelland.MP@aph.gov.au

Climate Change

Minister for the Environment and Water Resources, The Hon. Malcolm Turnbull MP Malcolm.Turnbull.MP@aph.gov.au

Shadow Minister for Climate Change, Environment & Heritage, Arts Mr. Peter Garrett Peter.Garrett.MP@aph.gov.au



⁴ Five countries have already surpassed the 0.7% target: Denmark (0.81%), Luxembourg (0.87%), Netherlands (0.82%), Norway (0.93%) and Sweden (0.92%). Five other countries have committed themselves to a timeline to reach this target before 2015: Belgium, Finland, France, Ireland and the United Kingdom.

[http://www.earthinstitute.columbia.edu/endofpoverty/oda.html]

Section Six: What you can do about climate justice and climate refugees

Climate change is the biggest environmental justice issue ever faced, with those least responsible and with least access to resources being the most vulnerable to its effects. Here are some very simple actions you can take to contribute to *climate justice*:

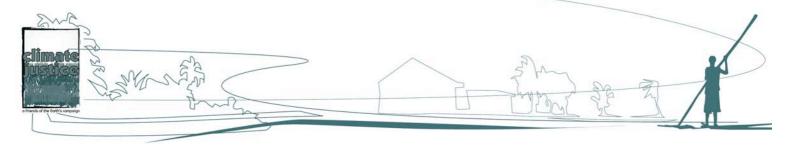
- Immigration Minister Kevin Andrews is yet to make a statement on environmental or climate refugees. Write to him or email Kevin. Andrews. MP@aph.gov.au and ask him to recognise and accept climate refugees.
- Write to the Labor Party and tell them you want to see the policy proposals in the ALP discussion paper about climate change and the Pacific, *Our Drowning Neighbours*, become ALP policy. These proposals include establishing an international coalition to accept climate refugees.
- Protest to the members of your state government if they are planning to expand or build new coal-fired power stations or coal mines. We need to reduce greenhouse gas emissions not increase them most of Australia's emissions are due to generating energy from coal and phasing this out should be our greatest priority. See the Climate Action Network website www.cana.net.au and find out how you can get involved.
- Talk with your local MP about mandatory renewable energy targets and binding emissions reduction targets for Australia. Australia needs to reduce our emissions by at least 40% of 1990 levels by 2020 and by 95% by 2050.
- Challenge the estimated \$9 billion per year support for the fossil fuel industry in Australia that is financed by government subsidies and investments from superannuation funds. Where is your superannuation going? Tell your super fund you don't want your money going to the fossil fuel industry.
- Demand that Australia ratify the Kyoto Protocol and thus take responsibility for our contribution of greenhouse gas emissions. One form letter you can support is: http://www.thepetitionsite.com/takeaction/525063229?ltl=1115160430#body
- Don't buy from companies that have pressured the United States government not to engage in climate agreements, like Exxon Mobil (Esso), Texaco and Chevron. Don't buy from companies that have been associated with human rights abuses in the production of energy, for example, Shell.
- Reduce greenhouse gas emissions in your household, transport use and recreational activities, BUT don't be secretive about it! Tell people (family and friends; sales people; work colleagues; your kids; school teachers, scout/guide leaders, sports coach; your church and social groups) that you are doing this because of the impact of global warming on the environment and people across the world. A great website to measure your impact is www.myfootprint.org
- As more and more people take to the air, air travel is growing as a greenhouse gas source. We should look at alternative travel options. For further information, see:

http://www.foe.co.uk/resource/reports/aviation_climate_change.pdf and

http://www.foe.co.uk/resource/press_releases/growth_in_flights_will_wre_31052005.html

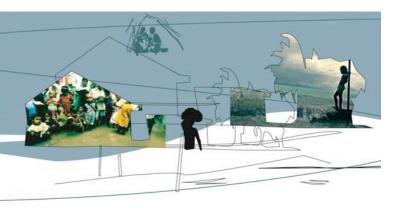
SUPPORT FRIENDS OF THE EARTH BY BECOMING A SUPPORTER, MEMBER OR ACTIVE VOLUNTEER. THE EARTH NEEDS FRIENDS!

www.foe.org.au



WHAT YOU CAN DO ABOUT

CLIMATE REFUGEES



Recommended Reading

Lonergan, S and A. Swain, 1999, *Environmental Degradation and Population Displacement*. Global Environmental Change and Human Security Project, Research Report No. 2, Victoria, BC, Canada, May 1999.

Myers, N., 1993, *Environmental Refugees in a globally warmed world*. Bioscience, Vol 43, No. 11, December 1993.

Myers, N., 1994, Environmental refugees: a crisis in the making. In People & the Planet, Vol.3, No.4 1994.

Friends of the Earth Australia, *Climate Justice: A Fair Share of the Atmosphere*, 2007. http://www.foe.org.au

Friends of the Earth International, *Gathering storm: the human cost of climate change*, 2001. http://www.noah.dk/energi/gathering.pdf

Red Cross/ Red Crescent Society, *World Disasters Report 2001*. http://www.ifrc.org/publicat/wdr2001/

Conisbee, Molly and Andrew Simms, *Environmental Refugees: The Case for Recognition*, New Economics Foundation, 2003. http://www.neweconomics.org

Brown, Lester, *Troubling New Flows of Environmental Refugees*, Earth Policy Institute, 2004. http://earth-policy.org/Updates/Update33_printable.htm

Sexton, Sarah, Nicholas Hildyard and Larry Lohmann, We're a Small Island: The Greening of Intolerance. The Corner House, 2005. http://www.thecornerhouse.org.uk

Websites

Friends of the Earth Australia www.foe.org.au

Living Space for Environmental Refugees www.liser.org

The Corner House www.thecornerhouse.org.uk

Tuvalu Meteorological Service www.informet.net/tuvmet

Tuvalu Islands http://www.tuvaluislands.com/index.html

Australian Government re Tuvalu www.dfat.gov.au/geo/tuvalu

National Tide Facility: Tide Predictions for South Pacific Island Countries www.bom.gov.au/oceanography/tides/MAPS/pac.shtml

South Pacific Regional Environment Program (SPREP)

United Nations www.un.org/smallislands2005/coverage/13.html

United Nations Refugee Convention www.unhcr.ch



A Citizen's Guide to Climate Refugees

It is now widely accepted in the scientific community that climate change will lead to both incremental and rapid ecological change and disruption. The impacts of climate change, which include increased droughts, desertification, and sea level rise, along with the more frequent occurrence of extreme weather events, will lead to an increased number of climate refugees around the world.

This Guide gives you basic facts on climate change, greenhouse gas emissions; what would cause people to become climate refugees, how many there are likely to be and where they are likely to come from; and, most importantly, what we can do about it.

'By recognising environmental refugees you recognise the problem. By recognising the problem you start on the road to accepting responsibility and implementing solutions' – Jean Lambert, Greens MEP (Lambert, 2002)

This revised and updated version of A Citizen's Guide to Climate Refugees was issued in April 2007. The original guide, launched in September 2005, was endorsed by the following organisations:

Oxfam Australia, WWF South Pacific, TEAR Australia, Uniting Justice, Catholic Earthcare Australia, Greenpeace Australia Pacific, Total Environment Centre, Conservation Council of South Australia, Conservation Council of Western Australia, Conservation Council of South East Region and Canberra, Project Safe Com, Nature Conservation Council of New South Wales, Social Action Office (Brisbane), Sisters of Mercy Brisbane, Climate Action Network Australia, Rising Tide, Australian Student Environment Network, Moreland Energy Foundation Limited, FairShare International, Environment Victoria, Cairns and Far North Environment Centre and the Catholic Commission for Justice and Peace Brisbane.