



**australian network of
environmental defender's offices**

Submission on Prime Minister's Task Group on Emissions Trading - Issues Paper

7th March 2007

The Australian network of Environmental Defender's Offices (ANEDO) consists of nine independently constituted and managed community environmental law centres located in each State and Territory of Australia. Each EDO is dedicated to protecting the environment in the public interest. EDOs provide legal representation and advice, take an active role in environmental law reform and policy formulation, and offer a significant education program designed to facilitate public participation in environmental decision making.

This submission is on behalf of the Australian Network of Environmental Defender's Offices Inc (ANEDO).

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Executive Summary

The Intergovernmental Panel on Climate Change's latest report, *Climate Change 2007: the Physical Science Basis* highlights the increasing urgency of implementing measures to combat climate change. The report states:

Warming of the climate system is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice, and rising global mean sea level. [1]

The Report also highlights the fact that eleven of the last twelve years (1995-2006) rank among the twelve warmest years on record. Further, the effect of human activities since 1750 has led to a global warming of 1.6 degrees and 2.4 degrees. The global increase in CO₂ concentration is due primarily to fossil fuel use and land-use change. [2] Temperatures are anticipated to increase between 2 and 4 degrees by 2100 if greenhouse gas (GHG) emissions remain at current levels. [3] The narrow window for change is rapidly closing. If action is not taken to curtail greenhouse gas emissions now, then the impacts may be irreversible. This will have a significant impact ecologically, socially and economically. An effective emissions trading scheme (ETS), which has as its overarching aim to significantly reduce greenhouse gas emissions, is one means of addressing this problem.

The Australian Network of Environmental Defender's Offices Inc (ANEDO) welcomes the opportunity to provide comment on the Issues Paper: *Task Group on Emissions Trading* ('Issues Paper'). ANEDO is a

network of community legal centres that specialise in public interest environmental law. Its functions include legal advice and representation, law reform and policy work, scientific advice and community legal education. We refer to our previous *Submission regarding the Possible Design for a National Greenhouse Gas Emissions Trading Scheme* December 2006 for further detail. It is available to be accessed at:

http://www.edo.org.au/edonsw/site/pdf/nets_anedosub061221.pdf

ANEDO broadly supports an emissions trading scheme. Although a global scheme is preferable in the long-term, ANEDO believes that a domestic scheme is an appropriate interim measure and can lead to demonstrable benefits, both environmental and economic. The European Union Emissions Trading Scheme (EU ETS) is an example of such a scheme. A robust ETS provides a low-cost means of achieving environmental outcomes, whilst stimulating abatement technologies to reduce future impact. Rather than damaging Australia's international economic competitiveness, ANEDO believes that an emissions scheme with international linkages will open up new economic pathways for Australia. A ratification of the Kyoto Protocol will enable Australia to participate in the global technology and clean development mechanism (CDM) markets, which are expanding at an exponential rate.

We note that an emissions trading should not be treated as a solution in and of itself. Rather, there remains an urgent need to implement such an approach in conjunction with a range of regulatory tools, incentives and policies that address demand side management in the energy sector and promote the development of low emission technology, thus allowing for a transition away from a carbon dependent economy.

Consistent with previous submissions, ANEDO submits that the following matters should form the basis of any Australian emissions trading regime:

- A national cap and trade system should be adopted where permits or credits are surrendered according to a legislated timetable, thus achieving significant reductions in GHG emissions;
- While it may initially be preferable to focus on carbon dioxide emissions from the stationary energy sector, the system should be robustly designed in a manner that allows it to expand to cover other industry sectors and other GHGs;
- The allocation of permits by auctioning is the most efficient and environmentally effective approach and should be supported;
- There should be clear incentives for existing installations and new entrants to actively participate in the scheme and achieve emissions reductions;
- Penalties for non-compliance should be set at a level significantly high enough to deter participants from just paying the compliance cost. Penalties should also be linked to making good the excess emissions in future compliance periods;
- Where reduction and mitigation measures have been implemented, and supplementary offsets are allowed, clear guidelines limiting the circumstances for their use should be developed in accordance with the following principles:
 - Environmental impacts must be avoided first by using all cost-effective prevention and mitigation measures on-site. Offsets are then only used to address remaining loads of pollutants,
 - All standard regulatory requirements must still be met,
 - Offsets must never reward ongoing poor environmental performance,
 - Offsets will complement other government programs, and
 - Offsets must not result in a net increase of target pollutants; and
- A suite of complimentary measures should be adopted in addition to an emissions trading scheme. These include funding research into cleaner technologies, creating incentives and introducing a carbon tax.

This submission comments on the following areas:

Part 1: Economic Focus

Part 2: Key Elements of Emissions Trading Schemes

Part 3: The European Union Emissions Trading Scheme

Part 4: Promoting Better Technology

Part 5: Complementary Measures

Introduction

Combating climate change is undoubtedly the biggest policy challenge confronting the Australian Government, and indeed the world, in the 21st Century. There is now irrefutable evidence that climate change is occurring and that it needs to be combated quickly. 2006 was the sixth hottest year on record. [4]

To avoid irreversible damage to our planet, scientists tell us that the earth's temperature must not heat up more than 2°C above pre-industrial levels. Stabilising temperature increases will require significant action and political will. ANEDO believes that the Australian Government must take action now to avoid the need for more stringent regulatory action in the future. A phased transition to a carbon constrained economy starting now, will have a far less dramatic impact on Australia's economy and international competitiveness, than implementing sudden cuts at a later stage. [5] Such a scenario would be detrimental to Australia economically, socially and environmentally.

In implementing climate change measures, the Australian Government should be primarily guided by principles of Ecologically Sustainable Development (ESD). A robust emissions trading scheme that provides incentives for the reduction of Greenhouse Gas (GHG) emissions through a market-based mechanism is an obvious means of implementing ESD. In particular, the precautionary principle should be at the forefront of considerations. Although there is an incontrovertible body of scientific evidence to demonstrate that human-induced climate change is already impacting on the planet, there remains significant uncertainty regarding the precise consequences of climate change - for example, on weather conditions, and essential ecosystem services. It is this uncertainty that triggers the precautionary principle. As a consequence, ANEDO believes that implementing an effective, robust and transparent emissions trading scheme as a matter of urgency is consistent with applying the precautionary principle. Taking significant action now is also consistent with the principle of intergenerational equity, the polluter-pays principle and the conservation of biodiversity. [6]

PART 1: Economic Impacts

The Terms of Reference for the Task Group on Emissions Trading state:

Australia enjoys major competitive advantages through the possession of large reserves of fossil fuels and uranium. In assessing Australia's further contribution to reducing greenhouse gas emissions, these advantages must be preserved. Against this background, the Task Group will be asked to advise on the nature and design of a workable global emissions trading scheme in which Australia would be able to participate. The Task Group will advise and report on additional steps that might be taken in Australia, consistent with the goal of establishing such a system.

ANEDO believes that the focus of the Issues Paper is misguided and reveals a lack of a serious

consideration of the possibility of Australia participating in an emissions trading scheme. The Terms of Reference reveal an inordinate focus on the economic aspects of an emissions trading scheme and on maintaining Australia's "major competitive advantage" and does not contemplate the inevitable economic consequences of failure to act. A broader approach to analysing international competitive advantage should be adopted to allow for considerations related to Australia's ability to gain an advantage in the field of alternative energy supply including technology advances. The Issues Paper does not contemplate Australia establishing a domestic emissions trading scheme as a precursor to an international scheme being established:

To be fully effective, a **global emissions trading scheme** would need to be underpinned by an international framework which is able to generate broad-ranging support.[7]

ANEDO submits that the focus of Australia's climate change response should be concentrated on drastically reducing Australia's GHG emissions to 60% of 2000 levels by 2050, and of finding the best means of achieving this goal. The focus should therefore be to drastically reduce greenhouse gas emissions into the atmosphere to combat the significant environmental, social and economic effects that climate change is forecasted to have on Australia. It is concerning that no mention of this overarching goal is found in the Issues Paper. ANEDO agrees with commentators who have noted that the Task Group should have been given much broader terms of reference within the aim of reducing carbon dioxide emissions to 60 percent of the 1990 level by 2050.[8]

ANEDO acknowledges that economic impacts are a fundamental consideration and form a constituent element of ESD. Indications are that there is likely to be some impact on trade-exposed industries if international competitors are not equally restrained. The Federal Government is using this as a reason for delaying Australia's participation in a domestic emissions trading scheme, despite calls from many sectors, including industry, for the establishment of a domestic scheme as a transitional measure. Indeed, it has been noted by the Minerals Council, that transitional measures "will help to build capacity to link national domestic trading schemes into an extensive international trading regime.[9]

The Issues Paper presupposes that any domestic trading scheme will have negative impacts on the economy by reducing Australia's international competitiveness. ANEDO disagrees with this contention. Rather, a robust trading scheme coupled with complementary abatement measures and other regulatory options has the ability to provide a significant boost to Australia's economy rather than signal a death knell for Australia's trade-exposed industries. Analysis of the international carbon market will illustrate this point. The global carbon market grew in value to an estimated US\$21.5 billion in the first three quarters of 2006.[10] Of this, the NSW GGAS market grew by over 300% growing in value from \$US59.13 million to US\$184.07 million from 2005-06. Further, the UK ETS, the EU scheme and the Chicago Climate Exchange all grew sharply. This shows that the carbon market is financially robust and is rapidly expanding. Thus, there is an opportunity for Australia to participate and benefit economically from this market.

Indeed, the state-based National Emissions Trading Taskforce is of the opinion that a reduction in GHGs can be accommodated without major economic disruption:

Overall, these results indicate that the economy would continue to grow strongly with a carefully designed emissions trading scheme. Importantly, it would appear that some industries and regions most vulnerable to the effects of introducing an emissions trading scheme - trade-exposed energy intensive industries - could be successfully sheltered from the impacts of the scheme in a way that maintains their competitiveness but does not limit the amount of abatement that occurs.[11]

This has been observed in the EU scheme. Despite the early predictions by some commentators, the EU ETS has not brought Europe's economy to its knees.[12] Its effect on economic competitiveness has only

been marginal. [13] A report from McKinsey and Company concluded that, although it is still too early to accurately measure the impact, the EU ETS was likely to have a "limited impact" on European industry, with the exception of primary aluminium production. [14] Later surveys suggested that the ETS is not having a particularly dramatic effect on the EU's energy-intensive sectors. McKinsey & Company did note that the scheme had increased the cost of operation but most industries are able to pass through these costs to customers. Finally, to emphasise the economic strength of the ETS, it is of note that over the past year the total value of the EU scheme has doubled in value. [15] The success of the EU scheme will be discussed in detail in **Part 3**.

In light of the recent *Stern Review on the economic impacts of climate change 2006*, [16] it is clear that without a primary focus on the environmental considerations of climate change, purely economic approaches are likely to fail to maintain economic and ecological sustainability in the long run. [17] Therefore, if action is not taken to forestall climate change now, the costs in the long-run will be drastic and the economy will suffer. In relation to the economic consequences of *in action*, the report estimates that unchecked climate change has the potential to in fact shrink the global economy by as much as 20%. The Report states:

Our estimate of the total cost of 'business as usual' (BAU) climate change over the next two centuries equates to an average welfare loss equivalent to at least 5% of the value of global per-capita consumption, now and forever. That is a minimum in the context of this model, and there are a number of omitted features that would add substantially to this estimate. Thus the cost is shown to be higher if recent scientific findings about the responsiveness of the climate system to greenhouse gas (GHG) emissions turn out to be correct and if direct impacts on the environment and human health are taken into account. Were the model also to reflect the importance of the disproportionate burden of climate change impacts on poor regions of the world, the cost would be higher still. **Putting all these together, the cost could be equivalent to up to around 20%, now and forever.** [18]

An incremental decrease in emissions over time through an emissions trading scheme as opposed to a significant reactive decrease through regulation in the future, is in Australia's best interests economically, socially and environmentally. To ensure Australia's economic growth in a carbon-constrained world, the Australian Government's first step should be the ratification of Kyoto. As the Issues Paper indicates, this would not be particularly onerous as Australia is broadly on track to achieve its Kyoto Protocol target of 108% of 1990 levels in the period 2008-12. Ratification would open up significant investment opportunities for Australia and would enable a more fluid transition to an international emissions trading scheme once it is established. The potential economic benefits Australia is missing out on in terms of carbon-reducing international business opportunities will be discussed in **Part 4**.

PART 2. Key Elements of Emissions Trading Schemes

ANEDO provides the following general comments on the crucial elements of a functional emissions trading scheme in relation to: **coverage, caps, penalties, the nature of permits and permit allocations, offsets, reporting and measurement**. Our position on these matters applies both to a domestic and an international trading scheme. For a detailed discussion of ANEDO's position on the key elements of a workable and environmentally sound trading scheme please see ANEDO's submission on the state-based NETS scheme. [19]

2.1 Coverage

As noted by the Katoomba Group, the wider the coverage of any emissions scheme, "the more economically efficient it is likely to be, as there are a wider range of abatement opportunities to be tapped." [20] Similarly,

the World Resources Institute has commented that a GHG cap and trade system should strive to incorporate a broad and diverse set of emissions sources. The rationale for this is that it serves to lower costs, achieve environmental objectives, accelerate innovation, and spur deeper engagement with the private sector. [21] ANEDO is therefore supportive of a broad-ranging scheme applicable to all major emission sectors and covering all GHGs. However, ANEDO recognises that most schemes, such as the EU scheme, are only applicable to the stationary energy sector on commencement. Nevertheless, if Australia adopts an emissions trading scheme that is initially applicable only to the stationary energy sector, it must be made clear that the intention is to expand the scheme to include other sectors as soon as possible, subject to feasibility studies and consideration of overseas experience.

Overseas experience suggests that it will be possible to increase the coverage of emissions trading schemes in the short to medium term. The European Union Emissions Trading Scheme (EU ETS) already has coverage that is broader than the stationary energy sector, and applies to a number of other large scale industries. Furthermore, there are plans in place to expand the EU scheme to include aviation, aluminium and chemicals. [22]

2.2. Caps

The key objective of a domestic or international emissions trading scheme must be its long term environmental performance, which is determined primarily by the cap. ANEDO submits that a cap should be consistent with a long-term emissions reduction target. As we have submitted previously, this target should be a reduction by 60% compared with 2000 levels by 2050. The United Kingdom has advocated for this target to ensure that emissions are stabilised at 550 ppm. [23] NSW has also committed to the same target and a return to year 2000 levels by 2025. [24] Any cap implemented should set Australia on the road to achieving this target. ANEDO submits that the cap should be determined using up-to-date scientific information and the latest projections of the IPCC. Other criteria such as economic competitiveness, industry certainty and practicality should be secondary considerations. The cap and gateway approach proposed by the National Emission Trading Taskforce [25] has the potential to meet the objectives of both flexibility in responding to improvements in scientific knowledge and certainty for industry and investors, and ANEDO therefore generally supports this scheme. [26]

2.3. Penalties

Consistent with previous submissions, ANEDO believes that a stringent, enforceable and robust penalty regime is an essential part of any emissions trading scheme. This will ensure that the environmental objectives of an emissions trading scheme are met. Penalties should be sufficiently high so as to deter companies from non-compliance. Low penalties may be relatively ineffective for large industries, where it may be more cost-effective to write-off any fines as simply a cost of doing business. The Australian Conservation Foundation has recently called for a penalty price of \$35 per tonne of greenhouse pollution to ensure that emitters will be reluctant to exceed their allocations, rather than just treat a penalty as a writable cost. [27] ANEDO endorses such an approach. Furthermore, ANEDO submits that effective monitoring and independent auditing is required to underpin compliance.

A domestic or international emissions trading scheme should also include a 'make good' provision for companies to compensate for breaches in successive compliance periods. This approach has been adopted in the EU ETS. The addition of a make good provision adds additional weight to the financial incentive of compliance with a GHG cap, particularly when linked with an effective penalty regime.

2.4. The nature of permits and permit allocations

ANEDO is supportive of the widely-held belief that auctioning is the most efficient and environmentally sound means of allocation and clearly applies the precautionary principle. Indeed, the Centre for Energy and Environmental Markets observes:

Auctioning seems to be the best way for allocating permits since any possible windfall gains from free allocation are avoided and the 'polluter pays' principle is applied. [28]

The dangers posed by GHG emissions have been known for some time, at least from the early 1980s. There has been significant forewarning to industry of the need to drastically reduce emissions to combat climate change. Hence, it is arguable that GHG emitters have had sufficient notice of the need to reduce emissions and should therefore not be entitled to free allocations.

In relation to the characterisation of permits, ANEDO submits that emission permits should be issued as licences to emit, with no proprietary character and no right to compensation for the lowering of permit levels. A detailed examination of this issue is found in ANEDO's submission on the National Emissions Trading Scheme. [29]

In general, ANEDO submits that:

- Permits should be characterised as licences allowing emitters to conduct an activity (namely the emission of GHGs) that would otherwise be unlawful.
- However, in the event that such rights are characterised as proprietary under the scheme, it does not automatically follow that compensation is payable for alteration of those rights.
- Proprietary rights created by statute, that have no existence outside legislation can, by their very nature, be altered, suspended or revoked at any time with no right to compensation. This would clearly apply to emission permits.
- The revocation of permits does not constitute an 'acquisition' as the person redeeming the permits has not acquired anything of value. The revocation of permits is merely a regulation of the right to emit, not the acquisition or sterilisation of the right itself.
- There is no requirement for compensation under state constitutions when property rights are altered or removed so there should be no expectation of compensation.
- The proper characterisation of permits is as shares of a pool of emission credits similar in nature to those under the National Water Initiative.

2.5. Offsets

Offsets should not be relied upon as the predominant means of achieving compliance with any domestic or international emissions reduction scheme. Consistent with previous ANEDO submissions, we submit that where reduction and mitigation measures have been implemented, and supplementary offsets are allowed, clear guidelines limiting the circumstances for their use should be developed. It is imperative that a reliance on offsets does not divert the focus of an emissions trading scheme from GHG reductions to the lowest-cost offset options for emitters to achieve compliance. ANEDO submits that environmental impacts must be avoided first by using all cost-effective prevention and mitigation measures on-site. Offsets are then only used to address remaining loads of pollutants. Furthermore, a specified limit on the percentage use of offsets is required. An examination of the EU ETS highlights these points.

The principle that applies under the EU ETS is that, in accordance with the relevant provisions of the Kyoto Protocol and Marrakech Accords, the use of credits from Joint Implementation (JI) and Clean Development Mechanism (CDM) projects should be *supplemental* to domestic action, which should therefore constitute a significant part of the effort made. [30] Member States may use credits from JI/CDM projects for

compliance up to a *specified limit*, which is set as a percentage of the allocation of allowances to each installation. In addition, certain projects are not able to generate offset credits (for example, land use changes and forestry activities are excluded). [31] ANEDO submits that such principles should apply to any local or international trading scheme. Consideration should be given to limiting the use of offsets for compliance by requiring that offset credits may only be used up to a specified limit, which is set as a percentage of the allocation of permits to each installation. In setting this limit, it may be appropriate to consider benchmarks that reflect the emissions reductions possible with implementation of best practice abatement technologies. In addition, offsets should further be limited to projects where there is a reasonable level of certainty as to the accuracy of measurement methodologies. Furthermore, under no circumstances should the overall level of direct emissions increase as a result of "abatement" through offset projects.

2.6. Reporting and measurement

It is essential that emitters be monitored regularly and accurately to ensure the validity of emissions levels and to increase public confidence in the scheme. The EU ETS has stringent monitoring regime which could provide a model for the Australian scheme.

ANEDO submits that the following elements should be incorporated into a domestic or international emissions trading scheme to ensure that the environmental objectives of such a scheme are met, and that the process is accountable and transparent:

- Annual triple bottom line reporting by regulatory bodies involved in the scheme;
- Annual independent review of the scheme based on comprehensive monitoring and random audits of participants;
- An easily accessible public register that tracks price signals and trading activity;
- Penalty and enforcement provisions, including innovative compliance orders;
- A provision clarifying that compensation is significantly limited; and
- A requirement that the scheme be implemented in accordance with the principles of ESD.

PART 3: The European Union Emissions Trading Scheme (EU ETS)

In examining the success of the EU scheme, the International Emissions Trading Association (IETA) has identified that the key indicators of effectiveness are;

- Environmental delivery;
- Impact on European competitiveness;
- Promoting technological and innovation deployment particularly in developing countries;
- Change in corporate culture; and

3.5 Effective market functioning. [32]

These will be examined in turn.

Environmental Delivery

It has been argued that it is probably too early to assess the environmental effectiveness of the EU ETS in reducing GHG emissions in the EU. [33] Furthermore, environmental groups were initially critical of the allocation process as they believed that industry successfully lobbied for more generous emissions targets

than was justified. [34] Despite this, there are some positive signs. IETA finds that, by optimistic calculations, up to 100 million tonnes of CO₂ were reduced due to the increased effective cost of power generation from coal and the increase in the use of gas for power generation. [35] Further, Eurelectric, the industry association for European generators, has reported a drop of 300 million tonnes of CO₂ below its "business as usual" trajectory- a 10% reduction over three years. [36] Despite these encouraging trends, there are still some concerns that the scheme has "singularly failed to encourage a shift away from dirty coal to cleaner gas." [37] Nevertheless, the scheme is still in a "teething" phase and initial results show that environmental outcomes are slowly being achieved. Power traders are also optimistic, concluding that the market will eventually force the price of carbon to a point where it is no longer economic to increase coal-fired generation. [38]

Effect on competitiveness

This was discussed in detail in **Part 1**. As observed there, the effect of the EU ETS on European competitiveness has been minimal.

3.3. Promoting technological innovation

This will be discussed in **Part 4** below. This has been the most significant achievement of the scheme. It is clear that the EU ETS has been the driving force behind the incredible growth of abatement technologies seen worldwide. The project-based EU market represented transactions of some 567 million tonnes of CO₂ in 2005 and 2006. [39]

3.4. Change in corporate culture

IETA has found that the price of emitting CO₂ is being factored into the operation of around 13,000 installations across Europe. This provides monetary rewards for those companies innovating to reduce emissions. [40] Furthermore, consultancies conducted by McKinsey & Company & Ecofys through surveys found that of some 300 companies, NGS, government bodies and market intermediaries, 48% already price in the cost of carbon in their daily operations. The figure rises to 77% when respondents were asked if they plan to factor in the price of carbon in future. [41] Hence, it is clear that the EU ETS has succeeded in facilitating a change in corporate culture which is very encouraging.

3.5. Market functioning

A functioning market has developed in the EU with daily trading in allowances often exceeding one million tonnes each day. [42] IETA finds that effective market functioning has been achieved. [43] Trading has been dynamic, with at least 780 million European allowances traded by October 2006.

In summary, the EU ETS has been quite successful in a relatively short time in the establishment of a carbon market, in the change to corporate behaviour and in its extraordinary effect on the development of abatement technologies, particularly in developing countries. Furthermore, there has been only a minimal impact on European competitiveness. Finally, and of most importance, environmental benefits are beginning to emerge with promising trends showing a reduction in CO₂ emissions. This scheme should be used as an example by Australia and provides ample evidence that an emissions trading scheme can be successful even where it is not a global scheme. ANEDO submits that an efficient and enforceable domestic emissions trading scheme can achieve the same results and should be implemented as soon as practicable.

PART 4. Promoting better technology

ANEDO believes that emissions trading will stimulate the development of low emission technologies. As the

World Bank notes, a well-designed emissions market "can send a clear signal to the private sector to innovate and identify opportunities to mitigate climate change. [44] Thus, an efficient scheme would accelerate and compliment the likely benefits to be gained from existing measures such as research and development and energy efficiency projects.

Part of the allure of market-based mechanisms is the financial incentive offered to emitters to lower their emissions. Proactive emitters who significantly reduce their emissions using the latest abatement technology have the ability to profit by selling the residual of their permits to emitters who are emitting more than their permits will allow. Both parties profit from this arrangement, with the excess emitter "reducing" their emissions in a manner that is not financially onerous. Hence, emissions trading facilitates the development of abatement and modification technologies in the most cost-effective manner. The EU scheme is a prime example of the success of an emissions trading scheme in prompting the growth of cleaner technologies. IETA has found that the EU scheme has been the driving force behind the 'extraordinary' growth in the CDM market, which has led to the promotion of technological and innovative deployment in developing countries. [45] Indeed, the World Bank states that prices are up across the board in the project-based carbon market which provides opportunities for Australian industries to participate. [46] Currently there are over 500 projects, worth around \$2.5 billion that are registered by developing countries under Kyoto's Clean Development Mechanism (CDM). [47] Much of the demand for credits from CDM projects has been generated by companies within the EU ETS. This presents a significant missed opportunity for Australia to assist developing countries in reducing their emissions. A failure to ratify Kyoto is thwarting Australia's participation in this market. As ACF Executive Director Don Henry states:

This means Australian companies, many of which already have the expertise and the connections, are being denied access to more than \$39 billion in investment opportunities simply because the Federal Government has not yet ratified. [48]

Hence, the ratification of the Kyoto Protocol and the establishment of a domestic trading scheme with international linkages would provide a significant boost to Australia's clean energy and abatement industries.

An example of the positive effect of an emissions trading scheme on the development of cleaner technologies is the National Emissions Trading Scheme (NETS) proposed by the states. In supplementary materials prepared for the trading taskforce, modeller McLennan Magasanik Associates finds that the NETS scheme would trigger an extra 2400 MW of renewable generation and 1000 MW of gas by 2030. [49] The business as usual approach would yield only a nominal increase.

PART 5. Complementary measures

The Issues Paper acknowledges that emissions trading has the potential to rationalise and consolidate the multiplicity of greenhouse gas reduction programmes between jurisdictions. ANEDO submits that an effective emissions trading scheme should be one of a suite of tools used in combating climate change and in implementing ESD. However, ANEDO believes that for such a scheme to make a meaningful contribution, the overarching environmental goal of significantly reducing Australia's GHG emissions must not be undermined by considerations of investor certainty, industry compensation, or an over-reliance of untested offset projects.

For these reasons, and the relative infancy of trading schemes as a policy tool, it is essential that other measures are also implemented as a matter of urgency to address climate change. Consistent with previous submissions, ANEDO recommends:

1. Australia ratifies the Kyoto Protocol;
2. A greenhouse gas emission trigger be included in the *Environment Protection and Biodiversity Conservation Act 1999* that recognises any development that produces over 100,000 tonnes of CO₂ equivalent per year as a matter of national environmental significance. This could be supplemented by provision for all projects on a designated development list (including expansion of existing projects and significant land use change, including significant land clearing and motorway projects) to trigger the approval provisions. This would ensure the trigger was more comprehensive in capturing diffuse emissions.
3. More investment and incentives for development and expansion of renewable energy options, to complement increased mandatory renewable energy targets.
4. The introduction of a carbon tax as a compliment to a trading scheme. In a debate at the World Economic Forum, Sir Nicholas Stern argued that environmental taxes - such as those on transport and energy - should not be discounted in favour of worldwide carbon markets.^[50] He stated that ruling out green taxes was "a risk we cannot take". In support of this, is Dr Donna Green of Macquarie University's Centre of Climate Change and Risk. She finds that a tax could be put in place within months while negotiating global emissions trading may take years.^[51] She finds that a carbon tax is more effective at cutting emissions and leads to price predictability. This has been observed in several Scandinavian countries. Furthermore, the taxes collected can be hypothecated into emission reduction projects, further reducing emissions.

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