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For copies of EDO submissions on climate policy and other environmental law matters, please refer to our website: http://www.edo.org.au/edonsw/site/policy.php.
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- Climate Change and Greenhouse Emissions Reduction Act 2007 (South Australia).
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- Renewables Obligation Order 2002 (United Kingdom).
- Bill S.280: Climate Stewardship and Innovation Act of 2007 (USA).
- The Lieberman-Warner America's Climate Security Act of 2007 (USA).
- Health and Safety Code, Division 25.5 (California)
- Texas Renewable Portfolio Standard, Senate Bill SB20 Relating to this State's Goal for Renewable Energy, in Utilities Code, Section 36.053.
- Kyoto Protocol to the United Nations Framework Convention on Climate Change
- United Nations Framework Convention on Climate Change
Executive Summary

The Environmental Defender’s Office of NSW (EDO) is a community legal centre specialising in public interest environmental law and policy. An increasing amount of our current policy and law reform work is focussed on climate change strategies for mitigation and adaptation.

We have been involved at the international level of policy making, for example, attending the 2007 Bali meeting of the United Nations Framework Convention on Climate Change (UNFCCC). We have been involved at the national level, for example, appearing at the Senate Inquiry hearing on the National Greenhouse and Energy Reporting Bill 2007. In the past week we have prepared three submissions addressing various Issues Papers and Reports prepared by the Garnaut Review team. We have engaged in debate on state level laws and policies, for example, by preparing a submission on the Renewable Energy (New South Wales) Bill 2007. Recently we have prepared a report for local coastal councils about the status of current legislation regarding climate change responsibilities and liabilities.

While there are exciting and progressive moves being made to develop Australia’s legal framework for responding to climate change, we believe there is an opportunity now to put in place a comprehensive, national legislative scheme. Such a scheme should build on existing initiatives that have merit, augment areas where we have lagged behind in implementing regulation, and establish best-practice standards. Comparable jurisdictions, such as the United Kingdom, the United States and Canada have draft national Bills currently under review.

The aim of this Discussion Paper is to highlight some of the issues we would like to see addressed by comprehensive national climate change legislation. We ask the question: if Australia was to introduce a national Climate Change Act, what should it cover? A comprehensive plan to address climate change requires more than just the establishment of an emissions trading scheme, and it is clear that there are a number of key elements that should form part of the legislative architecture. This Paper by no means presents a definitive list of necessary actions, rather it identifies ideas for discussion and development.

Part One briefly discusses the context of Australian legislative action on climate change.

Part Two provides an overview of some recent legislative developments in other jurisdictions. We analysed a number of existing and proposed Bills in order to find examples of provisions and concepts that may be useful for Australia.

Part Three outlines a preliminary list of 10 key areas that should be addressed in national climate change legislation. We note that while some elements are being addressed by Australian legislation (for example, mandatory renewable energy targets and energy and greenhouse reporting), it is necessary to ensure that these are ‘best practice’ and integrated into a coordinated legislative framework. The 10 key elements cover the following areas: objectives, quantified emissions reduction targets, mandatory renewable energy targets, emissions trading scheme, regulating the voluntary carbon offsets market, regulating biofuels, establishing an independent regulatory body, compliance and enforcement, monitoring reporting and public participation, and complementary amendments and policies.
Part One - Introduction

With the new Australian Government internationally announcing the ratification of the Kyoto Protocol within days of winning office, and establishing comprehensive reviews and consultation on climate policy, it is a promising time for the development of Australian climate law.

By signaling to the world an intent to become more involved in the main multilateral environmental agreement concerning climate change - the United Nations Framework Convention on Climate Change (UNFCCC) - Australia has an obligation to reform and make new national laws to implement international obligations.

The international context of Australian national legislative action is at an interesting stage. While the Bali Action Plan (2007) identified areas for multilateral agreement, final agreement of detailed commitments will not be confirmed for 2 more years. The UNFCCC itself does not include targets but it serves as a basis for additional protocols, namely the Kyoto Protocol, which does include targets and provides mechanisms in order to achieve the targets. The specific rules of the mechanism are laid down in the Marrakesh Accords and can often be used as schematics for national mechanisms.

Climate change legislation that purports to domestically implement international obligations originating from international treaties is not necessarily always codified in a single Act. In many countries, climate change obligations and actions are addressed over a range of different Acts, Regulations, Directives and policies. Whether Australia decides to introduce a comprehensive national Climate Change Act or deal with different obligations under separate Acts, it is essential that key elements are covered in a coordinated and comprehensive framework. This Paper discusses essential elements of that framework.
EDO Climate Change submissions 2005 - 2008

- Coastal Councils and Planning for Climate Change: An assessment of Australian and NSW legislation and government policy provisions relating to climate change relevant to regional and metropolitan councils - March 2008
- Submission on the Garnaut Climate Change review - Interim Report to the Commonwealth, State and Territory Governments of Australia - 11 April 2008
- Submission regarding abatement incentives prior to the commencement of the Australian Emissions Trading Scheme - 7 December 2007
- Submission to the Natural Resource Management (Climate Change) Inquiry - 6 December 2007
- Submission on the National Greenhouse and Energy Reporting Bill 2007 - 27 August 2007
- Submission Regarding the Possible Design for a National Greenhouse Gas Emissions Trading Scheme - 22 December 2006
- Submission on State Based Emission Trading - 21 November 2005

Part Two - Overview of legislative developments

For the purposes of this report, the EDO analysed current and draft legislation from a range of different jurisdictions. This part provides a brief overview of the main legislation reviewed.

United Kingdom

The United Kingdom (UK) climate change legislation consists mostly of directives and communications from the European Communities. However, the UK has drafted a Bill on climate change in addition to the EC framework. The Draft Climate Change Bill (UK Bill) of which the latest version dates from March 2007 is a new and comprehensive initiative to tackle climate change in a longer period. The UK Bill has been recently reviewed by the Joint Committee on the Draft Climate Change Bill. The Bill completed its passage through the House of Lords in March 2008 and is expected to become law later this year. While awaiting its enactment, five technical experts were appointed as members of the “shadow” Committee on Climate Change in February 2008 and before the end of the year the Committee will draft carbon budgets for the next three five-year periods, from 2008-12 to 2018-2022. In addition, there is a referral to the Renewables Obligation Order 2002 for a mandatory renewable energy target in the UK.

Canada

Similar to the UK, Canada has also drafted an extensive Bill on climate change - the Clean Air and Climate Change Act (draft 2006). The Bill has been re-worked and made far stronger by a special legislative committee and returned to be tabled again in parliament. There is also draft state legislation in British Columbia - the Draft Global Warming Solutions Act 2006, which was drafted by specialists of the University of Victoria. The draft was based on the Californian model and mainly focuses on the creation of an independent committee on climate change. British Colombia has also just introduced this month the ‘Cap and Trade Act’ to create a trading scheme in the Provence to assist in reaching its reduction target of 33% by 2020.

United States

Although the US does not easily commit to international obligations, their national legislation is often the most advanced in the world. However, the US has not yet enacted national climate change legislation. There have, however, been a number of Bills introduced to the US Senate. Currently there are two proposals that are gaining
significant support. The first proposal is Bill S.280: Climate Stewardship and Innovation Act of 2007 (Bill S.280). Bill S.280 is (co-)composed by Senator J. Lieberman and includes a program to accelerate emission reductions. It creates a market-based system of tradable allowances. The Bill is currently introduced and under review by Senate Committees. The Bill is co-sponsored by both Senator Obama and Senator Clinton. The second proposal worth noting is The Lieberman-Warner America’s Climate Security Act of 2007 (Lieberman-Warner Bill). It has been positively reviewed by critics and supporters of climate change. In addition, the Lieberman-Warner Bill has been drafted by (one of) the same author(s) as the Bill S.280 and includes similar provisions and entities to be created. The Bills may therefore be used to complement each other.

In addition to the national proposals, we reviewed some state legislation. Similar to the situation in Australia, some US states are leading the way with climate policy and legislation. California has been one of the first Governments to assess and introduce climate change legislation and subsequent legislation in other jurisdictions has been based on their model. For the purposes of this Paper, the following state legislation was analysed - the Californian Global Warming Solutions Act of 2006, the California Health and Safety Code and the Texas Renewable Portfolio Standard.

European Union

The European Union has a comprehensive framework of environmental regulation. Climate change legislation in the EU is mostly related to international agreements, especially the Kyoto Protocol. The legal framework system in the EU contains Directives from the European Commission (EC) level which have to be implemented by the individual states. The individual states (normally) have a certain degree of freedom in the detailed legislation as long as the minimum requirements or the purpose of the Directive are achieved. Directive 2003/87/EC established an emission trading scheme, Directive 2001/77/EC (RES-E Directive) promoted renewable energy. Directive 2003/4/EC creates a minimum standard for public access to environmental information, and Directive 2003/30/EC created Biofuel support and targets. The EC also publishes communications for the member states. These communications are official documents that EC institutions send to each other to emphasise an issue or set

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out an aspiration. For example, an important Communication was *Limiting Global Climate Change to 2 degrees Celsius; The way ahead for 2020 and beyond*. This Communication included the new aspirational emission reduction targets for the future. The Commission also produces White Papers containing policy guidelines, for example the *White Paper on Renewable Energies*. 

**Australia**

In this Discussion Paper Australian legislation is also taken into consideration. The Australian legislation consists of current Acts at the state and federal level, Bills and White Papers. Commonwealth documents that have been reviewed are the *Renewable Energy (Electricity) Act 2000* and Government's Energy White Paper, *Securing Australia's Energy Future*. Some state legislation that has been reviewed is the *South Australian Climate Change and Greenhouse Emissions Reduction Act 2007* and New South Wales' *Electricity Supply Act 1995*. We have also taken into account recent policy discussions regarding the design and implementation of an emissions trading scheme in Australia.

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16 Commission of the European Communities *Limiting Global Climate Change to 2 degrees Celsius; The way ahead for 2020 and beyond*, COM(2007) 2 final, 1, Communication from the Commission to the Council, The European Parliament, The European Economic and Social Committee and the committee of the Regions.


19 Climate Change and Greenhouse Emissions Reduction Act 2007 (SA)

20 Electricity Supply Act 1995 (NSW).
Part Three – Key elements of model climate legislation

Through analysis of existing and proposed legislation from different jurisdictions, the EDO is in the process of identifying key elements of model climate change legislation. Our key question is:

*If Australia was to introduce national climate change legislation, what are the key elements it should cover?*

1. **Clear objective**

National climate change legislation must have a clear environmental objective to reduce Australia’s greenhouse gas (GHG) emissions and put in place clear legal provisions for meeting our international obligations.

Many of the draft legislative models proposed internationally have extensive objects clauses or preambles. It is important that the clear primary object of climate change legislation is to achieve a reduction in GHG emissions, with additional objectives relating to the details of how reductions will be achieved. The objective should refer to the emissions reduction target (this is discussed further below). Objects may assist the Courts in interpreting the application of the legislation. However, there is always the danger that objects clauses will be nothing more than general aspirational statements, unless the legislation explicitly includes wording to operationalise the objects.

National climate change legislation must include:
1. A clear overarching environmental objective to reduce GHG emissions;
2. Additional objects relating to how reduction is to be achieved;
3. A requirement that the Act be implemented in accordance with the principles of ecologically sustainable development; and
4. A provision to operationalise the objectives so that implementation of the Act must be consistent with the objects.

2. **Quantified Emission Reduction Targets**

A common and fundamental element of climate change legislation is the establishment of a quantifiable emission reduction target (QERT). QERT’s can currently be found in press publications, draft Bills and legislation. In an ideal world, ambitious targets would already be set in multi-lateral agreements that inform national law, however the lack of consensus in international agreements to date does not prevent Australia from including a QERT in national legislation.

A QERT is a fundamental basis for any climate change legislation. Parties to the Kyoto Protocol currently have a QERT according to the Protocol. The target is based on the individual circumstances of each party and is made mandatory for Annex I parties to the

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21 Quantified Emissions Limitation and Reduction Commitments are defined by the UNFCCC as ‘Legally binding targets and timetables ... for the limitation or reduction of greenhouse-gas emissions by developed countries’. This paper will use the term quantified emission reduction target (QERT).
Parties to Kyoto Protocol have in some instances included a target in their national legislation but in general refer to the Protocol for their target. In the run-up to the second commitment period some countries have published their intention to implement additional national QERTs. Other countries have included targets into Bills and draft legislation. Although the likelihood of actual enactment of Bills differs substantially (often depending on how ambitious the proposed target is), the trend in drafting mandatory QERTs is increasing.

In the UK, the Joint Committee Report contained a target of 60% emission reduction of 1990 levels by 2050. The Joint Committee took into account scientific developments and proposed an amendment to the Bill. The target provision is to be amended in accordance with the most recent best available scientific evidence. Without the Bill even passing there is a demand from many community groups to increase the reduction percentage to 80%. In order to keep up to date with the latest scientific developments, a mandatory QERT provision should be amendable by the Government. The scientific evidence that is used as a base for the QERT should come from internationally accepted organisations and institutions, and from a national scientific advisory committee. The UK Bill also includes 5-year QERTs, which have to be reviewed annually; the QERT set for 2020 is 30% of 1990 levels.

In Canada the draft Clean Air and Climate Change Act is currently under review. This Bill also includes QERTs of 6% reduction of 1990 levels by 2012, 20% below 1990 levels in 2020, 35% below 1990 levels by 1935 and 60-80% below 1990 levels by 2050. The draft Act also includes the requirement for the Government to create an annual climate change plan.

As noted, in the United States there have been a number of federal Bills introduced concerning climate change, however none have been enacted yet. Bill S.280 refers to set a target at “the 2010 aggregate emissions level for the covered sectors at the 2000 level.” Bill S.280 is currently being reviewed by the Senate Committees. The second Bill, the Lieberman-Warner Bill includes set QERTs. The Lieberman-Warner Bill includes the following targets: a QERT of 2005 levels by 2012, 10% below 2005 levels by 2020, 30% below 2005 levels by 2030, 50% below 2005 levels by 2040 and 70% below 2005 levels by 2050.

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22 See Annex I of the Kyoto Protocol.
23 For example, the European Community Communiqué, The Netherlands in the Coalition Agreement and Norway in a White Paper on Climate Change.
24 See, eg, in the United Kingdom the Draft Climate Change Bill 2007 (UK) Cm 7040.
26 ‘Climate bill’s 60% emission cut’ BCC news (06/10/07). Available at http://news.bbc.co.uk/2/hi/uk_news/politics/7080580.stm.
27 Clause 18, Part 5.1 Bill C-30: Canada’s Clean Air and Climate Change Act 2006 LS 539E.
28 Clause 18 Bill C-30: Canada’s Clean Air and Climate Change Act 2006 LS 539E.
Other countries have expressed their QERTs through media publications and White Papers. The Dutch Government referred to a target of 30% of 1990 levels by 2020.\textsuperscript{31} The European Community agreed on a 20% reduction by 2020 and in case of international cooperation the target should be 30%.\textsuperscript{32} The final goal of the EC is set at 60-80% of 1990 levels by 2050.\textsuperscript{33} Norway recently published a White Paper on climate change and set targets of 30% below 1990 levels by 2020 and carbon neutral in 2050.\textsuperscript{34} The examination of the different QERTs in other jurisdictions concludes that a long term QERT should be around 60-80% reduction by 2050. Table 1 provides examples of the emission reduction targets currently expressed by Bills and press releases.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>2012</th>
<th>2020</th>
<th>2030</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>European Community</strong></td>
<td>- 8%*</td>
<td>- 30%</td>
<td></td>
<td>- 60-80%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>- 8%*</td>
<td>- 30%</td>
<td></td>
<td>- 60%</td>
</tr>
<tr>
<td>Canada</td>
<td>- 6%*</td>
<td>- 20%</td>
<td>- 35% (in 2035)</td>
<td>- 60-80%</td>
</tr>
<tr>
<td>Norway</td>
<td>+1%*</td>
<td>- 30%</td>
<td></td>
<td>Carbon neutral</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>- 8%*</td>
<td>- 30%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States Bill S.280</td>
<td>0% (2000 level)</td>
<td>0% (2000 level)</td>
<td>0% (2000 level)</td>
<td>0% (2000 level)</td>
</tr>
<tr>
<td>United States Lieberman-Warner Bill</td>
<td>0% (2005 level)</td>
<td>- 10% (2005 level)</td>
<td>- 30% (2005 level)</td>
<td>- 70% (2005 level)</td>
</tr>
</tbody>
</table>

* Parties and commitments to the Kyoto protocol

The mere existence or the intention of a target is not sufficient; the legislation requires additional provisions to effectively implement measures to reach the QERTs. In order to prevent possible unexpected gaps in achieving a QERT, the target period needs to be spread over a certain period, including five-year mandatory QERTs (such as the UK model) and annual QERT reviews. A long term QERT can realistically be used as a guideline while still being a mandatory target. The current level of scientific knowledge can not predict the changes that will occur, nor the QERTs that will be necessary in the future. The scientific uncertainty that is implicit in climate change causes long term targets to be an estimate. Therefore five-year mandatory QERTs should be included. The five-year QERT will help create a clear commitment and trajectory for the reduction of


\textsuperscript{32} Commission of the European Communities, *Limiting Global Climate Change to 2 degrees Celsius; The way ahead for 2020 and beyond*, COM(2007) 2 final, 1, Communication from the Commission to the Council, The European Parliament, The European Economic and Social Committee and the committee of the Regions. \textsuperscript{33} Ibid.

emissions. Annual reporting mechanisms, similar to those required under the UK Bill, provide an annual update of the current status of emission reduction and therefore indicate if the Government needs to put in more effort in reducing emissions.

Increased scientific evidence over the last two decades has highlighted the potential difficulties in setting concrete long term QERTs. A precautionary approach should be adopted, with flexibility for increasing the QERT should new evidence come to light. Current scientific modelling may not fully predict the total range of potential effects of climate change. The legislation should therefore include a provision which makes it possible to amend (i.e., increase) the QERTs to be consistent with best available scientific evidence. The amendment of the QERT must be consistent with the objective of the legislation to reduce greenhouse gas emissions. The amendment procedure should include a thorough review procedure involving an independent scientific and legal advisory committee.

National climate change legislation should provide for the following:

1. A long term mandatory quantifiable emission reduction target of between 60-80% by 2050 in accordance with best available science;
2. Emission reduction targets should be included in mandatory legislation, an aspirational publication is not sufficient;
3. Short-term interim targets, including mandatory five-year quantifiable emission reduction targets, to provide clear trajectories for meeting the long term target;
4. The quantifiable emission reduction targets should be reviewed annually.
5. Legislation should enable targets to be increased where new scientific evidence comes to light, consistent with the objectives of the legislation.

### 3. Mandatory Renewable Energy Target

In addition to a general QERT, the legislation should include a mandatory renewable energy target (MRET). MRETs can currently be found in many jurisdictions, including in Australia. MRETs have been set in three different ways.

The first method is the usage of a volumetric target based on an amount of Watts. The Australian Government initiated an MRET in the Mandatory Renewable Energy Target under the Renewable Energy (Electricity) Act 2000. The MRET is an indicated amount and not a percentage-based target and has set a renewable energy target of 9500 Giga Watt Hours per annum after 2010. The state of Texas in the US has also set a volumetric MRET. The disadvantage with a volumetric MRET is that it does not take into account the growing annual consumption of the energy rate. The annual energy consumption is likely to grow, as the population grows, and a volumetric MRET would stay unaltered. This

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36 Texas Renewable Portfolio Standard, Senate Bill SB20 Relating to this State’s Goal for Renewable Energy, in Utilities Code, Section 36.053.
could result in a percentage decline of the amount of renewable energy in the total energy production, if the annual growth exceeds the volumetric MRET.37

A second method is to use a MRET percentage based on a base year, e.g. a 20% increase of 2000 levels. This MRET threshold is hardly ever used, for it normally is used for reduction targets instead of increasing targets. This type of threshold has the similar disadvantage as the volumetric MRET. The base year target does not take into account annual growth in energy consumption.

The best practice, and frequently used MRET methodology, is a percentage-based MRET. A percentage-based MRET requires a certain percentage of energy production to come from renewable sources in relation to the current or final year. The MRET would indicate that a country with a MRET of 20% in 2010 needs 20% of the total energy production in 2010 to be from renewable energy sources. This type of MRET has been most frequently applied in other jurisdictions and states. Table 2 provides an overview of different countries and their MRETs. It might prove difficult to estimate how much volumetric renewable energy is to be generated in the target year. However, this difficulty might prove to be an advantage, because it ensures thorough annual review of the MRET and up to date information on the renewable energy needs.

Table 2

<table>
<thead>
<tr>
<th>Country/state/community</th>
<th>Renewable energy target</th>
<th>By year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>20%</td>
<td>2020</td>
</tr>
<tr>
<td>New Zealand</td>
<td>30 PJ of renewable energy</td>
<td>2012</td>
</tr>
<tr>
<td>Texas</td>
<td>10,000 MW</td>
<td>2025</td>
</tr>
<tr>
<td>China</td>
<td>15.0 %</td>
<td>2020</td>
</tr>
<tr>
<td>South Australia</td>
<td>20.0 %</td>
<td>2014</td>
</tr>
<tr>
<td>New South Wales</td>
<td>10.0 %</td>
<td>2010</td>
</tr>
<tr>
<td>California</td>
<td>33.0 %</td>
<td>2020</td>
</tr>
<tr>
<td>New York</td>
<td>24.0 %</td>
<td>2013</td>
</tr>
<tr>
<td>Nevada</td>
<td>15.0 %</td>
<td>2013</td>
</tr>
<tr>
<td>European Communities</td>
<td>22.0 %</td>
<td>2010</td>
</tr>
<tr>
<td>Austria</td>
<td>78.0 %</td>
<td>2010</td>
</tr>
<tr>
<td>Belgium</td>
<td>6.0 %</td>
<td>2010</td>
</tr>
<tr>
<td>Cyprus</td>
<td>6.0 %</td>
<td>2010</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>8.0 %</td>
<td>2010</td>
</tr>
<tr>
<td>Denmark</td>
<td>29.0 %</td>
<td>2010</td>
</tr>
<tr>
<td>Estonia</td>
<td>5.1 %</td>
<td>2010</td>
</tr>
<tr>
<td>Finland</td>
<td>31.5 %</td>
<td>2010</td>
</tr>
<tr>
<td>France</td>
<td>21 %</td>
<td>2010</td>
</tr>
<tr>
<td>Germany</td>
<td>12.5 %</td>
<td>2010</td>
</tr>
<tr>
<td>Greece</td>
<td>20.1 %</td>
<td>2010</td>
</tr>
<tr>
<td>Hungary</td>
<td>3.8 %</td>
<td>2010</td>
</tr>
<tr>
<td>Ireland</td>
<td>13.2 %</td>
<td>2010</td>
</tr>
<tr>
<td>Italy</td>
<td>25.0 %</td>
<td>2010</td>
</tr>
<tr>
<td>Latvia</td>
<td>49.3 %</td>
<td>2010</td>
</tr>
</tbody>
</table>

The MRET itself may vary enormously according to the different potential that different states have for renewable energy production. The MRET set by the government should be related to the potential a country has for the generation of renewable energy. For example, Australia has vast potential for solar and wind energy generation, as we have an abundance of both and the technological expertise. In comparison, some European states have an abundance of mountains and ice and often generate most of their renewable energy with hydro dams.\(^39\)

The MRET should include enforcement measures in case of non-compliance. The enforcement measures should be similar to the enforcement measures for non-compliance with the QERT. Provisions on enforcement should include consequences for the government in case the target is not achieved. A possible measure would be to set a term and create an action plan to the MRET as soon as possible. In addition, the government should report regularly, as part of the monitoring regime, to an independent committee. (Compliance and enforcement is discussed further below).

A market-based scheme can provide motivation for energy producers to generate more renewable energy. The *Renewable Energy Act 2007* of New South Wales provides one model of a market-based scheme for renewable energy. A market-based system requires the following key elements and provisions. The Government sets a target for the electricity retailers. The retailers are forced to buy certificates from the renewable energy producers. The certificates created by the renewable energy producers consist of the additional electricity produced over and above the level at the starting year of the scheme. The demand for certificates will force the renewable energy producers to create more renewable energy. The energy retailers may be held liable for not complying with the target set by an independent regulatory body. The target should be set and evaluated annually and should be based on estimate consumption of energy supply by the retailers.

Legislation should include clear provisions on the different types of renewable energy that is allowed. There should be a focus on ‘green’ renewable energy, energy that has the least detrimental impact on the environment, for example, wind or solar power. Hydro plants have been largely criticised for their broader environmental impact, despite producing around 20% of the world’s electricity.\(^40\) Within the EC the RES-E Directive

<table>
<thead>
<tr>
<th>Country</th>
<th>MRET (%)</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithuania</td>
<td>7.0</td>
<td>2010</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>5.7</td>
<td>2010</td>
</tr>
<tr>
<td>Netherlands</td>
<td>9.0</td>
<td>2010</td>
</tr>
<tr>
<td>Malta</td>
<td>5.0</td>
<td>2010</td>
</tr>
<tr>
<td>Poland</td>
<td>7.5</td>
<td>2010</td>
</tr>
<tr>
<td>Portugal</td>
<td>45.6</td>
<td>2010</td>
</tr>
<tr>
<td>Slovakia</td>
<td>31.0</td>
<td>2010</td>
</tr>
<tr>
<td>Slovenia</td>
<td>33.6</td>
<td>2010</td>
</tr>
<tr>
<td>Spain</td>
<td>29.4</td>
<td>2010</td>
</tr>
<tr>
<td>Sweden</td>
<td>60.0</td>
<td>2010</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>10.0</td>
<td>2010</td>
</tr>
</tbody>
</table>

\(^39\) Norway has currently around of 80% of its energy generation from hydro dams. Sweden and Austria also have the natural resources to exploit hydro dams and have relatively high renewable energy targets, see table 2 in appendix I.

\(^40\) In particular the effect large hydro projects have on ecosystems, local communities and water quality has attracted criticism. In addition, recent studies showed a new problem for large hydro dams located in tropical rainforest areas. In many cases hydro dams were created by flooding a largely vegetated area of
provides for a broad definition of renewable energy.\textsuperscript{41} It includes hydro power (large and small), biomass (solids, biofuels, landfill gas, sewage treatment plant gas and biogas) wind, solar (PV, heat, thermal electric), geothermal, wave and, tidal energy. Furthermore, large hydropower (more than 10 MW) is also included. It has been tacitly agreed that large hydro will count for meeting the targets but will not be eligible for support measures.\textsuperscript{42} Best practice legislation should stimulate the investment in and the use of ‘green’ renewable energy sources.

The Californian Government created the California Energy Commission (CEC) with the goal to assess, recommend and ensure energy efficiency. The CEC is currently the policy organ responsible for renewable energy generation, and has created guidelines and policy on renewable energy generation. The Californian RET is amended on advice from the CEC and is currently set at 33% in 2020. In addition to the creation of an advisory and regulatory body, is the introduction of tax incentives. The California Solar Initiative created a rebate program for solar power for the consumer.\textsuperscript{43} The Solar Initiative is continually monitored on its progress and effectiveness. The Californian Government also targeted $350 million for the New Solar Homes Partnership, in which the construction of residential buildings is regulated including solar power generation.\textsuperscript{44} (These are good examples of complementary policies, which are discussed further below).

In summary, best practice legislation should include a MRET which is percentage-based on a final/target year. In addition, compliance and enforcement measures are required and renewable energy generation projects should be subject to comprehensive environmental impact assessments. The creation of a market-based scheme for renewable energy generation will assist in achieving the target and there should be a focus on ‘green’ renewable energy, in relation to the potential resources of each country. Furthermore, the legislation should create tax incentives for consumers to use renewable energy and the government should initiate projects to promote the construction of solar energy generated residential areas. Finally an advisory committee on renewable energy should be created that monitors the progress, creates policy and advises the government on renewable energy generation.

National climate change legislation should include:

1. A mandatory renewable energy target;
2. The renewable energy target should be a percentage-based on a final/target year;
3. The renewable energy target should include compliance and enforcement

\textsuperscript{44} See also, http://www.gosolarcalifornia.ca.gov/nshp/, last visited on 3 October 2007.
measures;
4. The creation of a robust and transparent market-based scheme for renewable energy generation will assist in achieving the target;
5. Renewable energy generation projects should be subject to comprehensive environmental impact assessment;
6. (Large) hydro dams should not be included in the renewable energy target;
7. There should be a focus on ‘green’ renewable energy;
8. The government should create tax incentives for consumers to use renewable energy;
9. The government should initiate projects to promote the construction of solar energy generated in residential areas; and
10. There should be an advisory committee established on renewable energy that monitors the progress, creates policy and advises the government on renewable energy generation.

4. Emissions Trading Scheme

An emissions trading scheme (ETS) has been heralded as the centre-piece of the Australian Government’s approach to addressing climate change. Establishing a robust ETS is a central role for national legislation.

Emission trading schemes have been one of the main market-based mechanisms that contribute to reducing emissions. At the international level, an emission trading scheme is one of the three mechanisms of the Kyoto Protocol. Examples of an emission trading scheme are the EUETS in the EC and the New South Wales’ Greenhouse Gas Emissions Trading Scheme, in Australia. There also have been regional trading schemes developed in the US.

An emission trading scheme consists of tradable allowances for emissions of greenhouse gases. Each allowance, or permit, allows the holder to emit one ton of CO2 equivalent. The scheme participants are either given an allocation of allowances (a grandfathering approach) or have to buy them at auction. At the end of a relevant period, they will have to relinquish permits that cover their volume of emissions. If they have insufficient permits to cover their emissions, they will have to buy permits on the market to cover the shortage. If they have permits left over, these can be sold to other scheme participants. In this way, a market is created that ensures that permits are used by those who place the highest value on them, but at the same time ensuring that overall emissions remain within the target.

An emission trading scheme should include at least the six Kyoto recognised greenhouse gases and the flexibility to include later recognised greenhouse gases in accordance with international regulations. There should be penalties for non-compliance which should be set at a level significantly high enough to deter participants from just paying the compliance cost, along with a ‘make good’ provision that ensures that the emissions breach is compensated. Offsets should not be relied upon to achieve compliance. If

45 Art 17 of the Kyoto Protocol.
offsets are to be allowed, clear guidelines limiting the circumstances for their use should be developed.\(^47\)

A key element of ensuring that the ETS works is to include provisions to establish an independent regulatory body to oversee the scheme. Other jurisdictions have sought to create an independent registry or entity. The body may be responsible for the allocation of the credits or tradable allocated units. In some Bills there is a creation of a non-profit organization for the allocation of credits. In Canada's Climate Change Bill there is the creation of "an independent agency to be known as the Green Investment Bank of Canada, which is to be responsible for monitoring and regulating the greenhouse gas emissions of large industrial emitters".\(^48\) The detailed responsibilities for the Green Investment Bank of Canada need still to be regulated in further regulation.

In the EU Emission Trading Scheme (EUETS) all member states needed to create a national registry.\(^49\) These national registries report to the Community Independent Transaction Log (CITL) and are part of the emission trading scheme.\(^50\) CITL is an international database created by the EC for the publication of the greenhouse gas reduction information for all member states. CITL monitors and checks every allocation, auction, purchase and sale of emission allowances. The national registries, the member states and the CITL are subject to EC regulations.

Both US Bills require the creation of a comprehensive emission trading scheme. The proposed schemes require the creation of a Climate Change Credit Corporation (CCCC). The CCCC’s main function is to allocate tradable allowances or credits. The CCCC is a non-profit organisation. The members of the CCCC will be appointed and the CCCC has to report annually to the President, the Administrator (of the EPA) and Congress.\(^51\)

A national legislative regime should require annual triple bottom line reporting by regulatory bodies involved in the scheme and annual independent review of the scheme should be based on comprehensive monitoring and random audits of participants. Legislation should provide clear direction regarding the administration of the independent regulatory body, including criteria for membership expertise and transparency in the appointment process. Reporting guidelines should be established in accordance with international standards, in order to be compatible with an international scheme in the future. In the EUETS the member states of the EC need to create a National Allocation Plan (NAP), including the allocation to the different installations that are covered by the RES-E Directive.\(^52\) The Council of the EU approves the NAPs according to set guidelines. The guidelines need to be subject to monitoring and stringent.

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\(^{47}\) See also, EDO (NSW) submission, Rachel Walmsley, Submissions regarding the Possible Design for a National Greenhouse Gas Emissions Trading Scheme (2006), 20.


regulations. National legislation may also need to provide for the integration of existing state schemes.

The EDO has commented extensively on principles for designing an ETS,\(^{53}\) and strongly recommend the following key elements form part of national legislation:

1. 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;
2. The trading scheme should include at least the six Kyoto recognised greenhouse gases and the flexibility to later include other recognised greenhouse gases;
3. The allocation of permits by auctioning is the most efficient and environmentally effective approach and should be supported;
4. There should be clear incentives for existing installations and new entrants to actively participate in the scheme and achieve emissions reductions;
5. 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; and
6. Offsets should not be relied upon to achieve compliance. If offsets are to be 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;
   - Offsets must not result in a net increase of target pollutants.\(^{54}\)
7. The creation of an independent regulatory body to oversee the scheme, with clear criteria and transparent process for appointments to the independent body;
8. An independent review group comprising a range of stakeholders beyond state governments and industry with a defined role in an annual independent review of the scheme based on comprehensive monitoring and random audits of participants (this is discussed further below);
9. Annual public triple bottom line reporting by any regulatory bodies involved in the scheme;
10. Reporting guidelines should be in accordance with international standards in order to be compatible with an international scheme in the future;
11. An easily accessible public register that tracks price signals and trading


activity;  
12. A provision clarifying that compensation is significantly limited; and  
13. A requirement that the scheme be implemented in accordance with the  
principles of ESD.\(^{55}\)

5. Regulating the Voluntary Carbon Offset Market

The voluntary carbon market, which has developed in the absence of an Australian ETS,  
has been described as the “Wild Wild West of climate change action”.\(^{56}\) In Australia, as in  
many other developed and developing nations, a growing public response has created a  
voluntary demand for carbon offsets. The term ‘carbon neutral’\(^{57}\) is now espoused by  
corporations ranging from organisations as diverse as airlines, car-racing, banks, and  
newspaper publishers. The serious concern is that voluntary offsets providers, or ‘Carbon  
Cowboys’ in Australia are unregulated.\(^{58}\) It is generally well accepted that most consumers  
lack the knowledge to closely judge the value of carbon offsets.\(^{59}\) The ACCC has begun  
to investigate the issue, but there remains an absence of law with the potential to confuse  
many consumers. There is a clear and important role for national climate change legislation  
to regulate carbon offsets. This is essential to ensure the environmental integrity of any offset project.

A Federal Government standard, ‘Greenhouse Friendly’ exists and yet has not become  
the common standard for voluntary offset providers. This could be for a number of  
reasons including the overlap with other Government standards both state based and  
national\(^{60}\) or voluntary standards of international calibre.\(^{61}\)

The Federal Government is set to overhaul the carbon offset market in the lead up to  
establishing a national emissions trading scheme. One option for the Government would  
be to follow the UK model and create a voluntary Code of Best Practice for the carbon  
offset industry.\(^{62}\) Such a Code could certify offsets that meet the Kyoto Protocol  
standard, now applicable in Australia. An alternative option would be for the ACCC to  
create a safe harbour for certain carbon offset certification standards (e.g. Greenhouse

\(^{55}\) See: EDO (NSW) submission, Rachel Walmsley, Submissions regarding the Possible Design for a National  
56 Anja Kollmuss, Benjamin Bowell, ‘Tufts Climate Initiative’ (January 2007) Available at  
http://www.tufts.edu/tie/tc/carbonoffsets/.  
57 The term ‘Carbon Neutral’ was even voted ‘word of the year’ by the New Oxford Dictionary in 2006.  
58 Kholer, Allan ‘Lets regulate the carbon cowboys’ (03/12/07) Business Spectator. Available at  
9HRSDOpenDocument&Click uses the term for large state emitters, yet it is just as well transferable onto  
unregulated carbon offset providers.  
Next Generation of Environmental Claims,’ the Antitrust Source, (December 2007), pp 5-11.  
60 To give two examples of compulsory government standards: The NSW Greenhouse Gas Abatement  
Scheme and the National Mandatory Renewable Energy Target.  
61 To give two examples: The Voluntary Carbon Standard jointly produced by World Economic Forum,  
International Emissions Trading Association and The Climate Group, and the Gold Standard for  
Voluntary Emission Reductions.  
62 DEFRA Code of Best Practice Consultation Documents, to see responses to consultation go to  
http://www.defra.gov.uk/environment/climatechange/uk/carbonoffset/pdf/cop-summary-
responses.pdf.
Friendly, Gold Standard), with ACCC endorsement demonstrating that the Government has satisfied itself upon the merits of the particular scheme or project.

There has been some speculation of a regulatory framework for voluntary offsets markets to be released by the end of this year. Either way, there is a general understanding that once a mandatory ETS comes into place, demand for voluntary offsets will fall. The high-emitting corporations who utilise ‘carbon neutrality’ will require certified permits, with more stringent conditions. In addition, the creation of a credits registry would remove the ability to double-count credits, a previous issue highlighted by the ACCC. For more information on what to look for in carbon offset providers see the EDO’s submission to the ACCC on carbon offset claims. This provides further discussion about ensuring the environmental integrity of offsets, for example, avoiding leakage, ensuring additionality and longevity.

National climate change legislation should include:

1. Mandatory certification to ensure the credibility of voluntary emission reduction credits;
2. Certification must be of a standard to ensure the environmental integrity of the credits, in particular the following factors must be addressed and satisfied:
   a. Avoided Leakage
   b. Additionality
   c. Monitoring and Enforcement
   d. Timing (between the creation of carbon credits and actual reduction of emissions)
   e. Permanence
   f. Use of Life-Cycle Analysis.

### 6. Regulating Bio-Fuels

Biofuels are any kind of fuel made from living things, or from the waste they produce. Ethanol, diesel or other liquid fuels made from processing plant material including corn, sugarcane and rapeseed or waste oil are the most common bio-fuels. In principle, biofuels are carbon neutral, soaking up carbon dioxide which is eventually combusted. However, the energy used in farming and processing the crops (along with the potential clearing and burning of the land) can make bio-fuels as polluting as fossil fuels, depending on what is grown and how it is treated.

European countries were the first to regulate bio-fuels under the EU Biofuels Directive, adopted in May 2003. In 2006, the EU endorsed a 10% binding minimum target of

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64 Available at www.edo.org.au/policy/carbon_offset080215.htm
biofuels in the transport fuel market by 2020. The binding character of this target is appropriate, “subject to production being sustainable and second-generation biofuels becoming commercially available.” Yet one year later the EU Environment Commissioner Stavros Dimas, amid further understanding of the consequences of biofuel farming stated “it would be better to miss the target than achieve it by harming the poor or damaging the environment.” The EU has promised new guidelines including a certification scheme, to ensure that its target is not damaging to the environment.

At a national level many EU nations are scaling back their strong support for biofuels. Germany cancelled tax exemptions for biodiesel and passed a mandate on sustainability criteria. The Netherlands announced that it would no longer subsidise the importation of palm oil. Under a proposed Swiss Directive, biofuel would have to produce 40 percent less in emissions than fossil fuel to qualify for special treatment. It will be hard for some of the major Biofuels, like US corn ethanol, Brazilian sugarcane Ethanol or Malaysian palm-oil Diesel to meet the standard.

Outside of the EU, the US has also implemented many biofuel regulations. In particular the US has tried to support local biofuel production through a number of tax credits. The most recent legislation being contemplated is the new Renewable Fuels Standard (RFS), which has been revised into the Energy Bill. It calls for the production of 36 billion gallons (approximately 136 Billion litres) of biofuels—mainly ethanol and biodiesel—annually by 2022. In particular the Bill stipulates the performance targets placed on the biofuels: ethanol derived from corn has to achieve at least a 20 percent reduction in lifecycle emissions, biodiesel 50 percent, cellulosic biofuels at least 60 percent lower emissions.

The Canadian province of Quebec holds a provincial goal of supplying 5 percent of its fuel from biofuels by 2010. A test plant demonstrated that under the right circumstances, even corn Ethanol can have some environmental advantage if it uses only local surplus corn, is grown with low energy use and does not have to be transported long distances.

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67 President Glos, Michiel, Ibid.
68 Rosenthal, Elisabeth 'Europe, Cutting Biofuel Subsidies, Redirects Aid to Stress Greenerst Options' New York Times (22/01/08).
69 Ibid.
71 Volumetric Ethanol Excise Tax Credit (VEETC) This Blender’s Credit is the 51 cents per gallon tax credit that goes to the petroleum industry as an incentive to blend ethanol into their gasoline. Agri-Biodiesel Excise Tax Credit $1.00 per gallon for biodiesel made from virgin oils derived from agricultural commodities and animal fats. Biodiesel Excise Tax Credit 50¢ per gallon for biodiesel made from agricultural products and animal fats. Renewable Diesel Excise Tax Credit $1.00 per gallon for Renewable diesel derived from biomass using a thermal depolymerization process. Small Ethanol and Agri-Biodiesel Producer Tax Credits Production income tax credit of 10 cents per gallon on up to 15 million gallons of ethanol per year for facilities that produce up to 60 million gallons annually. Secondary Offset Tariff To offset the 51 cent per gallon Blender’s Credit a 54 cent per gallon tariff is in place. This helps to ensure that taxpayer dollars are not invested in foreign ethanol production. Fueling Stations for Alternatives gives gas station owners a tax credit of 30%, up to $30,000, of the cost of installing an E85 pump or converting an existing pump for E85. Not all of these tax credits were in EPAct 05 (http://www.tradeobservatory.org/library.cfm?refID=101689).
73 Rosenthal, above n33.
74 Ibid.
In NSW, the State Government remains determined to massively boost ethanol production. The Sydney Morning Herald announced on Thursday the 10th April that the Government might require oil companies to make all standard unleaded petrol with 10% ethanol. In the Premier's view, “Bio-fuels are good for the environment, they create jobs, they create regional jobs, they help farmers, they improve fuel security.”

Domestically produced fuel ethanol is currently effectively exempt from excise tax until July 1, 2011 (whereas an excise of 36.143 cents per litre is payable on petrol). From this date, excise will be increased at 2.5 cents per litre annually until it reaches 12.5 cents per litre in 2015.

The Federal Government has set a voluntary target of 350 million litres of 10% biofuel by 2010.

There are also existing environmental standards drafted by not for profit organisations like the Draft Environmental Standards for Biofuels commissioned by the Low Carbon Vehicle Partnership can be used, or built upon.

National climate change legislation should include Biofuel regulations that:

1. Develop robust sustainability standards for biofuels including life cycle analysis and satisfaction of the following factors:
   a. impacts on biodiversity,
   b. impacts on land-use,
   c. sustainable use of water resources,
   d. conservation of carbon, including carbon in soil structures,
   e. good agricultural practice,
   f. soil fertility,
   g. waste management,
   h. a further consideration relates to source of and implications of transport emissions from importing biofuels not locally produced.

2. Ensure that any regulatory support is limited to biofuels that have satisfied the sustainability criteria and have lifecycle reduction of over 50% compared to fossil fuels.

7. Compliance and enforcement

An important aspect of comprehensive national climate change legislation is that it includes clear provisions regarding enforcement in case of non-compliance.

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75 Daniel Lewis, 'Iemma gears up for ethanol boost' Sydney Morning Herald, (10th April 2008).
77 Ibid.
78 Low Carbon Vehicle Partnership is a multi-stakeholder UK organisation with 210 members from the automotive and fuels industries, operators of major vehicle fleets, academics and consultants, NGOs and Government Departments. See http://www.lowcvp.org.uk/
At the international level, in terms of party compliance with QERTs, the Kyoto Protocol includes an allegedly enforceable target. The Kyoto compliance mechanism forces Annex I countries, in case of non compliance, to make up for the difference with an additional 30% on the target and the country is not allowed to participate in the emission trading scheme. The Kyoto compliance mechanism consists of a Compliance Committee that was created at COP/MOP 7 and codified in the Marrakesh Accords. The enforcement branch of the Compliance Committee has “the responsibility to determine consequences for Parties not meeting their commitments.” The enforcement branch determines which Parties do not comply with their targets, their methodological and reporting requirements for greenhouse gas inventories and their eligibility requirements under the mechanisms. It can require the party to have an extra 30% GHG emissions reduction, in addition to making up the previous shortfall. The disadvantage of a construction in a multilateral environmental agreement is that the enforcement measures are only effective in a new commitment period. States can withdraw from the agreement or a second commitment period is never achieved. In such cases there is no legal mechanism enforcing the compliance mechanism upon the country.

Due to the problems of enforcement of international agreements, it is therefore important for national legislation to have clear compliance and enforcement provisions.

The UK Bill has attempted to include a compliance mechanism. The provision originally in the UK Bill consisted of a duty for the Minister to comply with the QERT. Legal experts and the Review Committee criticized this duty provision for lacking legal enforcement character, and simply requiring the Minister “to do his best.” A duty for the Minister is, problematic as “a target is not something you can guarantee ... and can only imply the best of a person to comply with the target.” This was deemed not legally enforceable and in need of amendment. The Review Committee suggested including a compliance mechanism. This compliance mechanism should legally bind Secretary of State. It was recommended that the provision include text to ensure certain steps are taken in the event that the targets or budgets are not met. It has been suggested that the steps should include:

- A new target consisting of the general set target for the new period including an additional target relative to the not compliance in the last period;
- A report, including a deadline, with strategies to successfully reach the new targets;
- In addition suspend the sale of carbon credits and debits by the Government; and/or
- Alternatively the Government has to buy carbon credits on the international market in order to comply with the target.

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80 The enforcement mechanism in the Kyoto Protocol is been reviewed on many occasion and to some critics it is not effective.
81 Marrakesh Accords In decision 24/CP.7 of the Marrakesh Accords, COP 7 adopted the text containing procedures and mechanisms relating to compliance under the Kyoto Protocol.
83 Ibid.
84 UK Bill ibid.
85 Professor Forsyth, of Cambridge University, in the report, para. 108.
In contrast to international treaty law, a nation state within its own jurisdiction can be subjected to a level of enforcement. Enforcement provisions and penalties in Australian legislation could be tailored to a range of issues covered, i.e. in relation to obligations under an ETS, renewable energy, offset providers, biofuel standards, failure to report etc.

Legislation should include open standing provisions to ensure any person may bring proceedings to enforce the Act. The British Columbia the Draft Global Warming Solutions Act contains options for a provision for citizens suits are also included for either/or failure to enforce the Act or loss/damage due to failure.

National climate change legislation should include robust compliance and enforcement provisions including:

1. The emission reduction target should be mandatory;
2. A range of offence provisions relevant to breaches of different parts of the legislation, for example, in relation to obligations under an ETS, renewable energy providers, offset providers, biofuel standards, failure to report, providing false and misleading information etc.
3. An annual reporting, monitoring and random auditing system is required to ensure transparency and to detect non compliance in an early stage.
4. In the case of non compliance with the QERT, the Government should be forced to comply with the set emission reduction target within a new set timeframe; the new timeframe should be additional to the normal following emission reduction target previously set for the coming period; and the State should have an extra reduction target of a previous set amount (e.g. 30%) for the next reduction period.
5. A range of innovative compliance orders should be available in addition to financial penalties. These could include requirements to purchase additional credits, make good provisions, and other innovative contributions.
6. Legislation should include open standing provisions to ensure any person may bring proceedings to enforce the Act.

8. Establishing an independent advisory body on Climate Change

Earlier in the Discussion Paper, we discussed the need for an independent regulatory body to oversee an Australian ETS. We also raised the possibility of establishing an independent advisory committee on climate change. In considering types of bodies required under comprehensive Australian climate change legislation, it is necessary to consider independent regulatory bodies, but also bodies which may be able to harness expertise of stakeholders and provide independent advice to other Government bodies. Roles would need to be clearly defined to avoid unnecessary overlap in functions.

An advisory committee could advise the Government and other institutions or entities on climate change issues. The second function is to assist in monitoring and analysing reporting.

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86 Ibid, s14.
The UK Bill includes the creation of a Committee on Climate Change (Committee). The Committee has the duty to advise the Secretary of State on climate change affairs. The Committee has to annually report to the parliament with its view to the current progress on combating climate change. The Joint Commission’s report on the Bill explains that the Committee needs to consist of experts in different fields relevant to climate change. The appointment and the advisory role must be undertaken according to a transparent process. If the Government differs from the advice of the committee, the Government is to submit a publicly disclosed report explaining the reason for differing from the advice and their choices of policy.

In British Columbia the Draft Global Warming Solutions Act proposes a British Columbia Global Warming Solutions Board, to develop and implement a climate action plan to reduce BC’s GHG emissions. The Board’s recommendations must be implemented by the Lieutenant Governor in Council. Auditor General reviews are required every 3 years.

The California Health and Safety Code requires the State Board “shall appoint an Economic and Technology Advancement Advisory Committee to advise the State Board on ... opportunities that will assist in the reduction of greenhouse gas emissions.” The Advisory Committee advises on technological possibilities to reduce greenhouse gas emissions.

The South Australian Climate Change & Greenhouse Emission Reduction Act 2007, similar to the UK Bill, seeks to establish an advisory body, namely a Premier’s Climate Change Council. The Bill passed both houses of parliament and includes detailed provisions on an advisory committee. The appointment process includes criteria on expertise and the members need ‘a commitment to climate change’ and need understanding of climate change. The members of the committee are appointed for three years and a removal provision is included in case of misconduct, negligence or a breach. The primary function of the Committee is to advise the Minister on the impacts of climate change, the impacts of the Act, the effectiveness of climate change legislation and the costs. The Act includes a provision on reporting to Parliament. The Minister has to report within 6 days to both houses of Parliament. The Minister has also to report to what extent the advice...
was or will be acted upon by the Minister.\(^9\) In case the Minister does not act or is not planning to act in accordance with the advice, he/she has to report the reason why.\(^{10}\)

National climate change legislation should include provisions regarding:

1. The establishment of an independent committee on climate change with an advisory role to the Government.
2. The advisory committee should represent expertise and independence in different fields of climate change and related topics.
3. The committee should be appointed in a transparent way and the reports of the committee should be made public.
4. The committee should have sufficient resources to ensure independent and feasible reporting.
5. The committee should annually report to the Government the status, progress and recommendations of climate change.
6. The Government can ask the advice of the committee at any time, and where advice is not followed, reasons must be published.

9. Monitoring, reporting and public participation

We have discussed the need for accurate and public reporting throughout this Discussion Paper. Monitoring and reporting are essential where a new scheme, such as an ETS, is in its infancy, and where the stakes for success are high. The provision of accurate information is essential for public participation and public confidence. Federal legislative reform last year addressed the issue of consistent national reporting in the lead up to establishing an ETS.

The *National Greenhouse and Energy Reporting Act 2007* (Australia) establishes a Greenhouse and Energy Data Officer (GEDO). The appointment of the GEDO in particular requires criteria for expertise and transparency in the appointment process.\(^{11}\) During the passage of the Bill and the Senate Inquiry hearing, ANEDO made recommendations to strengthen the provision of the Bill.

In relation to the creation of a national greenhouse gas reporting and monitoring system ANEDO asserted that the publics’ ‘right to know’ includes reporting and monitoring at the facility level and access for the public to the reports. The original draft only requires participants to report at the company level. This does not provide the public with enough information on the local level. Therefore reporting and public information should be at the lowest level possible (ie, the facility level). The type of reporting is also important, the Bill only required participants to report on gross totals and not the specific emissions of the different gases.\(^{12}\) A comprehensive scheme should also include comprehensive public reporting on offsets.\(^{13}\)

\(^{9}\) Art. 11 of the SA Bill.
\(^{10}\) Art. 11(4)(c) of the SA Bill.
\(^{11}\) Submission ANEDO National Greenhouse and Energy Reporting Bill 2007.
\(^{12}\) Submission on the National Greenhouse Gas Reporting and Monitoring Bill 2007, 3.
\(^{13}\) Submission on the National Greenhouse Gas Reporting and Monitoring Bill 2007, 3.
Other jurisdictions have noted the importance of public reporting. In the UK Bill, transparency was assessed by the Review Committee. The UK Bill does not refer to public participation in great detail, however, the Bill requires the publication of the final report of the advisory committee. In addition, the Review Committee advised the publication of all the official minutes of the committee from her meetings.\textsuperscript{104}

The US Bill S.280 includes a provision containing a duty for the Administrator to ensure that ‘information in the database is published; and made accessible to the public’.\textsuperscript{105} The provision does allow exceptions in case of national importance and confidential business information.\textsuperscript{106} The Lieberman Bill also contains a provision creating a duty for the Administrator to establish procedures to make the data public a with the exception of confidential business information.\textsuperscript{107} The US Bill S.280 requires the creation of National Greenhouse Gas Database (NGGD). The NGGD database includes an inventory of greenhouse gas emissions and a registry of reduction or increases of greenhouse gas emissions. The NGGD shall be under the authority of the Administrator, the Administrator is the head of the Environmental Protection Agency.\textsuperscript{108} The reporting and monitoring of emissions by corporations and facilities is to be registered by the NGGD. The reporting and monitoring scheme is supervised by a government agency, the EPA.

In California the State Air Resources Board is to consult with the Public Utilities Commission\textsuperscript{109} in the development in emission reduction measures. The state should also make available the goals and plans for emission reduction before a certain set time frame.\textsuperscript{110}

The EU framework contains a variety of legislation and directives. The Council Directive on the creation on an emission trading scheme refers for public access to Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information.\textsuperscript{111} This Directive creates a framework for public access to environmental information. Under the Directive the public can initiate a request to any government agency concerning environmental information. The Directive forces the member states to create within their own legal system the minimum requirements of this Directive. The relevant Government agency is obliged to publish the requested information as soon as possible, to the widest extent possible and preferably accessible by internet or by other electronic means.\textsuperscript{112} Similar to the Australian NGER Act 2007, the Directive does contain exceptions. The Governments can refuse an information request on formal or substantial grounds. The formal refusal grounds

\textsuperscript{104} UK Review report, 141.
\textsuperscript{105} Sec. 102 (6)(A) US Bill S.280.
\textsuperscript{106} Sec. 102 (6)(B) US Bill S.280.
\textsuperscript{107} Title I subtitle A Lieberman Bill.
\textsuperscript{108} US Bill s.280 sec 101.
\textsuperscript{109} Part 1 chapter 2 (g). The California Public Utilities Commission serves the public interest by protecting consumers and ensuring the provision of safe, reliable utility service and infrastructure at reasonable rates, with a commitment to environmental enhancement and a healthy California economy. We regulate utility services, stimulate innovation, and promote competitive markets, where possible, in the communications, energy, transportation, and water industries, http://www.cpuc.ca.gov/static/aboutcpuc/pucmission.htm, last visited 27 September 2007.
\textsuperscript{110} Part 4 Californian legislation.
\textsuperscript{112} Art. 3 Directive.
include unreasonable request, the information is not held by the Government or the request is too general. The substantial grounds of refusal are confidentiality of the proceedings of public authorities, international relations, public security or national defence, the court of justice, confidentiality of commercial interests and intellectual property rights. The exceptions have to be interpreted and applied in the most restrictive way possible.\textsuperscript{113} The Directive includes a provision on the access to justice. The provision requires member states to provide the individual who is directing a request the possibility to start legal proceedings and a review procedure.\textsuperscript{114} The Directive also includes a review procedure for the Directive itself and in 2009 the member states have to report on the experience in application of this Directive.\textsuperscript{115}

National Climate change legislation should include:

1. Extensive provisions to ensure monitoring and auditing, for example of ETS participants.
2. Regulatory bodies, advisory bodies, ETS participants should be required to do public annual triple-bottom line reporting.
3. A robust public reporting and monitoring scheme with a publicly accessible registry or database.
4. Public participation should be a priority in climate change legislation; this includes individual, public interests groups and any other relevant public information and access.
5. There should be transparency in the appointment and creation of government agencies, government employees and related personnel.
6. There should be public participation in legislative and regulatory decisions, such as the reviewing of targets.
7. The information that is to be made public should be accessible on the internet.
8. The public has a ‘right to know’ and therefore public information should be made available at the local level, this includes reporting and publishing of emissions at a facility level.
9. The exceptions to public information should be interpreted and applied in the most restrictive way, weighed against public interest considerations.
10. Information on offsets should be made publicly available.

10. Complementary policies and amendments

The scope of regulatory and policy development required to address the impacts of climate change in Australia is immense. It is highly likely that not all issues will be able to be addressed in a single national climate change Act. Such an Act should provide the basic architecture and framework for national action on the key elements, however we note a range of other legislative amendments and complementary policies may also be needed. Some examples of areas of law reform are outlined below including reforming

\textsuperscript{113} Art. 4 Directive.
\textsuperscript{114} Art. 6 Directive.
\textsuperscript{115} Art. 9 Directive.
environmental law, energy law, corporations law, consumer law, and providing support for complementary policies and initiatives.  

Environmental law

- The **Environment Protection and Biodiversity Conservation Act 1999** (Cth) could be amended to require referral and approval by the federal government for new proposals which emit over 500,000 tonnes of greenhouse gases or equivalent per year (i.e., designate greenhouse gas emissions as a ‘matter of national environmental significance’ under the Act). Similarly, broadscale land clearing above a certain threshold should also trigger the referral and assessment provisions of the Act given the significant contribution of land clearing on emissions and carbon storage. Furthermore, it is essential that the Act list ‘climate change’ as a ‘key threatening process’ and require a Threat Abatement Plan to be developed. The legislation could also provide that conditions of consent for developments concerning matters of national environmental significance, achieve carbon neutrality.

Energy law

- **Renewable energy target** - Increase the Mandatory Renewable Energy Target (MRET) under the **Renewable Energy (Electricity) Act 2000** (Cth) so that 10 percent of electricity is supplied by renewable energy by 2010 and 25 percent by 2020, with increasing targets beyond 2020. Furthermore, legislation should require businesses that earn over a specific amount (for example, $5 million p.a.) to use Green Power to a specified percentage of their electricity use.

- **Energy Efficiency legislation** - The obligation under the **Energy Efficiency Opportunities Act 2006** (Cth) to assess and report on the identification of energy efficiency opportunities, should be extended beyond large energy using businesses to include the Commonwealth and Commonwealth agencies. The Act should include a clear provision requiring implementation of identified energy efficiency opportunities, rather than simply requiring production of a report which is hoped will “encourage implementation of costs effective energy efficiency opportunities”. Furthermore, there should be a timeframe requiring actions to be implemented with a specific payback period.

- **Review subsidies** - Subsidies and tax incentives should be granted to renewable energy industries to make them economically viable and to encourage innovation. Furthermore, Australia has obligations under the UNFCCC to “identify and periodically review its policies and practices which encourage activities that lead to greater levels of anthropogenic emissions”.

- **Amend ‘Feed laws’** - Legislate to require electricity utilities to permit independent producers of renewable power to ‘feed’ their electricity into the grid against a guaranteed payment of a certain fee. This has been done in Germany, Denmark and Spain.

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Corporations law

- Corporate reporting and public disclosure - Amend federal corporations and insurance laws to require major companies and financial services providers to report to the public and to investors on the climate change impacts of their activities (as part of triple bottom line reporting) and to provide full disclosure of climate-related risks.

- Director’s Duties - Amend the Corporations Act 2001 (Cth) to make clear that the best interests of the company include the long-term interests of the company. The legislation should require directors and organisational decision makers to consider the long-term climate change impacts that the company may have upon the environment.

- Financial products disclosure - Amend the Corporations Act 2001 (Cth) to require Product Disclosure Statements to include climate-related risks. This will inform investors who will be less likely to invest in environmentally deleterious activities due to the financial risks posed.

Consumer law

- Mandatory information in electricity bills - The Renewable Energy (Electricity) Act 2000 (Cth) should be amended to require electricity suppliers to provide information to consumers about the price, source and environmental characteristics of their electricity. This will allow consumers to choose the most ‘climate friendly’ suppliers and assist in demand side management.

- Eco-labeling - Extend mandatory labeling requirements to provide consumers with accurate information on electricity use and emissions in relation to various household appliances (such as energy star rating).

- International obligations under UN Guidelines for Consumer Protection - Australia should legislate to achieve compliance with these guidelines. This would include mandatory information on the environmental impacts, including climate change impacts, of products, the impartial environmental testing of products, the encouragement of alternatives to environmentally harmful uses of substances, the strengthening of regulatory mechanisms to ensure sustainable consumption, and the introduction of sustainable operations into government practices.

Legislative support for a range of initiatives and policies

In addition to legislative reform at the federal level, there are a range of initiatives and policies currently undertaken or proposed by states that could be further supported by legislation. Such initiatives include:

- Green car incentives - providing benefits for users of ‘green cars’ such as lower annual registration fees, the use of transit lanes, etc.

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• Congestion levies - Requiring drivers to pay a per day fee if they wish to continue driving in CBDs during peak hours. This will reduce the number of private cars on city roads, and encourages the use of other modes of transport.

• Sustainable buildings - Requiring all new housing to conform to efficiency standards such as BASIX in NSW which ensures that new homes produce 25% lower greenhouse gas emissions than homes of the same type.

• Greenhouse rating scheme for offices - Legislate to make the voluntary Australian Building Greenhouse Rating scheme for office buildings compulsory.

Climate change presents a complex range of challenges for law and policy makers at the international, national, state and local level. There are a wide range of approaches currently proposed around the world to improve the ways that laws are currently attempting to address the issue. Australia now has the opportunity to better implement international obligations by both introducing new climate change legislation, and reforming our current laws.
Part Four – Next Steps?

As noted, the purpose of this Discussion Paper is to generate discussion and debate on what Australian climate laws should look like. While providing examples of approaches from other jurisdictions, it does not provide a definitive or exhaustive list of provisions or issues that must be covered.

We welcome robust debate on national legislation and a comprehensive review of existing legislation, so that it may be overhauled to become best-practice climate friendly legislation. We strongly advocate a national legislative framework that can encompass the broad scope of necessary reforms.

We welcome all comments and feedback on the ideas presented in this Paper, and any contributions to the ongoing climate policy work of the EDO.