



**Western Australian
Sustainable Energy
Association (WA SEA)**

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SUBMISSION

TO THE

GREENHOUSE TASKFORCE

IN RESPONSE TO

WESTERN AUSTRALIA'S GREENHOUSE ISSUES PAPER

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Mission:

'On behalf of the people of Western Australia, the Association will vigorously promote the development and adoption of sustainable energy so that by the end of this decade, 30% of the states fossil fuel use is displaced by sustainable energy practices.'

Introduction

The Western Australian Sustainable Energy Association (WA SEA) Inc. congratulates the Gallop Labor Government on its commitment to decreasing the State's Greenhouse Gas (GHG) emissions and appreciates the opportunity to comment on Western Australia's Greenhouse Issues Paper.

At present each Australian is responsible for 27 tonnes of GHG emissions per year. By 2010 each Western Australian alone will be responsible for the emission of 40.39 tonnes of CO₂ –e per year (government projections). This extremely high per capita emission level threatens not only the environment but also has ominous signs for the WA economy in a world that aims to reduce GHG emissions through financial mechanisms and highlights the need for the urgent development and implementation of an aggressive GHG reduction strategy.

We would also like to note that the lack of quantitative data contained in the issues paper has made it difficult for WA SEA to undertake meaningful analysis. In particular the issue paper is lacking vital information in the following areas:

- Stated Greenhouse Gas Emissions Projections (under a range of scenarios), Targets and achievable timeframe
- Potential economic, environmental and social impact to Western Australia for not reducing emissions under these scenarios

Nor is there any discussion of the “boundaries” within which WA might need to deal with the issue. For example:

- Targets to be met by emissions reductions and sequestration within WA only
- Targets to be met by emissions reductions and sequestration within WA plus tradeable instruments within Australia
- Targets to be met by emissions reductions and sequestration within WA plus tradeable instruments globally (ie Kyoto “flexibility mechanisms”)

As requested, WA SEA has commented on the identified Key Issue areas and has provided recommendations on how these issues can be addressed by the Taskforce.

Summary of Key Issues and WA SEA Recommendations

KEY ISSUE	RECOMMENDATIONS
<p>State government action to reduce its own greenhouse gas emissions</p>	<ul style="list-style-type: none"> • Power procurement process to expand and include renewables – astonishingly this process currently excludes renewable energy • Government Departments to source a percentage of their energy requirements from renewables – particularly if it is provided at the same or lower price as black power • All Government Departments to support SEDO’s Government Energy Smart Program • Support, strengthen and implement those recommendations of the Electricity Reform Task Force (ERTF) that increase the uptake of energy efficiency measures and renewable energy – particularly the mandatory purchase of RE electricity by electricity retailers • Develop and implement a workable renewable energy access regime • Develop a long strategy for achieving 30% renewable energy in the WA electricity mix by the year 2010 • Develop a long term strategy for reducing greenhouse gas emissions • Develop and implement policies which support the application of sustainable energy technologies. • Use bio-fuels in government fleet cars • Installation of solar hot water systems on all government buildings. Particularly government housing.
<p>State government action to reduce greenhouse gas emissions from industry, commerce and the community</p>	<ul style="list-style-type: none"> • State Government and local councils to lead by example • Support, strengthen and implement those recommendations of the Electricity Reform Task Force (ERTF) that increase the uptake of energy efficiency measures and renewable energy – particularly the mandatory purchase of RE electricity by electricity retailers • Adopt WA SEA’s target of 30% renewable energy in the WA electricity network by 2010 • Develop and implement a workable renewable energy access regime • Access to up to date quantitative data • Set mandatory greenhouse gas reduction targets • Develop comprehensive guidelines and strategies to assist industry in reducing emissions • Enforce Building Codes that facilitate the reduction of GHG emissions • Support WA SEA Inc.
<p>State government action to promote sequestration activities</p>	<ul style="list-style-type: none"> • Sequestration as a transition step
<p>State government action to engage government, community and industry in forming long term plans for climate change adaptations</p>	<ul style="list-style-type: none"> • Undertake micro scale (community scale) climate change modelling so that communities can better understand the potential local impact and plan for a changed climate • Develop and measure long term adaptation strategies • Undertake an Energy Forum similar to the Water Forums undertaken in 2002

<p>State government action to promote the expansion of low emissions, high value and employment industries.</p>	<ul style="list-style-type: none"> • Develop a comprehensive vision for Western Australia • Invest in long term greenhouse gas saving processes • Promote the application of sustainable energy technologies • Establish WA as the regional leader in sustainable energy • Set mandated renewable energy and GHG emissions targets that are in line with worlds best practice • Power procurement process to expand and include renewables • Government Departments to source a percentage of their energy requirements from renewables – particularly if it is provided at the same or lower price as black power • Support, strengthen and implement those recommendations of the Electricity Reform Task Force (ERTF) that increase the uptake of energy efficiency measures and renewable energy– particularly the mandatory purchase of RE electricity by electricity retailers • Adopt WA SEA’s target of 30% renewable energy in the WA electricity network by 2010 • Develop and implement a workable renewable energy access regime
<p>State government action to improve community awareness of climate change and reduce the contribution of climate change</p>	<ul style="list-style-type: none"> • Develop a comprehensive Marketing Communications Strategy • Implement strategies which reduce energy use • Undertake an Energy Forum similar to the Water Forums held in 2002
<p>State government action to advocate international and national climate change policies that recognise western Australia’s environment</p>	<ul style="list-style-type: none"> • Establish a single independent body responsible for greenhouse matters not linked or controlled by the energy/resource or mining sectors (ie. not under the Minister for Energy) • WA State Government to take a leadership role • Set mandated renewable energy and GHG emissions targets that are in line with worlds best practice • Power procurement process to expand and include renewables • Government Departments to source a percentage of their energy requirements from renewables – particularly if it is provided at the same or lower price as black power • Support, strengthen and implement those recommendations of the Electricity Reform Task Force (ERTF) that increase the uptake of energy efficiency measures and renewable energy– particularly the mandatory purchase of RE electricity by electricity retailers • Adopt WA SEA’s target of 30% renewable energy in the WA electricity network by 2010 • Develop and implement a workable renewable energy access regime
<p>State government action to gather information on climate change</p>	<ul style="list-style-type: none"> • Promote and support the study of local climate change modeling at a WA university.

Discussion of Key Issues

KEY ISSUE 1: *State Government Action To Reduce Its Own Greenhouse Gas Emissions*

WA SEA fully supports the State Government's GHG reduction initiatives and urges it to lead by example. The State Government has the opportunity to set a precedence for the private sector and the community to follow.

WA SEA recommends the Government take the following actions to reduce GHG emissions:

Power procurement process to expand and include renewables

The current power procurement process for the next 600 plus MW of electricity capacity for the South West Interconnected System (SWIS) relates only to making sure that coal can effectively compete with gas and shuts out renewables. This also negatively impacts on the ability of Western Australia to meet the Federal obligation under the Mandated Renewable Energy Target (MRET). There is a need to expand the current power procurement process and enable renewables to compete. If renewable energy opportunities are to be realised then the State's power purchase process needs to recognise the States obligations towards renewable energy.

The power procurement process, in evaluating technology, does not take into account the fact that certain types of black power generators will make it more difficult to integrate future renewable energy generating plants into the SWIS. For example, large coal fired power stations are not as suitable as fast start gas power stations in integrating wind energy and act as a barrier to entry.

Government Departments to source a percentage of their energy requirements from renewables.

The WA Government is the States largest electricity purchaser and has the potential through selective purchasing of renewable energy to stimulate the market for renewable electricity and help create the market that will deliver renewable energy power stations.

The current WA renewable energy industry has no market for electricity other than through a direct customer contract. These contracts need to be acceptable to the finance community to guarantee funding. If Government agencies were to preferentially source renewable electricity this would provide the security that finance institutions require.

This will give certainty in the market while still maintaining a competitive environment and will facilitate and encourage the development of renewable energy projects. There is an opportunity for the State Government to show leadership and encourage the purchasing of renewable energy.

In particular if renewable energy can be sourced at the same or lower cost then there should be a policy of compulsory purchase by government departments and agencies. A tender process initiated under a central purchasing strategy can easily test the market.

All Government Departments to support SEDO's Government Energy Smart Program

The Sustainable Energy Development Office (SEDO) recently announced the Government Energy Smart Program which requires selected Government departments to reduce their total energy usage levels by 12% over five years. This can be achieved by implementing structural changes and adopting energy efficient behavioural patterns which will in turn reduce the demand for electricity. This program was introduced as a mechanism to decrease greenhouse gas emissions.

WA SEA fully supports this initiative as it clearly demonstrates the State Government is reducing greenhouse gas emissions and would like to see the program extended and be applicable to all Government Departments and agencies.

Support, strengthen and implement those the recommendations of the Electricity Reform Task Force (ERTF) that increase the uptake of energy efficiency measures and renewable energy

WA SEA is fully supportive of the ERTF process and its final recommendations. Such reform of Western Australia's electricity market is necessary for the development of a significant supply of sustainable and competitive renewable energy. In particular, the mandatory purchase of renewable electricity by electricity retailers will be a most effective strategy of meeting renewable energy targets.

Develop and implement a workable renewable energy access regime

A successful and workable renewable energy access regime will allow Western Australia's sustainable energy sector to develop and facilitate a number of key renewable energy projects that have high value for our community. The majority of all Western Australian's will welcome this.

Without a workable renewable energy access regime the private sector will not be able to leverage the opportunities afforded to it by the Federal Government's MRET legislation. As a consequence, jobs and opportunities for GHG reductions, particularly in the agricultural sector, will leave the State.

Develop a long term strategy for achieving 30% renewable energy in the WA electricity mix by the year 2010

There is a need to develop a long term strategy for renewables and outline how renewable energy fits within the state's energy mix. Setting meaningful targets and an effective implementation strategy is required to ensure that renewables is also seen as an equal energy player.

Develop a long term strategy for reducing greenhouse gas emissions

Similarly, there is a need to develop a long term plan that outlines methods for reducing GHG emissions. Achievable targets and an effective implementation strategy is required to ensure that emission reductions are achieved and maintained.

Develop and implement policies which support the application of sustainable energy technologies.

The development and implementation of Government policies which support the application of sustainable energy technologies is a proactive means of reducing GHG emissions. For example, the implementation of the Solar Hot Water Heater subsidy will see the states greenhouse gas emissions reduce by 5,210 tonnes per annum (this is a conservative figure).

Use bio-fuels in government fleet cars.

A government purchasing strategy targeting bio-fuels, low emission vehicles and similar neutral or low emission transport options will create significant market pull, kick starting the development of this emerging industry sector while reducing government's transport emissions.

Installation of solar hot water systems on all government buildings. Particularly government housing.

Solar hot water systems are very effective at reducing GHG emissions in a cost effective manner. The state will also benefit directly as four out of five solar hot water heater manufacturers are located in Western Australia.

KEY ISSUE 2: State Government Action To Reduce Greenhouse Gas Emissions From Industry, Commerce And The Community

State Government and local councils to lead by example

The State Government and Local Councils have a responsibility to set an example and adopt best energy management practices. This can involve purchasing renewable energy, adopting energy efficient technologies, etc.

A number of strategies already discussed above are relevant to this section. These include:

- Support, strengthen and implement those recommendations of the Electricity Reform Task Force (ERTF) that increase the uptake of energy efficiency measures and renewable energy— particularly the mandatory purchase of renewable energy electricity by electricity retailers
- Develop and implement a **workable** renewable energy access regime
- Use bio-fuels in government fleet cars
- Installation of solar hot water systems on all government buildings. Particularly government housing.

In addition,

Access to up to date quantitative data

Need to provide industry, commerce and the community information on current GHG emission levels based on existing energy usage. This information can be presented on electricity bills. Methods of reducing energy use (hence GHG emissions) could also be provided.

Setting mandatory GHG reduction targets

For targets to be truly effective they must be mandatory and enforced. Voluntary schemes deliver limited success. Due to the predicted increase in GHG emissions by 2010 this demonstrates the urgency of establishing immediate mandatory greenhouse targets. Companies which do not achieve savings must be penalised.

It is also essential to publicly acknowledge industries which have shown progress towards significant greenhouse reductions.

We recommended adopting, as a first step, the target of 30% sustainable energy within the WA electricity mix by the year 2010.

Develop comprehensive guidelines and strategies to assist industry in reducing emissions

Clear and comprehensive guidelines need to be established by the Environmental Protection Authority (EPA) to demonstrate to industries, companies and the community practical ways of reducing GHG emissions. These guidelines should be aligned with world's best practice.

Meaningful strategies need to be established which specify real mechanisms which will reduce greenhouse emissions if implemented. It is also essential that strategies which result in both short and long term greenhouse savings are implemented. For example, though the development of renewable energy projects may take considerable time to develop, the resulting long term greenhouse savings are substantial.

Enforce Building Codes

All new commercial buildings must adhere to strict energy efficiency standards. Similar to the Government Energy Smart Program, commercial businesses and communities should be encouraged to reduce GHG emissions.

Supporting WA SEA Inc.

Supporting the activities of WA SEA can assist the Government significantly in reducing greenhouse gas emissions. For example WA SEA can:

- Provide a direct communication link to the sustainable energy industry
- Promote to industry, state and local Government work the Taskforce is undertaking to develop and implement its greenhouse strategy within the sustainable energy industry
- Provide expertise and a knowledge base available to assist in the development of effective and meaningful WA Greenhouse policy
- Provide expertise and a knowledge base available to assist in the practical and effective implementation of WA Greenhouse policy
- Provide information on effective strategies and projects to reduce greenhouse gas emissions
- Advise on the development of the sustainable energy industry in Western Australia as a meaningful participant nationally and internationally.

KEY ISSUE 3: *State Government Action To Promote Sequestration Activities*

Sequestration as a transition step

WA SEA acknowledges the role of carbon sequestration as a legitimate element of a comprehensive greenhouse response strategy, and its potential social and environmental collateral benefits. Enacting the Carbon Rights Bill 2002 will provide greater certainty to investors in plantation projects which could provide sustainable feedstock for renewable bio-energy. However, since most biological, chemical or geological sequestration activities offer only **temporary** storage, the State Government should regard sequestration only as an appropriate transition step towards a future dominated by **permanent** reductions in emissions of greenhouse gases including the displacement of fossil fuels by renewable energy.

KEY ISSUE 4: State Government Action To Engage Government, Community And Industry In Forming Long Term Plans For Climate Change Adaptations

Undertake micro scale (community scale) climate change modelling so that local communities can better understand the local impact and plan for a changed climate

Funding should be granted to the CSIRO to develop specific models which demonstrate the effects of climate change on the State's different shires. Within the bounds of necessary accuracy for decision-making, each shire should be modelled individually. The data should be accurately conveyed to the community through existing community networks that included town meetings. This information can then be assimilated at the resident and local government level to assist in strategic planning.

Identification and dissemination of climate change information

Any results from work undertaken by the CSIRO should be published and distributed to the community. There is a need to identify new climate change patterns and inform people of the climate they will be operating in the future so they can adapt accordingly.

Developing and measuring long term adaptation strategies

Need to establish long term strategies for adaptations and greenhouse gas reduction. The State Government should work with the Federal Government and the Australian Greenhouse Office to measure the effectiveness of adaptation strategies.

Undertake an Energy Forum similar to the Water Forums held in 2002

Community awareness and ownership of the GHG debate can be stimulated through a community consultation process that has wide reach. Such a process can drive home the costs of different GHG strategies and will facilitate the acceptance of energy efficiency measures and other strategies. Such a forum would also be a suitable avenue to air/develop a long term strategy for energy supply in the state.

KEY ISSUE 5: State Government Action To Promote The Expansion Of Low Emissions, High Value And Employment Industries.

A number of strategies already discussed above are relevant to this section. These include:

- Set mandated renewable energy and GHG emissions targets that are in line with worlds best practice
- Power procurement process to expand and include renewables
- Government Departments to source a percentage of their energy requirements from renewables – particularly if it is provided at the same or lower price as black power
- Support, strengthen and implement those recommendations of the Electricity Reform Task Force (ERTF) that increase the uptake of energy efficiency measures and renewable energy – particularly the mandatory purchase of RE electricity by electricity retailers
- Adopt WA SEA’s target of 30% renewable energy in the WA electricity network by 2010
- Develop and implement a **workable** renewable energy access regime

In addition,

Develop a comprehensive vision for Western Australia

Need to determine what is the vision for Western Australia? Is it to develop WA’s knowledge base or to reduce the greenhouse gas intensity of current WA industries? Ensure that the environmental and societal risks to WA of further developing energy intensive industries are fully and transparently evaluated and strategies to mitigate these risks are developed.

Invest in long term greenhouse gas saving processes

Promote the expansion of the sustainable energy industry and assist in the development of the sustainable energy industry. Equivalent dollars which have previously been spent by governments in supporting the development of the coal and gas industries should also be spent on developing the sustainable energy industry.

Promote the application of sustainable energy technologies

Promote through industry-targeted publications activities occurring in the sustainable energy industry.

Establish WA as the regional leader in sustainable energy

State Government neglect has led to WA missing the opportunity to develop a globally-significant critical mass of activity in emerging knowledge-based industries such as biotechnology or information and communications technology. However, WA does have the chance to build on a strong and innovative sustainable energy base in WA (including in the threatened ACRE) to become a regional and even a global leader in the sustainable provision of energy

KEY ISSUE 6: State Government Action To Improve Community Awareness Of Climate Change And Reduce The Contribution Of Climate Change

Development of a comprehensive Marketing Communications Strategy

Communication is a critical aspect in creating awareness of climate change. Make householders aware of how their individual behaviours can impact climate change. Climate change information can be disseminated to the community via advertising in community papers, public seminars, within household rates, through local environment centres (Eg. City of Melville – Piney Lakes Environmental Centre, City of Bayswater – Environment House).

The internet is also a useful tool in disseminating information about climate change, however, can only be effective if the community is aware that such information is accessible via this medium.

Implement strategies which reduce energy use

A number of strategies or initiatives can be implemented which can reduce greenhouse gas emissions within the household (hence reduce the contribution of climate change). These include:

- Local councils could develop community policies that do not require legislation. (Eg. Encourage the purchase of green power)
- Minimum efficiency standards for homes
- Mandatory energy labelling for all electrical appliances
- Free household energy audits to examine current energy use and identify where energy savings can be made
- Low/no interest loans for energy efficient appliances
- Rebates for adoption of energy efficient technologies (eg. Already applied to solar hot water heating, can also be extended to insulation, skylights etc)
- Make householders also aware of the monetary savings of reducing energy use or using public transport.
- Transport – provide free public transport passes to each household to encourage use. Encourage the use of alternative/low emission transport – ie. walking, cycling.

Undertake an Energy Forum similar to the Water Forums held in 2002

Community awareness and ownership of the GHG debate can be stimulated through a community consultation process that has wide reach. Such a process can drive home the costs of different GHG strategies and will facilitate the acceptance of energy efficiency measures and other strategies. Such a forum would also be a suitable venue to look at the long term strategy for energy supply in the state.

KEY ISSUE 7: State Government Action To Advocate International And National Climate Change Policies That Recognise Western Australia's Environment

A number of strategies already discussed above are relevant to this section. These include:

- Set mandated renewable energy and GHG emissions targets that are in line with worlds best practice
- Power procurement process to expand and include renewables
- Government Departments to source a percentage of their energy requirements from renewables – particularly if it is provided at the same or lower price as black power
- Support, strengthen and implement those recommendations of the Electricity Reform Task Force (ERTF) that increase the uptake of energy efficiency measures and renewable energy– particularly the mandatory purchase of renewable energy electricity by electricity retailers
- Adopt WA SEA's target of 30% renewable energy in the WA electricity network by 2010
- Develop and implement a **workable** renewable energy access regime

In addition,

Establish a single independent body responsible for greenhouse matters not linked or controlled by the energy/resource or mining sectors (i.e. not under the Minister for Energy)

A single department responsible for greenhouse matters should be established by the State Government and located under the Minister for Environment's. It is WA SEA's belief that greenhouse outcomes would be better served through this portfolio. It is of utmost importance that the body established maintain close links with sustainable energy stakeholders.

WA State Government to take leadership

The State Government has opportunity to show leadership and set aggressive greenhouse targets and implement long term strategies that reduce GHG emissions. WA's isolation is advantageous in that it enables us to develop our own energy policies independent of the National Electricity Market.

KEY ISSUE 8: *State Government Action To Gather Information On Climate Change*

Promote and support the study of local climate change modeling at a WA university.

The balance of scientific opinion is strongly weighted to human-induced climate change. The State Government should ensure it has access to relevant climate change information, including the commissioning of research on significant WA-specific issues. However, it should acknowledge that the science of climate change will remain inexact and not use a search for exactness as an excuse to delay the decisions that will be required over time to sensibly manage the economic, environmental and social risks of climate change to WA.

With the above in mind it would be most helpful to the WA community if there was access to specific information relating to climate change in WA. Particularly the ability to model local regional impacts at a scale that was meaningful to individual community members. This work would be best undertaken by leveraging resources at a WA university.