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Cc:

Hon Ian Hunter MLC, Minister for Sustainability, Environment and Conservation
Hon Tom Koutsantonis MP, Minister for Mineral Resources and Energy

RE: Energy White Paper – Issues Paper

To the Energy White Paper Taskforce,

The Conservation Council of South Australia is pleased to provide comment on Energy White Paper – Issues Paper. This submission is not confidential.

Conservation Council SA is an independent, non-profit and strictly non-party political organisation representing around 50 of South Australia's environment and conservation organisations and their 90,000 members. Conservation Council SA has developed a comprehensive view of environment policy in *South Australia in a Changing Climate: A Blueprint for a Sustainable Future*¹. This document sets out, at a strategic level, policy positions in key environmental areas, including energy and planning matters in the context of addressing climate change.

We agree that the Energy White Paper should outline a "coherent, integrated and efficient regulatory and policy framework, stimulating sustainable growth, building community confidence in environmental safeguards and growing investment in the energy sector". However, we remain concerned that this Energy White Paper (similar to previous versions) appears to be largely segregated from renewable energy policy, from the environmental aspect of sustainability and from climate change mitigation, and is not set within the context of transitioning Australia's energy infrastructure towards deep cuts in emissions by mid-century. Any credible Energy White Paper cannot be coherent and integrated without uniting these policy areas behind common objectives.

¹ <http://www.conservationsa.org.au/blueprint.html>

It is surprising and inefficient that there are three energy reviews scheduled to take place in 2014 with the Energy White Paper, the Renewable Energy Target (RET) Review and the state-based GreenPower Accreditation Framework. An integrated approach would combine the RET review and state-based GreenPower review as part of the Energy White Paper review. Both the Renewable Energy Target (as the major market push policy instrument), and the GreenPower Accreditation Framework (as the major market pull mechanism for renewable energy) are the key successful drivers towards lower emissions energy production, and as such should be properly addressed in the Energy Green Paper when it is released.

In this regard Conservation Council SA identifies the need for the Energy Green Paper to provide clear direction in Australia's energy future, particularly in long-term renewable energy goals for stationary energy, and to improve the market push mechanism (the Renewable Energy Target), and undertake market pull reforms (for electricity consumers to buy GreenPower-accredited renewable energy at fair prices).

Of 17 recommendations we have made in this submission, our key recommendation that we believe is necessary for energy policy to be effective is that: **The Energy Green Paper should describe long-term 2050 goals for the energy sector, including for renewable energy, to provide direction and context for Australia's energy policy. Furthermore, Australia's energy policy should be integrated with climate policy and supportive of achieving deep cuts in greenhouse gas emissions.**

In support of 2050 energy goals, Conservation Council SA argues that the Renewable Energy Target is the proven and essential mechanism for Australia to decarbonise its electricity system and that this mechanism be enhanced and extended to 2050 to create certainty for investment decisions.

Our submission has followed the order of the discussion questions and in some sections this has created the need for some repetition and cross referencing of our recommendations.

We note with disappointment that this Discussion Paper has not recognised the GreenPower Accreditation Review, nor that there are market barriers which make it difficult for electricity customers that seek to buy renewable and low-emissions energy.

RESPONSES TO THE ISSUES PAPER QUESTIONS FOR CONSIDERATION

The Security of Energy Supplies

- **ways community expectations can be better understood and reflected in reliability standards:**

The Government could better understand community expectations by ensuring that it provides forums and opportunities for the different types of energy consumers to be heard. Customers have interests that extend beyond simply reliability, price and hardship, yet these are the exclusive area of focus of the National Electricity Customer Framework. There is no customer based forum that includes representation from GreenPower and renewable energy paying customers.

Recommendation 1

The Energy Green Paper to support GreenPower and providing renewable energy paying electricity customers a place in policy forums such as the National Electricity Customer Framework.

- **ways to increase new gas sources to meet demand and measures to enhance transparency in market conditions;**

The greenhouse gas emissions of energy sources as either fuel or electricity are attributes that should be clearly disclosed in markets.

It is important that there be comprehensive accounting and reporting of the greenhouse gas emissions impact of fossil gas sources, to ensure transparency of the life-cycle greenhouse impact of gas and its use in either the domestic or overseas markets. Currently, the fugitive emissions from landscapes that may result from or be increased by gas and unconventional gas exploration and production are not properly accounted for by the industry. In response to the apparent excessive methane leaks in the Condamine River, the CSIRO² was unable to determine whether this observed methane leakage was natural or accelerated as a result of hydraulic fracturing of coal beds, because verified baseline assessments had not been undertaken.

In addition, gas is often referred to as a clean or cleaner fuel source to produce electricity in Australia or overseas without being properly described in regard to its life cycle emissions (which must incorporate scope 2 and 3 emissions as a minimum).

There is now no state or federal standard for disclosing greenhouse gas emissions on electricity accounts as this was not incorporated into the National Electricity Retail Law. Emissions printed on electricity bills could be based on state-based National Greenhouse Accounts Factors, or National Electricity Market Factors, and may not reflect the emissions profile of generator retailers in any way.

² See Condamine River gas seep investigation update (2013)
<http://www.industry.qld.gov.au/lng/documents/condamine-gas-seep-report.pdf>

Recommendation 2

Emissions associated with current and new gas sources (and electricity created from those gas sources) be transparently reported on a life cycle basis.

Regulatory Reform and Role of Government**• priority issues, barriers or gaps within the COAG energy market reform agenda;**

The COAG Reform Agenda has not addressed is the need for long term goals of Australia's electricity infrastructure. There is no 2050 renewable energy goal or emissions reduction goal for the stationary electricity sector. Australia's 2020 emissions target and 41,000 GWh of large scale renewable electricity, do not provide adequate context for long term energy investment decisions at the scale that is required.

To create certainty on markets for investment decisions to be made, **2050 goals are essential**. 2020 and 2030 targets can then play their part to ensure that Australia is making sufficient progress towards the transition that is required.

The Conservation Council SA, together with other South Australian environment groups, advocates for a 50% renewable electricity generation by 2020, moving towards 100% as soon as possible, and that there be a commitment for no new fossil fuel power stations and the phase out of existing ones³.

The Renewable Energy Target is an essential policy mechanism that has proven to be successful and should be extended to 2050 to reach long term emissions reduction and renewable energy goals (see Recommendation 16).

Recommendation 3

The Energy Green Paper should describe long-term 2050 goals for the energy sector, including for renewable energy, to provide direction and context for Australia's energy policy. Furthermore, Australia's energy policy should be integrated with climate policy and supportive of achieving deep cuts in greenhouse gas emissions.

This is the major recommendation of this submission.

Creating a truly integrated approach

Currently, the jurisdictions and entities described above each have very different objectives and operate in an uncoordinated manner, creating various cycles of winners and losers in the energy sector. It is our view that agreed long-term goals will be achieved more efficiently where government agencies and jurisdictions operated better integrated their objectives. The key players include the government departments covering energy and climate change, the Australian Energy Market Commission and the National GreenPower Steering Group.

³ See [South Australian Environment Groups 2014 State Election Asks](#)

The Energy Green Paper should advocate that the new Department of Industry and the Department of the Environment should strive for greater collaboration and integration of their policies which impact on organisations such as the Australian Energy Market Commission, the Australian Energy Regulator and the effectiveness of the National GreenPower Steering Group (controlled by states). In particular, the following two jurisdictions would be more efficient and effective by removing silos in energy policy.

Australian Energy Market Commission

The current rules based approach by the AEMC has come at the expense of strategic planning of Australia's Energy Infrastructure. There is a sense that the role of the AEMC in focussing exclusively on economic efficiency, serves as a barrier to the creation of infrastructure towards any planned direction. As a consequence Australia's renewable energy infrastructure for example, tends to cluster around existing high voltage transmission lines, rather than being located to open up Australia's renewable energy regions to reach their full potential.

Recommendation 4

The Energy Green Paper should provide an alternative approach to the Australian Energy Market Commission decision-making which includes Strategic Planning towards 2050 goals as an integrated objective.

National GreenPower Steering Group

NGPSG represents the best opportunity to deploy and grow accredited renewable energy in the broader retail market. Its role however is hampered by being separated from Federal Government Policy and the scheme operates without proper legal recognition in greenhouse and energy legislation. For the NGPSG to be effective, the GreenPower Framework should be transferred into the jurisdiction of the Commonwealth Government where reforms to legislation and the program rules can be made in an efficient manner (see recommendation 13).

- **possible approaches and impacts of review of tariff structures including fixed network costs, further time-of-use based electricity tariffs and the use of smart meters;**

Managing a sector in a time of rapid change and decentralisation

The Energy Green Paper should canvas the key areas of opportunity created by the significant decentralisation of energy systems and the continued growth of household renewable power systems. Many in the Government and energy sector have been surprised by the rate of change and to date have not been adequately prepared to make the most of this opportunity.

In addition, the costs of a changing energy market are often singled out without the benefits also being considered. Consideration of tariff structures therefore needs to recognise that household and community scale renewables and storage have helped slow demand growth to help defer infrastructure spending in other areas.

For example:

- The greatest use of smart meters should be made as this technology can help to align the needs of electricity customers with the need to reduce peak loads on the grid. However, as hundreds of thousands of household solar systems were installed, the opportunity to replace old meters with smart meters was not fully captured.
- Community scale renewable energy systems often face prohibitive costs to connect to the grid. At the same time, local infrastructure upgrades are being undertaken regularly for other reasons so there is an opportunity to integrate planning for community scale power input and energy storages where infrastructure upgrades are being considered.

Recommendation 5

The Energy Green Paper should describe innovative ways to share costs as Australia's aging or constrained energy supply systems (from transformer stations to household meters) are replaced, so that new systems support the transition towards low emission and decentralised energy.

The pricing structures for renewable energy, as they apply to GreenPower paying electricity customers, are in urgent need of review. Whilst the wholesale cost of renewable energy has been falling, and renewables have become largely a 'price taker' in the wholesale markets, the cost of GreenPower to customers remains as an expensive penalty above electricity charges. The attributes of renewable energy (being renewable energy use, and reduced emissions) are not legally transferable via renewable energy contracts, meaning that GreenPower customers do not reduce their emissions and are not protected from carbon costs (current or future).

The costs applied to GreenPower paying customers are largely based on the opportunity cost of a power company not selling renewable energy certificates elsewhere, plus a considerable mark up, plus the carbon pass through cost, plus GST. Whilst it is understandable that the pricing structures may have evolved this way, the pricing approach must change as renewables become competitive with fossil fuelled electricity. If the current pricing structures continue, it would even as renewables might become a cheaper form of electricity in wholesale markets, they will still be charged as more expensive penalty in retail markets.

Recommendation 6

The Energy Green Paper to describe pricing frameworks that will ensure that as the wholesale cost of renewable energy continue to fall, the retail price of GreenPower does not continue to be a penalty price above all electricity products.

- **areas where further privatisation of government-owned assets would contribute to more effective regulatory frameworks and better outcomes for consumers.**

Governments should not privatise further fossil fuelled power stations, as this creates obligations on governments for these assets to continue to operate.

Australia missed the opportunity provided in the Clean Energy Plan to close 2000MW of the worst polluting power stations as the former Government was not prepared to pay for their closure. If these power stations had been under Government ownership they could have been closed more easily. It can therefore be argued that privatising fossil fuelled infrastructure is a form of grandfathering and perpetuating greenhouse pollution.

Recommendation 7

The Energy Green Paper should recommend that the diesel fuel rebate for energy resource companies is scrapped.

Growth and Investment

- **commercial or market initiatives that could enhance growth and investment in the energy and resources sectors;**

A long term Renewable Energy Target as close to 100% Renewables as possible would enhance growth in the low emissions energy sector. An integrated National Energy Plan that incorporates the transition to a long term renewables goal, energy storage and national Green Grid would serve to guide energy development across Australia.

Targeted initiatives to diversify Australia's renewable energy and energy storage mix are overdue. Whilst wind electricity and household solar systems have led the way in taking the first steps toward a renewable energy future, the design of the RET has not provided for diversity in renewable energy sources. Large Scale concentrated solar thermal projects with energy storage, large scale PV systems, hot rocks and wave power are some of the technologies that have now been proven but are not being implemented at scale quickly enough in Australia.

Recommendation 8

The Energy Green Paper to describe an integrated National Energy Plan that incorporates a 2050 renewable energy goal and strategies to create diversity in renewable energy sources and energy storage solutions.

- **areas where approvals processes could be further streamlined while maintaining proper environmental and social safeguards;**

New fossil fuel power stations are not consistent with safeguarding our future environment and well-being. One of the most effective policy tools is to prevent new fossil fuel power stations being built.

Recommendation 9

The Green Paper to recommend against new fossil fuel power stations where alternative solutions using renewable energy with energy storage systems are available.

Workforce Productivity

- **the capacity of industry and education sector-led programs to meet long-term training and skills development needs of the energy and resources sectors; and**

If the Government accepts the science that greenhouse gas emissions must be drastically cut to provide the best chance of avoiding dangerous climate change then it would then be logical to establish long term energy sector goals for achieving these reductions and transitioning to renewable energy.

The industry and education sector programs can prepare to meet long term training and skills development needs of the energy sector once the long term goals of the sector have been defined.

Recommendation 10

Establish 2050 long term energy sector goals for reducing emissions and transitioning to renewable energy in order for industry and education sector to develop the appropriate training and skills development initiatives.

- **specific long-term training and skills development needs for alternative transport fuel, renewable energy, energy management and other clean energy industries.**

Similarly, the industry and education sector programs for renewable energy and clean energy cannot prepare to meet long term training and skills development needs when the long term goals of the renewable and clean energy industries have not been defined.

It is a basic requirement that a long term renewable energy goal be established together with strategies to support producers and consumers of renewable energy and low carbon products and services to participate in a low carbon economy.

Recommendation 11

Establish 2050 long term goals for alternative transport fuels and other clean industry outcomes, in order for the industry and education sector to develop appropriate training and skills development initiatives.

Driving Energy Productivity

- **the current suite of energy efficiency measures, ways these could be enhanced to provide greater energy efficiency or possible new measures that would enhance energy productivity;**

The most effective step that Government could take to drive energy productivity is to remove the diesel fuel rebate for the energy resources sector. This rebate serves as a subsidy to the sector that distorts the market and is a barrier for those companies with renewable energy and low emission solutions.

Recommendation 12

Remove the diesel fuel rebate for the energy resource sector as this distorts the market towards continued fossil fuel usage and is a barrier to renewable energy and deployment.

- **the use of demand-side participation measures to encourage energy productivity and reduce peak energy use;**

Demand side participation must include choice for renewable energy. The current GreenPower accreditation framework does not provide such choice as the scheme is not properly supported by legislation and standards. The Renewable Energy (Electricity Act (2000)), the National Greenhouse and Energy Reporting Framework and Australia's National Carbon Offset Standard do not provide any basis for the GreenPower Accreditation Framework to exist. Until significant reforms are undertaken to support the attributes of renewable energy to be legally established and to be transferable in contracts, an important component of demand side participation will continue to be disadvantaged.

See recommendation 15

Alternative and Emerging Energy Sources and Technology

- **ways to encourage a lower emissions energy supply that avoids market distortion or causes increased energy prices;**

The Clean Energy Finance Corporation

The Clean Energy Finance Corporation has a vital role in providing investment funds for low emissions projects to be built. The Corporation does not duplicate other funding bodies because it is specifically focused on the low emissions sector, and applicants are not competing against all other types of investment projects for funding. There is every indication that the funding allocated to the Clean Energy Finance Corporation will be paid back with interest to reinvest in new low emission projects.

Conservation Council SA suggests that any decision to abolish the Clean Energy Investment fund could only be based on ideological grounds rather than consideration of the financial and investment merits of the fund.

Importantly, the fund should be allowed to increase over time through repayments, interest payments and additional funds added by Government from time to time. This would create a fund that can meet the challenge for the larger investment projects post 2020 that would be necessary to continue the transition to deep cuts in emissions by 2050.

Recommendation 13

It is recommended that the committee provide advice to Government that the Clean Energy Finance Corporation be continued to provide targeted finance towards renewable energy diversity, energy storage and other clean energy projects.

ARENA

ARENA has a vital role to assist the renewables sector to begin to deploy these other technologies at production scale. This should not be considered as distortion as it is evolving the energy markets to lower emissions in the right direction for a safer climate.

Projects such as the Large Scale Concentrated Solar proposal for Port Augusta are dependent on some additional assistance to make projects feasible (and on power purchase agreements for the electricity and GreenPower/REC components).

There is a danger that if the ARENA funding is not adequate and the deployment of diverse renewables and energy storage too slow, the market will become overly dominated by wind power, failing to embrace a mix of stabilising renewables and storage whilst also creating the potential for community resentment.

Prevent distorting markets for fossil fuels

As previously stated, market distortion and lower long term energy supplies would be achieved if the Government stopped paying the diesel fuel rebate to energy resource companies. The rebate serves to stall progress towards switching away from fossil fuels to accelerate the deployment of renewable energy and low carbon solutions that will ultimately lower energy costs faster.

The Government should apply equally weighted focus on market supply and retail market demand choices for consumers to participate in buying lower emissions energy.

See recommendation 12

- **the need to review existing network tariff structures in the face of rapidly growing deployment of grid-backed-up distributed energy systems, to ensure proper distribution of costs;**

The Conservation Council SA supports that there be a sustainable and fair contribution of electricity infrastructure costs by electricity customers. However, the issue of proper distribution of costs needs to be looked at across the entire sector. Other areas that need to be considered in this evaluation of proper distribution include:

- The proper/improper contribution towards the RET where Energy Intensive Trade Exposed Industries may be exempt from contributing, and still claim the benefits of lower emissions associated with state-wide grid factors.
- The proper/improper charging to 100% Accredited GreenPower customers of carbon pass through costs and contributions to the RET.
- The proper/improper inclusion of waste coal mine gas requirements with the Renewable Energy Target creating additional cost that is branded against green energy schemes, when coal mining has nothing to do with green energy.

Recommendation 14.

The Energy Green Paper should develop and consult on principles how all major cost components associated with the energy sector should be addressed in a proper and fair manner.

- **additional cost-effective means, beyond current mandatory targets and grants, to encourage further development of renewable and other alternative energy sources and their effective integration within the wider energy market;**

As previously outlined in the introduction of this submission, the Energy Green Paper should incorporate long term goals for Australia's energy future, including a 2050 renewable energy goal.

The current Renewable Energy Target design is for 45,000 GWh of renewable energy by 2020, and this level to continue to deliver around just 20% renewable energy by 2030. The RET in its current form will not be able to contribute to substantial cuts in Australia's stationary energy emissions which means that there will need to be either increasing renewable energy targets through to 2050 or another mechanism established to continue the transition.

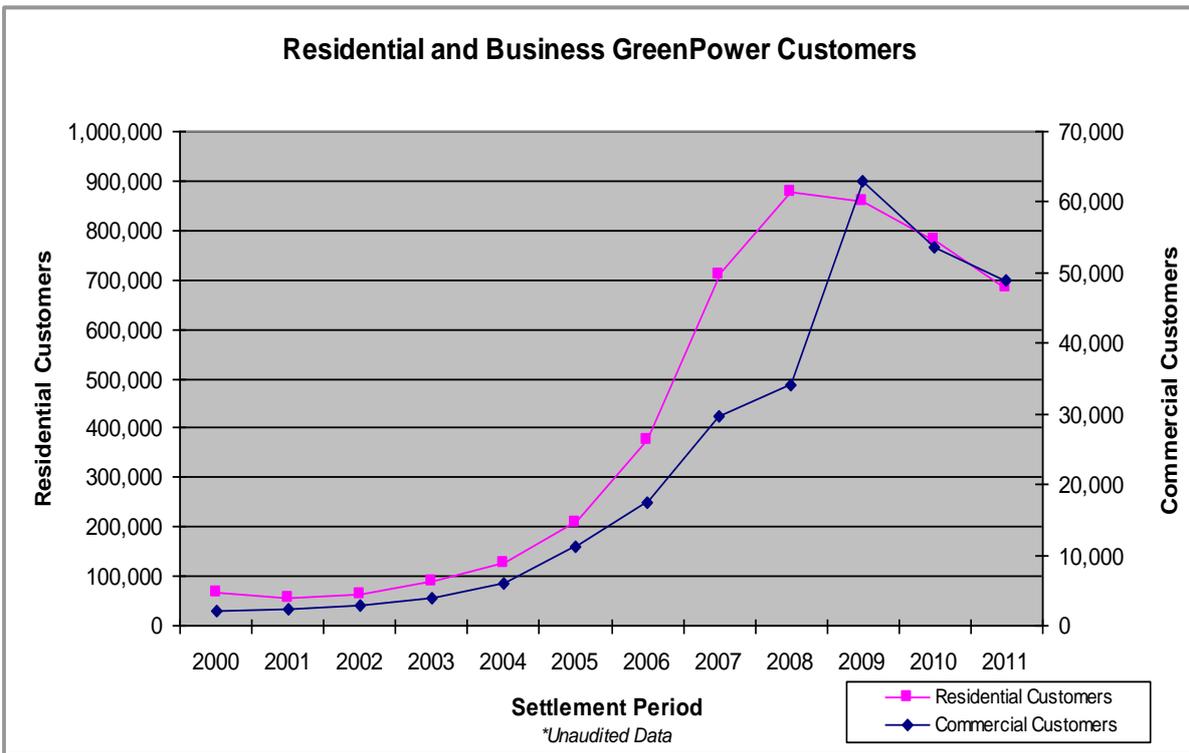
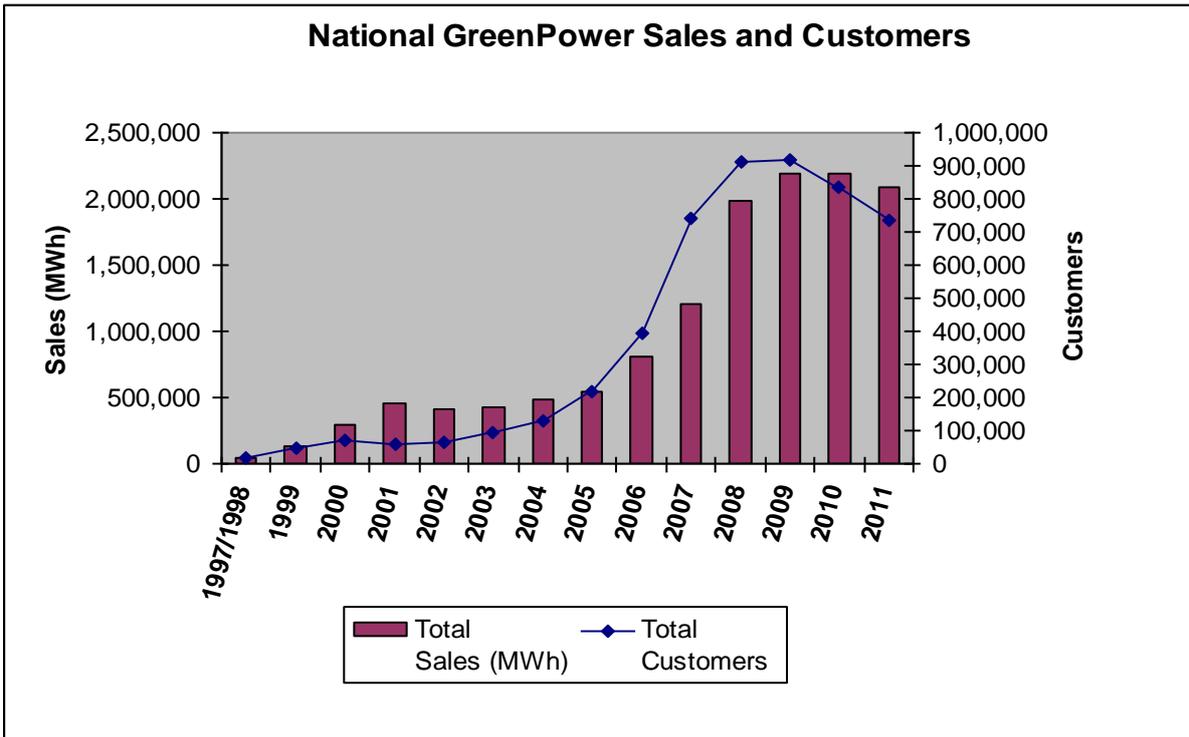
Beyond current mandatory targets, the greatest reforms the Government could undertake are to the customer side of renewable energy markets.

GreenPower has largely stalled in recent years due in part to a lack of its ongoing evolution with greenhouse and electricity legislation. Reforms have been largely stifled because no single jurisdiction will take responsibility for GreenPower. The National GreenPower Steering Committee point out that they don't make the accounting rules, whilst the Federal Government point out that GreenPower is managed by the states. The failure to protect GreenPower customers from carbon pass through costs is evidence that marketing messages that advised consumers that their emissions associated with electricity were reduced was not correct. A fall in commercial GreenPower customers since 2009 also demonstrates that the failure to grow GreenPower demand is not substantially tied to the increase of on-site solar systems. As Australia's renewable energy production has been increasing, the following two charts illustrate that GreenPower sales and customers stalled as GreenPower customers have been discouraged and under supported.

Even the South Australian Government, which is a member of the National GreenPower Steering Committee, will cease all of its GreenPower purchasing at the end of this year⁴, with its decision based on a view that "Contracts will be assessed on overall value for money"⁵, thereby implying that GreenPower currently does not provide value for money.

⁴ See 2012/13 Mid-year budget review (p. 32)
http://www.treasury.sa.gov.au/_data/assets/pdf_file/0005/2210/mid-year_budget_review_2012.pdf

⁵ See 2013–14 Budget paper 4, Agency Statements, Volume 3 (p. 132)
http://servicesa.cdn.on.net/mybr2013/docs/Budgetp4v3_201314.pdf



Source: National GreenPower Accreditation Framework (2014)

The soon to be released GHG Protocol Scope 2 (Green Power) accounting guidelines will create the opportunity for steps to reform GreenPower markets to incorporate the attributes of 'reduced emissions' and 'renewable energy use' in retail electricity contracts. This will provide an opportunity for the Government to consider a package of reforms that would restore the integrity of the GreenPower Accreditation Framework and provide value for money to those electricity customers that pay extra for renewable energy.

For renewable and alternative energy sources to be effectively integrated within the wider energy market, the Green Paper will need to specifically outline how it will undertake GreenPower reforms to reach the full potential of renewable energy in energy Australia's electricity consumer markets.

Recommendation 15.

The Energy Green Paper should outline reforms to the customer side of renewable energy markets to fully support GreenPower

The Conservation Council SA suggests that GreenPower reforms include:

- a. the Renewable Energy (Electricity) Act to define that Renewable Energy Certificates incorporate the attributes of lower emissions in contract sales (zero scope 2 emissions and a provision for scope 3 life cycle emissions to be set by the National Greenhouse Accounts (NGA) Factors workbook on an annual basis).
- b. the National Greenhouse and Energy Reporting (NGER) legislative package (including the NGER Determination), make appropriate provision for scope 2 and 3 avoided and reduced emissions associated with renewable energy sales contracts to be segregated from state grid factors.
- c. That the GreenPower Accreditation framework be consolidated under a single national Jurisdiction whilst ensuring that 100% renewable electricity customers have adequate representation in rule-making as it applies to GreenPower.
- d. A new GreenPower pricing structure should be established that links the retail price of renewable electricity to the falling wholesale cost of renewable energy production, rather than the price being a permanent penalty above all standard electricity products.
- e. Establish the role of a GreenPower Advocate to ensure that there is an adequate place to go to properly deal with GreenPower customer issues.

- **how the uptake of high efficiency low emissions intensity electricity generation can be progressed;**

The uptake of high efficiency, low emissions renewable energy will be made possible through the establishment of a 2050 renewable energy goal that is as close to 100% as possible, and enhancing the Renewable Energy Target to ensure that the goal is achieved

Recommendation 16.

The successful Renewable Energy Target be increased and extended to 2050 to create the necessary market push mechanism to decarbonise Australia's electricity systems.

The uptake of high efficiency, low emissions renewable energy will be dramatically improved where the reforms outlined above are implemented, so that renewable energy can be a choice that delivers value for customers, rather than a permanent penalty above all other electricity costs.

See Recommendation 15.

- **any barriers to the increased uptake of electric vehicles and advanced biofuels.**

There are a growing number of car parks that provide recharging for electric vehicles. However, the transition to substantial levels of electric vehicles including electric mopeds, cars, trams and rail systems is not being managed in a way that is transitioning Australia to a clean energy future. To accelerate progress, more effort is required to communicate the story of transition and to create a community culture that supports electric vehicles to be powered using GreenPower accredited renewable energy or on site renewable systems.

Electric rail and train services should be operated using a minimum percentage of GreenPower and customers be offered ticketing options to make up the difference to achieve 100% renewable transport use.

Similarly, for diesel and gas powered public transport, customers should be offered the option to pay for carbon offsets or low emission biofuels.

Ensuring that commercial and freight vehicle efficiency standards are consistent with best international standards such as the European Union Regulations is a minimum expectation.

Recommendation 17

The Green Paper should describe more effort to promote the use of electric vehicles with accredited GreenPower, and to provide options for commuters to buy:

- GreenPower tickets when using electric trains and trams.
- carbon offset tickets when using diesel powered public transport.

In conclusion, it is necessary to for the Energy Green Paper to address the following key areas of a long term energy framework in order to deliver the energy direction in Australia that is coherent, integrated and efficient:

- Long term goals to provide the context for our energy future including a 2050 Renewable Energy Target.
- Strategic planning to guide infrastructure development.
- Market push mechanisms such as the RET.
- Market pull mechanisms including the reform of GreenPower.
- Reforms to improve the value of other end user products, product data and services, for consumers to make real choices for lower emissions.

We would be pleased to discuss our submission in more detail with members of the Energy White Paper Taskforce.

Kind regards,



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