

GreenPower submission to the NEG consultation paper

Summary

Australian electricity consumers are increasingly demanding products that align with their values as well as their energy needs. GreenPower[®] facilitates consumer choices to invest in renewable energy and reduce emissions. To date, GreenPower[®] has channelled approximately \$1.5 billion in revenue to the renewable energy sector, supporting investment in approximately 450 MW renewable energy capacity and reducing Australia's grid emissions by at least 19 MtCO₂-e. It is well positioned to respond to growing commercial drivers for additional renewable energy and emissions reduction.

GreenPower[®] is a joint initiative from the Australian Capital Territory (ACT), New South Wales (NSW), South Australia (SA) and Victorian (VIC) state and territory governments. However, the position presented in this submission is only representative of GreenPower[®], and is in no way indicative of the policy positions from any involved jurisdictions.

Under the National Energy Guarantee (NEG) draft design, the proposed method to account for voluntary programs in calculating retailers' emissions intensity undermines additionality and consumer choice. This could adversely impact the GreenPower[®] program.

GreenPower[®] recommends the following points be addressed in further detailed design of the NEG:

- GreenPower[®] renewable electricity and associated emissions savings should be excluded from the calculations of retailers' emissions liability, and
- Regarding the compliance registry, a new system should be developed to account for combined multiple sources of electricity in a retailers' supply mix with varying emission intensities.
- External offsets should not be used to satisfy emission reduction requirements in the electricity sector while zero emissions options are available within the electricity sector.

Introduction: the value of GreenPower

The National GreenPower® Accreditation Program (GreenPower®) welcomes the opportunity to make a submission to the Energy Security Board on the National Energy Guarantee draft design consultation paper.

GreenPower® is a voluntary accreditation program that enables business and household customers to displace their electricity use with renewable energy, which is added to the grid on their behalf.

GreenPower® is a joint initiative from the Australian Capital Territory (ACT), New South Wales (NSW), South Australia (SA) and Victorian (VIC) state and territory governments. However, the position presented in this submission is only representative of GreenPower®. In 2017, GreenPower® was provided by 28 companies to over 200,000 customers.

Since its inception in 1997, GreenPower® has made a significant contribution to the Australian economy. Between 2005 and 2016 GreenPower® customers have:

- Channelled approximately \$1.5 billion in revenue to the renewable energy sector. This supported investment in approximately 450 MW of renewable energy capacity (i.e. unlocking capital investment of more than \$1 billion)
- Taken voluntary action to reduce Australia's grid emissions by at least 19MtCO₂-e (cumulatively over the 12 years)
- Contributed to 325 jobs across the energy sector throughout Australia
- Provided customers with a robust, verified mechanism for renewable energy purchasing.

1. GreenPower's ability to offer consumer choice must be preserved and enhanced

GreenPower® responds to consumer values

Australian electricity consumers are increasingly demanding products that align with their values as well as their energy needs. Sustainable products and services is a fast-growing consumer segment, and increasing willingness to pay for clean renewable energy is evidenced in the emergence of multiple offerings to the market, including solar PV installations, corporate renewable Power Purchase Agreements, and of course GreenPower®. These products serve to deliver broader community value and satisfy individual customers' motivations.

GreenPower® recognises that for some customers non-price considerations such as environmental credentials and reputation are more important than cost alone, and provides an independently audited, credible renewable energy product for these customers.

These customers consider their personal values such as environmental credentials, local investment in addition to cost. These "value based" consumers seek alternative products and

services in the market place that align with their values. They ought to be provided with this choice in the market.

In addition to values-based reasons, there are commercial reasons why corporate customers choose GreenPower®:

- Reputation and market position as a supporter of renewable energy and a leader on emissions reduction
- Higher capital return through high rated (NABERS and/or Green Star) commercial properties from higher occupancy rates and higher yield
- Aligning with customers' requirements, particularly when specific buildings ratings are stipulated for rental leases

Several rating schemes recognise GreenPower® as a credible source for renewable energy purchasing. These include:

- The National Australian Built Environment Rating System (NABERS) greenhouse gas rating for buildings
- Green Business Council of Australia (GBCA)'s Green Star performance rating performance
- The National Carbon Offset Scheme (NCOS) for carbon neutrality claims

The inclusion of renewable energy purchasing through the rating schemes provide clear commercial drivers for GreenPower®.

Further commercial drivers for GreenPower® are emerging

New commercial drivers have also begun to emerge. The global Science Based Targets (SBT) Initiative allows businesses to align their strategy and operations to a pathway consistent with the goal of the Paris Agreement on climate change to limit global temperature rise to less than 2°C. The number of companies committing to SBTs domestically and internationally is rising rapidly.¹ As SBT approaches recognise renewable energy use as an option to reduce business emissions, GreenPower® provides a valuable mechanism for companies to meet their SBTs. This is in contrast to carbon offsets, which are not recognised as contributing to an SBT.

Another emerging driver is the increasing interest among companies and institutional investors in managing the financial risks of climate change. The Financial Stability Board's Taskforce on Climate-Related Financial Disclosure (TCFD) released recommendations in June 2017 on how companies and investors should report on how they integrate climate-related risks into their governance, strategy, risk management and metrics. A number of major Australian and international companies (including the big four banks) have committed to report against the TCFD framework. The TCFD explicitly recognises participation in renewable energy programs and the use of lower-emission sources of energy as opportunities by which companies can manage their climate-related risks.²

¹ <http://sciencebasedtargets.org/>

² <https://www.fsb-tcfid.org/wp-content/uploads/2017/06/FINAL-TCFD-Report-062817.pdf>

GreenPower® facilitates consumer action to achieve deeper cuts to electricity emissions

The Paris Agreement on climate change, which Australia ratified in November 2016 and which entered into force that same month, aims to *hold average temperature increase to well below 2°C and pursue efforts to keep warming below 1.5°C above pre-industrial levels* and reach net zero emissions in the second half of the century. As noted above, commercial drivers for products like GreenPower® are increasingly aligned with the Paris Agreement's 1.5-2°C temperature goal and its net zero emissions goal.

GreenPower® provides a mechanism for business and household customers that recognise that additional emissions reduction is required, and want to take additional action themselves. The voluntary program provides a robust and verified product for business and household customers that choose to do more to reduce emissions.

GreenPower® facilitates consumer action to grow renewable energy

Many consumers support further growth in Australia's renewable energy, with polls conducted by different organisations at different times showing consistent public support for renewable energy to play a greater role in Australia's electricity system.^{3 4 5}

Corporate consumers are also increasingly aware that the emission reductions required to achieving Australia's commitments under the Paris Agreement cannot be achieved without further investment in renewable energy.

The transition to renewable energy is supported by GreenPower® customers

The increasing competitiveness of renewable energy and storage technologies means that the costs of decarbonising (reducing the emissions intensity of) electricity are declining. These declines in cost make it cheaper for customers to choose renewable energy products, including GreenPower®, suggesting that the market for such products will continue to grow.

This comes at the same time as the broader electricity system is undergoing a fundamental and inevitable shift from its traditional reliance on coal-fired generators to a system based on a more diverse range of energy sources. Providing a reliable electricity supply underpinned by sufficiently dispatchable, flexible and dependable sources of energy drawn from a broader range of technologies than in the past is a challenge to electricity suppliers, market operators, regulators, and policymakers. GreenPower® offers an opportunity for customers to contribute to this challenge by increasing the funding mechanisms available to large-scale renewable energy generators, which will be vital to the diverse range of energy sources needed in the future.

³ <https://arena.gov.au/assets/2017/07/AU21476-ARENA-Corporate-Report-REVISED-v1-1.pdf>

⁴ <https://www.lowyinstitute.org/publications/2017-lowy-institute-poll>

⁵ <http://www.climateinstitute.org.au/articles/publications/climate-of-the-nation-2017-page.html>

2. GreenPower®'s ability to satisfy consumer expectations should be strengthened by the NEG

As outlined in our previous submission to the 2017 Climate Change Policy Review⁶ the core issue for GreenPower® is the confirmation by the Commonwealth that GreenPower® is an additional contribution to emissions reduction beyond Australia's Nationally Determined Contribution (NDC). In practice this requires the cancellation of Assigned Amount Units (AAUs), equivalent to the emissions embodied in GreenPower® added to the grid by customers.

GreenPower® welcomes the inclusion of additionality in the NEG draft design. However, the NEG draft design, in its current form, does not ensure emissions additionality for voluntary renewable energy programs, such as GreenPower®. This is in terms of its provision of 'beyond regulation' renewable energy. The proposed method to account for voluntary programs in calculating retailers' emissions intensity undermines additionality. This is discussed further in section 2.1.1 below.

The NEG's detailed design in this regard can significantly impact potential outcomes for GreenPower® and the future credibility of its product, which has a direct impact on consumer choice in purchasing energy.

The below sections also respond to questions from the consultation paper in regard to the compliance framework under the NEG (3.6 Reporting and Compliance) and the impact of external offsets on voluntary actions (4.4 External Offsets).

2.1. The additionality of GreenPower is fundamental to its credibility

Relevant questions from the consultation paper in section 3.5:

- *What are stakeholders' views on how a retailer's emissions should be determined?*
- *What are stakeholder views on the interaction between the emissions requirement of the Guarantee and voluntary programs such as GreenPower?*

GreenPower® customers make a deliberate investment decision to support more renewable energy supply than is required under policy or regulatory mechanisms. The additionality of GreenPower® is a fundamental component of its value proposition.

GreenPower® recommends an emission allocation and accounting framework that restores additionality for GreenPower® and the voluntary market. This means that the NEG would prevent the efforts of voluntary GreenPower® customers from freeing up emissions for polluting customers. This will ensure the accredited renewable energy sales in Australia are supported to provide faster and additional emissions reductions on top of Australia's international commitments. This will

⁶ GreenPower submission to 2017 Climate Change Policy Review <http://www.environment.gov.au/submissions/climate-change/review-climate-change-policies-2017/national-greenpower-accreditation-program.pdf>

encourage further voluntary market participation from customers under the NEG by creating clarity on credible voluntary action products.

Restoring and enhancing GreenPower®'s additionality is critical to preserving the program's credibility in the market and delivering on its customers' expectation that voluntary action produces impact beyond that required by law. Weakening additionality provisions would undermine the investments already made through GreenPower®, and reduce public trust in all voluntary programs.

Currently GreenPower® is recognized as additional in terms of the renewable energy it facilitates. The shift from the Renewable Energy Target's recognition of renewable energy to the National Energy Guarantee's focus on emissions reduction could enhance GreenPower®'s ability to provide both additionality both in terms of renewable energy and emissions reduction.

The Guarantee should ensure that, GreenPower®'s electricity and avoided emissions are treated as additional. It should ensure that additional costs incurred by GreenPower®'s customers for voluntary actions do not fund retailers' regulated requirements. Ensuring additionality and matching it with GreenPower®'s customer expectations has these important benefits:

- It prevents the efforts of voluntary GreenPower® customers from freeing up emissions for polluting customers, including retailers - essential for the credibility of voluntary programs
- It improves the consistency of regulatory treatment of renewable energy and emissions reduction
- It provides consumer choice backed by a robust and credible scheme – particularly after the RET is met

2.1.1. The proposed method of calculating additionality is misleading.

GreenPower® welcomes the intent of section 3.5 and would welcome the opportunity to consult further with the Energy Security Board on the issue discussed below. There are several concerns with the method of calculating the additionality of voluntary programs proposed in the NEG consultation paper (Box 3.4):

- The calculation produces different amounts of 'additional' emissions at different emissions requirements, even if a retailer's load, emissions and voluntary action are the same
- The example provides a misleading indication of the impact of the proposed approach
- The approach appears to conflict with the intention of the consultation paper.

The intention of section 3.5 and Box 3.4 of the consultation paper appears to be to preserve the additionality of voluntary programs like GreenPower®. However, the proposed method of accounting for additionality undermines the additionality of voluntary programs.

The proposed method applies the emission target multiplier to voluntary zero emissions electricity. We see no rationale for attaching emissions or emissions intensity to voluntary electricity which has zero emissions and zero emissions intensity and which should not be considered as contributing to the emissions requirement. Moreover, this method appears to produce perverse results whereby the value of voluntary action diminishes at lower emissions requirements:

Repeating the suggested approach for an emissions requirement of 0.4 tCO₂-e/MWh produces the following calculations:

A retailer has electricity load of 90,000 MWh, including 10,000 MWh of voluntary zero emissions generation and emissions of 60,000 tonnes. The emissions requirement multiplier of 0.4 is applied to the voluntary load to produce 4,000 tonnes, so now the retailer's calculated emissions are 64,000 tonnes and its emissions intensity 0.64 tCO₂/MWh

Compared with the example in Box 3.4, the above example shows that even though the retailer's emissions and emissions intensity are the same as in Box 3.4 its calculated emissions intensity has fallen.

We strongly recommend excluding GreenPower® renewable electricity and associated emissions savings from the calculations of retailers' emissions liability. This ensures that retailers' emissions intensity is calculated based on load subject to the emissions requirement. We note that this is the approach proposed in the consultation paper to the exemption of emissions intensive trade exposed industries' (EITEI) electricity use from the emissions requirement.

2.2. The compliance framework should cover all attributes of electricity as it enters the market

Relevant questions from the consultation paper in section 3.6:

- *What are stakeholders' views on the need for a compliance registry? What are stakeholders' views on its design?*

GreenPower® recognises the complexity involved in designing an adequate compliance framework and welcomes the Energy Security Board's proposal to establish a new system that values the emissions and electricity output of generators. However, the current National Greenhouse and Energy Reporting (NGER) scheme, which operates through physical accounting, is not appropriate for calculating emissions in its current form as it cannot be adopted for the contractual accounting proposed under NEG.

Currently Large-scale Generation Certificates (LGCs) operate outside of the NEM and enable electricity to be attributed towards the national Renewable Energy Target by the Clean Energy Regulator. However, the proposition under the NEG is to incorporate the emission intensity of a generation technology and attribute it to the electricity sold. In order to achieve this, the NEG compliance framework should capture the required emission information of the electricity generated and sold into the NEM. There are potential issues in trying to achieve this with LGCs due to their existence outside of the NEM.

The new framework should be developed to account for combined multiple sources of electricity in retailers' supply mix with varying emission intensities. It should incorporate a system to disclose the relevant information to end users for the electricity they are paying for. The intent of this is to properly allocate electricity related emissions to end users in a way that fully reflects the market choice of customers.

Under a design of this nature, the proposed Compliance Registry would incorporate a mechanism to cover all attributes of generated electricity as it enters the market. This would enable it to be traded into the different streams of end user products to satisfy the need for consumer choice, which of course includes accredited renewable energy such as GreenPower®.

GreenPower® would welcome the opportunity to consult further with the Energy Security Board on this proposition.

2.3. External offsets (outside the electricity sector) are not equal to voluntary actions and should not be eligible to meet the emissions requirement

Relevant questions from the consultation paper in section 4.4:

Stakeholder views are sought on whether retailers should be allowed to use external offsets to meet a proportion of their emissions requirement. In particular, views are sought on:

- *Whether there is a strong rationale for the use for offsets within the Guarantee*
- *The impact allowing offsets would have on investment under the Guarantee*
- *If offsets were to be used to help achieve compliance with the emissions requirement, what would be an appropriate limit for their use?*

All offsets are not created equal. Renewable energy transforms the electricity supply at the point of generation and has more permanence. Carbon offsets encompass a wide range of activities including carbon sequestration in soil, reforestation and even energy efficiency activities. They can be sourced locally and/or internationally. There is a wide variety of offset types available which vary widely in trade volume, price and quality of accreditation.

GreenPower® strongly opposes allowing external offsets to be used to meet any share of retailers' emissions requirements while zero emissions options are available within the electricity sector. The varying quality of carbon offsets means they are not equally recognised compared to voluntary emission reduction programs, such as GreenPower®. There is a risk that offset inclusion leads to a diminution in the credibility of voluntary action to reduce electricity emissions. Moreover, bringing offsets created in other sectors into the electricity market weakens the signals for investment in the electricity market transition and diverts offset use from areas of the economy where they would provide greater value.

External offsets weaken investment signals in the electricity market because they introduce greater uncertainty into investment decisions:

- The price and availability of offsets are highly contingent on international and domestic policy decisions. External offset markets are in development and are likely to change significantly

after 2020 in response to rules under the Paris Agreement which are currently being negotiated.

- This complicates forecasting of electricity market supply trends and emissions projections, as it makes it very difficult to determine in advance when and whether a retailer would choose to invest in offsets or energy supply to meet its obligations. This in turn reduces the visibility of market developments for other energy market participants.
- External offset availability and prices will be volatile as they are dependent on the policy decisions of international as well as national actors. Offset prices could change significantly with little warning. Investments made on the basis of an assumed offset price could be rendered suddenly uneconomic. This risk would be reflected in higher risk premiums for a wide range of potential investments, resulting in higher consumer costs.

Using external offsets to satisfy emission requirements in the electricity sector could also divert offsets from areas of the economy where they would provide greater value because the electricity sector is much better placed than many other major economic sectors to reduce its own emissions, as it can access cost competitive zero emissions options. Other sectors, such as agriculture and parts of industry and transport, do not have access to similar options and will be dependent on offsets in the medium term to reduce their emissions.

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