



Investor
Group on
Climate
Change

Submission:

Australia's Guarantee of Origin Scheme

October 2023

About the Investor Group on Climate Change

The Investor Group on Climate Change (IGCC) is a collaboration of Australian and New Zealand institutional investors focused on the impact of climate change on investments. IGCC represents investors with total funds under management of more than \$3 trillion in Australia and New Zealand and \$30 trillion around the world.

Institutional investors have a fiduciary duty to millions of Australians to generate long-term returns that can be safely enjoyed in retirement. This can only be achieved by responsibly managing climate related risks and the opportunities presented by the transition to a zero emissions economy.

The Consultation

The IGCC welcomes the opportunity to provide input into the Government's consultation on the Guarantee of Origin scheme, specifically, the renewable energy electricity certification scheme. The IGCC echoes the Department's hopes that REGO legislation will provide investment certainty for the creation of renewable energy certificates beyond 2030. Whilst the existing Clean Energy Regulator administered renewable energy certificate framework has worked well, limitations in the near 25-year-old design have contributed to the delay in investment in new renewable energy projects in Australia, with investment lagging behind the pace required to meet Australia's target of an 82% renewable energy grid by 2030.¹

One contributing factor to this has been the emergence of grid integration issues – such as the need to curtail renewable energy at times of surplus and energy market price cannibalisation – as the proportion of renewable energy in the grid passes certain key thresholds.² Increasingly, global thought leaders are beginning to ask not simply 'how do we install more renewables?', but 'how can we manage the energy system so as to maximise the positive impact of renewable energy and drive system decarbonisation?'

More granular renewable energy certificates can help consumers concentrate their energy consumption at times when renewables are abundant, whilst also providing incentives for the technologies required to provide clean energy around the clock. Not just when the sun is shining. A decarbonised electricity system is amongst the most important tools we have to decarbonise our world, due to the run-on effect on other industries including transport, heating, and buildings. It is essential if Australia is to meet its ambitious decarbonisation targets, and if IGCC members are to actively play a part in this process while meeting their own ambitious targets.

Impending REGO scheme represents a unique opportunity to create a sophisticated, modern renewable energy accounting process which can keep Australia abreast with international developments and key trading partners, establishing Australia as a leader and modern-day renewable energy superpower.

For further information and to discuss, please contact:

Bethany Richards Junior Manager, Policy

bethany.richards@igcc.org.au

¹ Clean Energy Council Renewable Projects Quarterly Report

² EnergyTag Granular Certificate Scheme Standard

Key Points

Alignment with international best practice is essential to ensure investment opportunities for IGCC members can be maximised, and for Australia to realise its ambitions in becoming a renewable energy super-power.

Key to this need for alignment is the proposed size of an Australian regulated REGO. This is a key theme running through the submission proposed below, with the IGCC keen to ensure that the scheme design does not exclude international trading partners, nor preclude smaller Australian businesses from participating.

Lastly the IGCC acknowledges that several components of the scheme's design – most notably the incorporation of time series data, timestamping, VPP participation, and storage participation – remain to be designed. The IGCC looks forward to forthcoming industry consultation to ensure these components of the scheme can be constructed in such a way so as to promote innovation, jobs, and growth within Australia for IGCC Members and the broader community.

Introduction

The IGCC directs the Government to consider the following responses to the Consultation Paper:

Section 1.1 Below baseline

The IGCC is concerned by the proposal that below baseline generators be eligible for REGOs. The provision of renewable energy certificates (RECs) for old, below baseline generators risks damaging the investment business case in new renewable energy generation by flooding the market with additional RECs that do not represent additional renewable energy generation progressing Australia to its Paris commitment.

Section 1.2 Small-scale generation

The IGCC agrees with the Department's proposal that power stations can assign the right to create REGO certificates. The capacity for technology providers to aggregate REGO capabilities to administer orchestrated participation of distributed energy resources is a noted key component in Australia's trajectory towards a net zero emissions economy by 2050.

The IGCC however encourages further investigation of the Department's claim that owners of small-scale system owners "will continue to utilise the SRES in preference to the REGO

scheme” in the future. This assertion is untested and risks overlooking the diminishing returns attached to STCs as 2030 approaches. Further, this overlooks a potential future scenario where small-scale owners are incentivised to access REGO markets via their participation in Virtual Power Plants and other forms of orchestrated DER actions conducted on their behalf by emerging third party technology providers.

Lastly, as consumer appetite for 24/7 renewable energy claims increases, there is likely to be a market for small-scale REGOs capable of being matched with small-scale demand from businesses and energy users with relatively small energy footprints. Successful adoption of the REGO scheme may include a demand for certificates representing relatively small quantities of renewable energy (as elaborated more under section 2.2 of this document). As such, the stronger the incentives and models encouraging small-scale generators into the REGO market, the better.

Section 1.3 Electricity storage

The IGCC welcomes the inclusion of discharged stored renewable energy within the REGO scheme. This will create a carbon incentive for batteries, whereby owners of batteries can realise financial benefits from a tiered REC market, by discharging renewable energy into the grid during times of high fossil fuel penetration. For example, during September and October 2023, the average renewable energy composition of the NSW Grid dropped from 66.1% at midday to 18.4% at 6pm.³

Time-stamping renewable energy would create a premium for RECs generated once the sun has set amongst energy users with 24/7 renewable energy targets.

However, this is another scenario whereby the proposed 1MWh REGO certificate size could harm these efforts. A 1MWh requirement would effectively exclude all residential batteries and many community and commercial batteries from participation in the REGO scheme. Some IGCC members operate assets with batteries smaller in size than 1MWh. This would undermine the aforementioned efforts to incentivise orchestrated DER opportunities and risks harming the incentive structures for residential and community batteries. This includes batteries in EVs as vehicle-to-grid charging becomes more commonplace in the future.

Section 2.2 Time stamping

The IGCC raises concerns with the proposed design methodology that would size REGOs at 1MWh.

³ opennem.org

In the first instance, the rationale behind the sizing – that REGOs be consistent with LGCs – seems at odds with the Department’s admission that LGCs need to be “more fit for purpose market-based instrument” given the “limitations (that) are emerging”.

Further, given the Government’s understanding that “International markets and hydrogen certification standards are likely to demand some degree of time matching in future” it is essential that the Australian scheme match international equivalents. Ensuring that Australian businesses can demonstrate time matching of their electricity consumption to their international customers is a critical component of the scheme.

The requirement that a REGO by 1MWh risks this outcome by putting Australia at odds with international designs.

The two most notable instances of international designs allowing smaller units of REGOs come from the EU and EnergyTag, an independent, non-profit initiative to define and build a market for Granular Renewable Energy Certification.

The EU’s Third Renewable Energy Directive allows Granular Certificates down to 1 Wh in size. Noting, that where appropriate, renewable energy guarantees of origin “shall be of the standard size of 1 MWh.” And that “where appropriate, such standard size may be divided to a fraction size, provided that the fraction is a multiple of 1 Wh.”⁴

Similarly, whilst EnergyTag “has not yet standardised the GC (Granular Certificate) size” their recently released paper mandates that GCs “use Wh as the base unit rather than a multiple (kWh, MWh etc.) unit.” Further, all time matching must “be demonstrated by proving that energy consumption volumes (i.e. Wh) equal the volume of Cancelled Granular Certificates that have been issued for energy production in the same time interval.”⁵

Beyond international concerns, the 1 MWh size requirement also risks excluding SMEs and small facilities from participation in the scheme. Members with assets with peak energy use below 1MW – including commercial properties, infrastructure, technology, and transport – would be unable to make REGO certified time-matched 24/7 renewable energy claims. The lack of a government backed certification scheme for such enterprises risks disincentivising 24/7 carbon free energy targets and harms the broader objectives of the scheme.

Concerns regarding data availability and administrative costs associated with smaller enterprises participating in the REGO scheme are valid yet overlook the new technology solutions being implemented to solve these issues.

⁴ EU Renewable Energy Directive III (link)

⁵ EnergyTag Granular Certificate Scheme Standard

Whilst a 1 MWh size REGO certificate would provide benefits and allow for a smoother transition from LGCs, the IGCC encourages the Department to consider the risks associated with such a design, and the opportunities that might present themselves should a smaller sized certificate be made available under the scheme.

Conclusion

The REGO scheme represents a unique opportunity to establish Australia as a leader and modern-day renewable energy superpower. The IGCC is broadly supportive of the schemes design with the most significant exception being the sizing of REGO certificates and the proposal that below baseline generators be eligible for REGOs.

The IGCC hopes that a finalised scheme can be implemented as soon as possible so as to provide investment certainty for the creation of renewable energy certificates for members beyond 2030, allowing them to continue to invest in Australia's transition.

Granular renewable energy certificates can create better incentive structures on both the supply and demand side of Australian energy markets. More energy being demanded during times of high renewable supply (and lowest wholesale cost) and more renewable energy being supplied during times of peak fossil fuel penetration, will accelerate the orderly transition to a grid powered by 82% renewable energy by 2030.

It is essential if Australia is to meet its ambitious decarbonisation targets, and if IGCC members are to actively play a part in this process while meeting their own ambitious targets.

Resources

Clean Energy Council Renewable Projects Quarterly Report ([link](#))

EnergyTag Granular Certificate Scheme Standard ([link](#))

EU Renewable Energy Directive III September 2023 ([link](#))

opennem.org ([link](#))