

Clean Energy Council submission in response to the Renewable Electricity Certification position paper

10 February 2023

The Clean Energy Council (CEC) welcomes the release of the Australian Government's position paper on renewable electricity certification as part of the Guarantee of Origin Framework for Australia.

The CEC is the peak body for the clean energy industry in Australia. We represent and work with more than 1,000 businesses operating in Australia across solar, wind and hydro power, energy storage and renewable hydrogen. Our mission is to accelerate Australia's clean energy transition.

Decarbonisation commitments are gathering pace globally, and there is increasing demand for green and low-emissions products. The proposed Guarantee of Origin framework represents a landmark policy proposal, which will provide Australia with an essential mechanism to be able to demonstrate the environmental credentials of the products we produce, for both domestic and international consumption. Please see our submission on the overarching Guarantee of Origin Framework [here](#). This submission focuses on the design and implementation of a proposed Renewable Electricity Guarantee of Origin (REGO), which would be a subset of the overall guarantee of origin architecture.

The rationale for the new REGO certification scheme is two-fold:

- To enable sources of renewable electricity generation, which are currently ineligible to produce Large-scale Generation Certificates (LGCs) under the mandatory Renewable Energy Target ('the RET') – specifically below-baseline generation and electricity intended for international exports – to demonstrate their product characteristics.
- To ultimately succeed Large-scale Generation Certificates when the RET is due to cease operation at the end of 2030.

The new certificate scheme is also viewed as an opportunity to modernise the nature of product information available on a renewable energy certificate, by providing more granular information about the time, place and source of production. The CEC considers these to be welcome proposals, noting the growing global interest from business and consumers for more detailed information and transparency relating to the environmental (and social) impacts of the products they purchase.

In 2022, we saw signals from the European Commission that it intended to apply strict standards to the definition of renewable hydrogen, both produced domestically and imported from overseas, which would cover the temporal correlation between hydrogen production and electricity generation, the geographic correlation between the hydrogen production facility and the renewable

electricity generation plant, and even the ‘additionality’ of the electricity source supplying the electrolyser.

Regardless of our views about the merits of these requirements, which may yet be softened to some extent (see our submission to the European Commission [here](#)), it is clear that there is a growing global macro trend towards more granular information relating to electricity generation and consumption¹, and Australia needs to be equipped to respond to these information needs.

The CEC supports the principle of developing a modernised renewable electricity generation certificate which can meet the needs of all renewable electricity generators in Australia. However, we have deep concerns about the potential unintended consequences for *renewable electricity investment* and *wholesale electricity prices*, if the Government proceeds with the proposal in its current form – without any other supporting measures – from 2024.

Impacts on renewable electricity investment

The Australian Government has legislated a national emissions reduction target of 43 per cent, and forecast² a renewable electricity share in the National Electricity Market of 82 per cent by 2030. However, deployment of large-scale projects has slowed in recent years and new capacity is currently only being deployed at around half the necessary rate (~3 GW per annum³ compared to the needed ~6GW per annum) in order for Australia to reach these levels. There are a number of factors why Australia’s renewable energy deployment is under-performing, including grid connection challenges, a lack of transmission capacity and long lead times to deploy new network infrastructure, and COVID-induced supply chain shortages and global inflation which have led to substantial increases in equipment prices and shipping costs.

More recently, the CEC has become concerned that the introduction of the *Inflation Reduction Act (2022)* in the United States (which is providing generous incentives for the build-out of new wind and solar plants, electrification, green manufacturing and industrial decarbonisation), will result in intensified competition for capital, equipment and people, which will further increase the challenges associated with project deployment in Australia. See the CEC’s pre-Budget submission [here](#), which outlines the risks in further detail.

Set against this backdrop of challenging market conditions and intensifying global competition, the Department of Climate Change, Energy, Environment and Water (‘the Department’) is now proposing to introduce a new form of renewable electricity certificate (REGOs) in less than 12 months, which we are concerned could result in a substantial decrease in large-scale generation certificate prices, which has not been expected or factored in by the market.

We expect that this fall in prices would occur because the total demand for certificates is currently around 40 TWh per year (33 TWh of which are required under the RET, and a further 7 TWh from voluntary action). Under the current REGO proposal, the 14TWh⁴ of below-baseline renewable electricity generation which could not previously be recognised as renewable electricity would

¹ We also note the rise of initiatives such as [Energy Tag](#), which is working to ‘define and build a market for Granular Certificates that enables energy users to verify the source of their electricity and carbon emissions in real time’.

² Based on modelling carried out by energy market analyst, Reputex

³ https://twitter.com/AEMO_Energy/status/1614775673473896449?s=20&t=oiDq_C8NfDJo8Y0EgwmkEw

⁴ We note that this figure, which is based on hydro energy generation fluctuates year to year, but is typically in the order of 13TWh – 16TWh per year

become eligible to generate renewable electricity certificates (REGOs). At this stage, the demand for REGOs is not known. While the CEC does not assume that all current buyers of LGCs would immediately switch from LGCs to REGOs⁵, given contractual commitments and differentiation applied by some buyers – we nevertheless expect that there could be a dampening effect in prices for LGCs, which would further damage the investment case for new projects.

The argument has been made that voluntary demand will continue to grow, meaning that the market for certificates will increase over the coming years. However, this growth is unlikely to be rapid enough or large enough to soak up the additional 14 TWh of certificates that become available in 2024.

Impacts on wholesale electricity prices

In addition to the likely chilling effect on new renewable energy project investment which would slow electricity market price declines over the longer term, the Government should also expect that the introduction of REGOs in 2024 – without other supporting policy measures – would result in higher average wholesale electricity prices in the immediate term.

The reason for this is that the LGC price currently enables renewable electricity plant to continue to operate even at negative prices, until the point at which the negative price cancels out the *positive* LGC price. With lower LGC prices, the frequency and magnitude of these negative pricing events is likely to decrease, which will mean an increase in average wholesale electricity prices.

Impacts on energy storage investment

AEMO's Integrated System Plan identifies that under the *Step Change* scenario, approximately 46 GW/640 GWh of dispatchable storage capacity and 7 GW of existing dispatchable hydro is needed by 2050, to efficiently operate and firm variable renewable energy.

We note that while interest and activity in energy storage projects has been growing, a single 10 MW utility scale battery was connected in 2022, signalling that a rapid acceleration in battery deployment will be needed in the coming years to meet system requirements.

Energy market arbitrage (buying and storing electricity at low or negative prices and dispatching it at times of higher demand) has been a major component of the energy storage 'value stack' for proponents assessing the commercial viability of new energy storage investments. However, a reduction in the scale and frequency of low and negative prices within the wholesale electricity market could reduce the 'spread' available to storage proponents and also dampen the business case for new energy storage investments, which are critical to achieving higher shares of renewable energy within the NEM.

CEC recommendations

In light of these significant risks to investment in new renewable electricity generation and storage capacity, the CEC urges the Department and Government to exercise great caution with its proposed introduction of the REGO scheme, and calls on it to consider a range of policy and design options which could minimise adverse consequences for the clean energy transition.

⁵ The CEC expects that some purchasers will continue to prefer LGCs, which would see this category of certificate enjoy a price premium to some degree, compared to REGOs.

First among these options to be considered by the Government is an **increase and extension** of the legislated Renewable Energy Target to at least 2035, noting that the scheme would need to continue for some period after this date to ensure investment returns for projects committed to meet these increased targets.

The RET, which requires retailers to purchase a specified amount of renewable electricity generation each year (currently 33 TWh), has already been met, and the mandatory surrender of LGCs by retailers is scheduled to conclude at the end of 2030. These factors mean that the incentives for *new* generation investment are declining, and there are no other predictable Federal Government mechanisms in place to pull new projects through to financial close.

The CEC considers that increasing the volume of generation required under the RET to better reflect the necessary speed and scale of Australia's clean energy transition, and extending the RET to provide an incentive for capital-intensive, long-lived infrastructure assets, is the cleanest and simplest mechanism for maintaining investment.

Adopting this measure would have a positive impact on wholesale electricity prices, noting that there is a clear correlation between higher shares of renewable electricity generation and lower electricity prices, meaning that this measure would accelerate downward pressure on consumer electricity bills.

Other complementary design measures that the Department could *also* consider would be a gradual phasing in of REGO certificates over time, or limitations on the use of REGOs within the domestic market, although any such measures would require careful consideration.

Another important initiative that the Australian Government should deliver as part of any introduction of the REGO scheme prior to the conclusion of the RET, is to provide **substantial funding support for a major, national public education and marketing campaign for GreenPower** - the government backed certification scheme for voluntary purchases of additional renewable electricity generation. Years of underinvestment in this scheme mean that many consumers are unaware of what the GreenPower accreditation scheme signifies, and as such it is difficult for them to differentiate between different renewable energy products. Investing in a consumer education campaign will help to support demand for GreenPower, and accordingly, new renewable electricity projects.

Conclusion

The CEC strongly supports the vision and intent of the Guarantee of Origin framework and the provision for all forms of renewable electricity to be able to demonstrate their characteristics in a transparent way. However, as this submission notes, the current proposal for the introduction of REGOs represents a material risk to the speed and scale of Australia's clean energy transition.

Complementary measures and design considerations will be required in order to reduce the risks to new investment in the coming years. Foremost among these measures is the increase and extension of the Renewable Energy Target.

Please find in the appendix which follows, a response to the full range of draft policy proposals put forward within the REGO position paper.

We would welcome the opportunity to work with the Department and the CER over the coming weeks and months to further discuss and refine the policy design to support the successful introduction of Australia's Guarantee of Origin framework.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'A. Freeman', written in a cursive style.

Anna Freeman
Policy Director, Decarbonisation

APPENDIX 1 – CEC COMMENTS ON PROPOSED POLICY POSITIONS

Page	Departmental policy position proposal	CEC comments
10	#1 The Department proposes to develop and implement an enduring tradeable renewable electricity certificate mechanism administered by the Clean Energy Regulator.	The CEC supports the principle that all forms of renewable electricity generation should have a mechanism for demonstrating their renewable energy credentials.
11	#2 The Department proposes to allow renewable electricity generation to create REGOs where that generation has not already created LGCs, STCs unless the certificate creation period has passed) or other certificates.	The CEC supports the Department's proposal for broad eligibility for certificate creation, allowing all renewable electricity generators operating in Australia to create REGOs, including small-scale (solar) systems, where the maximum deeming period has passed. However, participation on the scheme should be reliant on metering rather than deeming (as is currently the case for STC creation under the RET).
12	#3 The Department proposes to allow eligible renewable energy sources as defined under the Renewable Energy (Electricity) Act 2000 to create REGOs.	The CEC supports this position.
12	#4 The Department proposes to allow storage facilities to create REGOs for electricity dispatched if they demonstrate that the stored energy came from eligible renewable electricity generation by first surrendering an appropriate REGO or LGC.	<p>For stand-alone batteries operating in the NEM, some members have noted their concerns that treating batteries as generators will require asset owners to operate their plants based on two different price signals – one from the REGO scheme and another from the NEM spot market, which would add complexity and some degree of distortion.</p> <p>We note that hybrid (generation & storage) systems could continue to adopt an approach that is similar, or which leverages <u>the existing sub-metering LGC methodology</u>, for noting there are probably some opportunities to improve it.</p>
13	#5 The Department proposes that electricity generated by offshore renewable energy power stations and storage facilities located within coastal waters of states and territories, the territorial sea of Australia, and Australia's Exclusive Economic Zone, and electricity	The CEC supports the principle that all forms of renewable electricity generation should have a mechanism for demonstrating their renewable energy credentials. We

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	that is exported internationally, be eligible to create REGOs.	agree that REGOs created by projects <u>directly</u> supplying offshore markets should be labelled accordingly.
13	#6 The Department proposes to allow all renewable electricity generation to create REGOs regardless of power station age.	The CEC supports this position for all renewable electricity generation, regardless of age, to be able to create REGOs, noting that independent certification schemes or voluntary action programs (eg. RE100) may apply their own criteria relating to the age of generation facilities.
14	#7 The Department proposes to allow all renewable electricity generation to create REGOs regardless of power station or storage facility capacity.	On principle, the CEC considers that all renewable electricity generation should be treated equally. On that basis, for this generation to be allowed to create REGOs, we agree that the maximum deeming period must have concluded. In addition, all sites (including homes and businesses) participating in the scheme must have metering to measure actual output (rather than relying on deeming).
14	#8 The Department proposes to require REGOs include all the information currently displayed on LGCs, and that this information be publicly visible.	The CEC supports the adoption of the data currently represented on LGCs as the core data to be publicly available for REGOs.
14	#9 The Department proposes to allow RET participants to choose to include on LGCs some or all of the additional information required on REGOs.	The CEC supports the CER making it possible for RET participants to voluntarily provide additional information should they choose to do so.
<i>New information proposed for inclusion on REGOs</i>		
15	#10 The Department proposes to require REGOs include the commissioning date of the power station or storage facility creating the certificates.	Noting the increasing level of international interest and scrutiny relating to environmental claims, the CEC considers that making more granular information available will enable buyers to exercise greater choice in their purchasing decisions if they wish to do so. Accordingly, the CEC welcomes the proposal to include the power

Page	Departmental policy position proposal	CEC comments
		station commissioning date or storage facility on the certificate.
16	#11 The Department proposes to require REGOs to include the grid location of the power station or storage facility creating the certificates.	The CEC supports this proposal, noting some buyers will prefer to support projects within their same grid.
16	#12 The Department proposes that REGOs created by power stations and storage facilities over 1 MW in capacity be required to include a timestamp reflecting the hour in which the electricity was dispatched by the power station or storage facility.	In principle, the CEC does not see the need for <i>time-matching</i> , noting that effective investment signals to build electricity supply which meets load profiles are already available via the wholesale electricity market. Nevertheless, the CEC supports this proposal for <i>timestamping</i> on certificates at one hour intervals, noting that some international markets are pursuing requirements for time-matching, and some Australian renewable electricity producers may be required by their customers to report such data.
17	#13 The Department proposes to require REGOs to include information indicating whether the certificate was created for generation exported overseas, or for electricity dispatched from a storage facility.	The wording of this policy proposal requires clarification. If the Department is proposing that ‘... <i>information indicating whether the certificate was created for electricity generation directly exported overseas</i> ’ [our insertions in red], suggesting a direct grid connection, then the CEC is comfortable with this proposal. We would however regard this proposal as unworkable if it is intended to extend to electricity generation sold into the wholesale electricity market which may then be purchased by companies utilising the electricity for renewable energy exports (eg. green hydrogen/ammonia exports).
17	#14 The Department proposes that anyone may surrender a REGO at any time, including for the purpose of creating a product Guarantee of Origin certificate.	We support this proposal that a REGO owner could surrender a certificate regardless of the certificate vintage or energy attributes. This allows flexibility within the market, while noting that independent certification schemes may have vintage requirements.

Page	Departmental policy position proposal	CEC comments
18	#15 The Department proposes that the Clean Energy Regulator develop systems and processes to facilitate the voluntary matching of certificates based on time or other energy attributes.	<p>While we are pleased to see the CER doing the forward planning to enable its systems to provide a time-matching service, we note that it is not currently envisaged that the government/Regulator will perform <u>certification</u> services.</p> <p>While it appears entirely feasible for the CER's data registry to perform time-matching services in the coming years, such a service could blur the line between 'accounting' and 'certification', and as such may require further consideration prior to implementation.</p>
18	#16 The Department proposes to require REGOs to include the name of the person or organisation on whose behalf the REGO is being surrendered, where applicable and if the surrender is being made on behalf of many organisations.	The CEC does not envisage the REGO certificates themselves including the name of the person/organisation on whose behalf the REGO is being surrendered, but rather this information being subsequently reported/recorded when the certificate is surrendered.
18	#17 The Department proposes that additional information capturing the purpose of the REGO surrender be required to be provided when a person or organisation surrenders a REGO, and be publicly visible.	The CEC would envisage this information being collected/recorded upon surrender of the certificate, rather than being published on the certificate itself.