Clean Energy Investor Group

50 Camberwell Road Hawthorn East VIC 3123

8 February 2023

Hon. Chris Bowen MP
Federal Minister for Climate Change and Energy
Commonwealth Government
Lodged online at: DCCEEW Consultation hub

Dear Minister,

Response to Australia's Guarantee of Origin Scheme - Consultation Papers
The Clean Energy Investor Group (CEIG) welcomes the opportunity to provide feedback on the Commonwealth Government Department of Climate Change, Energy, the Environment and Water's Consultation Papers published in December 2022 on Australia's *Guarantee of Origin – policy paper* (the GO paper) and *Renewable Electricity Certification - policy paper* (the REGO paper).

CEIG represents domestic and global renewable energy developers and investors, with more than 16GW of installed renewable energy capacity across more than 76 power stations and a combined portfolio value of around $38 billion. CEIG members' project pipeline is estimated to be more than 46GW across Australia. CEIG strongly advocates for an efficient transition to a clean energy system from the perspective of the stakeholders who will provide the low-cost capital needed to achieve it.

KEY POINTS

CEIG Members have reported that new projects are finding it increasingly difficult to agree on the value of green certificates post 2030. This is increasingly impacting on project financing and could place the sizeable Australian PPA market at risk.

CEIG supports the introduction of the proposed REGO scheme
Implementation of the REGO scheme should start in 2024, or shortly after that date, to provide certainty for the PPA market and to avoid other non-government schemes replacing the LGC framework.

CEIG supports broad REGO eligibility criteria:
- allow eligible renewable energy sources as defined under the *Renewable Energy (Electricity) Act 2000* to create REGOs (incl. native wood waste not eligible);
- allow offshore generation and generation for export to create REGOs;
- allow below-baseline generation to create REGOs; and
- allow all renewable electricity generation to create REGOs, regardless of capacity.

CEIG supports the following REGO energy attributes:

- all the information currently displayed on LGCs; and
- new information such as power station age, location, international export and storage status.

Further analysis is required before deciding on the suitability of having a time-stamping attribute and whether storage assets should be eligible to create REGOs. CEIG outlines its arguments for and against in the body of the submission.

Actual (rather than marginal) losses should be used for the purpose of creating REGOs. This updated methodology should be reflected in the REGO scheme.

REGO surrender – REGO expiry date

To improve the REGOs' credibility and value, CEIG recommends considering imposing an expiry date to ensure the REGOs cannot be banked for long periods of time.

REGO surrender – Linkages with the RET scheme

CEIG supports REGOs being used purely for voluntary purposes and not being eligible to be surrendered to extinguish a RET liability.

- However, CEIG is concerned that there is a risk of sudden devaluation of LGC value:
  - the proposal would create an immediate oversupply of LGCs from 2024, without any new demand (or very uncertain);
  - this would blunt the investment signal for clean energy, would go against the principles of the LRET scheme and would fail to support revenue predictability for investors; and
  - ultimately, **this could negatively impact on Australia's decarbonisation task by lowering incentives for clean energy investment**.

- CEIG believes that further consideration needs to be given to how to mitigate this risk and outlines a number of options:
  - Increase the mandatory RET by the amount of below-baseline generation from the REGO scheme implementation date (e.g. increase RET to 50TWh p.a.);
  - Extend the mandatory RET period beyond 2030 (e.g. until 2040 or 2045);
  - Only allow the surrender of new REGOs against new demand (including export) until the end of the mandatory RET.
    - new demand would be defined as green hydrogen, green ammonia, green steel, any new electricity demand since the commencement of the REGO scheme or any electricity export.
  - Restrict the supply of green certificates (e.g. make below-baseline power stations gradually eligible to create REGOs between 2024 and 2030).

CEIG supports in-principle the introduction of the proposed GO scheme

Introducing the proposed GO scheme has the potential to support more ambitious economic and decarbonisation scenarios for Australia.

The broad range of attributes proposed to be attached to the GO certificates could support future innovation from the private sector to differentiate products based on a broad number of clean attributes, beyond clean energy.

Why the Australian electricity market needs a REGO scheme

CEIG Members have reported that new projects are finding it increasingly difficult to agree on the value of green certificates post 2030: the scheduled sunset of the Large-scale Generation Certificate (LGC) scheme means that there is no market to value them.

This is increasingly impacting on project financing whereby corporate offtakers are reluctant to sign longer-term Power Purchase Agreements (PPAs) that go beyond 2030. In turn, this could place the sizeable Australian PPA market at risk, and it could slow the energy transition, particularly as State-based schemes such as the NSW Roadmap assume that generators will sign private PPAs.

With the sunset of the LGC scheme in 2030, the Australian electricity market needs a replacement framework that will:

- continue valuing the 'green' component of electricity generation;
- demonstrate the provenance of green certificates for voluntarily surrenders;
- provide a tradable instrument specific to the electricity market to act as an alternative to Australian Carbon Credit Units; and
- help pull forward investment to achieve the timely decarbonisation of the electricity sector.

There is also a global push from the United Nations' 24/7 Carbon-free Energy Compact to move towards time-matched and locally procured new generation.

CEIG welcomes the introduction of the proposed REGO scheme

<u>CEIG supports the new REGO scheme being based on the existing LGC architecture</u>

CEIG welcomes the introduction of the proposed REGO scheme as it will be instrumental in supporting the Australian decarbonisation effort. The current LGC mechanism for trading certificates and showing provenance is trusted, well-known and has proven to be an effective tool. By using a similar architecture, the proposed REGO scheme can expect to carry through that credibility.

<u>Importance of timely implementation</u>

CEIG agrees with the proposed staging that prioritises the implementation of the REGO scheme and the first phase of the GO scheme.

It is critical for the Australian energy transition that the PPA market functions smoothly to deliver sufficient capital and investment. CEIG supports implementation of the REGO scheme starting in 2024, or shortly after that date, to provide certainty for the PPA market and in turn support the broader decarbonisation efforts.

Timely implementation of the GO scheme is also important to avoid other non-government schemes replacing the LGC framework.

REGO scheme – detailed design considerations

Eligibility - Renewable energy sources

CEIG supports the proposal to allow eligible renewable energy sources as defined under the *Renewable Energy (Electricity) Act 2000* to create REGOs. This includes native wood waste continuing to not be eligible to create REGOs.

Eligibility - Offshore generation and generation for export

CEIG supports the proposal 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 that is exported internationally, be eligible to create REGOs.

This is critical to incentivise investment in offshore wind generation and to support the trading of green electricity with overseas markets.

Eligibility - Below-baseline generation and size threshold

The use of baselines in the RET has created a barrier to verifying the provenance of renewable generation created by pre-1997 assets which has established an arbitrary distinction between 'old' and 'new' renewable capacity.

CEIG supports the proposal to allow all renewable electricity generation to create REGOs regardless of power station age and capacity as it will result in a fairer system of renewable accreditation that will benefit generators and consumers.

However, CEIG notes that while this proposal improves the certification of green vs non-green electricity, in the absence of other policies, it could dilute the incentive for new clean energy investment. We discuss this risk later in this submission.

REGO energy attributes

CEIG supports the proposal to:

- require REGOs to include all the information currently displayed on LGCs, and that this information be publicly visible;
- include the following information on REGOs: power station age, location of generation, international export and storage status; and
- allow RET participants to choose to include on LGCs some or all of the additional information required on REGOs.

This will support value-creation by allowing the REGOs to differentiate based on a broad suite of attributes.

Time-stamping attribute and eligibility of storage assets to create REGOs

CEIG finds that further analysis is required before deciding on two issues:

- suitability of having a time-stamping attribute on the REGO certificate; and

- whether storage assets should be eligible to create REGOs.

1) Arguments against time-stamping and eligibility of storage assets to create REGOs.
While the current proposal is only to enable the display of a time-stamping attribute (i.e. not a policy to incentivise or mandate its use), it is worth considering what the consequences of using the time-stamping attribute could be:

- increased accounting and reporting burden;
- increased trading burden to deliver time-matching in each interval;
- increased trading risk because of the discrepancy between energy bids being submitted ex-ante and certificates being settled ex-post (i.e. there is a risk that a plant makes a loss on the spot market that it does not recover from certificate sales);
- increased potential for greenwashing;
- risk that REGO price volatility increases in a voluntary time-matching scheme which would undermine revenue certainty; and
- continuing difficulty in auditing customers' claim unless the customer makes their consumption profile public (unlikely).

Having a time-stamp on a certificate is currently not necessary to deliver real-time renewable matching: this can be done through simpler accounting methods (e.g. by an offtaker disclosing that they have purchased 70% generation of wind farm X) and using public AEMO data to determine at what time the generation has occurred. In short, there are other ways to deliver the benefits of real-time renewable matching.

The time-matching issue is linked to the question of whether storage assets should be eligible to create REGOs since storage eligibility is only valuable with time stamping.

Arguments against storage eligibility include:

- Energy markets may be distorted and revenue certainty for all asset owners may be reduced as they would have to operate their plants based on two different price signals (REGO and NEM spot market prices); and
- due to round-trip losses, the differences in surrendered and created certificates will likely be greater than the arbitrage value to trade in the certificates market, which will in turn minimise revenue incentives.

2) Arguments for time-stamping and eligibility of storage assets to create REGOs
Eligibility for storage assets has the potential to incentivise investment by creating new revenue streams:

- It would recognise their ability to time-shift the green value of electricity generated in the grid and should be directly linked to timestamping:
  - If the REGOs are not time-stamped, storage would not benefit from being eligible.
  - If the REGOs are time-stamped, storage should be eligible (but without making this a compulsory feature).
- The combination of time-stamping and storage eligibility would provide a new option for firm green electricity to be exported.
  - It could be useful as part of a portfolio of assets to demonstrate the green value of the electricity generated despite the lack of revenue arbitrage opportunity.

  - It would also be valuable with behind-the-meter storage assets (e.g. combined with hydrolyser) where the value of the green electricity would transfer directly to the end-product.
- It would broaden the REGO eligibility criteria to include all types of generation and would future proof the market.

Despite the potential difficulties in implementing time-stamping and storage eligibility, the benefits of enabling future green products may be worth pursuing. It is likely that storage would be part of an optimal solution where purchasers of green hydrogen (or other green product) would require to have maximal time-matching between electricity supply and usage. Not having the ability to create REGOs would make achieving low emission products more difficult.

Under this scenario, the Commonwealth's proposal would be appropriate (i.e. that storage facilities would first need to surrender an appropriate REGO or LGC before creating their REGO).

<u>REGO surrender – REGO expiry date</u>

CEIG does not agree with the proposal to impose

> *"(...) no restrictions on when REGOs could be surrendered to the Clean Energy Regulator. This means that the owner would be able to surrender regardless of certificate age (vintage) or energy attributes."*

To improve the REGOs' credibility and value, CEIG recommends considering imposing an expiry date to ensure the REGOs cannot be banked for long periods of time (e.g. REGOs to expire one or two years after the creation date).

<u>REGO surrender - Linkages with the RET scheme</u>

As described above, CEIG supports broad eligibility criteria for REGO creation because this will ultimately increase the supply of low-cost clean energy generation, which will in turn support the decarbonisation of the Australian economy.

CEIG supports REGOs being used purely for voluntary purposes and not being eligible to be surrendered to extinguish a RET liability. This supports the main intent of the RET scheme which was to incentivise new generation and will help to avoid blunting the investment signal provided by LGCs.

However, once the REGO scheme is implemented, the broader eligibility criteria will create an immediate large increase in the number of green certificates available with no new demand (or very uncertain), and those certificates will be able to be used against some of the demand for voluntary certificates currently being filled by LGCs.

As a result, CEIG is concerned that there is a risk of sudden devaluation of the value of LGCs which would blunt the investment signal for clean energy, would go against the principles of the LRET scheme and would fail to support revenue predictability for investors. Ultimately, this could negatively impact on Australia's decarbonisation task by

lowering incentives for clean energy investment.

CEIG believes that further consideration needs to be given to how to mitigate this risk and outlines a number of options available to the Commonwealth government:

1) Increase the mandatory RET by the amount of below-baseline generation from the time that the REGO scheme is implemented (e.g. increase the RET from 33 to around 50TWh p.a., assuming below-baseline generation of around 16TWh p.a.);
2) Extend the mandatory RET period beyond 2030 (for example until 2040 or 2045) to continue incentivising new green generation;
3) Only allow the surrender of new REGOs against new demand (including export) until the end of the mandatory RET. New demand would be defined as green hydrogen, green ammonia, green steel, any new electricity demand since the commencement of the REGO scheme or any electricity export; or
4) Restrict the supply of green certificates (e.g. by making below-baseline power stations gradually eligible to create REGOs between 2024 and 2030).

Those amendments would meet the GO scheme objective of providing low-cost green energy certificates to help green hydrogen and other new industries to grow without negatively impacting on the integrity of the existing RET scheme.

CEIG recognizes that the Commonwealth government should also consider the implications on other market participants, including consumers, and looks forward to further engagement on this issue.

<u>Other linkages with RET scheme</u>

CEIG supports the following proposals:

- making no changes to eligibility criteria for LGC creation; and
- giving the ability for accredited generators to be able to create LGCs or REGOs and the ability to switch between those at any time, noting that there should be no double-counting.

<u>Role for government in providing a certificate framework</u>

CEIG considers that it is highly desirable for the continuation of an Australian Government-led and administered scheme - it is critical to the integrity of the scheme that government maintains a central register, issues certificates and provides for their orderly retirement.

<u>Ability for the REGO certificates to be used for non-hydrogen related transactions</u>

CEIG is pleased to note that the proposed REGO scheme will be able to be used for non-hydrogen related transactions:

> *"[The REGO scheme] could also be used by organisations wanting to demonstrate their progress towards renewable energy and emission reduction targets to investors, customers and the community."*

This is critical to the continued smooth operation of the sizeable PPA market and to the decarbonisation effort.

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Methodology to integrate electricity losses for the purpose of creating REGOs

CEIG argues that actual (rather than marginal) losses should be used for the purpose of creating REGOs. This updated methodology should be reflected as part of the REGO scheme.

CEIG supports in-principle the introduction of the proposed GO scheme

Introducing the proposed GO scheme has the potential to support more ambitious economic and decarbonisation scenarios for Australia. CEIG agrees with the government that the introduction of the proposed GO scheme should enable Australian industry to meet growing domestic and international demand for certified renewable energy and clean products.

CEIG supports in-principle the broad range of attributes proposed to be attached to the GO certificates. This could support future innovation from the private sector to differentiate products based on a broad number of clean attributes, beyond clean energy (e.g. water source attributes). It is useful to list those attributes as part of the GO scheme in a standardised way. It will allow to trace value creation in a transparent manner and to trade that newly created value more efficiently.

CEIG supports in-principle the broad range of attributes proposed to be attached to the GO certificates: it has the potential to support future innovation from the private sector to differentiate products based on a broad number of clean attributes, beyond clean energy.

CEIG thanks the Department of Climate Change, Energy, the Environment and Water for the opportunity to provide feedback on the consultation papers and looks forward to continued engagement on this issue. If you would like to further discuss any elements of this submission, our Policy Director Ms. Marilyne Crestias can be contacted at marilyne.crestias@ceig.org.au.

Yours sincerely,

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