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8 February 2023

AGL Response to Australia's Renewable Electricity Guarantee of Origin Scheme: Consultation Paper

AGL Energy (AGL) welcomes the opportunity to contribute to the Renewable Electricity Guarantee of Origin (REGO) consultation.

AGL is a leading integrated essential service provider, with a proud 185-year history of innovation and a passionate belief in progress – human and technological. We deliver 4.2 million gas, electricity, and telecommunications services to our residential, small, and large business, and wholesale customers across Australia. We operate Australia's largest electricity generation portfolio, with an operated generation capacity of 11,208 MW, which accounts for approximately 20% of the total generation capacity within Australia's National Electricity Market (NEM). We have the largest renewables and storage portfolio of any ASX-listed company, having invested \$4.8 billion over two decades in renewable and firming generation.

Climate and energy policy

In the last two decades, energy and climate policy in Australia has been fragmented, with both State and federal governments having implemented several policies over the last two decades to incentivise new generation but also keep the system reliable, secure, and affordable.

In order to meet the broader objective of supporting Australia's national commitment to reducing emissions, governments have implemented several renewable energy investment programs, most notably the federal Renewable Energy Target (RET), which set a target of sourcing 33 TWh of renewable generation per year. The RET has been successful in supporting a major increase in the number of installations of small-scale renewable energy systems, as well as investment in large-scale renewable power stations. At the same time, other policies and reform programs have been sought to achieve other electricity market objectives, in particular regarding price and reliability.

Central to the operation of the RET has been a certificate-based scheme for renewable electricity and the requirement on retailers to purchase and surrender small-scale technology certificates (STCs) and large-scale generation certificates (LGCs).

These LGCs and STCs under the RET have been a major driver for the relatively rapid growth of renewable electricity in Australia, as they have both provided a strong and enduring signal for investment in small- and large-scale systems, and a viable way to support additional voluntary purchases of renewable electricity.



In parallel to policy actions from the Australian Government, State governments have also implemented several programs to incentivise or directly fund renewable generation, both at a small scale, and for large grid-scale projects. These programs have generally operated in addition to the federal RET scheme, leveraging where possible the architecture of the RET that certifies eligible renewable electricity.

The overall contribution of these renewable programs has seen emissions from the electricity sector reduce significantly over the past decade, as aging emissions-intensive generation has exited the market, replaced by subsidised renewable generation.

However, the RET is due to end in 2030, just as the energy transition will need to accelerate in order to meet ambitious climate targets set by governments and other organisations. It is therefore important to know well in advance how renewable electricity will continue to be certified in order to support the rapid growth in renewables we have seen in recent years.

The role of the electricity sector in decarbonisation

AGL understands the importance of the energy sector to Australia's broader economy and the need to decarbonise the energy sector and reduce Australia's emissions. Reducing emissions in the electricity sector has the potential to unlock substantial reductions in the transport and industrial sectors through fuel switching, and supporting a new era of economic prosperity powered by renewable electricity. Businesses and residential customers may also be able to achieve substantial cost reductions on an individual basis by switching to renewable energy sources.

Businesses and residential customers are increasingly concerned not just about their primary (Scope 1) emissions, but also emissions associated with the production of energy (Scope 2) and emissions in other parts of their supply chains (Scope 3). Being able to track emissions associated with the production of electricity is therefore central to the objective of broader decarbonisation.¹

The imperative to act on climate change by monitoring and reducing emissions in the electricity sector has also coincided with exponential growth in the use and capability of digital services, the expansion of a much more participatory energy customer base, and an increase in both residential customers and businesses seeking to take voluntary action to contribute to emissions reduction, which has also significantly accelerated the demand for products and services that support decarbonisation.

We expect that these trends are likely to continue, and that the acceleration of the energy transition will continue to be guided by evolving trends in customer needs, community expectations, and emerging technologies.

An enduring certification for renewable electricity

¹ For further consideration of this issue, refer to AGL's submission to the federal government's Guarantee of Origin consultation, published alongside this submission in February 2023.



Within this context, as customers become more engaged in the energy transition, there is also increasing scrutiny on the detail of products that claim to be supporting emissions reductions, and a need to be able to measure green electricity production from generation through to end-use.

Certification of green electricity is therefore a key element of driving decarbonisation in the electricity sector, but also supporting decarbonisation of other products and services that use electricity as an energy input.

We therefore support the consideration of an appropriate enduring certification program for electricity as has been put forward in the discussion paper.

Considering the merits of existing schemes

The operation of the existing RET provides a useful starting point from which to assess any improvements that could be made to a certification scheme. The RET has been a useful driver of large-scale generation, both in terms of supporting mandated government policy targets and providing a way to substantiate claims of additional voluntary purchases of green energy through the LGC market. The RET has also strongly incentivised small-scale PV through upfront subsidies provided by deemed STCs.

While the government's consultation paper raises several possible shortcomings of existing renewable electricity certificates (RECs)—for example, generator eligibility, granularity of certificate creation, and other attributes—the impacts on the electricity market from changing the existing structure of RECs under the RET has not yet been comprehensively assessed.

Changes in the way RECs are created, traded, and extinguished could have a material impact on electricity markets, including impacts on wholesale spot prices and market operation, existing REC markets, and existing contracts with renewable generators including government-backed agreements. While the consultation paper has stated that the government intends to minimise these impacts, we would support a phased implementation period for new certificates, guided by possible trials and pilots that can properly assess the impacts of moving towards a more widespread and at the same time more comprehensive certification of renewable electricity.

It is critical that the proposed scheme for certification is resilient, given the scope of renewable electricity development that will be required to support the energy transition both before 2030 and beyond. Helpfully, while the RET continues to be an effective renewable electricity certification for most current purposes, there is a unique opportunity to take some time to carefully consider the best way to structure an enduring scheme for the future.

At the same time, we recognise that there is some immediacy with respect to gaps in coverage of the current RET, which was not established with regard to several issues raised in the consultation paper. While we support swift action to resolve these gaps and to support the acceleration of the energy transition, some caution should be exercised to ensure that immediate actions do not have the effect of unintentionally dampening the important investment signals currently provided by the RET out to 2030.



Our position on these issues is further elaborated in our responses to the consultation questions included at Appendix A to this submission.

We look forward to further opportunities to engage on the direction of this scheme prior to commencement. If you would like to discuss this submission further, please contact Aleks Smits (Senior Manager Policy) at asmits@agl.com.au.

Yours sincerely,

Chris Streets

General Manager (a/g), Policy, Market Regulation and Sustainability

AGL Energy



Appendix A – Response to Questions Raised in Consultation Paper

Policy Position Proposal	Response
<p>1. The Department proposes to develop and implement an enduring tradeable renewable electricity certificate mechanism administered by the Clean Energy Regulator.</p>	<p>While we agree that the CER is the logical choice for administering this scheme, we have some concerns about the capability of CER systems and resources, given the many schemes it administers (RET, ERF, NGER, Safeguard and GO scheme in future) and the level of granular detail that is expected to be recorded for a variety of certificates. Accordingly, there may need to be a material increase in CER funding, which could lead to increases costs for participants across all schemes. This potential cost should be examined more closely prior to making immediate policy decisions.</p>
<p>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.</p>	<p>Facilities could have a number of certificates open to them for creation from a given renewable energy output – REGOs, IRECs, LGCs or STCs. Their choice as to which certificate to generate would likely depend on which they are eligible to generate and which fetches the best price due to perceived value. It will be important that the green credentials of REGOs are stringently verified ensuring a high level of integrity so generators can be confident in making a choice to create this particular certificate.</p>
<p>3. The Department proposes to allow eligible renewable energy sources as defined under the Renewable Energy (Electricity) Act 2000 to create REGOs.</p>	<p>We are supportive of this proposal.</p>
<p>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>	<p>We are supportive of this proposal, although it seems sensible for storage REGOs to be implemented only after establishment period for REGOs from other generation.</p>
<p>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 that is</p>	<p>While we see the benefits of certifying renewable energy for export—particularly in the current context where our large trading partners are considering or implementing carbon border adjustment mechanisms—clarification is required as to which country’s contributions the emissions would count towards under Article 6 of the Paris agreement.</p>



exported internationally, be eligible to create REGOs.

6. The Department proposes to allow all renewable electricity generation to create REGOs regardless of power station age.

We agree with this approach. Allowing pre 1997 or below-baseline facilities to generate REGOs would bring down the cost of certificates by increasing overall supply and allow all renewable generation to participate in the scheme. It could also extend the lifetime of existing renewable energy generation assets if certificate revenue can tip the balance of refurbishment costs. Given the RET was aimed specifically at incentivising new generation this design feature does not need to automatically carry across to the REGO scheme.

While broadening out the REGO scheme could result in a lower certificate price and send the wrong signal to new renewable energy investment, this could be resolved through additional future policies. As customer demand and government policy evolves, the need for incentivising one type of generation over others may become clearer. It would therefore be preferable to include a broader range of generation in the scheme, and allow governments or voluntary purchasers to make more detailed decisions in the future about appropriate incentives.

It is unclear from the consultation paper what mechanism will ultimately drive new renewable energy project development in place of the RET. It may be that voluntary commitments and/or state schemes may not be sufficient drivers to enable the scale of investment required to decarbonise our grid and meet our national emissions reductions targets, requiring additional incentives for new generation build.

7. The Department proposes to allow all renewable electricity generation to create REGOs regardless of power station or storage facility capacity

We are supportive of this concept, as it would allow the democratic creation of certificates by all energy generators from grid-scale to community-owned assets to households with rooftop PV and could incentivise more households and communities to install rooftop solar or battery storage.

In practice, however, monitoring the creation and use of REGOs from small-scale installations may be very challenging to execute.

For example, it may be a very large administrative burden for the CER to administer large volumes of certificates created by owners of residential rooftop solar or other assets, noting there are currently well over 3 million small-scale PV systems installed across Australia.

Allowing aggregators to step in as intermediaries, or



considering a deemed arrangement for some purposes (similar to current STC arrangements), could potentially streamline the administration while meeting the policy objective of tracking all renewable generation.

Methods to track small-scale generation certificates may be able to evolve in parallel to improvements in systems and technology – presently, it is not clear that the benefits of including small-scale technology in the scheme would outweigh the costs.

We also note that almost all existing small-scale PV would have received the benefit of deemed certificates (STC) to 2030 and to avoid double-counting should therefore not also be able to generate REGOs during this period.

Accordingly, there seems no immediate need to implement a hurried solution to what may be a particularly challenging problem, especially if there is no immediate customer demand to this category of REGOs. Over the coming years, Government could consider piloting the best administrative arrangements, leveraging new technologies to monitor and track generation, in advance of the RET and the STC program ending in 2030.

8. The Department proposes to require REGOs include all the information currently displayed on LGCs, and that this information be publicly visible.

We are supportive of this proposal.

9. The Department proposes to allow RET participants to choose to include on LGCs some or all of the additional information required on REGOs.

This proposal could effectively add attributes to LGCs which could lead to less liquidity and fragmenting of the LGC market.

The stratification of LGCs as a result of several different attributes could have impacts on the efficiency of markets – currently LGCs are fungible, supporting liquidity and price discovery, which in turn supports investment signals in renewable energy projects.

The impact of stratification of LGC markets is not clear, but it could dampen investor confidence in specific projects that are perceived as generating LGCs that are not as desirable as other credits in the voluntary market, or projects that could be subject to potential exclusion as a result of a future policy decision.

To be clear, there are both advantages and disadvantages to stratification of units within a market, and the policy decision to support or enable stratification should largely rest on customer demand for different products compared



to the efficiency gains from trading a more fungible product. However, we note that stratified markets will generally produce less efficient outcomes overall. This perspective would support fewer attributes, especially in the absence of a significant demand for different types of LGCs or a policy program that requires them.

10. The Department proposes to require REGOs include the commissioning date of the power station or storage facility creating the certificates.

We are supportive of this proposal in the context of potential demand for 'newer' generating facilities; however, we note that the commissioning date of facilities may become more complicated as older facilities are refurbished, expanded, or redeveloped. Commissioning date may not therefore be a reflective indicator of recent or ongoing capital investment into a renewable project.

Although there may be demand for newer generation facilities, this attribute should not disincentivise continued and additional capital investment into existing renewable generation facilities with older commissioning dates. The benefit of incentivising new developments should be balanced with the clear benefits of extending and expanding existing renewable facilities.

11. The Department proposes to require REGOs to include the grid location of the power station or storage facility creating the certificates.

We are supportive of this proposal in the context of some demand for projects located in specific areas.

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 our view the issue of time-stamping requires much more consideration. While there is some merit to measuring time-of-day generation, the potential for severe stratification of the REGO market may have consequences as covered in other responses to questions above.

While we are supportive of eventually moving towards a more granular time element on RECs, especially to support more accurate carbon neutral claims, switching from the current annual creation of RECs to an hourly granularity increases the complexity of the scheme by several orders of magnitude.

In our view, there is no clear need to launch the REGO certification with such a high degree of complexity, and the issue of greater granularity could be implemented at a later date. The European Union, which has an advanced GO scheme that has been operational for several years, has still not agreed on certified 24h renewable energy certificates despite several discussion papers, consultations, and pilots considering the relative merits of such an approach. Currently certificates in the EU are created on a monthly



basis.

However, there may be some merit in including optional time-stamping on REGOs (not mandatory), to enable pilots and trials to test how 24-hour renewable energy might best be certified in the future. These pilots could also consider the way that such certificates should be created, registered, and tracked, which will be complex issues given the much greater volumes of certificates created when compared to annual RECs.

It could be beneficial for government to begin with project trials to demonstrate best practice for a range of different generators to begin implementing time-stamping certification and build up to an hourly granularity. This would also be an opportunity to gauge consumer demand for these certificates, which we currently expect to be low.

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.

We are supportive of this proposal.

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

For mandatory schemes, the terms of surrendering a REGO are likely to be tied to the scheme under which it is required to be surrendered. For example, future policy developments may mandate the purchase and surrender of REGOs with a specific creation date in order to incentivise new generation. The production time stamp on the REGO should be sufficient to monitor compliance in this example.

At the same time, in order to support a Product GO claim, a REGO should also be reasonably temporally consistent with the production of the commodity for which a GO is being sought. This point is reflected in the Government's GO consultation paper, which proposes that REGO certificates used to demonstrate renewable electricity usage in GOs must have been issued within the previous 12 months. This aligns with international examples such as EU GO certificates that have a 12-month validity period.

With regard to other potential uses for REGOs—for example, to support voluntary claims—the approach is less clear.

For some schemes, such as GreenPower and Climate Active, certificate vintage will be restricted by the terms of the scheme. We would support this approach moving forwards,



and note that the production time stamp of the REGO should serve to meet any requirements for scheme compliance.

However, some care should be taken as to other possible applications for REGOs to ensure that any claims made using REGOs are legitimate. For example, policy makers may wish to avoid a situation where older REGOs that have been banked by organisations are then used to make later claims that could be misleading.

It is important that the REGO market maintain a high level of integrity, and that schemes (both mandatory and voluntary) that utilise REGOs are closely monitored to ensure this integrity is maintained.

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.

We are supportive of this proposal, noting that this could involve a high level of complexity and result in a highly stratified market given the different attributes proposed.

There may be no present benefit in developing very complex systems and processes in the absence of any customer demand for these services.

The CER should undertake more research into the potential need for these services, especially during the initial period, the costs of developing systems that may not be well-utilised, and how these costs will be recovered from participants.

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.

We are supportive of this proposal.

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.

We are supportive of this information being provided at an aggregate level as this could provide trends and insights for energy sector participants. However, we don't support the public disclosure of individual organisation data as this could reveal commercial in confidence information relating to company strategy.