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Australian Government

Department of Climate Change, Energy, the Environment and Water

Submitted via email: GuaranteeofOrigin@dcceew.gov.au

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AGL Response to the Renewable Electricity Guarantee of Origin Approach paper

AGL Energy (AGL) welcomes the opportunity to contribute to the Renewable Electricity Guarantee of Origin Approach paper (Consultation Paper).

AGL is a leading integrated essential service provider, delivering 4.3 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 and have the largest renewables and storage portfolio of any ASX-listed company, having invested \$4.8 billion in renewable and firming generation over the past 20 years and added more than 2,350 MW of new generation capacity to the grid since 2003.

AGL recognises the important role that the electricity sector has in decarbonising the economy. In September 2022, AGL released its inaugural Climate Transition Action Plan (CTAP) under the Say On Climate initiative, which states AGL's updated ambition for decarbonisation, including the following commitments:

- Targeting a full exit from coal-fired generation by the end of FY35 (up to a decade earlier than previously announced).
- Ambition to meet customer energy demand with around 12 GW new firming and renewable assets by 2036.
- An initial target of 5 GW new firming and renewables by 2030.

This submission has drawn on our experiences as a participant and advocate in a number of environmental markets across carbon, renewables and energy efficiency.

The role of the REGO scheme in the energy policy context

Over the years, both state and federal governments have implemented several programs to incentivise investment in renewable generation and the rollout of low-carbon technologies. The impact of both state and federal schemes has seen emissions from the electricity sector decline significantly over the past decade as large fossil fuel power stations exit the market and are replaced with renewable energy generation. While state-based schemes have played a significant part, the overarching Renewable Energy Target (RET) at a national level has perhaps been the largest driving force, providing a clear signal to international investors of Australia's intent to decarbonise the electricity grid. Through Small-scale Technology Certificates (STCs) and Large-scale Generation Certificates (LGCs), the scheme has provided a strong and clear signal for investment in both small and large-scale renewable systems and, in addition to the mandatory target, has also provided an avenue for participants to trade and receive recognition for voluntary climate commitments.



The federal government has set a target of 43% reduced emissions (on 2005 levels) by 2030, as well as an ambition to reach 82% renewables by the end of the decade. At the same time, energy consumers, both at a residential and commercial scale, are continuing to make voluntary commitments to purchase renewable electricity in order to reduce their own emissions. In this context, and with the RET due to end in 2030, there is a need for an enduring mechanism to certify renewable electricity to continue to support both voluntary action and decarbonisation of the electricity sector at a national level.

While the RET has been successful in incentivising the necessary technological and commercial advancements in renewable energy rollout over the past two decades, it is not clear that simply extending the RET is the best approach moving forward, or that LGCs and STCs represent the best way of certifying renewable electricity into the future.

The proposed introduction of additional attributes in renewable electricity certificates, and expansion of the scheme to include wider renewable energy participation, represent useful amendments to the existing certification framework, allowing flexibility to adapt to international trends, support more targeted policies, and meet changing conditions and customer demand. However, while the proposed Renewable Electricity Guarantee of Origin scheme (REGO) provides a strong platform for delivering transparency and confidence to renewable energy development beyond 2030, improved scheme architecture may need to be supported by additional demand-side policies to further incentivise renewable generation development and meet Australia's climate targets. In addition, further action is required both to address the supply-side constraints that have been a significant barrier to the renewable rollout, and to support firming capacity requirements for the energy transition.

Given that the RET is effective until 2030, the introduction of new competing certificates prior to then may disrupt the LGC market. To help manage the transition from the RET to the new scheme and to allow the market to prepare, we would support a phased implementation period for new certificates, guided by possible pilots that can properly assess the impacts of moving towards a more widespread and comprehensive certification of renewable electricity¹.

Barriers to renewable energy development

In recent times, development of large-scale renewable generation has slowed significantly and there are concerns that the rollout of renewable energy is not moving quickly enough to support Australia meeting its 2030 climate target. While the mandatory RET has been met, and LGC prices remain strong, the more pressing concerns around the stalling of the renewables rollout are due to a wide range of issues including social licence, lack of transmission, cost and complexity of connections, planning delays, supply chain constraints, labour shortages, volatile markets, and rising costs of materials and finance in an inflationary world. Additionally, there are concerns around the USA's *Inflation Reduction Act* (IRA) competing for resources and capital investment, and its impact on renewable energy deployment in Australia.

While a renewable energy certificate framework such as that proposed in the Consultation Paper provides some certainty to help support investment decisions being made now, it does not address the more pressing regulatory and physical constraints. Issues around transmission, planning and connections delays, and

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¹ This point is elaborated on further in AGL's submission to the federal government's Guarantee of Origin Scheme Design paper, published alongside this submission in October 2023.



social licence must be resolved as a priority to fast-track the rollout of renewables. Complementary measures such as a scheme target or tax breaks, similar to that of the IRA, may also need exploring as an additional incentive.

Scheme eligibility

AGL is supportive of a scheme that tracks and measures all renewable energy generation, regardless of power station age, for transparency purposes. Broadening of the scheme to include below baseline generation would result in additional supply and potentially a lower certificate price which could send the wrong signal to new renewable energy investment. This could be resolved through a number of supporting policy levers such as a demand-side target or limiting the surrender of below-baseline REGO certificates for certain purposes only.

Below-baseline REGO certificates will likely trade at a discount to above baseline REGO certificates and LGCs, similar to International Renewable Energy Certificates (IRECs) which already fill this gap, as many voluntary standards such as GreenPower and RE100 move to introduce 15-year commissioning limits for power stations supplying renewable electricity. As customers become more engaged in the energy transition and scrutinise the green credentials of products and services, the market is likely to move away from the purchasing of certificates and products seen as having lower integrity such as those with questionable additionality.

Small-scale system inclusion

The installation of consumer energy resources (CER) within Australia is continuing at pace. While generous feed-in tariffs were a key driver of early uptake of solar PV, incentives provided by the Small-scale Renewable Energy Scheme (SRES), and especially the upfront installation rebates from deemed STCs, were a key driver of the widespread deployment of small-scale solar PV in Australia. CER has a large role to play in the decarbonisation of the energy system and to help alleviate cost of living pressures for consumers, however, the rapid growth of CER, in particular small-scale solar, also introduces challenges in managing the stability of the grid.

Both supply-side and demand-side solutions will be required to address these operational challenges. While the further installation of CER provides significant benefits, AGL recognises the need for demand-side solutions to manage the influx of CER by coordinating consumers' demand, generation and storage devices to support grid reliability².

Policy that leverages the certification of exported small-scale solar PV could continue to support the uptake of CER, while also supporting demand-side participation to support the broader grid. As outlined in the Consultation Paper, there are benefits to including small-scale systems within the proposed scheme to transparently capture and track all renewable energy as well as to assist in the orchestration of CER. However, in practice, this could prove quite challenging to execute, and it is unclear whether the benefits would outweigh the administrative burden and potential upfront and ongoing system costs.

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² For example, AGL undertook a Virtual Power Plant project in South Australia from 2017-2021 and from 2019-2021, AGL conducted a three-year demand response project trial in New South Wales, both with funding support from the Australian Renewable Energy Agency (ARENA)



One of the principal reasons that solar PV uptake has been so successful in Australia is because the value of small-scale renewable generation was calculated on a deemed basis, and the administrative burden of creating and surrendering STCs was assigned to other parties, with customers merely receiving the benefit of the STCs in an upfront rebate. In our view, the creation and management of REGO certificates generated by small-scale generation should similarly be managed by other parties, in order to streamline the process and reduce administrative challenges.

The Consultation Paper's approach to allowing owners of smaller systems to assign their rights and responsibilities of REGO certificate creation to an intermediary or aggregator appears to be a sensible step to aid small-scale participation; however, care should be taken to ensure that the more complex architecture of REGO does not create an administrative burden on customers or CER providers.

It is also unclear if the electricity that is generated by a small-scale solar installation and consumed on site - or for that matter, any renewable generation that is consumed behind-the-meter (BTM) - should be captured by some form of certification. Whereas STCs under the SRES are created under a deemed methodology according to installation size, our understanding is that REGO certificates would only be created from electricity exported to the grid for small-scale systems. This may create the wrong incentives for solar installers who should be focused on maximising self-consumption for customers, rather than seeking to create REGO certificates from exported generation. Additionally, participation of residential storage may be limited if only grid-connected storage can create REGO certificates.

For similar reasons as stated above, it is also not clear how REGO certificates might be structured to support other CER, such as batteries, heat pumps, and electric vehicles (EVs). These other resources, while not focused on the generation of electricity, have an important role in supporting decarbonisation by reducing reliance on fossil fuels, shifting load, reducing peak demand, and providing grid stabilisation services.

This does not mean that exported solar should not be used to create REGO certificates – however, it does suggest that a different type of methodology may need to be considered to measure the benefit of CER and BTM installations, which could then be leveraged to develop policies to drive further uptake. The uptake of non-solar small-scale resources has been slower to-date in part because of significant upfront costs. In future, targeting small-scale technologies necessary for grid stability such as batteries and EVs, as well as demand-response mechanisms, will therefore become more important as BTM solar installations further increase. It may be that the REGO architecture may not be particularly useful at supporting these outcomes.

While we understand that the proposed scheme does not aim to replicate the incentives provided under the existing SRES, it's worth considering more broadly how this scheme will coincide with other policy mechanisms that encourage CER uptake. In particular, a more targeted approach may be required to support small-scale technology installations in public housing, schools, rental properties and low-income households, to ensure that all consumers can participate and benefit from CER.

In this regard, it is worth also considering the interaction of the proposed scheme with state schemes, as there are sometimes overlapping activities, e.g. VEECs or STCs can be created for solar water heaters. Care must also be given to avoid potential loopholes such as double deeming when replacing existing solar panels.

As there is time to carefully consider how CER can integrate within the REGO scheme, given that many small-scale systems will not be eligible to participate until later this decade, we encourage the government to



investigate the issues in more detail, and to design, test, engage, and refine the scheme to best support participation and orchestration of CER in the electricity system over the coming years.

Electricity storage inclusion

As the speed of the energy transition increases, and coal plants continue to shut down at pace, there is an increasing urgency to roll out storage quickly to support the transition of the grid to renewables and decarbonise. While storage forms a critical part of the resources required to drive the energy transition, the benefits of including storage in the proposed scheme are less clear.

We are supportive of the proposal to allow storage facilities to create REGO certificates for electricity dispatched if they demonstrate that the stored energy came from eligible renewable electricity generation by first surrendering an appropriate REGO certificate or LGC. However, our view is that storage facilities will only participate in the scheme if they believe that they will receive a premium for the certificates they create for dispatched electricity over the price paid for the certificates they surrender for energy stored. This makes sense if time stamping is involved and buyers are willing to pay higher prices for energy dispatched at certain times of the day. However, if buyers are unwilling to pay for this, then the benefits of the inclusion of storage in the scheme are less clear.

While we don't object to the inclusion of storage in the scheme, if the objective of REGO is to incentivise additional storage then maybe some other mechanism is best, as certifying electricity dispatched from storage installations appears to be burdensome.

REGO certificate attributes

AGL supports providing sufficient information to consumers to allow below-baseline differentiation and to enable participants to make informed choices in supporting renewable energy builds. However, it's worth considering the impact that adding a below-baseline status may have on renewable certificate prices as this added level of differentiation may lead to additional stratification and affect market liquidity. In general, markets with tradable certificates that hold multiple attributes have the potential to stratify and impact market efficiency. An example of this is the Australian Carbon Credit Unit (ACCU) market which has become fragmented as a result of different methodologies commanding different prices due to perceived integrity differences. As a result, ACCUs are not treated equally, and liquidity is often low.

Similarly, time stamping may lead to further price stratification and undermine tradability. While there appear to be some use cases for time stamping, these appear limited in the context of the overall market for renewable electricity, and the complexity and cost involved could be significant. While we understand that global certification frameworks are looking to introduce this type of temporal detail, we do not see a clear need to introduce mandatory time stamping immediately. We believe it would be prudent to further assess the implications of time stamping to ensure that the administration costs do not outweigh the benefits. Pilots could be a useful mechanism to test and refine certificate implementation and to gauge customer interest in particular attributes. AGL looks forward to further detail on the implementation of time stamping in the regulations to be developed in 2024.

For additional views on the implementation of this scheme, please refer to our submission on the Guarantee of Origin Scheme Design paper. We look forward to further engagement on the intent and implementation of this scheme.



If you would like to discuss any aspect of AGL's submission, please contact Casey Barkla-Jones cbarkla@agl.com.au or Aleks Smits at asmits@agl.com.au.

Yours sincerely,

Chris Streets

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