1 November 2021

Tim Kelly
Adelaide SA

Australian Government – Clean Energy Regulator
RET and Energy Section
GPO Box 621 Canberra ACT 2601
CER-RETandEnergySection@cleanenergyregulator.gov.au

Cc, ACCC, ASIC, Productivity Commission & Climate Active

Dear RET and Energy Section

RE: Consultation on the Second CERT Reporting Scheme Consultation

Please accept this submission on the second round of consultation of the Corporate Emissions Reduction Transparency Reporting Scheme.

It is noted that the CERT as proposed, uses market based concepts that are currently not exclusive and are not established in law. These concepts are would be applied in contradiction to the legislated National Greenhouse and Energy Reporting Determination and the non-legal National Greenhouse Accounts (NGA) Factors. The CERT as currently proposed, is also non-legal reporting guidance which therefore does not improve the integrity or transparency of corporation reports, or of reputational, product and service based claims. Rather, the CERT continues to lock in double counting and provides no transparency or clarity for corporations or customers.

In so far as seeking feedback on the practical implementation of the CERT then all aspects of this submission are relevant because in its current form the CERT does not assist participants to *"communicate their achievements to consumers, investors, shareholders and government agencies, providing confidence in progress towards their emissions reduction commitments*".

At the heart of the issue is a major misunderstanding or misrepresentation of market based accounting which is necessary for claims of renewables and offsets to have integrity. There is also a misuse of accounting as it applies to emission scopes and offsets with no acknowledgement that Australian Carbon Credit Units and Large Scale Certificates do not yet contain the legal attributes that they are being traded for in voluntary markets.

Virtually all of the issues identified in this submission, have been identified previously and not properly acknowledged or addressed. Australia's carbon markets in their current state can only be described as lawless, double counted and farcical.

In this submission I address the key areas of misrepresentation and concern with reference to the Consultation Paper and the proposed CERT Reporting Guidelines. There is a solution to bring the multitude of Australian schemes and claims in line with the Greenhouse Gas Protocol best practice, including the GHG Protocol Scope 2 Guidance and this is described as follows.

SOLUTION TO ESTABLISH INTEGRITY IN AUSTRALIA'S VOLUNTARY CARBON AND RENEWABLE ENERGY MARKETS

Australia as an advanced economy with an established REC Registry and Clean Energy Regulator should now fully embrace market based GHG accounting for renewable electricity and carbon offsets.

To achieve this outcome, market based accounting should be integrated into Australia's Climate Change Accounting Law, which is the National Greenhouse and Energy Reporting (NGER) Framework via the NGER Determination.

- No change is required for the scope 1 emissions methods which by definition, are location based.
- For consistency, the National Greenhouse Accounts (NGA) Factors need to be brought into the NGER Framework to legally apply to all participants in Australia's low carbon markets. This is not about forcing all participants to report under the NGER reporting, it simply means that when sellers and buyers are making reputational, product and service based claims, they all follow the same set of market rules under a legislated framework.
- A change to the NGER Determination is needed to transition to market based accounting for scope 2 emissions will require alignment of the Determination with the GHG Protocol Scope 2 Guidance. A single method to claim renewable electricity use and zero scope 2 emissions is required. The revised NGER Determination should formerly establish a National Residual Grid Mix Factor. Those not making emissions specific claims for renewable electricity should be reporting their electricity emissions using the Residual Grid Mix Factor as the primary method, including to make any and all reputational, product and service based claims. The Dual Reporting with a location based factor should therefore become a reference point only and must not be a choice, as this would not prevent double counting.
- To align the Residual Grid Mix Factor (RMF) with a location based factor, the State Average Factors should no longer be used. Instead, dual reporting should use the National Location Based Factor to compare performance against the primary market based method.
- If LGCs are to be treated as incorporating renewable use and zero scope 2 emission attributes then these attributes need to be legally assigned with the Large Scale Certificates.
- All eight quality criteria of the GHG Protocol Scope 2 Guidance should be achieved.
- A change to the NGER Determination is needed to introduce market based accounting for carbon offsets as negative scope 3 emissions. This is essential to stop double counting across producers, consumers and sectors. Where a carbon offset such as Australian Carbon Credit Units are sold or allocated across different entities or locations, then basic debit and credit rules need to apply such that a scope 3 emission are added to a sellers account in order for scope three deductions to be claimed by a buyer/end user. This basic concept is the foundation of financial markets and must also apply to carbon markets in order for integrity, certainty and sustainability to be established.
- NGER reporting, Climate Active, GreenPower, the Hydrogen Guarantee of Origin Scheme and the CERT should all be based around a common single National Greenhouse and Energy Accounting framework that is established under the NGER Determination.

- Given the scale and expansion of low carbon markets together with the rapid growth of emissions and renewable electricity related claims:
    - The Clean Energy Regulator needs to address the fundamental problem of low carbon markets not having a legislated carbon and renewables accounting framework.
    - The Department of Industry, Science Resources and Energy needs to start addressing carbon accounting rules seriously to establish long term and sustainable carbon markets and claims integrity to legally underpin such concepts as renewable hydrogen, green steel and exporting renewable electricity to Asia, as well as underpinning Australia's domestic low carbon markets and claims.
    - The Australian Securities and Investment Commission (ASIC) should be called upon to assure that NGER reporting and claims, GreenPower, Climate Active, the CERT, The Hydrogen Guarantee of Origin Scheme, NABERS are all underpinned by an emissions and renewables accounting framework that is robust and applies consistently across the economy for Corporations to be protected when making investment decisions.
    - The ACCC should be called upon to assure that all the schemes have sufficient legal foundation, clarity and fairness to enable enforcement actions to be applied where required to protect consumers
    - The Productivity Commission should be asked to address:
        - The economic impacts of the continuation of the RET from now until 2030 noting that the target has already been achieved and continuation creates unwarranted scarcity for renewables and artificial upward pressure on prices in voluntary renewable electricity markets that are already primed to take over from the mandatory mechanism
        - The economic impacts of not allowing pre 1997 renewable electricity a place in voluntary markets
        - The economic impact of not having a single national accounting and allocation framework for greenhouse gas emissions, renewables and offsets to legally apply across the market to provide business and customer certainty and assurance.

CERT CONSULTATION PAPER

1.1 Context

The Discussion Paper states that: "*Investors and other stakeholders can be assured that progress is real for net emissions data verified by the agency*". The statement is not correct as the data for Renewable Electricity and Australian Carbon Credit Units is not supported by law and is contradictory to the existing NGER Determination which is legislated and based on location based accounting. It is also contradictory to the non-legal NGA Factors, which are widely used across the economy for greenhouse reporting and carbon calculators.

These schemes can be reformed to integrate market based accounting under a single accounting framework but the Government has resisted such efforts for at least sixteen years.

1.3 Coverage

The Discussion Paper describes coverage as including *"• progress towards those commitments and the associated evidence, including annual gross and net scope 1 and scope 2 emissions"*

There is an error in GHG accounting in the way that net emissions are presented. Whilst it is possible with reforms to formally establish market based accounting, that net scope 2 emissions and net scope 3 emissions could be calculated, and for net emissions across scopes 1, 2 and 3 to be calculated, reported and claimed, the concept of *net scope 1 emissions* is not possible. By definition, scope 1 emissions are location based and cannot be directly changed. Climate Active should respect the basic logic of carbon accounting for it to work.

There seems to be an attempt to shield corporations from responsibility to account for scope 3 emissions, by treating carbon offsets (negative scope 3 emissions) as wildcards that bypass scope 3 accounting. This is incorrect. If corporations are to claim carbon offsets, or to create and sell carbon offsets then there is an absolute need to follow scope 3 accounting practices with debit and credit rules.

1.4. Complementing existing frameworks

This section makes reference to several frameworks but fails to acknowledge the GHG Protocol. Given that The CERT is introducing concepts claim to be in line with Climate Active and Market based accounting, the GHG Protocol should be prominent.

In this section there is a statement that *"CERT is underpinned by data collected as part of the NGER scheme and the Renewable Energy Target (RET)"*. Previously, in the first round of consultation the Department stated that the CERT "will be underpinned by the National Greenhouse and Energy Reporting scheme". This statement was not true and it is welcomed that the new discussion paper and proposed guideline no longer makes this false claim. There should be a proper retraction of this erroneous claim in order to be open and transparent about the issues. Instead the CER has once again chosen cryptic language to mask across the issues.

It remains deeply disturbing that market based reforms are not being made to the NGER Framework so that it could underpin the CERT, GreenPower, NABERS, Climate Active and the Hydrogen Guarantee of Origin Scheme.

Again, in describing how a company can calculate net scope 1 emissions, Climate Active has departed from basic accounting principles for emission scopes.

2.What data and information will be published in CERT?

The consultation paper states that *"As a general principle, the CERT framework seeks to access information and data already reported to the agency through other mechanisms*". However, where market based accounting is adopted in a jurisdiction, then to prevent double counting, it is necessary to take steps to ensure **exclusive claims of attributes** and establish debit and credit rules to support market trading and claims for scope 2 emissions and scope 3 offsets. There is a need for the location based scope 2 accounting to be replaced as the foundation for reputational, product and service based claims, by market based accounting of either contractual claims or use of the Residual Mix Factor (RMF).

Whilst an NGER location based factor can continue as a point of comparison, there needs to be a transition away from its use for primary reporting and claims. This is matter has been fully dealt with by the GHG Protocol Scope 2 Guidance, but is ignored by the CERT, NABERS, Climate Active and the Hydrogen Guarantee of Origin Scheme.

There is also a statement of caution that:

> *"CERT participants are responsible for the accuracy and quality of data and information provided to the Clean Energy Regulator for CERT. Participants should ensure they comply with legal or regulatory requirements, including any ASIC guidance on climate risk disclosure and legal requirements regarding false or misleading information".*

The statement does not mention the need to comply with the Trade Practices Act. The ACCC has prepared guidance in relation to Green marketing and the Australian Consumer Law, but compliance is not possible when market based accounting is not established in law and exists in contradiction to the NGER Determination and NGA Factors.

In particular, corporations will continue to have material difficulty in demonstrating the following requirements:

ACCC Requirement	Implementation issues
'Renewable' or 'green' energy These claims should disclose the proportion of energy which is obtained from renewable sources if it is less than 100 per cent.	**This is impossible because there is no legal method.** **Some use location based, some use market based claiming LGCs certificates and others make claims without LGCs**
The source of the energy (e.g. solar, wind, hydro or biomass) and whether it is new renewable energy should also be disclosed.	**This is impossible because there is no legal method to make exclusive renewable electricity use claims or to associate with specific sources of renewables via the grid.**
The means by which you may be contributing to beneficial environmental outcomes by purchasing 'green power' are complex and should be clearly explained to you when you elect to sign up.	**This is impossible because there is no legal method.** **GreenPower is based on 100% double counting and is not legally defined.**
Things for you to think about: • Several state and territory governments operate a GreenPower accreditation scheme to help consumers select between different renewable energy offerings. • You can find out more about renewable energy by visiting the GreenPower website at www.greenpower.gov.au.	**It is not possible to find out accurate information from GreenPower, as GreenPower is not founded in legislation. It competes with the legislated location based NGER Determination and non-legislated NGA factors**
'Carbon neutral', 'carbon offsets' and 'greenhouse gas emission' claims Some businesses make claims about the levels of greenhouse gas emissions associated with their products and the measures	

they have in place to 'offset' them Things for you to think about: • How are the carbon offsets generated? Does the offset have any other negative or positive side effects? • Do claims about carbon offsets or carbon neutrality relate to the whole life cycle of the product? • Do claims relate to emissions from the production of the product, emissions from the product's use, or both? • Has the offset been independently audited? What standard is used? • Would there have been a reduction in emissions without your help? Emission reductions from the offsets you purchase should be in addition to what the government requires of business.	**This totally ignores the issue of GHG reductions being claimed by both sellers and buyers** **Claims cannot relate to emissions reduction of ACCU carbon offsets, as these do not incorporate the carbon offset in law. Regardless of what standard has been used to create the offset, Australia has not established any legal debit and credit rules for trading and claiming carbon offsets.**

In summary, the CERT discussion paper issues a caution to corporations to comply with the law, whilst not addressing that the CERT and the way market based accounting is being introduced, is not founded in law. Therefore, claims cannot be made in accordance with Australian Consumer Law. The caution is therefore nonsense.

3.3. Accounting options

The accounting options allow participating entities to choose a scope 2 accounting method that best suits their situation. This is a major departure from market based accounting defined by the GHG Protocol Scope 2 Guidance which envisages that where jurisdictions adopt market based accounting, then those not buying emissions specified electricity, would otherwise report using the RMF. Location based reporting is then used in dual reporting as a point of comparison only in dual reporting.

There is no integrity in a system that allows both market based and location based claims of the same renewable electricity or offsets abatement at the same time in the same market jurisdiction.

Eligible certificates and units

RE: "*Voluntary surrenders of Australian Carbon Credit Units (ACCUs) and Certified Emissions Reduction Units (CERs) in the Australian National Registry of Emissions Units will be confirmed and accepted as offsets for scope 1 or reduction in scope 2 emissions".* This is a problem because ACCUs do not legally incorporate the carbon offset in law, as market based accounting has not been established in Australia. I won't comment on international offsets but offsets in general need to be used within an accounting framework with debit and credit rules.

Re: *"LGCs that are voluntarily surrendered for the purpose of reducing the emissions intensity of electricity consumed by the company (scope 2 electricity consumption) are eligible for the CERT report".* LGCs do not incorporate any tradable attributes in law.

3.5. Avoiding double counting of ACCUs

Re: "*A principle of CERT is no double counting of carbon abatement"* This is a worthy and essential principle that I have been arguing for over the past sixteen years. This principle needs to be formally established in all climate policy and schemes. However, the CERT does not prevent double counting of abatement, it continues and further entrenches double counting.

The CERT vaguely establishes *a no double counting of abatement principle* as passing comment and then ignores that same principle.

A key problem is that the CERT only considers double counting of the ACCUs [the certificates], but does not acknowledge double counting occurs all around the ACCUs where those creating and selling ACCUs can continue to claim emissions reductions as well as those buying ACCUs claiming emissions reductions.

The constraints on Safeguard Corporations for not selling offsets where they are obliged to make reductions, does not prevent claims in relation to all offsets created and sold on voluntary markets. This is because basic debit and credit rules for carbon offsets as negative scope 3 emissions have not been created. For market based accounting to have credibility, those selling carbon offsets should add a scope 3 emission to their account or claims. Those buying carbon offsets can then subtract a scope 3 emission from their account.

Re:

> *Where ACCUs are issued for an ERF project that does not reduce a company's reportable emissions in NGER, these emissions would not be added to a company's gross emissions profile. For example, ACCUs issued for a land-based project would not be included, as land-based emissions are not reported under NGER.*

If Corporations are to make market based claims using offsets from the whole market with reputational, product and service based claims mad to the whole market, and international market, then there is no justification for suggesting that accounting rules do not need to apply outside NGER Reporting to the whole market.

Whenever a carbon offset is created and sold then a scope 3 emission should be added to the sellers account in order for a customer to claim a scope 3 offset. This is about basic debit and credit rules. If a seller is not an NGER liable Corporation and does not make any public reports then there may not be any public disclosure. However, if the seller is also making any market based claims, any reputational product and service based claims, then the integrity of the market depends on the seller acknowledging that they have sold the offset and the seller should have therefore added a scope 3 emission to their account, for a buyer to deduct a scope 3 emission from their account. For example

A revegetation project sells 25 tonnes of carbon offsets.

- The Seller has sequestered 25 tonnes of scope 3 emissions
- They sell 25 tonnes of negative scope 3 emissions as a carbon offset
- THE SELLER CAN CURRENTLY CLAIM THE SCOPE 1 EMISSIONS REDUCTION AND SELL THE CARBON OFFSET AT THE SAME TIME

- Under a market based accounting framework with reforms, the seller can report and claim negative 25 tonnes scope 1 but should also add 25 tonnes of scope 3 emissions to their reporting/claims equaling net zero across scopes 1 to 3 emissions for their business in this this transaction.
- The buyer of the carbon offset can then have exclusive use of the abatement to claim negative scope 3 emissions of 25 tonnes to record against their aggregated scope 1, 2 and 3 emissions accounting and claims.

A business creates 25 tonnes of ACCUs through an approved ERF method

- This business is not a safeguard liable entity or if they are, they are well within their cap and can therefore sell the ACCUs on voluntary markets
- CURRENTLY THE SELLER CAN SELL THE CARBON OFFSET WHILST CONTINUING TO REPORT LOWER SCOPE 1 OR 2 EMISSIONS. THIS IS A DOUBLE COUNTING LOOPHOLE
- Under a market based accounting framework with reforms, the seller must decide whether to keep or sell the carbon abatement.
- If the seller decides to sell the carbon abatement then the seller should add 25 tonnes of scope 3 emissions to their account/claims
- Whilst NGER mandatory reporting does not require reporting of scope 3 emissions, as soon as a Corporation seeks to make reputational, product and service based claims they are operating in a market accounting environment which requires accounting for major scope 3 emissions and offsets.

Without proper market based accounting, abatement is double counted regardless of certificates. When certificates like ACCUs do not legally incorporate the carbon offsets that they are being used for and with no basic debit and credit rules, then it is near impossible to prevent the double counting of abatement.

3.6. Scope 2 emissions accounting

As with ACCUs, the principle of no double counting of abatement has not been fulfilled in regard to renewable electricity claims in this CERT Guideline.

The CERT proposal fails the following key criteria described in the GHG Protocol S2G such as:

> All contractual instruments used in the market-based method for scope 2 accounting shall:
>
> **Criteria 1.**
> *Convey the direct GHG emission rate attribute associated with the unit of electricity produced.*
>
> **Criteria 2.**
> *Be the only instruments that carry the GHG emission rate attribute claim associated with that quantity of electricity generation.*

Criteria 8
Finally, to use any contractual instrument in the market-based method requires that: An adjusted, residual mix characterizing the GHG intensity of unclaimed or publicly shared electricity shall be made available for consumer scope 2 calculations, or its absence shall be disclosed by the reporting entity

Market Based Accounting as described by the GHG Protocol S2G, has been misrepresented in this CERT Guideline.

The allowance "*A company may nominate which scope 2 accounting approach they prefer to use to track progress toward their voluntary commitments*" perverts the integrity of market based accounting and is not consistent with the S2G. It fails to meet Criteria 8.

Under the S2G, where market based accounting is established, there is a separation of voluntary renewables from the grid factors used by those not seeking to make market based claims. Chapter 4, Scope 2 accounting methods Pg. 27 of the GHG Protocol Scope 2 Guidance describes that:

> *The emissions from all untracked and unclaimed energy comprise a residual mix emission factor.* ***Consumers who do not make specified purchases or who do not have access to supplier data should use the residual mix emission factor to calculate their market-based total.***

This means that the use of a residual mix emission factor is part of market based accounting. The CERT completely ignores this aspect of the GHG Protocol S2G.

Summary of the GHG Protocol Scope 2 Guidance

For electricity accounting, the GHG Protocol acknowledges location based accounting and market based accounting as summarised below (these are not quotes):

Market based accounting

Where jurisdictions allow market based claims (such as GreenPower or LGCs), then there is an expectation by the S2G that a residual Grid Mix factor would be used by all customers that purchase unspecified electricity as the method to make reputational, product and service based claims.

Market based accounting =	Buying renewables electricity to make reputational, product or service based claims **Or** Unspecified electricity using an RMF to make reputational, product and service based claims

Location based accounting is not described as a choice for individual entities operating in a jurisdiction where market based claims are made because this will cause double counting.
Where entities report market based outcomes in a jurisdiction that does not provide a Residual Grid Mix factor, they are required to disclose its absence (because double counting is not prevented)

Location based accounting

Where jurisdictions use location based accounting, they report and make reputational, product and service based claims using location based factors the voluntary purchasing of electricity from a grid is not supported.

Location based accounting =	Using a grid average emissions intensity factor to report electricity emissions and for making reputational, product or service based claims. Renewables via the grid cannot be claimed.

Dual Reporting

Dual reporting is a feature of the GHG Protocol S2G which requires the location based emissions to be reported as a **secondary** point of reference where market based claims are made.

Dual Reporting =	Primary reporting for the purposes of making reputational. Product and service based claims under **the Market Based Method.** Secondary reporting under the **Location Based Method** as a point of comparison.

3.8. Providing context

Whilst Climate Active publish a Residual Mix Factor, this not yet used as a part of the legislated NGER Determination or the non-legal NGA Factors that cover the vast majority of reporting and claims.

There is no current Australian Government guidance to direct sellers and consumers to use market based accounting as primary for reputational, product and service based claims. The NGA Factors do not cover a Residual Mix Factor.

The GHG Protocol S2G has some specific requirements for businesses claiming to report market based emissions reductions from renewable electricity in jurisdictions where a Residual Grid Mix factor is not in use.

Criteria 8 of the GHG Protocol S2G require that:

> ***Residual mix***
>
> *To ensure unique claims by all electricity users, an adjusted, residual mix characterizing the GHG intensity of unclaimed or publicly shared electricity is necessary. This residual mix should be based on combining national or subnational energy and emissions production data with contractual instrument claims. If a residual mix is not currently available, companies shall disclose that an adjusted emissions factor is not available or has not been estimated to account for voluntary purchases and this may result in double counting between electricity consumers. Reporters may provide other information about the magnitude of this error, where it is available and where it puts the scale of the residual mix adjustment into a context of other sources of error in grid emission factor calculation.*

The CERT Guideline as proposed, does not require companies to disclose that an adjusted residual grid Mix Factor is not being used by the vast majority of NGER reporters and Australian markets using the NGA Factors. It does not disclose that there is systemic double counting as a result. Omitting this essential contextual information places those participating in the CERT and the scheme as a whole, at risk of challenge.

The broader issue is about why Australia as a nation with an advanced REC Registry and the ability to apply market based accounting across the economy in order to stop double counting, to align with the GHG Protocol scope 2 Guidelines and support renewable electricity markets, has not done so.

FEEDBACK ON THE REPORT GUIDELINE

Some of the comments in this section may repeat comments made regarding the Consultation Paper.

3.6 Context statements

The CERT Guideline should warn those corporations reporting under the GHG Protocol to disclose that Australia has not applied a Residual Grid Mix factor across the electricity market for all those not buying emissions specific electricity (such as accredited renewables) to report and claim emissions using a residual grid mix factor. The CERT does not warn corporations that '***Australia has not yet established market based accounting in law, so abatement claims made under this reporting guideline may be double counted***'.

4.1 Eligible units and certificates

Re: "*4.1.1 Units eligible to be included in CERT (against scope 1 and scope 2)*". The Guideline misdirects participants with improper guidance to users that carbon offsets can be used directly against scope 1 & 2 emissions to produce a net scope 1 or 2 value. Scope 1 emissions by definition, cannot change and scope 2 emissions can only be changed under market based accounting by emissions specific electricity (such as accredited renewables). The CERT

Guideline should be reworded for carbon offsets (as negative scope 3 emissions) **to be used across the aggregate of scope 1, 2 and 3 emissions** to produce a net value.

5.1 Net emissions position

Again, the proposed CERT Guideline misdirects participants that carbon offsets can be used directly against scope 1 & 2 emissions to produce a net scope 1 or 2 value. Offsets need to be used against the aggregate of scope 1, 2 and significant scope 3 emissions.

It is noted that the scope 3 emissions of reporting organisations are not even acknowledged. Where Corporations are seeking to make reputational product and service based claims using carbon offsets and market based methods, there is no justification for those corporations to omit their major scope 3 emissions. It is fundamentally wrong to try to claim scope 3 offsets whilst not acknowledging scope 3 liabilities in claims. Under NGER Scope 1&2 only reporting they can do this, but in voluntary markets, there are elements of the Trade Practices Act that should require full disclosure of green claims, including emissions counted and those not counted in relation to the claim.

Such disclosure would quite rightly discourage businesses from claiming scope 3 offsets whilst not acknowledging significant scope 3 emissions.

5.2 scope 1 emissions

RE "*5.2.2 A participant's 'Net scope 1 emissions' is calculated using the following equation":*

$$\text{Net scope 1 emissions} = \text{Gross Scope 1 Emissions} + \text{ACCUs issued for emissions reductions activities} - \text{eligible units}$$

This equation is presenting an incomplete narrative. By definition, the concept of net scope 1 emissions does not exist.

The CERT does not address that ACCUs can be created and sold by all those operating outside the scheme whilst they can still claim the reductions for reputational, product and service based claims.

What can and should exist (with market based reforms in the NGER Determination) is the following equation:

Net emissions = the sum of scopes 1. 2 & significant 3 emissions less carbon offsets purchased (as negative scope 3 emissions), plus carbon offsets sold (as scope 3 emissions).

The equation needs to apply across the whole economy, to all market participants, in order to establish credibility to any market based claims.

5.3 scope 2 accounting

This section is a major distortion of market based accounting and requires rewriting in its entirety.

If the Government, CER and CERT are looking to enable market based accounting then this needs to be done with the basic intent and safeguards of the GHG Protocol Scope 2 Guidance.

In market based accounting those making reputational, product and service based claims must either report and claim using an emissions specified product (such as accredited renewable electricity) **or** report using the Residual Mix Factor.

The location based reporting is simply then reported as a secondary point of comparison in dual reporting. It should be based on a national grid average factor to serve as an appropriate comparison to the national RMF. This is because all consumers across Australia have contributed equally to Australia's mandatory renewables, despite some states appearing greener with low state based factors.

Individual participants should not be able to choose between location or market based methods as this is a choice to be made and to apply across the whole jurisdiction and market.

It is not acceptable to establish new contradictory frameworks in a CERT trial, given the 20 years of delayed action by the Federal Government on establishing basic market accounting and reforms for renewable electricity and ten years of delay for carbon offset accounting.

If the Department is seeking to give Industry market based outcomes and support low carbon markets in the broader economy then location based accounting should be presented in the CERT Guidelines after and secondary to market based accounting.

5.3.8 'Market-based net scope 2 emissions' is calculated using the following equation:

The **scope 2 location vs market-based accounting** diagram fails to acknowledge that where market based accounting is used in a jurisdiction, for businesses and individuals to make reputational, product and service based claims, location based accounting **should not** also be used for such claims. Refer to GHG Protocol Criteria 2, 7 and 8.

Fig: GHG Protocol Scope 2 Guidance Table 7.1 scope 2 Quality Criteria Pg. 60

Table 7.1 Scope 2 Quality Criteria

Further explanation on select Scope 2 Quality Criteria can be found in Section 7.5.

All contractual instruments used in the market-based method for scope 2 accounting shall:
1. Convey the direct GHG emission rate attribute associated with the unit of electricity produced. 2. Be the only instruments that carry the GHG emission rate attribute claim associated with that quantity of electricity generation. 3. Be tracked and redeemed, retired, or canceled by or on behalf of the reporting entity. 4. Be issued and redeemed as close as possible to the period of energy consumption to which the instrument is applied. 5. Be sourced from the same market in which the reporting entity's electricity-consuming operations are located and to which the instrument is applied.
In addition, utility-specific emission factors shall:
6. Be calculated based on delivered electricity, incorporating certificates sourced and retired on behalf of its customers. Electricity from renewable facilities for which the attributes have been sold off (via contracts or certificates) shall be characterized as having the GHG attributes of the residual mix in the utility or supplier-specific emission factor.
In addition, companies purchasing electricity directly from generators or consuming on-site generation shall:
7. Ensure all contractual instruments conveying emissions claims be transferred to the reporting entity only. No other instruments that convey this claim to another end user shall be issued for the contracted electricity. The electricity from the facility **shall not** carry the GHG emission rate claim for use by a utility, for example, for the purpose of delivery and use claims.
Finally, to use any contractual instrument in the market-based method requires that:
8. An adjusted, residual mix characterizing the GHG intensity of unclaimed or publicly shared electricity shall be made available for consumer scope 2 calculations, or its absence shall be disclosed by the reporting entity.

The CERT scope 2 location vs market-based accounting diagram fails to clearly show that those consumers not buying accredited renewables should report using the residual grid mix. It is a poor diagram that would be difficult for many to properly comprehend.

It is suggested that a plain English explanation is improved to reflect the following, in addition to redrafting the diagram.

Market based accounting =	Buying renewables electricity to make reputational, product or service based claims **Or** Unspecified electricity using an RMF to make reputational, product and service based claims

Location based accounting =	Using a grid average emissions intensity factor to report electricity emissions and for making reputational, product or service based claims. Renewables via the grid cannot be claimed.

Dual Reporting =	Primary reporting for the purposes of making reputational. Product and service based claims under **the Market Based Method.** Secondary reporting under the **Location Based Method** as a point of comparison.

5.3.9 A participant's market-based 'Residual emissions' is calculated using the following equation:

RE:

$$Residual\ emissions = Residual\ electricity \times Residual\ mix\ factor$$

And

$$Residual\ electricity = (Imported\ electricity - EITE\ electricity\ consumption) \times (1 - RPP) + EITE\ Electricity\ consumption + Renewable\ onsite\ electricity\ consumption\ (LGC) - LGCs\ surrendered$$

The presentation of residual electricity is potentially confusing. I am not sure that the term *Residual Electricity* is appropriate and I am not understanding that that this term relates to anything 'residual' in the grid like the Residual Mix Factor does. What is the document trying to say in plain English? Is this about electricity not claimed as renewable under a market method, or produced and consumed on site but where LGCs have been sold? If that is the case, the RMF should apply? Is that what the document is trying to say?

EITEIs

In regard to Energy Intensive Trade Exposed Industries that are claiming RET Exemption Certificates, they should just report residual mix emissions, nothing else

Should EITEI Corporations choose to start claiming renewables, then the requirement would be that they must stop claiming RET Exemption Certificates in order to claim the RPP. Beyond the RPP they would need to buy accredited renewables.

All Other Consumers

For all other Consumers whether inside the CERT or not, the transition to market based accounting means that they need to be allocated their electricity emissions in two parts.

For the Mandatory RPP, all other consumers need to be allocated zero scope 2 emissions for the RPP. This is because it has been netted out of the National Grid Average Factor but still needs to be given back to the consumers that are paying for it across Australia

For the (1-RPP)% of electricity use all other customers they need to be allocated residual grid mix emissions. This means that the values on electricity bills need to be calculated using the

market based methods, all the carbon calculator tools need to be updated and the changes need to be made in the NGA Factors and NGER Determination. Otherwise the system is still stealing renewables and reduced emissions from those that have paid for renewables and handing these to those who have not paid for the same renewables.

For many consumers they will either be buying accredited renewable electricity or unspecified electricity where the Residual Mix Factor should apply. If they are purchasing a percentage of both then they should report and make claims as appropriate to the relevant percentages.

Use of the Climate Active Residual Grid Mix Factor

The Residual Mix Factor as calculated by Climate Active is not accurate because of an omission in the formula.

It is designed only to remove mandatory renewables from the National location based grid factor but makes no attempt to remove the voluntary renewables from the factor to determine the Residual Grid Mix

The equation is:

National Residual Mix Factor = the National Location based emissions factor (for scope 2 & 3 combined)
(1-the Renewable Power Percentage)

In light of the rapidly expanding renewable claims made by large corporations, and the fair treatment of consumers, the RMF must also take out the voluntary renewables from the Residual Mix Factor. Anything less is still a double counting method.

Australia is supposedly an advanced first world economy with a Clean Energy Regulator administering a REC Registry so there should be no problem in correcting the omission in the RMF calculation.

The formula should be amended to

National RMF = the National Location based emissions factor (for scope 2 & 3 combined)
(1 - (the Mandatory RPP + the Voluntary RPP from GreenPower & LGC surrender))

Or further abbreviated to

National RMF = National Location EF (S2&3)
(1 - (MRPP + VRPP))

As voluntary renewables are reformed with proper accounting, access and pricing fairness these will grow to outstrip the mandatory RPP from the RET scheme that is already achieved and

should be wound up. It is currently scheduled to finish by 2030 and would need to be removed from the equation by that time anyway.

If a CERT reporter is an Energy Intensive Trade Exposed Industry (EITEI) claiming RET exemptions and wish to start claiming renewables use, then they first need to stop claiming RET Exemption Certificates. Once they do this, they could participate in market based accounting like all other consumers (assuming that market based accounting is established).

The document should acknowledge that whilst there is no market wide accounting framework and that where some companies are able to claim renewables and zero emissions for electricity produced and consumed on site (behind or near a meter) whilst selling LGCs they will continue to do so. **This is a rapid growth area of additional double counting in Australia**. The CERT does not prevent this where participation in the CERT is voluntary. The only thing that can prevent against such loopholes is market wide accounting reform to establish market based accounting in the NGER Determination.

6. Renewable electricity accounting

The section fails to acknowledge that there is no definition of renewable electricity use anywhere in law. South Australia and Tasmania appear to wish to claim that when their states are 100% renewable generation, it would give renewable electricity use to all consumers in their states. Other schemes are presented as delivering market based justification of 100% renewable electricity use. Then there are methods used by consultants and market participants to claim 100% renewables in Power Purchase Agreements without LGCs (in RECless or LGCless agreements). Until there is a single legal method to claim 100% renewables then the section in the CERT Guideline is not relevant to the vast majority of market participants.

14 Definitions

Australian Carbon Credit Units

The CERT Guideline states that an Australian Carbon Credit Unit *is "A unit issued pursuant to the Carbon Credits (Carbon Farming Initiative) Act 2011 and is equal to one (1) tonne of carbon dioxide equivalent*". **This assertion is not true**. The CFI Act does not say that Australian Carbon Credit Units include the attribute of a negative emission (or a negative scope 3 emission). As with the creation of Large Scale Certificates under the renewable Energy (Electricity) Act 2000, the certificates are described as being tradeable, but are not described as incorporating any attributes.

It is not acceptable for the Clean Energy Regulator, charged with the role to administer schemes legislated by the Australian Government, determined by climate change law, to assert that something as fundamental as ACCUs are equal to something that they indisputably do not equal in law.

If the Government wishes to implement market based accounting, it can revisit legislation to include the attribute of negative scope 3 emissions in ACCUs.

LGC (Large-scale generation certificate)

The CERT Guideline states that *"A certificate issued pursuant to the Renewable Energy (Electricity) Act 2000 and is equal to one (1) megawatt hour of renewable electricity generated"*.

This is a misleading statement that fails to include or acknowledge critical information as it relates to market based claims. For the purposes of end users, LGCs do not currently mean renewable energy is bought, renewable electricity is transferred to the end consumer or that zero scope 2 emissions are allocated to the end user.

The Clean Energy Regulator is well aware that the attribute of 1 MWh of renewable energy is not legally integrated into the certificate. Neither is the attribute of renewable energy use or the attribute of zero scope to emissions. This was discussed in a zoom meeting with representatives and the foundation to the CER Position seemed to be about inferred attributes, not legal attributes. This is an unacceptable position for a Regulator to take.

Under the Renewable (Electricity) Act, a "Renewable Energy Certificate means a certificate created under Division 4 of Part 2". This Division describes only how certificates are created and makes no mention of certificates including attributes. This means that they are nothing more than proof of generation with no transference of ownership possible.

The fact that the NGER Determination, the NGA Factors allow location based accounting of electricity emissions to make reputational, product and service based claims, including under the CERT, is clear evidence that Renewable Energy Certificates/LGCs do not include the attributes of renewable energy.

If the Government wishes to implement market based accounting to support the direction that businesses and consumers are already seeking, it can revisit legislation or amend the NGER Determination to include the attributes of renewable electricity use and zero scope 2 emissions in LGCs for renewables.

Market Based Accounting

RE: "It enables surrendered LGCs to be used as evidence of zero emission renewable electricity consumption". A broad concept does not enable non legal units to be claimed as evidence and this does not work when Australia is applying both market based and location based methods for primary reporting, reputational, product and service based claims.

The definition as presented implies that market based accounting is established in Australia. **It is not**.

The reference to LGCs suggests that these units include attributes **that they do not yet include in law.**

Net scope 1 and 2 emissions

"Net scope 1 emissions" is a false concept. Net emissions determined over the aggregate of scope 1, 2 & 3 emissions less offsets, is possible where market based accounting is established in a jurisdiction.

DISTORTIONS WHEN PREPARING A BUSINESS CASE ON RENEWABLE ELECTRICITY.

Where the NGER and NGA Factors enable location based methods to be used to make reputational, product and service based claims, then it is cheaper for entities to free ride rather than pay for accredited renewable products. Why would a customer in South Australia pay for 65% GreenPower now when they could just say that South Australia is 65% renewables? Why would a customer in South Australia in just a few years, pay for 100% GreenPower when they could claim zero emissions and presumably 100% renewables based on the state grid factor?

Financial evaluation when comparing accredited renewables against location based claims.

The NGA Factors and all the carbon calculators are based on the location based state average grid factor to determine the amount of scope 2 emissions from company electricity consumption.

The cost of 100% renewables (or 120% renewables for GreenPower) is then divided by the emissions (using location based grid factors) to determine the cost of abatement. This is a flawed assessment as the state grid factors also include all mandatory and voluntary renewables. As the renewables in the grid increase towards 100%, the cost of abatement actually increases to an infinite cost which is perverse.

Even if a company tries to make the ethical decision to not free ride and pay for accredited renewables, the business case is perverted with the use of state grid factors which already include renewables. For example, in South Australia:

- Where businesses determine the *cost of Greenhouse gas (GHG) abatement* using renewable electricity as a cost premium above electricity, the state location based factor and a nominal LGC price of $40/MWh, the cost of abatement is **$114.29 per tonne CO_2-e** ($40/MWh x 1/(0.35 tonnes CO_2-e /MWh[1])).
- Climate Active has confirmed that their Residual Mix Factor for 2020-21 is 1.073 tonnes CO_2-e /MWh rounded to 1.1. (I am not sure why there is a different factor quoted in the proposed CERT Guidelines). If South Australian businesses were instead guided to determine the cost of abatement using renewable electricity based on the National Residual Mix Factor (in alignment with the GHG Protocol S2G) and the same nominal LGC price of $40/MWh, then cost of GHG abatement would be **$36.36 per tonne CO_2-e** ($40/MWh x 1/(1.1 tonnes CO_2-e /MWh)).

Whilst $36/ tonne is better than $114/ tonne, even this cost difference still includes other policy distortions due to government demand for LGCs for a target that has already been achieved and customers claiming emissions reductions by free riding on state factors using the location based approach. By Australia using both location based accounting and market based accounting at the same time in the same market, it is not possible for any clear financial assessment to be accurate or ethical decision making to be made.

[1] NGA Factors Latest estimate = 0.3 tonnes CO_2-e/MWh, NGA Factors 2018-19 value is 0.35 tonnes CO_2-e/MWh and NGER Determination 2021 says 0.49 tonnes CO_2-e/MWh.

Demonstrating the issue of renewables being evaluated against renewables, consider the situation when South Australia is 95% renewables generation with a state grid factor of say 0.05 CO_2-e /MWh, the cost of abatement increases **to $800 per tonne CO_2-e** ($40/MWh x 1/(0.05 tonnes CO_2-e /MWh)) without any change to the cost of renewables.

At 99 % renewables the cost of abatement to consumers trying to support 100 %, becomes **$4,000 per tonne CO_2-e.**

The Federal Government and CER might say that the financial determination of the cost of abatement doesn't need to be undertaken this way but in practice it is. This is because the NGER Determination and NGA Factors do not provide a National Residual Mix Factor for all participants in the market with clear instruction that this should be used for all market based decision making when looking to buy renewables, not the state average emission factors.

As a 100% GreenPower customer, my voluntary contributions are being claimed by NGER reporters and will continue to be claimed under both the CERT Location based method and market based method.

I would like to discuss my submission with senior CER representatives if this is possible.

Kind regards

Tim Kelly

100% GreenPower customer

APPENDIX 1 PREVIOUS GHG ACCOUNTING RELATED SUBMISSIONS

- **2021 Hydrogen Guarantee of Origin Scheme**
  https://drive.google.com/file/d/1kHOEZOLEb7TkzJ6KkqqH6cygCSeoGAT6/view?usp=sharing
- **2021 Carbon Capture and Storage Method**
  https://drive.google.com/file/d/1UF4vyiQfBnHRYtV0I58ZGU9XDC3WqpJF/view?usp=sharing
- **2021 NGER Determination Consultation**
  https://drive.google.com/file/d/1UF4vyiQfBnHRYtV0I58ZGU9XDC3WqpJF/view?usp=sharing
- **2021 Submission on the proposed Corporate Emissions Reporting Transparency Scheme**
  https://drive.google.com/file/d/1-1ahaLXpTPlIOiSBIvlfGI5m_Zo0bm0K/view?usp=sharing
- **2020 Climate Active Accounting for Electricity Emissions Discussion Paper**
  https://drive.google.com/open?id=1qjiV1_bkSIpODeVGkW5TEl1TIVEgcuAY
- **2020 NGER Determination**
  https://drive.google.com/file/d/14XY3beOwIwy1fHntVGbTpT1GgcW9bBDm/view?usp=sharing
- **2020 The Climate Change Authority Review of the Emissions Reduction Fund**
  https://drive.google.com/open?id=1YKvH7pIFijKXLEvgeuVpPHaeK-F1Tf5T
- **2020 Clean Energy Regulator Draft guidance on the Emissions Reduction Fund's regulatory additionality requirement**
  https://drive.google.com/open?id=1bpwJkovyBD9cuir9p1fSoGed3NZ0A1cv
- **2020 Carbon Market Institute: Independent Review of the Carbon Industry Code of Conduct**
  https://drive.google.com/open?id=1h69IznYLAEip-551LrpwoTE-KIoJDp2L
- **2020 Submission on proposed Hydrogen Accreditation Scheme**
  https://drive.google.com/file/d/1V3gtgGgimLfeODfKdy6fKMBjRHvHBu2I/view?usp=sharing
- **2018 Climate Change Authority review of the National Greenhouse and Energy Reporting Act**
  https://drive.google.com/open?id=1SuZl5QBVEGCDDMAXrexjLxJLIjAc1r2e
- **Submission on the National Energy Guarantee Emissions Registry – Emissions Reduction Requirements**
  https://drive.google.com/file/d/1BHsU_sQZQX6k9SjhJpjOv7V7OsqCQRPa/view?usp=sharing
- **2011 GreenPower Program Rules – Version 7**
  https://drive.google.com/file/d/1lsBKfYIBh1GpmsphAPm5McBXbtPIwxgq/view?usp=sharing
- **2010 Submission on Renewables under NGERS**
  https://drive.google.com/file/d/1JwUkpe-AMX6xmhPydJFCB_veTurNaLQk/view?usp=sharing
- **2010 GreenPower Program Rules - Version 6**
  https://drive.google.com/file/d/1fezP3fN9NvgUsFD3B6kF83rdKTG_VBQd/view?usp=sharing
- **2008 Submission on the Mandatory Renewable Energy Target**
  https://drive.google.com/file/d/1VSzRYQ68_jrSekAJqmp12X2ihKa28PcH/view?usp=sharing
- **2006 A National System for Streamlined Greenhouse and Energy Reporting by Business -Draft Regulation Impact Statement**
  https://drive.google.com/file/d/1PEnWkUGxfgFSmXsO5IZRaMclm9ysTPLF/view?usp=sharing