Town of Gawler Proposal - Method to determine Residual Mix Factors for use in the market based accounting of electricity.

Respondent information

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Yes

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With attribution

Proposal and supporting information.

1. **Which standard or guidance does the proposal relate to (Corporate Standard, Scope 2 Guidance, Scope 3 Standard, Scope 3 Calculation Guidance, general/cross-cutting, market-based accounting approaches, or other)? If other, please specify.**

GHG Protocol Scope 2 Guidance

2. **What is the GHG accounting and reporting topic the proposal seeks to address?**

Scope 2 Guidance to address:

- Market based accounting – Residual Mix Factors
- Loopholes that lead to systemic double counting of renewable electricity use and the related zero Scope 2 emissions.
- Confusion on how the GHG Protocol documents (including Scope 2 Guidance) are interpreted and applied in jurisdictions.

3. **What is the potential problem(s) or limitation(s) of the current standard or guidance which necessitates this proposal?**

This reform proposal seeks to improve the methods used to prepare Residual Mix Factors (RMFs) to meet the intent of the market based accounting concept.

METHOD FOR PREPARING RESIDUAL MIX FACTORS

The Scope 2 Guidance states that "The emissions from all untracked and unclaimed energy comprise a residual mix emission factor". However, the RMF established in Australia has only netted out mandatory renewable electricity contributions from the RMF.

- All voluntary renewable electricity purchased and claimed by consumers is still allocated to dilute the RMF.
- In addition, all small scale and household renewable electricity produced and consumed behind the meter, is allocated to the grid, and dilutes both the location based and RMF. Advice provided to system owners is that that they can claim these renewables on site at zero emissions even if Small Tradable Certificates are created and sold. This situation resulted in double counting of approximately 27% of Australia's renewable electricity in 2022.

Where there is a mandatory component for renewable electricity, such as Australia's Renewable Power Percentage (~18% in 2022), then this component should be allocated to those consumers who contribute to these mandatory renewables (but not to consumers who are exempt from mandatory contributions).

There is an additional problem created when poorly created RMFs (and location based factors) are used to underpin electricity performance claims. If the voluntary renewable electricity, mandatory renewable electricity and small scale renewable electricity consumed on site are not all removed from

diluting the factors, then the standard grid electricity claimed appears showing lower emissions than it should really be. The direct outcome being that buying renewable electricity appears to show as reducing fewer Scope 2 emissions, with this situation being named as '*Diminishing Apparent Greenhouse Gas Avoidance'.* The problem puts renewable electricity at a disadvantage, including when compared with carbon offsets, because fewer offsets are required to reduce emissions to net zero. This is because the price of greenhouse reduction per MWh of renewable electricity increases as grid factors reduce in GHG intensity per MWh.

The Scope 2 Guidance could be improved to specifically guide the methods used to calculate RMFs.

4. Describe the proposed change(s) or additional guidance.

Recommendation: Better Guidance for the preparation of RMFs in jurisdictions

The proposal is for the GHG Scope 2 Guidance to require that where jurisdictions allow market based renewable electricity use and related zero Scope 2 emissions claims to be made, that RMFs are appropriately defined and calculated to remove any dilution from renewable electricity allocation and claims that are made by others. The objective is for all electricity that is allocated or claimed by others, to not be allocated towards diluting the greenhouse gas intensity of the grid.

The Scope 2 Guidance should describe that:

- The following renewables must be removed to prevent inappropriate dilution when calculating RMFs:
    - Remove all voluntary renewables to prevent dilution of the RMF.
    - Prevent small scale renewables produced and consumed behind the meter from diluting the RMF (or location based factors).
    - Prevent large scale renewables produced and consumed behind the meter from diluting the RMF (or location based factors).
    - Ensure that all mandatory renewables charged of customers are allocated at the appropriate percentage of emissions and are not counted towards diluting the RMF.
- There are appropriate methods established to deal with cross nation grids and border adjustments need to be applied to ensure the Residual Grid Emission Factors integrity is maintained.
- RMFs be prepared for the full extent of a grid within a jurisdiction or the full extent of a national jurisdiction.
- Ensure that all those not purchasing renewable electricity are reporting and making claims using the RMF rather than location based emission factor claims, to prevent systemic double counting and free riding.

5. Please explain how the proposal aligns with the GHG Protocol decision-making criteria and hierarchy (A, B, C, D below), while providing justification/evidence where possible.

A. **GHG Protocol accounting and reporting approaches shall meet the GHG Protocol accounting and reporting principles (see Annex for definitions):**
   - Accuracy, Completeness, Consistency, Relevance, Transparency
   - Additional principles for land sector activities and CO_2 removals: Conservativeness, Permanence, and Comparability if relevant

The proposal will support the *accuracy* principle by preventing renewable electricity that is already allocated and claimed by consumers, from being allocated again through a poorly prepared factor.

The Town of Gawler, in its advocacy for clear and consistent rules for accredited renewable electricity and carbon offsets, also covers the need for integrity based rules and principles in preparing emissions factors in a way that prevents systemic double counting.

B. **GHG Protocol accounting and reporting approaches shall align with the latest climate science and global climate goals (i.e., keeping global warming below 1.5°C). To support this objective (non-exhaustive list):**
   - Direct emissions reported in a company's inventory should correspond to emissions to the atmosphere. Reductions in direct emissions reported in a company's inventory should correspond to reductions in emissions to the atmosphere.
   - Indirect emissions reported in a company's inventory should in the aggregate correspond to emissions to the atmosphere. Reductions in indirect emissions reported in a company's inventory should in the aggregate correspond to reductions in emissions to the atmosphere.

Improvements in the methods to prepare RMFs will demonstrate commitment to the integrity and effectiveness of market based accounting and the efforts of consumers to contribute to keeping climate change heating to within 1.5 degrees Celsius.

C. **GHG Protocol accounting frameworks should support ambitious climate goals and actions in the private and public sector.**
   - Would this proposal enable organizations to pursue more effective GHG mitigation/decarbonization efforts as compared to the existing standards and guidance? If so, how?
   - Would this proposal better inform decision making by reporting organizations and their stakeholders (e.g., related to climate-related financial risks and other relevant information associated with GHG emissions reporting)?

The reforms to improve the preparation of RMFs will improve the integrity of market based renewable electricity to support consumer choice in the private and public sectors to participate in climate action.

D. **GHG Protocol accounting frameworks which meet the above criteria should be feasible. (For aspects of accounting frameworks that meet the above criteria but are difficult to implement, GHG Protocol should provide additional guidance and tools to support implementation.)**

- What specific information, data or calculation methods are required to implement this proposal (e.g., in the case of scope 2, data granularity, grid data, consumption data, emission information, etc.)? Would new data/methods be needed? Are current data/methods available? How would this be implemented in practice?
- Would this proposal accommodate and be accessible to all organizations globally who seek to account for and report their GHG emissions? Are there potential challenges which would need to be further addressed to implement this proposal globally? What would be the potential solutions?

Reforms to improve the preparation of RMFs include:

- Accurate tracking of renewable electricity market data (such as from Australia's REC Registry).
- Data on voluntary renewable electricity sold in markets.
- Data or statistical analysis/best estimate of the volume of small scale solar electricity exported to the grid, that is not produced and consumed behind the meter.
- Data or statistical analysis/best estimate of the volume of large scale solar electricity exported to the grid, that is not produced and consumed behind the meter.

6. Consistent with the hierarchy provided above, are there potential drawbacks or challenges to adopting this proposal? If so, what are they?

There may be concern in some jurisdictions regarding improved integrity methods to prepare RMFs where stakeholders have come to rely on lower intensity RMFs compared to what they should be, as a part of reporting against targets and making claims.

Those consumers purchasing carbon offset electricity, rather than renewable electricity, would require more carbon offsets when purchasing standard grid electricity.

For renewable electricity consumers however, buying renewable electricity with an improved RMF will show as reducing more emissions compared with an RMF factor that is over-diluted.

7. Would the proposal improve alignment with other climate disclosure rules, programs and initiatives or lead to lack of alignment? Please describe.

Reforms to better guide the preparation of RMFs will demonstrate continuous improvement for integrity and accuracy and will also lead improvements in other climate disclosure programs and initiatives.

8. Please attach or reference supporting evidence, research, analysis, or other information to support the proposal, including any active research or ongoing evaluations. If relevant, please also explain how the effectiveness of the proposal can be evaluated and tracked over time.

This should not be necessary beyond the examples that have already been provided. However further information is available on request.

9. If applicable, describe the process or stakeholders/groups consulted as part of developing this proposal.

In June 2021, the at the Australian Local Government Association National General Assembly, the following motion was passed:

The National General Assembly calls on the Federal Government to amend the National Greenhouse and Energy Reporting (NGER) Framework to establish ***a legal definition of what is required to buy renewable electricity via the electricity grid and claim 100% renewable electricity use and zero emissions****. This will establish market based accounting for renewable electricity that is consistent with the internationally respected Greenhouse Gas Protocol Scope 2 Accounting Guidelines. It will create a single nationally consistent method that applies to electricity and renewable electricity consumption and prevent double counting for all customers including for councils, households, and small to medium businesses seeking legally assured, clearly defined and fairly priced renewable electricity.*

In 2022 the National General Assembly passed an extended resolution which also covered carbon offsets:

Motion 31 Town of Gawler SA

That this National General Assembly, building on the 2021 National General Assembly resolution and progress to date towards clear and transparent rules for renewable electricity, calls for formal engagement with the Federal Government and Department of Industry, Science Resources and Energy to accelerate reforms for nationally ***legislated market-based greenhouse accounting and rules*** *for renewable electricity and carbon offsets to be established in Australia.*

Since 2019, the Town of Gawler has engaged in numerous consultation processes that cover renewable electricity and carbon offsets and has engaged with key Government Agencies including regulators. The Town of Gawler has also played a key role in seeking renewable electricity procurement options through the Electricity Working Group of South Australian Councils.

This reform proposal is a consistent response to the issue *of 'Diminishing Apparent Greenhouse Gas Avoidance'* for those buying renewable electricity, which has impacted on Councils and other renewable electricity customers in the community.

10. If applicable, provide any additional information not covered in the questions above.

Additional information on any aspect can be provided upon request.