Template for submitting proposals related to GHG Protocol's *Corporate Standard, Scope 2 Guidance, Scope 3 Standard, Scope 3 Calculation Guidance* and market-based accounting approaches

(Optional)

Proposal instructions

GHG Protocol is conducting four related surveys in reference to the following GHG Protocol standards, guidance and topics:

1. Corporate Accounting and Reporting Standard (Revised Edition, 2004) ("Corporate Standard")
2. Scope 2 Guidance (2015)
3. Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011) ("Scope 3 Standard"), and Technical Guidance for Calculating Scope 3 Emissions, version 1.0, 2013 ("Scope 3 Calculation Guidance")
4. Market-based accounting approaches

The survey is open until March 14, 2023. To fill out the survey, click here.

As part of the survey process, respondents may provide proposals for potential updates, amendments, or additional guidance to the *Corporate Standard, Scope 2 Guidance, Scope 3 Standard, or Scope 3 Calculation Guidance*, by providing the information requested in this template. You may also use this template to provide justification for maintaining a current approach on a given topic.

Submitting proposals is optional. Respondents may submit multiple proposals related to different topics.

Proposals should be as concise as possible while providing the requested information. Submissions that are outside of the template may not be considered. Proposals may be made publicly available.

To submit the proposal, please save this file and fill out the fields below. When you've completed your proposal, please upload the file via this online folder. Please name your file STANDARD_Proposal_AFFILIATION, e.g., *Scope 2_Proposal_WRI*.

Respondent information

Name

Jesse Scharf

Organization

Green Gas Certification Scheme

Email address

jscharf@greengas.org.uk

If proposals are made publicly available, would you like your proposal to be made publicly available? Please write either "Yes" (make publicly available) or "No" (do not make publicly available).

Yes

If your proposal is made publicly available, would you like it to be made publicly available with attribution (with your name and organization provided) or anonymous (without any name or organization provided)? Please write either "With attribution" or "Anonymous".

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.**

Corporate Standard (assuming that this would be the place to where the GHGP would provide more detail on market-based account approaches. However, we can also see potential for a standalone Scope 1 Guidance document). Market-based accounting of biomethane in Scope 1 also affects Scope 3 reporting so the proposal may affect the contents of that Standard as well as the Land Sector and Carbon Removals guidance.

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

Scope 1 and Scope 3 emissions from market-based reporting for low carbon gases delivered via a common carrier pipeline or closed distribution systems for liquid gas e.g. LPG or rDME.

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

The current Corporate Standard needs to be updated to reflect the significant changes seen in the gas market as a result of new low carbon and renewable gas options becoming available – and being delivered to a consumer's site through different routes (pipeline/virtual pipeline/onsite generation). There is general consensus that further low carbon and gas products are to come to market over the coming decade and the Corporate Standard must take such options into account.

The Scope 2 guidance from 2015-2019 filled this gap with Appendix A text on biogas, but these paragraphs were then removed.

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

The dual reporting approach to Scope 2 emissions from purchased electricity should be used for low carbon/renewable gas purchased from common carrier pipelines or delivered by closed distribution systems such as those that are in use in the biopropane/LPG market.

This would revert the GHGP guidance to the status when the Appendix to Scope 2 guidance paragraphs on biogas were in place between 2015-2019.

It could also be in the form of additional guidance e.g. Scope 1 reporting guidance, or as an update to the main corporate standard document.

The quality criteria in Scope 2 should be updated and based on a defined process with the input of industry experts and we provide an outline of our view on those updates in this proposal.

There should be some common criteria applied to purchased electricity, gas, heating and cooling and some criteria that were product/sector specific.

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

Completeness
Market-based reporting allows for a more complete assessment of a consumers' GHG inventory by including the relationship of the consumer to the GHG emissions associated with the production and supply of gaseous fuels they use, which can be renewable or non-renewable and have a range of emissions associated with their production and use. The main renewable and low carbon gas available at the present time is biomethane and there are also smaller but growing amounts of biopropane (often marketed as 'bioLPG') and, in future, renewable dimethyl ether (rDME), which has similar properties to biopropane and will use the existing biopropane supply chains. In the future there are anticipated to be large amounts of renewable and non-renewable hydrogen delivered though common carrier pipelines either mixed with methane or in dedicated pipelines. As such, the GHGP needs a robust methodology for consumers to report the purchase and consumption of these gases in a way that supports the GHGP principles and drives real world emissions reductions.

Consistency
Market-based reporting supports the consistency principle so that the location and market-based emissions of both gaseous fuel and purchased electricity can be compared.

There is also the issue of consistency of the GHGP with other well established and government supported market-based reporting methods such as:

- The Green Gas Levy (UK)
- The Renewable Transport Fuel Obligation (UK)
- Streamlined Energy and Carbon Reporting guidelines (UK)
- Guarantees of Origin for consumer disclosure as defined in Article 19 of European Union's Renewable Energy Directive

Relevancy
The relevancy principle includes the key statement that the reporting approach should service the decision-making needs of users. Market-based reporting in Scope 1 informs internal decision makers of the availability of lower carbon gases in the supply chain they source from. They can therefore make fully informed decisions regarding their continued use of gaseous fuels as a decarbonisation option or the need to focus on alternatives such as electrification. Such decision makers need to compare location and market-based emission values between Scopes 1 and 2.

Transparency
Market-based reporting (as part of a dual reporting approach) is fully in line with the transparency principle of including a clear audit trail and proving references to account methodologies used. We recognised some of the criticisms of market-based reporting such as companies failing to publicise

both location and market-based values This GHGP Review process is an opportunity to address those concerns (along with target setting organisations).

Biomethane registries such as the Green Gas Certification Scheme continuously developed our system to improve transparency, in terms of the level of detail received by consumers about the gas they are purchasing and also in the public reporting of issuing and retirement of GoO. The GHGP should support that progress within its quality criteria.

Accuracy
The spread of mature, independent, and often government-regulated system for tracking low carbon gases supports the GHGP principle of accuracy. Systems such as the GGCS are externally audited had have extremely low rates of error and processes in place for making corrections where errors are found, ensuring that double counting is eliminated. There is a growing knowledge base for calculating GHG emissions from the production of low carbon gases, for example by Certification Bodies qualified to audit against the ISCC standards – https://www.iscc-system.org/process/certification-bodies-cbs/recognized-cbs/

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.

Contractual instruments ensure that a consumer's activity, in this case being the consumption of pipeline delivered gas (or gas from another closed system), correspond to low carbon gases being placed into the same pipeline and the emissions associated with the production of those gases.

For example a company using a Renewable Gas Guarantee of Origin issued by the Green Gas Certification Scheme can be assured that units of biomethane were produced and entered into the same grid they are consuming gas from, that the combustion of that gas will release only biogenic CO_2 from the short-term carbon cycle, and they will be given either an actual value of a maximum threshold of the GHG emitted from the production of that biomethane. These values will appear in their Scope 1 market report (direct emissions) and their Scope 3 (indirect emissions) respectively.

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)?

This proposal will enable more efficient GHG decarbonisation efforts and better decision making.

Without any market-based reporting in Scope 1 (where most companies are rightly setting their central reductions targets) then it is impossible for companies to explore the full range of decarbonisation options.

Only on a case-by-case basis, knowing the circumstances of their own facilities and having a consistent approach to market-based reporting across Scopes 1 and 2, can companies understand the best mix of efficiency gains, use of renewable gas or electrification/use of renewable electricity. The current situation where guidance on biogas/biomethane has been removed from the Scope 2 document has created uncertainly around investment decisions.

At the governmental level, market-based mechanisms create an efficient "price discovery" of the optimal combination of government policy and/or support and market-generated income through GoO and other contractual instruments. This allows governments to support the maximum amount of new renewable energy generation in the most affordable way.

Without the ability to use contractual instruments in Scope 1 reporting they will be devalued, government support will back a lower amount of low carbon gas generation, which has a proven track record of displacing fossil gas used and lowering emissions to atmosphere.

Regarding more effective GHG mitigation/decarbonisation efforts as compared to the existing standards and guidance, in many cases renewable gas will be the best option in terms of technology availability and cost. But, it will not be possible to generate that gas on site or to have it physically delivered (or such physical delivery would add costs and increase GHG emission vs grid delivery). Existing standards and guidelines would require this in order for the company to get the benefit in their GHG inventory. Therefore, a market-based approach is needed overcome those issues and will result in the same GHG reductions as if the company has physically consumed the gas.

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?

What's required?
Robust calculations of GHG emissions associated with the production of biomethane and other low carbon gases that will be reported in the Scope 3 emissions of companies sourcing biomethane via the grid.

Is this feasible?
Yes – there are national and international frameworks for calculating these emissions e.g. the sustainability criteria in the Non-Domestic Renewable Heat Incentive and in the European Union's Renewable Energy Directive. Some alterations in approach may be needed to align with the Land Sector and Carbon Removals guidance (as proposed), but there are qualified auditors who will be able to adjust to a GHGP complaint GHG emission calculation method.

What's required?
Robust systems for the issuing, tracking and retirement of contractual instruments that link production and consumption of renewable gases.

Is the feasible?

These are already implemented in many places e.g. UK, EU, and USA. We ourselves run a registry for a contractual instrument for grid injected biomethane and biopropane distributed in a closed system. We are externally audited every year to ensure the accuracy of the certificates we issue, and we have government recognition as being able to provide proof of biomethane supply to households.

EU member states are at various stages of establishing Guarantee of Origin issuing bodies according to the provisions of the Renewable Energy Directive.

The European Commission is currently launching the "Union Database" for liquid and gaseous biofuels that can be used on a pan-European basis for mass balancing of biomethane in the grid, as well as tracking liquids such as biopropane.

The I-REC standard operates internationally and is developing a gas system.

What's required?

Robust data is available for quantities of biomethane produced, injected, and withdrawn from the gas grid forming part of a balanced system where it is clear that whatever is consumed by a company has been placed into the same system.

Is it feasible?

Yes – gas networks globally are heavily regulated and have tight control of entry and exit points with robust metering. Independent system operators ensure the system is balanced between overall injection and withdrawal and contractual instruments can be issued based on the injection data available.

What's required?

A calculation of the residual mix in the gas grid once contractual instruments have been used to allocated renewable gas production to individual companies.

Is it feasible?

Yes – a system is already in place in the power sector in both the UK and the EU and can be developed for the gas system. The data on the issuing and retirement of contractual instruments is already available in the UK and across the EU.

There would be challenges in areas where no registry for GoO exists, but the I-REC system could be applied.

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

The challenges with adopting this approach would be:

1) To ensure that the dual reporting approach was enforced so that there was transparency between location-based and market-based emissions in Scope 1.
2) To ensure that companies have systems in place to accurately and simply report Scope 3 emissions associated with the production and transport of the low carbon gas purchased (the GHGP guidance should not trigger the need for a company to report all Scope 3 emissions just because they have used bioenergy – as this may be beyond the resources of many companies).

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

Market-based reporting of gaseous fuels in Scope 1 would align with the existing CDP and RE100 reporting guidance which is still in place despite the removal of text related to the use of pipeline delivered biogas in Appendix A from the Scope 2 guidance.

It would also align the GHGP with the reporting frameworks in the UK and EU, for example:

- The Renewable Transport Fuel Obligation where grid delivered biomethane is recognised
- The Green Gas Levy where an exemption is given for biomethane that is delivered in place of fossil gas
- The Streamlined Carbon and Energy Reporting guidelines in the UK which recognised the dual reporting approach in Scope 1
- The EU ETS where grid delivered biomethane is zero-rated because of its biogenic source
- The European Sustainability Reporting System

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.

Indicative additional value of contractual instruments to biomethane production.

In the UK, since 2015, over 14TWh of Renewable Gas Guarantees of Origin (RGGOs) issued by the registry we operate (the Green Gas Certification Scheme) have been purchased by gas consumers to show that they are consuming biomethane using a market-based approach. Assuming a conservative value of £2/MWh for RGGOs, this is over £28 million of value delivered into the biomethane industry. Looking just at 2022, and using the much higher reported prices over this year of £10/MWh, then over £44 million of value was bought into the sector in a single year. This revenue is critical as it has supported existing biomethane producers and the operation of their plant during a volatile period. If viewed in terms of supporting new plant, this sum would be equal to the capex to build approximately 4 new biomethane plants of around 5MW capacity each. Confidence in this income stream is increasing and is a core part of the business model for building new plants.

These figures are from the UK alone and similar levels of support to renewable energy producers from the sale of contractual instruments such as GoO have been seen in other countries. We include below some indicative numbers reported to us by biomethane registries who are members of the European Renewable Gas Registry (ERGaR) association:

- AGCS – Austria – 0.5TWh
- Energinet – Denmark – 22.0TWh
- DENA – Germany – 75.0TWh
- GRDF – France – 10.0TWh

- Vertogas/VertiCer – Netherlands – 8.8TWh
- VSG – Switzerland – 2.6TWh

Across these five countries over 100TWh of biomethane certificates have been bought since 2015. Pricing information is not available for all of these certificates, and there are a range of relationships to different support schemes. However, if a conservative assumption is made that consumers purchasing these certificates gave an additional value to them of £2/MWh, over and above any value they might receive back in support or subsidy claims, then one arrives at a value of £200 million.

Effectiveness of the proposal can be evaluated and tracked over time

The biomethane and low carbon gas industry is ready to support ongoing research and evaluation of the value of contractual instruments over time. Prices are already reported by several high-profile companies and organisations such as the European Biogas Association, and the European Renewable Gas Registry already produce statistics on production and certificate transfers.

Annual assessments can be made of the growth of production and value of contractual instruments.

More holistic reviews can be conducted every 5 years to take feedback, assess policy and technologies developments and ensure the GHGP principles are still be supported by market-based Scope 1 reporting.

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

This proposal broadly reflects the views of the biomethane and biopropane producers and suppliers in Europe.

The GGCS has over 100 stakeholders who produce and trade biomethane.

The WRI has received several joint letters broadly supporting this approach, signed by a range of industry stakeholders, such as EBA, ERGaR, WBA and representatives of end users in the Steel and Ceramics industry.

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

Proposal Annex

GHG Protocol Decision-Making Criteria and Hierarchy

A. First, GHG Protocol accounting and reporting approaches shall meet the GHG Protocol accounting and reporting principles:

- Accuracy, Completeness, Consistency, Relevance, Transparency
- Additional principles for land sector activities and CO_2 removals: Conservativeness, Permanence, and Comparability if relevant
- (See table below for definitions)

B. Second, 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.

C. Third, GHG Protocol accounting frameworks should support ambitious climate goals and actions in the private and public sector:

- Accounting framework/s would enable organizations to pursue more effective GHG mitigation/decarbonization efforts as compared to the existing standards and guidance
- Accounting framework/s would 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)

D. Fourth, GHG Protocol accounting frameworks which meet the above criteria should be feasible to implement for the users of the frameworks.

- 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.

GHG Protocol Accounting and Reporting Principles

Principle	Definition
Accuracy	Ensure that the quantification of GHG emissions (and removals, if applicable) is systematically neither over nor under actual emissions (and removals, if applicable), and that uncertainties are reduced as far as practicable. Achieve sufficient accuracy to enable users to make decisions with reasonable assurance as to the integrity of the reported information.
Completeness	Account for and report on all GHG emissions (and removals, if applicable) from sources, sinks, and activities within the inventory boundary. Disclose and justify any specific exclusions.

Consistency	Use consistent methodologies to allow for meaningful performance tracking of emissions (and removals, if applicable) over time and between companies. Transparently document any changes to the data, inventory boundary, methods, or any other relevant factors in the time series.
Relevance	Ensure the GHG inventory appropriately reflects the GHG emissions (and removals, if applicable) of the company and serves the decision-making needs of users – both internal and external to the company.
Transparency	Address all relevant issues in a factual and coherent manner, based on a clear audit trail. Disclose any relevant assumptions and make appropriate references to the accounting and calculation methodologies and data sources used.
Conservativeness (Land Sector and Removals Guidance)	Use conservative assumptions, values, and procedures when uncertainty is high. Conservative values and assumptions are those that are more likely to overestimate GHG emissions and underestimate removals, rather than underestimate emissions and overestimate removals.
Permanence (Land Sector and Removals Guidance)	Ensure mechanisms are in place to monitor the continued storage of reported removals, account for reversals, and report emissions from associated carbon pools.
Comparability (optional) (Land Sector and Removals Guidance)	Apply common methodologies, data sources, assumptions, and reporting formats such that the reported GHG inventories from multiple companies can be compared.