Draft for TWG discussion

GREENHOUSE GAS PROTOCOL

Scope 2 Technical Working Group Meeting

Meeting #20

November 18, 2025

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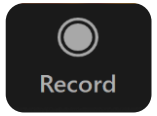
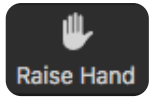
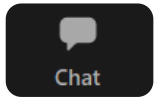


This meeting is recorded.



Please use the Raise Hand function to speak during the call.



You can also use the chat function in the main control.

Recording, slides, and meeting minutes will be shared after the call.

Be mindful of sharing group discussion time; keep comments as succinct as possible.

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TWG Documents sharing

- **TWG members (SharePoint):**
  - **SharePoint with restricted access** (TWG members and Secretariat – internal use only) will be used for all relevant documents for TWG members.
  - TWG members **are granted view only access** for their TWG's folder and cannot make changes to sub folders and documents.
  - Documents will be uploaded by Secretariat **in pdf format** as default five days prior to a TWG meeting.
  - Documents for TWG member track change edits or comments to be uploaded as .docx .
  - **Documents not posted to the GHG Protocol website are for internal use only and should not be circulated.**

- **Public (GHG Protocol Website):**
  - **Selected TWG documents** will be posted on the Governance Document Repository on the GHG Protocol website after TWG meetings. These include:
    - Meeting agendas
    - Meeting slides
    - Meeting minutes
    - Discussion papers
  - Not to be published: internal working documents of TWGs

Agenda

1. Housekeeping
2. Goal of today's meeting
3. Corporate Standard TWG update: justifiable exclusion threshold for Scope 2 (Alley Leach, *Corporate Standard Secretariat*)
4. Action and Market Instruments TWG update
5. Standard Supply Service (SSS)
   a. Presentation on work underway to develop free public resource for identifying SSS (Casey Martinez, *Clean Incentive*)
   b. Country specific SSS considerations and questions
6. Next steps

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Goal of today's meeting

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Goal of today's meeting

1. Update from Corporate Standard Secretariat on TWG recommendation on justifiable exclusions
   a. Review current requirements in GHG Protocol
   b. Consider how the Corporate Standard TWG came to its recommendation
   c. Discuss preliminary outcomes on justifiable exclusions in Scope 2
   d. Poll on support for Corporate Standard TWG recommendation on justifiable exclusions for scopes 1&2

2. Update on Action and Market Instruments TWG and opportunities for collaboration

3. Standard Supply Service (SSS) presentation and discussion
   a. Presentation by *Clean Incentive* on work underway to develop free public resource for identifying SSS
   b. Discuss country specific SSS considerations and questions

Corporate Standard Update: Justifiable Exclusions

(Alley Leach, *Corporate Standard Secretariat*)

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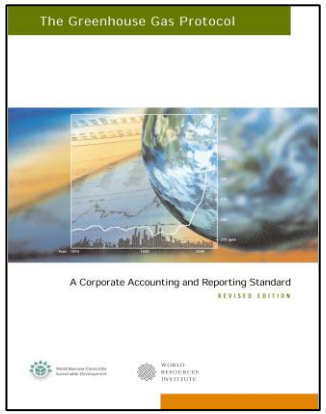
Introduction: Justifiable exclusions



Corporate Standard TWG Scope of Work:

C.2. Consider providing more prescriptive requirements or additional guidance regarding **justifiable exclusions** from an inventory boundary and expanding disclosure requirements related to exclusions.

What are justifiable exclusions?

Exclusions that are allowed in the inventory, provided they are disclosed and justified

Justifiable exclusions are relevant across **the entire inventory** (scopes 1, 2, and 3) and for **all Standards**

Other key related topics:

- De minimis emissions
- Disclosure requirements
- Material discrepancies in assurance/verification*

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See Corporate Standard Development Plan, Section 5: Scope of work for the standard revision

*Assurance/Verification topic will be considered by Corporate Standard Subgroup 2

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Corporate Standard TWG: Preliminary outcomes on justifiable exclusions for scopes 1 and 2

Current approach

- **Exclusions are allowed**
- Exclusions must be **disclosed and justified**
- Reporter has **flexibility** to determine what to exclude
- No quantitative exclusion threshold currently defined

Revisions: Preliminary outcomes

Approach	• Adopt a prescriptive and quantitative approach for exclusions
Boundary	• Define separate quantitative exclusion thresholds for scopes 1 and 2
Value	• Define a cumulative 1% quantitative exclusion threshold for scope 1 • **Define a cumulative 1% quantitative exclusion threshold for scope 2** • Recommend that all emissions should be reported
Justification	• Total scope 1 and scope 2 emissions must be quantified to justify exclusions

Note: Scope 3 TWG is separately recommending a 5% quantitative exclusion threshold for scope 3

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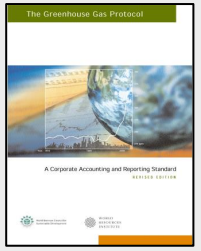
GHG Protocol context: Corporate Standard and Scope 3 Standard

Current language in the Corporate Standard (2004)



Completeness principle:

"Account for and report on all GHG emission sources and activities within the chosen inventory boundary. Disclose and justify any specific exclusions."

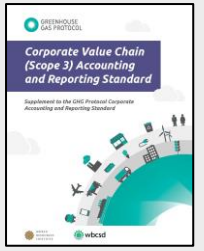
Required information:

"Any specific exclusions of sources, facilities, and / or operations."

Key take-aways:

- **Exclusions allowed**
- Must be disclosed and justified
- Reporter has **flexibility** to determine what to exclude
- No quantitative exclusion threshold currently defined

Current* language in the Scope 3 Standard (2011)



*"Companies **shall** account for all scope 3 emissions and disclose and justify any exclusions.*

*Companies **may** exclude scope 3 activities from the inventory, provided that any exclusion is disclosed and justified."*

*"In particular, companies **should not exclude** any activity that is expected to contribute significantly to the company's total scope 3 emissions."*

Key take-aways:

- **All** scope 3 emissions are required
- **Flexibility** for exclusions
- **Minimum boundaries** are defined, but under review in Scope 3 TWG

**Under revision by Scope 3 TWG*

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GHG Protocol context: Corporate Standard and "de minimis"

Current language in the Corporate Standard

De minimis is defined in the context of verification:

"*A materiality threshold is not the same as **de minimis emissions, or a permissible quantity of emissions that a company can leave out of its inventory**.*"
-page 69-70

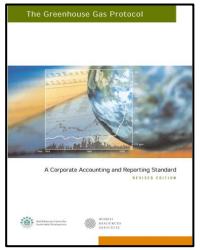
"Rule of thumb" that is misinterpreted:

"*As a rule of thumb, an error is considered to be **materially misleading if its value exceeds 5%** of the total inventory for the part of the organization being verified.*"
-page 69

Note: "De minimis" is only mentioned in passing twice in the Corporate Standard in the context of verification, and is not mentioned once in any other GHG Protocol Standard

Key points:

- **"De minimis" is not currently allowed**
- Material discrepancy for verification is often **misinterpreted** as a permissible 5% exclusion from the GHG inventory



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Corporate Standard stakeholder feedback survey: Key themes related to justifiable exclusions

Prohibit exclusions	**Revise completeness principle** to remove language implicitly allowing for exclusions so that companies cannot intentionally omit emissions sources
More prescriptive language	Explain **how to evaluate acceptable exclusions** to comply with the completeness principle
Quantitative thresholds	More specific **materiality criteria and thresholds** for completeness (e.g., 95% of emissions for a given scope)
Comparability	Better defined exclusions could promote comparability across inventories

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For more detail, please see Section C.5 of the Detailed Summary of Responses from Corporate Standard Stakeholder Survey.

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Draft accounting and reporting requirements: Justifiable exclusions

Relevant chapter: Chapter 4, "Setting Operational Boundaries"

Scope 1, 2, and 3 accounting and reporting requirements	• *Companies **shall** account for and report at least 99% of scope 1 emissions, 99% of scope 2 emissions, and 95% of total required^ scope 3 emissions.*
	• *Companies **shall not** exclude any of the following:*
	  • *More than 1% of scope 1 emissions*
	  • *More than 1% of scope 2 emissions*
	  • *More than 5% of required^ scope 3 emissions*

Justification of exclusions	• *Companies **shall** disclose and justify the exclusion of any scope 1 emissions, scope 2 emissions, and required^ scope 3 emissions.* • *Companies **shall** quantify scope 1, scope 2, and required scope 3 emissions to justify exclusions.* • *Companies **should** use the best available data to quantify total emissions to justify exclusions.* • *Companies **may** quantify total emissions to justify exclusions using any method.*
Recommendation to report all emissions	• *Companies **should** account for and report all scope 1 and scope 2 emissions* • *Companies **should include relevant*** * scope 3 emissions falling within the 5% exclusion threshold* • *Companies **should include optional**** + *scope 3 emissions, where relevant*
De minimis provision** (scope 3 only; under review for scopes 1 and 2)	• *Companies **may** exclude de minimis [scope 3] emissions as part of the 5% exclusion threshold, provided that total exclusions (de minimis and non-de minimis) are not reasonably expected to exceed said 5%.*

^ *Required scope 3 emissions = minimum boundary scope 3 emissions*
* *Relevant emissions = defined by relevance principle and scope 3 relevance criteria*
\+ *Optional scope 3 emissions = any scope 3 emissions that fall outside the minimum boundary*
** *De minimis emissions = emissions reasonably expected to be insignificant or negligible*

See Appendix A for more details on the package of revisions

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Subgroup 3, phase 1: Feedback received from ISB

Topic	Preliminary outcomes	Level of support** (ISB members at Meeting 15)	Feedback from ISB
Justifiable exclusions for scopes 1 and 2*	Prescriptive and **quantitative approach**	**Support: 9 of 11** (5 support with minor edits) Oppose: 2 of 11 Abstain: 0 of 11	**Support:** • Significant improvement over current ambiguity while maintaining practical feasibility **Opposition** (2 members): • **Opposition to a rules-based approach** and preference for maintaining the current principles-based approach • Concern about the **accuracy of the hotspot analysis**, which is needed to determine exclusion threshold • **Interoperability concerns** with external programs that use principles-based approach (e.g., materiality) • Question: If total emissions must be quantified, why not just report 100% of emissions? **Suggestions for revision:** • Consider **different exclusion threshold for scope 2** versus scope 1 due to market- and location-based methods • **Scope 2 TWG should consult** on the appropriate scope 2 threshold • **Explanation of the exclusion** should be disclosed
	Separate thresholds for scopes 1 and 2		
	1% emissions exclusion threshold		
	Require **total quantification** to justify exclusions		

**Scope 3 TWG is separately recommending a 5% quantitative exclusion threshold for scope 3.*
***Three responses were received from observing entities, all of which indicated either full support or support with minor edits.*

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See Appendix A for more details on the package of revisions

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Rationale for justifiable exclusions for scopes 1 and 2

Overall rationale

- Completeness, transparency, and comparability
- Feasibility

Prescriptive, quantitative approach

- Interoperability with external programs
- 1% exclusion threshold for scopes 1 and 2

Why not require 100% of emissions?

- Public reporting
- Assurance

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Rationale for justifiable exclusions for scopes 1 and 2

Overall rationale

Completeness, transparency, and comparability

- Stakeholder survey feedback and TWG members **expressed concern about the current qualitative approach to exclusions**, which is subjective and results in inventories that could be missing significant emissions sources, be non-transparent and non-comparable across companies.
- More prescriptive and quantitative exclusion thresholds promote completeness, transparency, and comparability.

Feasibility

- The approach **retains the ability and flexibility of companies to exclude minor sources of emissions** from their GHG inventory, with flexibility on which sources are excluded as long as they are justified and do not exceed 1% of emissions.
- This allows companies to **avoid the undue cost and effort** of collecting high quality data for a small percentage of emissions.

See Appendix A for more details on the package of revisions

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Rationale for justifiable exclusions for scopes 1 and 2

Prescriptive, quantitative approach

Interoperability with external programs

- Maintains interoperability with programs that use a qualitative approach to materiality (e.g., IFRS S2, ESRS E1) because **emissions below the quantitative exclusion threshold will usually also be immaterial** (and vice versa).
- In the rare cases where an emission source is below the exclusion threshold and is considered material, **companies should follow the recommendation to report all** scope 1 emissions, scope 2 emissions, and required scope 3 emissions.
- Also maintains interoperability with programs with different quantitative exclusion thresholds (e.g., draft SBTi CNZS v2.0) through requirement to quantify total emissions to justify exclusions.

1% exclusion threshold for scopes 1 and 2

- A low quantitative threshold promotes a **balance between completeness and feasibility**.
- Allowing flexibility with a 1% exclusion threshold helps ensure companies can report high quality, credible, and decision-useful GHG inventories.
- **Lower thresholds for scopes 1 and 2 versus scope 3** are justified given the better data availability for scope 1 and 2 emission sources.
- The 1% threshold was further **supported by disclosures to CDP** in which most companies that report exclusions disclosed that they used an exclusion threshold of 1% for scopes 1 and 2.

See Appendix B for more details on interoperability with external programs
See Appendix C for CDP data analysis on exclusions disclosed by reporters

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Rationale for justifiable exclusions for scopes 1 and 2

Why not require 100% of emissions be reported?

Public reporting

- Although companies are required to quantify 100% of emissions to justify exclusions, **reporters may wish to exclude low-quality estimates** (for small emissions sources only) from public reporting.
- The exclusion threshold allows companies to **keep these small sources internal** and exclude them from public reports, targets, and performance tracking.
- This approach aims to strike an appropriate **balance between accuracy and completeness.**

Assurance

- A requirement to report 100% of emissions **would not be defensible from an assurance perspective**.
- An auditor would only need to **identify any unreported emissions** (no matter how small) and the reporter would no longer be in conformance with the standard.
- The flexibility to disclose and justify exclusions below the exclusion threshold **gives reporters coverage for verification and assurance**.
- To promote completeness, the proposed text does include a **recommendation** (but not a requirement) **to report all emissions.**

Discussion

What questions or concerns do you have about applying this approach to scope 2?

Justifiable exclusions for scopes 1 and 2	Prescriptive and **quantitative approach**
	Separate thresholds for scopes 1 and 2
	1% emissions exclusion threshold
	Require **total quantification** to justify exclusions

Scope 2 discussion questions

1. Should the 1% exclusion boundary be defined across the entire scope 2 inventory or by market boundary?
2. How should the **exclusion boundary** be defined for location-based versus market-based?
    a. **Calculate based on location-based** and apply to market-based (as applicable) using the same boundary
    b. **Calculate separately** for location-based and market-based
3. Should any **minimum methods** be defined for the total quantification of emissions to justify exclusions?
    a. **No minimum methods requirements** (CS and S3 TWGs recommendation)
    b. **Define minimum methods requirements** for scope 2

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Poll question

Do you support the Corporate Standard TWG recommendation for justifiable exclusions for scopes 1 and 2?

a. Yes, **fully support**
b. Yes, **support with edits** (please suggest edits in the chat)
c. Oppose (please explain why in the chat or by email)

Justifiable exclusions for scopes 1 and 2	Prescriptive and **quantitative approach**
	Separate thresholds for scopes 1 and 2
	1% emissions exclusion threshold
	Require **total quantification** to justify exclusions

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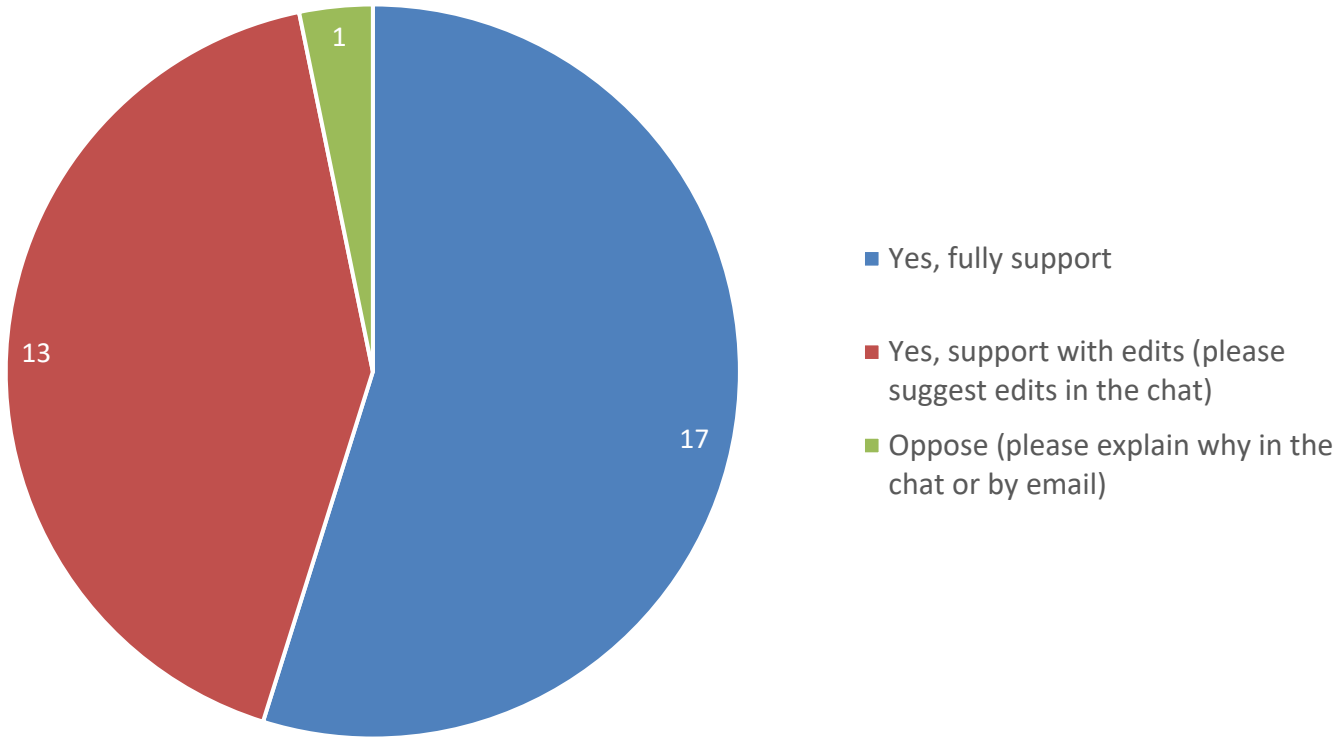
Do you support the Corporate Standard TWG recommendation for justifiable exclusions for scopes 1 and 2?



Action and Market Instruments TWG update

Update on AMI TWG

- **In-person workshop (Nov 11–13, Washington DC)**
  - *Refining* Draft-AMI-Phase1-White Paper-TWG Review-v1.0
  - *Discussing multi-statement reporting structure options*
  - *Exploring sectoral examples and coordination with SBTi*

- **Workshop goals:**
  - *Build common understanding of key issues*
  - *Align on White Paper Part 2 and 3*
  - *Identify next steps and roadmap through 2026*

- **Next steps:**
  - *Consolidate workshop feedback into revised White Paper*
  - *Define path toward public consultation (2026)*
  - *AMI roadmap (see* Draft-AMI-Phase1-White Paper-TWG Review-v1.0*)*

Two opportunities for collaboration between AMI and Scope 2 TWG

TWG change from Scope 2 TWG to AMI TWG

- Up to 2-4 members
- Must follow existing GHG Protocol processes, including a formal member change request approved by Secretariat and ISB
- Members must have appropriate expertise and willingness to engage in entire AMI workplan
- As early as January 2026
- Members would no longer participate in Scope 2 TWG

Joint subgroup to further develop consequential methods for electricity – TBD

- 4-8 members from Scope 2 TWG + 4-8 members from AMI TWG (exact membership numbers TBD)
- No sooner than Q2 2026
- Members continue in their normal Scope 2 TWG capacities, in addition to jointly-convened subgroup meetings

Two opportunities for collaboration between AMI and Scope 2 TWG

Next steps

1. If you would like to change TWGs or volunteer to participate in TBD subgroup, send the Secretariat an email documenting your request.
2. Subgroup requests will be noted and revisited in Q1 2026.
3. Requested changes will be reviewed and approved by the ISB, including evaluation of appropriate expertise fit and demographic balances.
4. Any members changing TWGs will be notified and onboarded to AMI.
5. Members who requested a change but were not approved would continue in their normal Scope 2 TWG capacity.

Standard Supply Service

(Casey Martinez, *Clean Incentive*)

Implementing GHG Protocol SSS Revisions: Introducing the SSS Resource Registry & Case Studies

Presentation to GHG Protocol Scope 2 Technical Working Group

November 18, 2025

Casey Martinez

Founder & CEO, Clean Incentive

Casey@CleanIncentive.com

CLEAN INCENTIVE

Clean Incentive Background

- **Company Overview:** Clean Incentive is a for-profit company specializing in granular energy attribute tracking and procurement services, building the data infrastructure needed to enable hourly energy matching and impact-optimized procurement with verifiable data-rich certificates. Headquartered in Houston, Texas, USA.
- **Separate Public Initiative:** In addition to our commercial operations, we have developed a distinct, free public resource dedicated to compiling and aggregating SSS data from open sources, ensuring broad accessibility without any monetization or ties to our for-profit activities.
- **Presentation Capacity:** We are presenting today solely in our role as stewards of this public SSS database, driven by a commitment to public good—advancing transparent Scope 2 reporting aligned with GHG Protocol revisions, without any profit motive or promotion of our services.

GRANULAR REGISTRY
POWERED BY CLEAN INCENTIVE

Global meta-registry which issues Granular Certificates (GCs) linked to verified EACs in any geography globally.

Learn More

CLEAN INCENTIVE MARKETPLACE

Hourly or time-of-day GC auctions with carbon impact quality criteria.

Case Study

SSS RESOURCE REGISTRY
POWERED BY CLEAN INCENTIVE

Free public resource for suppliers and reporters globally.

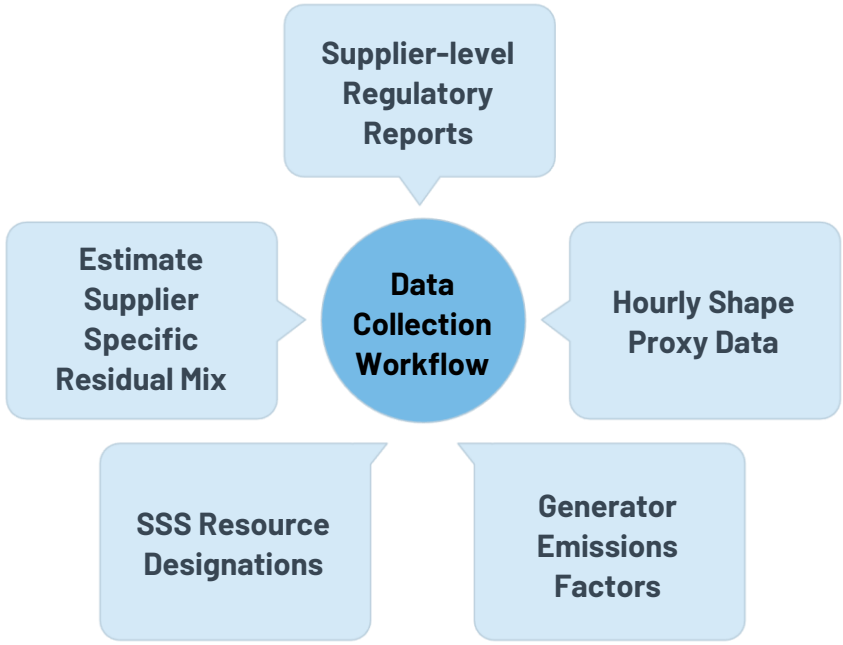
Currently in private beta

Join the methodology working group

Free Public SSS Database

Alignment with proposed GHG Protocol guidance:

- A no-cost, accessible database aggregating public data sources to estimate SSS (CFE and non-CFE) and supplier-specific residual mix for market-based accounting and reporting.
- Supports GHG Protocol's SSS draft proposed guidance (Section 5.1.3) by providing a third-party database for cases where suppliers do not allocate EACs.
- AI-powered pipelines for scalable data collection, validation, and calculation; annual updates with confidence scoring.



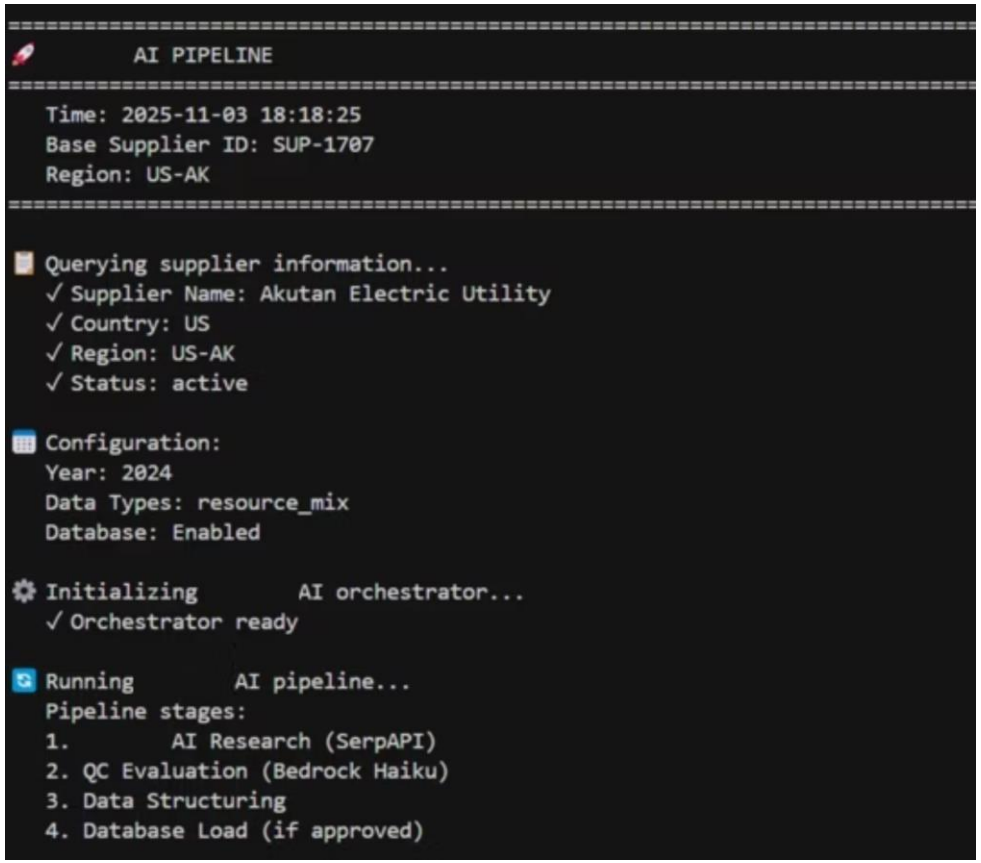
Phase 2: Supplier-Verified Annual Reports

Third-party verification for data collected directly from suppliers.

Phase 3: Direct Granular Certificate Allocations

Utilizes Granular Registry for GC issuance and customer allocates.

Example Data Collection



Utilizes AI-driven pipelines to scrape, process, and validate public sources for SSS data, including utility reports and compliance filings.

Supplier Discovery

Find all suppliers in a given region

AI Research Agent

Search the internet for public reports per supplier

AI Quality Control Agent

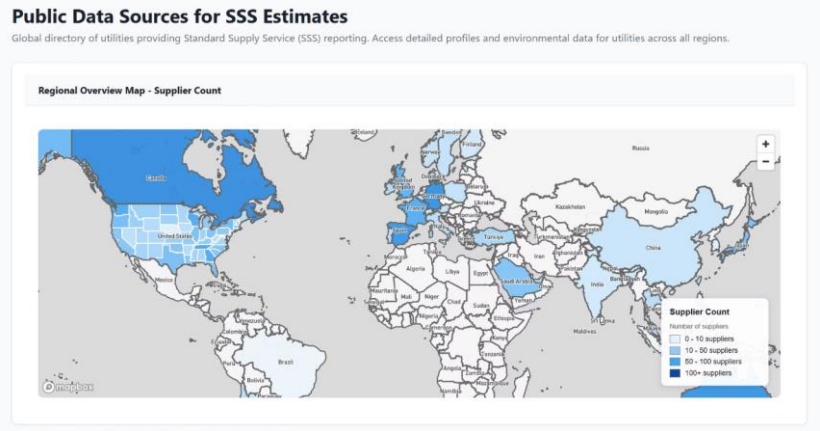
Verify sources and assign confidence score

SSS Designations

Estimate SSS percent and emissions factors

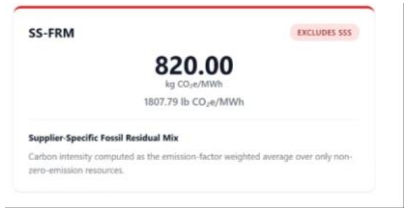
SSS Resource Registry Screenshots

Supplier Map



Resource Mix

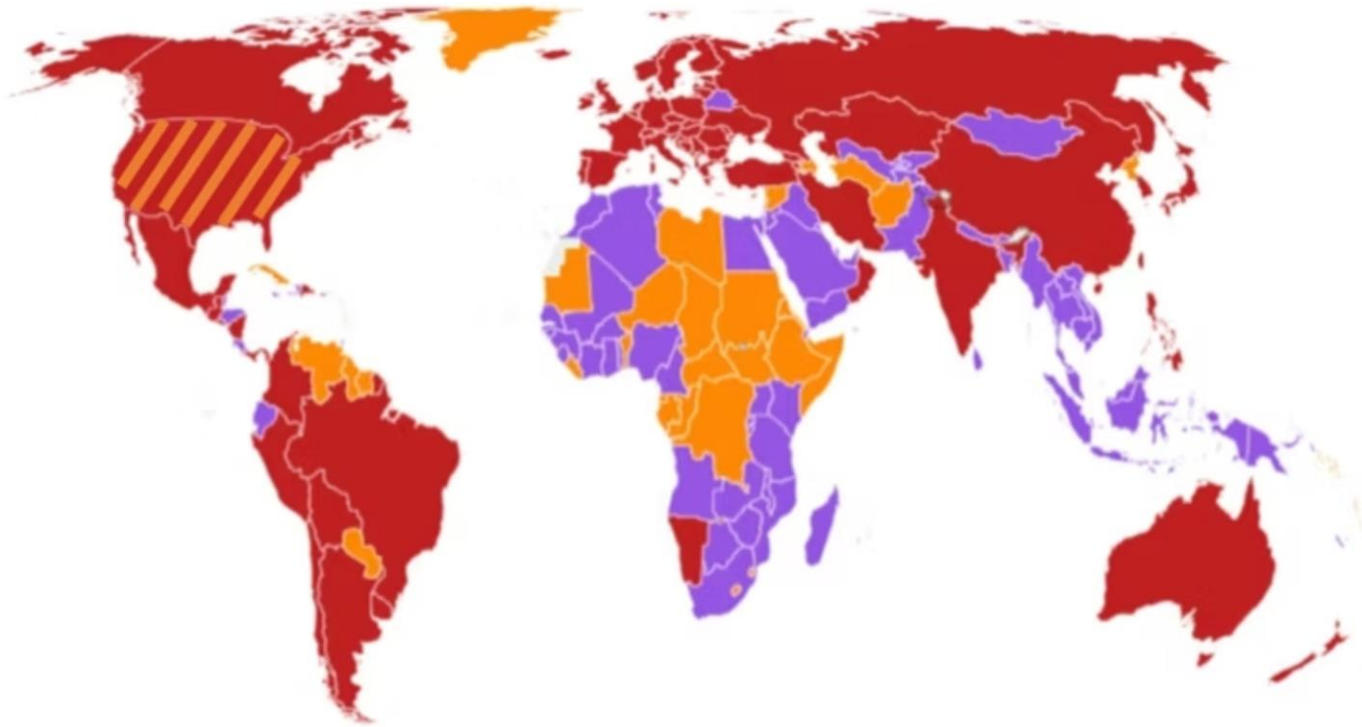
Emissions Factors



Data Sources

Global Market Structures

A World Bank study shows the global by market types by region for the year 2024. This can be further refined to show sub-regions in the database.



Adapted from source: *Global Power Market Structures Database*

Market Structures

VIU - Vertically Integrated Utility

SBM - Single Buyer Model

WRC - Wholesale/Retail Competition

SSS Coverage

About **38%** of the global population has no retail choice.

Global Nuclear Power Fleet

Pending review, 77% of the 172 nuclear facilities in the world appear aligned with the proposed SSS designation.

Over 50% of nuclear capacity operates in just three countries.

65% Publicly Owned/State-Operated Reactors

These reactors are dominant in countries such as **China** (~58, all state-owned), **France** (~56, state-controlled EDF), **Russia** (~36, Rosatom), **India** (~24, NPCIL), **South Korea** (~26, KEPCO), **Canada** (~19, mostly provincial Crown corporations), and **Ukraine** (~15, Energoatom).

These facilities appear aligned with SSS (State-Owned or State-Sponsored) criteria as publicly owned entities serving domestic load under regulatory frameworks, without competitive advantages for private developers.

12% Privately Owned with Mandated Public Support

In the **US** (~92 total reactors), approximately 20–30 reactors appear to receive qualifying support through state-level non-bypassable charges. Examples include ~12 reactors in **Illinois** and **New York** under Zero Emission Credit programs funded by ratepayers, with similar mechanisms in **New Jersey** and **Connecticut**.

Japan (~10 operational) utilizes Feed-in Tariff (FIT)-like mechanisms for some reactor restarts post-Fukushima. The **UK** (~9, mostly EDF-owned) and **Sweden** (~6) also feature partial public subsidies or cost-recovery elements, though fewer appear to qualify strictly under the proposed SSS criteria.

Source: World Nuclear Industry Status Report 2025

Case Studies
Country-specific Considerations and Questions

France, New Zealand, Japan, Norway

Japan

Fully liberalized since 2016, Japan's electricity market features 10 regionally dominant utilities operating semi-independent grids with limited interconnections. The Act on Sophisticated Methods of Energy Supply Structures plays a pivotal role in shaping Japan's non-fossil energy procurement landscape. The non-fossil portfolio standard mandates retailers to procure ≥44% non-FIT NFCs by 2030 (incl. FIP-NFC, nuclear, large hydro).

Feed-in Tariff (FIT)

Involves fixed, above-market payments to RE generators for electricity fed into the grid, funded primarily through mandatory surcharges on ratepayer bills (non-bypassable).

Non-Fossil Certificates (NFCs) are EACs issued for FIT resources but are auctioned quarterly via JEPX.

Feed-in Premium (FIP)

FIP provides a premium payment added to the wholesale market price for RE generation, often awarded via competitive bidding (auctions) to minimize costs.

Projects may require combined support: premiums plus guaranteed offtake.

⚠ Should FIP qualify as SSS only if surcharge funding exceeds a threshold (e.g., >50% of revenue), or does the presence of any mandatory premium create a traceable financial link sufficient for full pro-rata claims?

What happens when a CFE resource receives both FIP and corporate offtake agreement?

New Zealand

New Zealand's electricity market is dominated by four major generator-retailers ("gentailers"): Meridian Energy, Mercury NZ, Genesis Energy, and Contact Energy. The government holds a 51% stake in Meridian, Mercury, and Genesis, treating these as mixed-ownership companies that operate commercially and return dividends (e.g., no plans to dilute ownership below 51% without public consultation, but recent policy allows capital raises for new plants while maintaining dividends).

There are no non-bypassable charges, regulated cost recovery, or government schemes funding renewables or mandating clean energy procurement. NZ's grid is already ~85% renewable (hydro, geothermal), driven by natural resources rather than policy mandates. Customers choose suppliers freely, paying market rates without traceable, mandatory contributions to specific resources.

Government Owned	Government Funded
Implies investment but does not create a mandatory consumer relationship. Classifying based solely on ownership risks over-expansion of SSS, capturing commercial entities without public funding mechanisms.	Better aligns with SSS spirit, requiring traceable contributions (e.g., non-bypassable charges). NZ gentailers are not "funded" by mandates; profits flow to shareholders (including government), not vice versa.

⚠ Should SSS eligibility hinge on government funding of resources (e.g., via taxes, rates, or surcharges) rather than government ownership of the supplier?

France

The Tarifs Réglementés de Vente (TRV), specifically the "Tarif Bleu" (Blue Tariff), are a crucial aspect of France's energy market. They represent state-set prices for electricity supply, primarily designed to protect residential consumers and small businesses from market price volatility. Grid energy composition of ~75-80% nuclear (via ARENH), 15-20% renewables (funded by CSPE levy), <5% fossil fuels. Estimated 365 TWh annual generation.

Regulated Pricing

Non-bypassable CSPE (Contribution au Service Public de l'Énergie) surcharge (~2.5% of bill) funds renewable integration and energy transition.

RED III Mandate (Directive (EU) 2023/2413)

Allows Member States to withhold Guarantees of Origin (GOs) from subsidized renewable producers to prevent "double benefits" (subsidy + GO revenue). France auctions GOs via EEX so subsidized renewables.

Nuclear GOs & CAPN Contracts

Suppliers sells issued GOs via Nuclear Production Allocation Contracts (CAPN): Allocates production & attributes for to corporate offtakers (e.g., Data4 40MW/12 yrs Sep 2025; Lafarge long-term Sep 2025; open to all EU clients).

⚠ In cases where SSS EACs have been sold into the voluntary market, how should this be handled?

Norway

Norway's electricity production in 2024 reached 157 TWh, with ~98% from state/municipally-owned hydropower under public service obligations. Guarantees of Origin (GOs) certify renewable attributes but are predominantly exported, generating revenue rather than retained for domestic claims. In 2024, Norway exported ~22% generation but 68% of the issued hydro GOs.

Pre-1990 Hydro Facilities	Post-1990 Hydro Facilities
These qualify as taxpayer-funded. Built during Norway's regulated era (pre-1991 liberalization), they were financed through public budgets, municipal utilities, state loans, and taxes. Statkraft inherited these as legacy assets under public service obligations to serve domestic load, aligning with SSS criteria for publicly owned facilities without competitive advantages.	While Norway's market liberalization shifted to competitive models, Statkraft's newer hydro developments (e.g., upgrades like the NOK 20-30 billion program for 2024-2030) often involve state reinvestments from profits/dividends (taxpayer-derived via state ownership) or public funding mechanisms, such as government-backed R&D or environmental grants. Limited direct subsidies exist, but state ownership implies indirect taxpayer support through equity injections or risk assumption.

⚠ Can utility’s reinvestment of profits/dividends into hydro upgrades be classified as “taxpayer-funded” for SSS eligibility, or must direct subsidies be proven?

Next Steps*

Publish draft SSS Wiki for:

- Guidance by country, sub-region, market type, and subsidy type.
- SSS Generator Designation Examples (decisions trees)
- Customer reporting examples (CFE %, residual mix, and claims)
- Supplier guidance to prevent resource shuffling

Join the Conversation

Attend monthly working group sessions

Post Questions/Comments

Reach Out - Casey@CleanIncentive.com

**Note, these activities are outside GHG Protocol TWG process*

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Next steps

- Next meeting #21: Wednesday, December 10th, 15:00 EST/23:00 CET/05:00 CST +1
- TWG members to contact secretariat with any expression of interest for AMI engagement options.

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Thank you!

If you'd like to stay updated on our work, please subscribe to GHG Protocol's email list to receive our monthly newsletter and other updates.

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Supplementary slides

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Proposed revision text - Criterion 6. Standard Supply Service

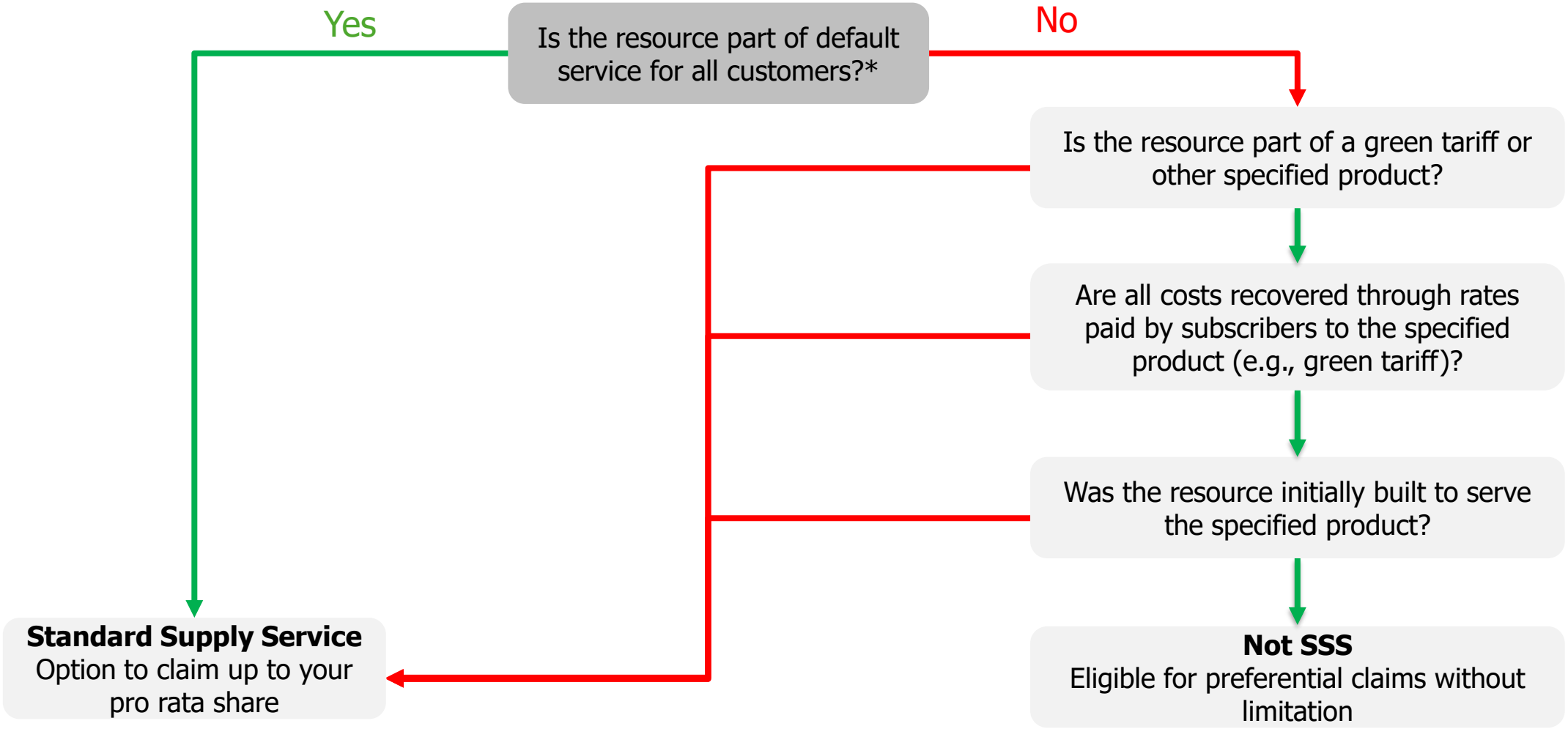
Standard Supply Service emission factors **shall** convey the direct GHG emission rate associated with resources where there is a traceable and mandatory financial relationship with consumers.

The defining characteristic of SSS resources is that there is a traceable and mandatory financial relationship between customers of a supplier or utility and the electricity and/or contractual instruments from deliverable generation resources (including both carbon-free and fossil resources) used to supply their load. The intent of the SSS designation is to ensure fair allocation of these resources among customers, such that nonparticipating customers are not harmed by the exercise of claim(s) for SSS resources by reporting companies. Examples of a financial relationship between customers and electricity supply and/or contractual instruments that constitute a designation of SSS include:

- Facilities and/or supply that are subject to regulated cost recovery from a monopoly supplier* as part of default service in a particular service area and are not part of a resource-specific supplier product (e.g. a green tariff).
- Competitive or regulated suppliers complying with government-mandated clean energy procurement programs through the procurement of certificates on behalf of the load they serve. Examples of such programs include Renewable Portfolio Standards (RPS), Clean Energy Standards (CES), and nuclear-support policies applied to state-level electricity supply in the United States, or Feed-in Tariff (FIT) mechanisms in countries such as Japan.
- Publicly owned facilities where the majority owner is a government entity and the facility is operated to serve domestic electricity load under a public service obligation or similar regulatory framework. This does not include new resources developed through competitive open tender processes where the government-owned entity receives no regulatory advantage or cost recovery not equally available to private developers.

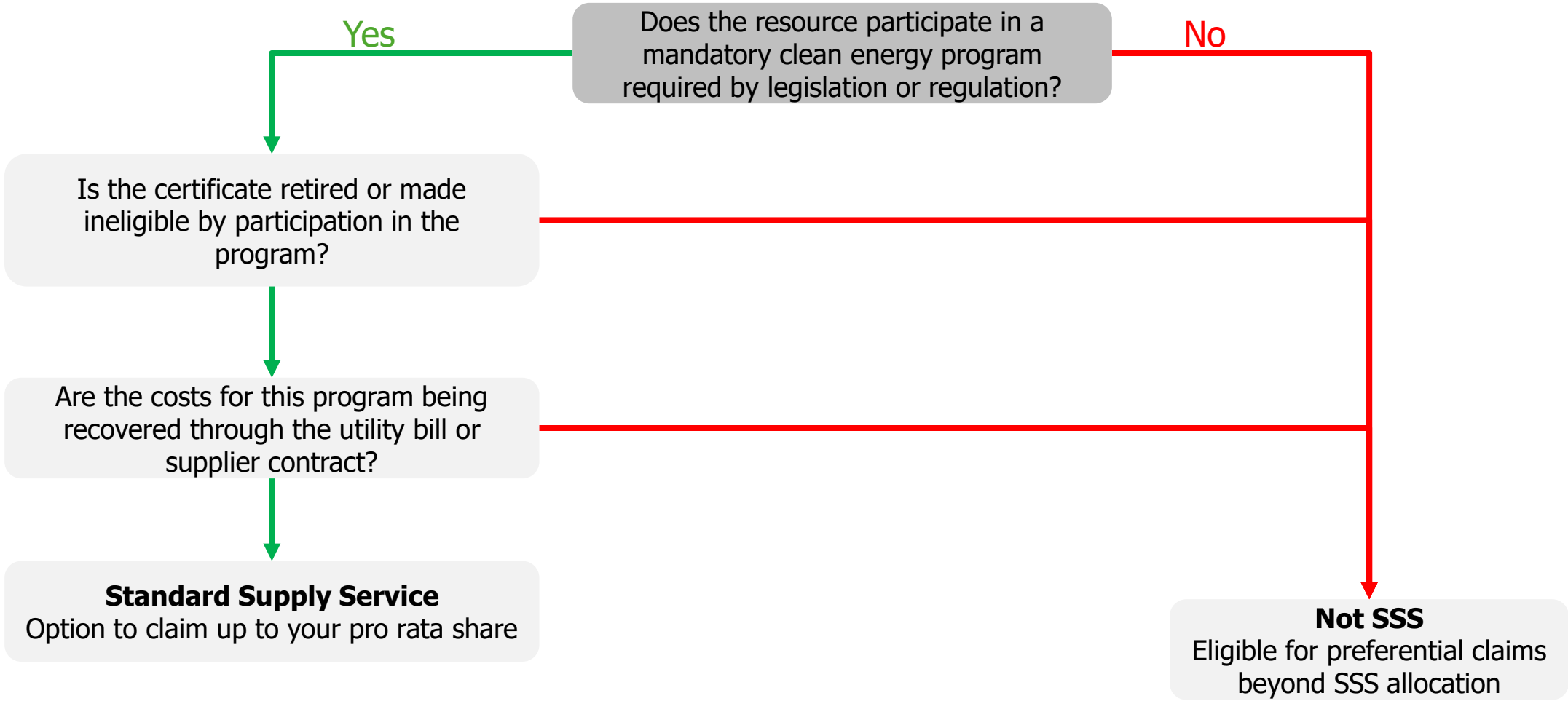
*Stakeholder feedback on what should be defined as a monopoly supplier is requested in public consultation. For example, a monopoly supplier could be a vertically integrated investor-owned utility or a government entity operating in a service area without supplier choice or they could be a distribution utility in a restructured market where certain electricity supply and/or contractual instrument purchases are subject to non-by passable, regulated cost recovery.

SSS Designation Decision Tree: Monopoly supplier or facilities with regulated cost recovery



* Some territories with monopoly suppliers also have publicly owned and/or policy mandates, compliance programs or subsidies. In these cases, the fact that the resource is part of default service from a monopoly supplier and is therefore SSS supersedes any exceptions to a SSS designation.

SSS Designation Decision Tree: Policy Mandates / Compliance Programs



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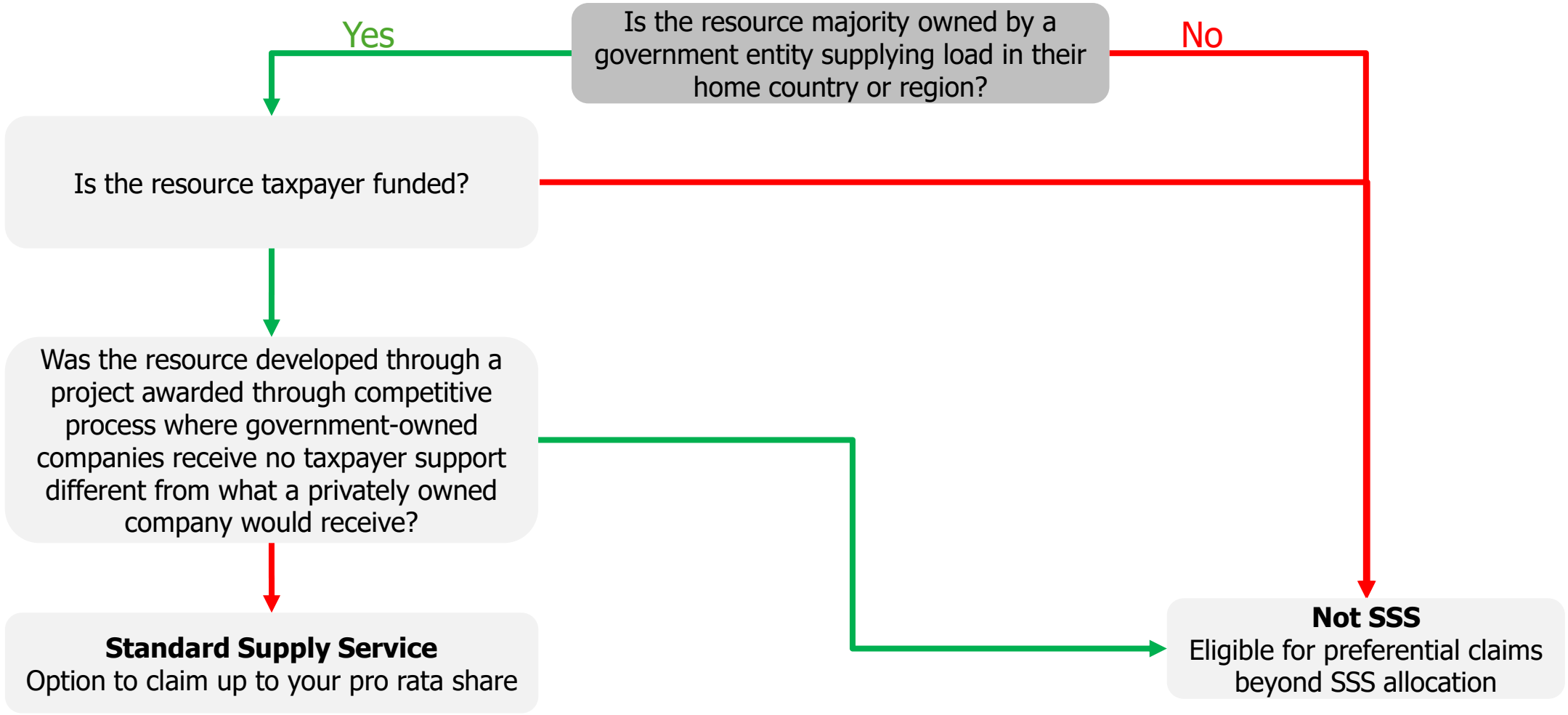
SSS Designation Decision Tree: Publicly owned



Appendix A

Justifiable exclusions for scopes 1 and 2:
Package of revisions

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Maintain exclusions for scopes 1 and 2

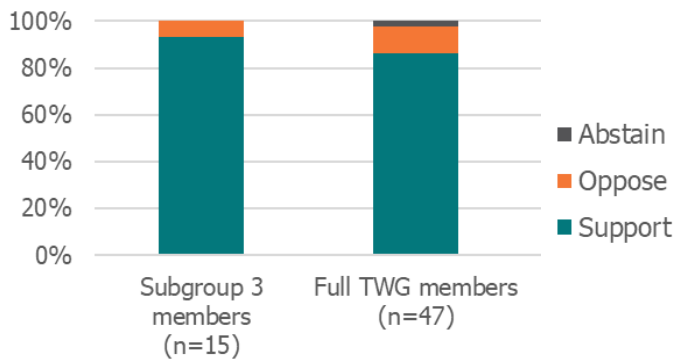
Preliminary outcome

- **Maintain** scope 1 and scope 2 exclusions
- Make scope 1 and scope 2 exclusions more **prescriptive and quantitative**

Rationale

- More prescriptive and quantitative exclusion thresholds promote **transparency, completeness, and comparability**
- **Flexibility** with justifiable exclusions allows companies to avoid undue cost and effort of collecting high quality data for a small percentage of emissions

Level of support



ISB Meeting 15 vote on the full package:

Support: 9 of 11

(5 support with minor edits)

Oppose: 2 of 11

Implications

- **Full quantification required** to calculate and justify exclusions
- **Why exclude any emissions?** Some members suggest all quantified emissions should be reported; others note that reporters may wish to exclude low-quality estimates from public inventory.
- **Interoperability concerns** with programs that use a qualitative exclusions approach. Subgroup 3 members agree that qualitative exclusions can be interoperable with qualitative exclusions. However, there may be rare cases of misalignment.

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For more information, see Subgroup 3 Meeting 6 minutes and slides; Subgroup 3 Meeting 7 minutes and slides

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Boundary: Define separate boundary for exclusions for scopes 1 and 2

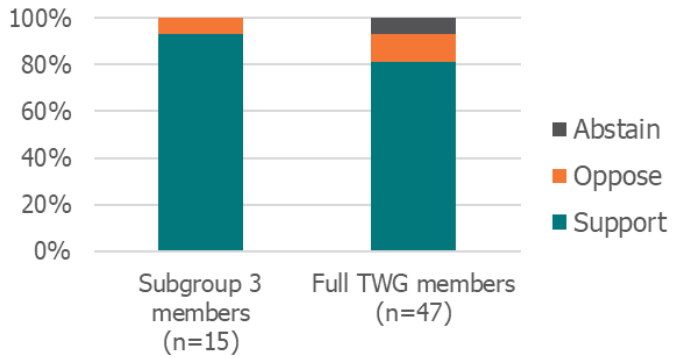
Preliminary outcome

- **Define separate quantitative exclusion thresholds** for scopes 1, 2, and 3
- This means that a separate exclusion boundary would be defined for each scope

Rationale

- Boundaries of the three scopes are **inherently different**
- Separate thresholds **support transparency** in the reporting of exclusions because the exclusions are distributed across the scopes
- **Complexities of scope 2** (e.g., dual reporting) would complicate a cumulative threshold

Level of support



ISB Meeting 15 vote on the full package:

Support: 9 of 11

(5 support with minor edits)

Oppose: 2 of 11

Implications

- **Reporting:** Companies would need to separately report their exclusions for each scope
- **Cross-cutting:** Additional justifiable exclusions or exceptions proposed by other workstreams (e.g., Scope 2 TWG, Scope 3 TWG) would need to be harmonized

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For more information, see Subgroup 3 Meeting 7 minutes and slides; Subgroup 3 Meeting 8 slides

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Value: Define separate 1% quantitative exclusion threshold for scope 1 and scope 2

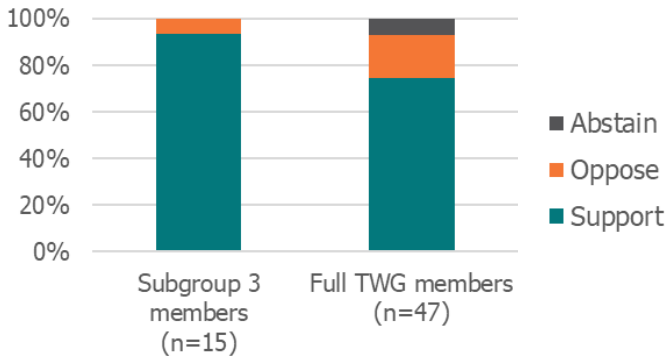
Preliminary outcome

Define a **1% quantitative exclusion** threshold for scope 1 and a 1% quantitative exclusion threshold for scope 2

- *Companies **shall** account for and report at least 99% of scope 1 emissions, 99% of scope 2 emissions, and 95% of total required^ scope 3 emissions.*
- *Companies **should** account for and report all scope 1 and scope 2 emissions*

^Required scope 3 emissions = minimum boundary scope 3 emissions as defined in S3 Standard

Level of support



ISB Meeting 15 vote on the full package:

Support: 9 of 11

(5 support with minor edits)

Oppose: 2 of 11

Rationale

- A low quantitative threshold promotes a **balance between completeness and feasibility**
- Allowing **flexibility** with a 1% exclusion threshold helps ensure companies can report high quality, credible, and decision-useful GHG inventories
- **Lower threshold for scopes 1 and 2 versus scope 3** is justified given the better data availability companies typically have for scope 1 and 2 emissions sources

Implications

- **Full quantification required** to calculate and justify exclusions
- **Cross-cutting:** Additional justifiable exclusions or exceptions proposed by other workstreams (e.g., Scope 2 TWG, Scope 3 TWG) would need to be harmonized

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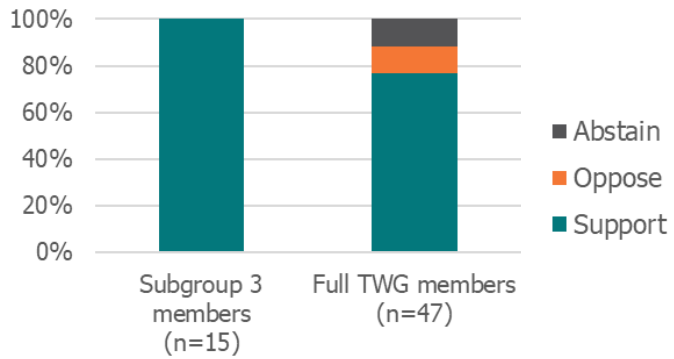
Justification: Quantify total emissions to justify exlusions

Preliminary outcome

Total scope 1 and scope 2 emissions shall be quantified to justify exclusions

- *Companies **shall quantify** scope 1 and scope 2 emissions to justify exclusions.*
- *Companies **shall disclose and justify** the exclusion of any scope 1 emissions and scope 2 emissions.*

Level of support (updated with latest polling since Meeting 13)



ISB Meeting 15 vote on the full package:

Support: 9 of 11

(5 support with minor edits)

Oppose: 2 of 11

Rationale

- Companies **must quantify 100% of emissions** to determine what quantity of emissions can be excluded
- Companies **may wish to exclude quantified emissions** from their inventory due to low quality (e.g., may not be assurable)

Implications

- **Full quantification required** to calculate and justify exclusions
- Concern about use of low quality data to justify exclusions. Proposed solution: **Guidance needed** for full quantification of emissions stating companies should use best available data

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Appendix B

Justifiable exclusions for scopes 1 and 2:
External program interoperability

External programs: Justifiable exclusions

	Name	Type	What can be excluded?	Requirement type	Interoperability with proposed GHG Protocol revisions* (i.e., exclusions allowed based on quantitative exclusion threshold)
IFRS	**IFRS S2**	**Climate disclosure mandate**	**Immaterial scope 1 and 2** emissions **Immaterial scope 3** categories Scope 3 emissions that meet "**impracticability**" clause	Qualitative	IFRS S2 could be interoperable if emissions excluded on a quantitative basis are also deemed immaterial, and vice versa
	ESRS E1	**Climate disclosure mandate**	**Non-material scope 1 and 2** sources and assets **Non-significant scope 3** categories, where "significant" is similar to GHG Protocol definition of "relevance"	Qualitative	ESRS E1 could be interoperable if emissions excluded on a quantitative basis are also non-material (scopes 1 and 2) or non-significant (scope 3), and vice versa
	SBTi: CNZS	**Target-setting initiative**	**Up to 5%** cumulative exclusion across scope 1 + scope 2 **Up to 5%** exclusion across total scope 3 GHG inventory	Quantitative	Interoperable and potentially aligned
	SBTi: DRAFT v2.0 CNZS	**Target-setting initiative**	**No scope 1 and 2 exclusions permitted** **Categories <5% of scope 3 can be excluded from scope 3**	Quantitative	Public report is not aligned However, reporters would need to calculate full inventory to identify and justify exclusions. Reporters can then to SBTi's quantitative threshold.
ISO	**ISO 14064-1:2018**	**GHG Standard**	Emission sources that are not relevant Indirect emissions that are not significant	Qualitative	ISO could be interoperable if emissions excluded on a quantitative basis are also not relevant (direct emissions) or not significant (indirect emissions), and vice versa
GRI	**GRI**	**Climate Reporting Standard**	No specific text on omissions for direct emissions For scope 3 exclusions, reporter is **required to provide a reason for omission**	Qualitative	NA

*See definitions and interoperability case studies on the following slides
Note: Excluded CDP (all disclosure is voluntary) and California SB 253 and 219 (regulation not yet drafted)

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External programs: Justifiable exclusions

	Name	Type	Scope 1+2 exclusions	Scope 3 exclusions
IFRS	**IFRS S2**	**Climate disclosure mandate**	Refers to Corporate Standard for "measurement" Material scope 1 and scope 2 emissions required	Material categories required **Impracticability** clause: "*In those rare cases when an entity determines it is impracticable to estimate its Scope 3 greenhouse gas emissions, the entity shall disclose how it is managing its Scope 3 greenhouse gas emissions.*" –IFRS S2 paragraph B57
	ESRS E1	**Climate disclosure mandate**	No specific text on exclusions for scope 1 and 2	Significant scope 3 categories required **Exclusions permitted:** "*Disclose a list of Scope 3 GHG emissions categories included in and excluded from the inventory with a justification for excluded Scope 3 categories*" –ESRS, AR44 (i)
SCIENCE BASED TARGETS	**SBTi: CNZS**	**Target-setting initiative**	**Up to 5%** cumulative exclusion across scope 1 + scope 2	**Up to 5%** exclusion across total scope 3 GHG inventory
SCIENCE BASED TARGETS	**SBTi: DRAFT v2.0 CNZS**	**Target-setting initiative**	**No exclusions permitted**	**Quantitative exclusion threshold:** Categories <5% total scope 3 can be excluded from scope 3. Primary emission sources must be included.
ISO	**ISO 14064-1:2018**	**GHG Standard**	"*The organization **may exclude GHG sources or sinks** for which the contribution to GHG emissions or removals is not relevant. It shall identify and explain …*" –page 9	Significant indirect emissions required **Exclusions permitted:** "*Exclusions of significant indirect emissions shall be justified.*"
GRI	**GRI**	**Climate Reporting Standard**	No specific text on omissions for direct emissions	"*If the organization cannot report the emissions data for a particular [scope 3] category, it is **required to provide a reason for omission**.*" -Guidance to GH-3-b

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Note: Excluded CDP (all disclosure is voluntary) and California SB 253 and 219 (not yet finalized)

External programs: Definitions

	Name	Definitions
IFRS	**IFRS S1**	**Material information**: "In the context of sustainability-related financial disclosures**, information is material if** omitting, misstating or obscuring that information could reasonably be expected to influence decisions that primary users of general purpose financial reports make on the basis of those reports, which include financial statements and sustainability-related financial disclosures and which provide information about a specific reporting entity." – IFRS S1, pg 8
	ESRS E1	**Double materiality** = Reflecting both impact materiality and/or financial materiality **Impact materiality** = "A sustainability matter is material from an impact perspective when it pertains to the undertaking's material actual or potential, positive or negative impacts on people or the environment over the short-, medium- or long-term. Impacts include those connected with the undertaking's own operations and upstream and downstream value chain, including through its products and services, as well as through its business relationships." –ESRS E1, page 10 **Financial materiality** = "…information is considered material for primary users of general-purpose financial reports if omitting, misstating or obscuring that information could reasonably be expected to influence decisions that they make on the basis of the undertaking's sustainability statement." –ESRS E1, page 10 **Significance:** "The undertaking shall identify and disclose its significant Scope 3 categories based on the magnitude of their estimated GHG emissions and other criteria provided by GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (Version 2011, p. 61 and 65- 68) or EN ISO 14064-1:2018 Annex H.3.2, such as financial spend, influence, related transition risks and opportunities or stakeholder views." -ESRS E1 §AR 46 d
SCIENCE BASED TARGETS	**SBTi: DRAFT v2.0 CNZS**	**Relevant** = Significant scope 3 categories representing 5% or more of total scope 3 emissions; and Emission-intensive activities representing 1% or more of total scope 3 emissions or at least 10,000 tCO2e/year.
ISO	**ISO 14064-1:2018**	**Significance:** "…the organization shall define and explain its own pre-determined criteria for significance of indirect emissions, considering the intended use of the GHG inventory. … The criteria to evaluate significance may include the magnitude/volume of the emissions, level of influence on sources/sinks, access to information and the level of accuracy of associated data (complexity of organization and monitoring). A risk assessment or other procedures (e.g. buyer requirements, regulatory requirements, concern of interested parties, scale of operation, etc.) may be used…" -ISO 14064-1:2018, Section 5.2.3 and Annex H
GRI	**GRI**	"*If the organization cannot report the emissions data for a particular [scope 3] category, it is* ***required to provide a reason for omission****.*" -Guidance to GH-3-b

Note: Excluded CDP (all disclosure is voluntary) and California SB 253 and 219 (regulation not yet drafted)

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Interoperability with external programs: Scenarios

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Scenarios showing interoperability of qualitative and quantitative exclusion approaches

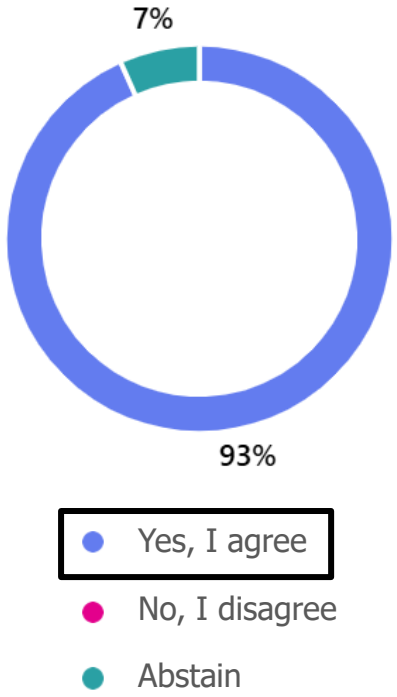
Scenario	Material?	Above or below quantitative threshold?	Outcome	Notes
1	**Immaterial**	**Excluded** **Below** 1% threshold*	**Excluded by both**	Source may be excluded under GHG Protocol, but should not be. Recommendation to report all scope 1 and 2 emissions
2	**Immaterial**	**Included** **Above** 1% threshold*	**Excluded in IFRS S2, but included in GHG P**	**Should be unlikely,** but possible since materiality assessment is mostly qualitative
3	**Material**	**Excluded** **Below** 1% threshold*	**Included in IFRS S2, but excluded in GHG P**	Source may be excluded under GHG Protocol, but should not be. Recommendation to report all scope 1 and 2 emissions
4	**Material**	**Included** **Above** 1% threshold*	**Included by both**	**Complete** reporting

Justifiable exclusions and interoperability with external programs

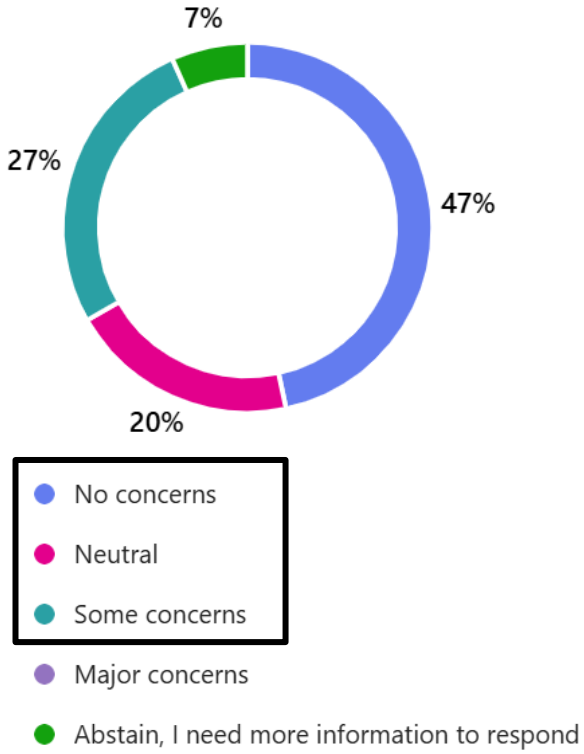
Interoperability take-aways:

- **Most external programs have qualitative approaches** for emissions exclusion (e.g., "materiality," "significance," "relevance")
- Proposed GHG Protocol **quantitative** exclusion threshold **can be interoperable** with **qualitative** exclusion approaches defined by external programs
- However, **qualitative approaches are open to interpretation**, and therefore there will not always be aligned with a quantitative exclusion threshold

Subgroup 3 **had majority agreement** that external programs with qualitative exclusions **can be interoperable** with a quantitative exclusion threshold



Majority of subgroup 3 had **no concerns or was neutral** regarding about interoperability



Appendix C

Justifiable exclusions for scopes 1 and 2:
CDP analysis on exclusion threshold:

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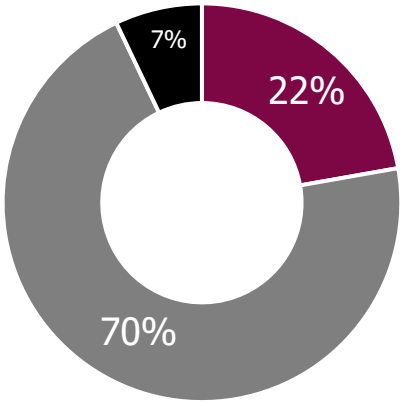
Relevant research: CDP disclosures on justifiable exclusions

Take-away: 70% of companies report no exclusions

CDP Question 6.4^: **Are there any sources … which are not included in your disclosure?**



- Yes, sources excluded
- No exclusions
- Blank

*Count: 7,253**

CDP Question 6.4a^: **Provide details of the sources … which are not included in your disclosure.**

Of the companies reporting exclusions:**

- 55% excluded Scope 1 sources
- 45% excluded Scope 2 sources
- 52% excluded Scope 3 sources

*Count: 2,483**

** May exclude companies that do not have scope 3 in their selected reporting boundary

CDP Question C6.4: Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are **within your selected reporting boundary** which are not included in your disclosure?

CDP Question C6.4a_C2: Provide details of the sources of Scope 1, Scope 2, or Scope 3 emissions that are **within your selected reporting boundary** which are not included in your disclosure.

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**Fewer total respondents on question 6.4 than 6.4a. Excluded responses of "question not applicable."*
^Source: CDP disclosures 2023, which uses a previous version of the CDP questionnaire

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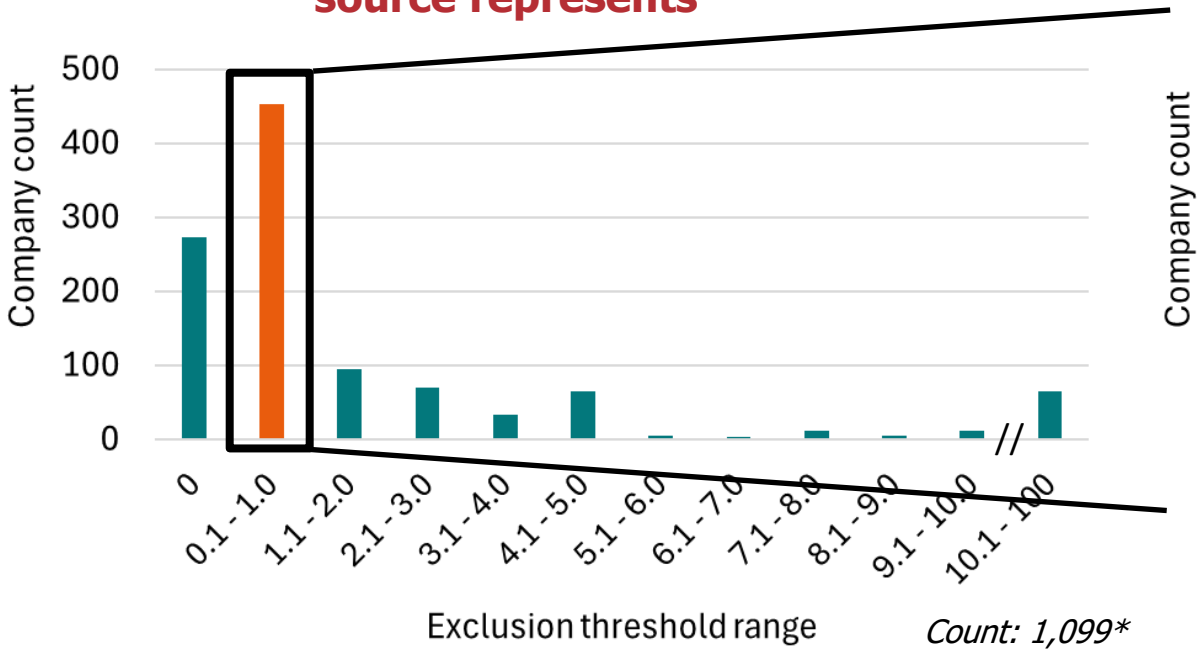
Relevant research: CDP disclosures on justifiable exclusions

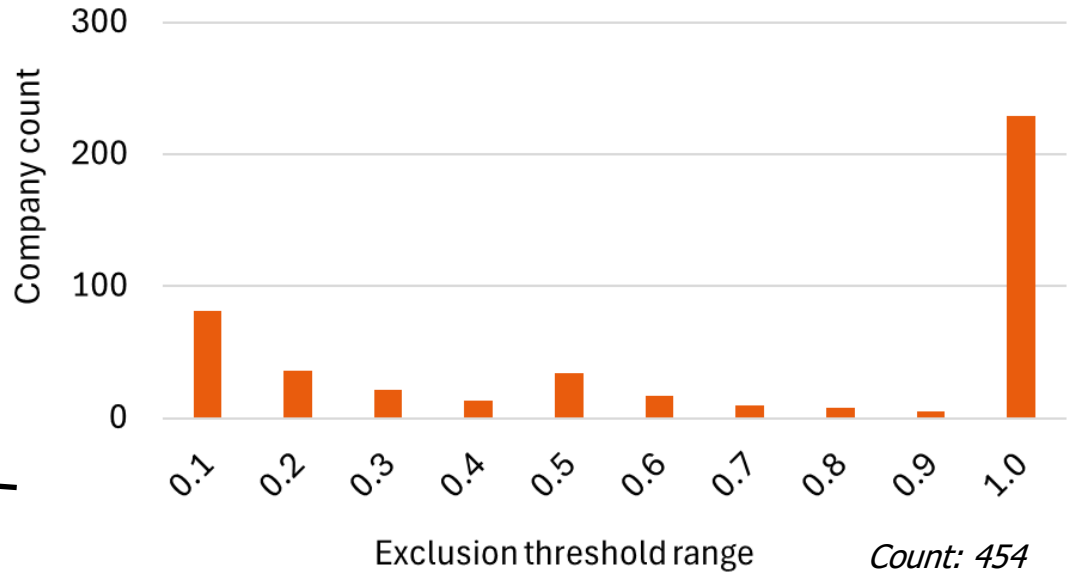
Take-away: Of companies reporting emissions exclusions,
The most common exclusion range for **scopes 1 and 2** is **0.1 to 1.0%**

CDP Question 6.4a^: **Estimated percentage of total Scope 1+2 emissions … excluded source represents**



*Count: 1,099**

CDP Question 6.4a^: **Subset of companies excluding 0.1 to 1.0% of scope 1+2 emissions**



Count: 454

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*Note: This only includes exclusions **within a company's selected reporting boundary***
**Excluded responses of "question not applicable," which reported that they did not exclude any emissions in scopes 1 and 2*
^Source: CDP disclosures 2023, which uses a previous version of the CDP questionnaire

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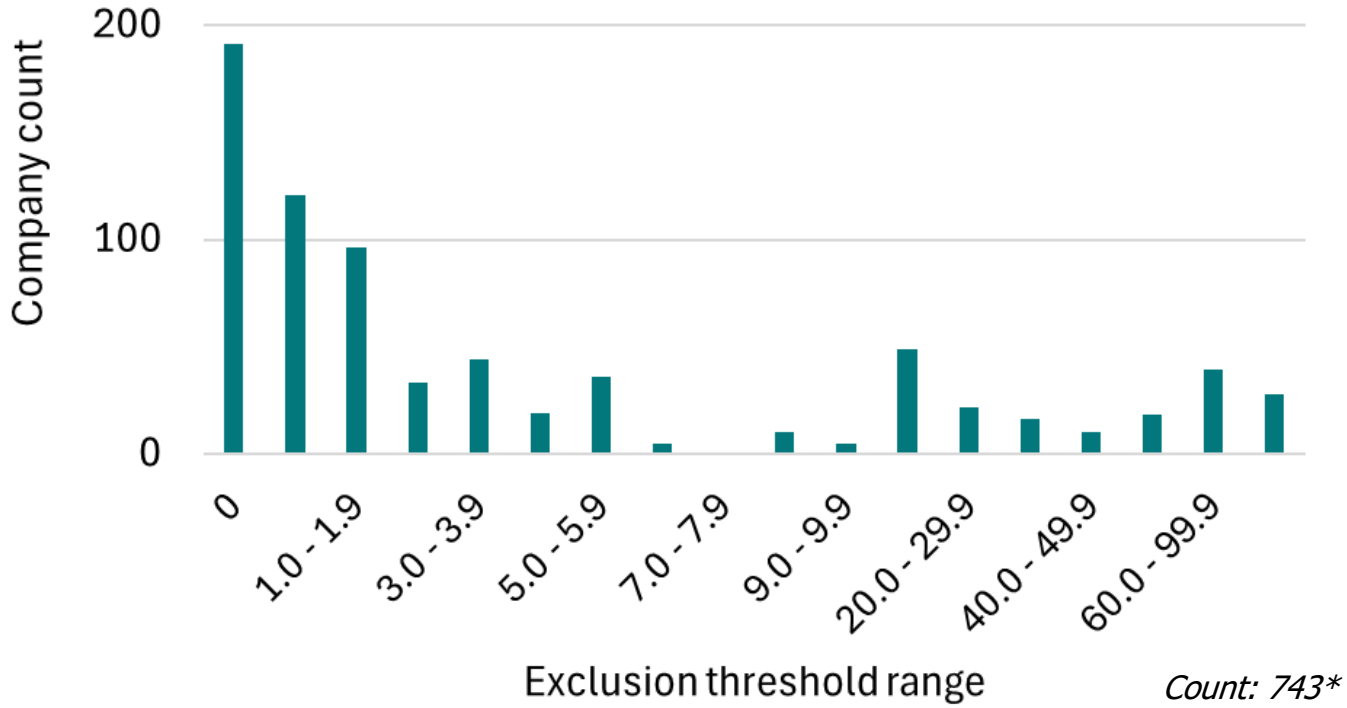
Relevant research: CDP disclosures on justifiable exclusions

Take-away: The most common exclusion range for **scopes 3 is greater than that of scopes 1 and 2**

CDP Question 6.4a^:
Estimated percentage of total Scope 3 emissions … excluded source represents

*Note: This only includes exclusions **within a company's selected reporting boundary***



*Count: 743**

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**Excluded responses of "question not applicable," which reported that they did not exclude any emissions in scopes 1 and 2*
^Source: CDP disclosures 2023, which uses a previous version of the CDP questionnaire