Proposition Paper: Reduction Criteria

For the new CNG Standard

(DRAFT RELEASE - vs 0.2 - July 2019)

Important notes and considerations:

CNG is currently revising and updating its certification program, as outlined in the ***Terms of Reference****. The new CNG Certification Program (vs 1.0) consists of a revised Standard (vs 3.0, in the past referred to as the KNG Standard vs 2.0), a new Assurance Protocol (vs 1.0) and a new Claims Policy (vs 1.0). For questions related to the CNG Certification Program, please contact certification@climateneutralgroup.com. All (draft) documents can be found on the CNG website: https://www.climateneutralgroup.com/en/cng-certification-program-development-process/*

- This (draft) Proposition Paper has been developed by CNG, and includes an **updated proposal** for the **GHG Emission Reduction Criteria**, which we envision becoming a key element of the new CNG Standard.
- Input received from stakeholders during the Stakeholder Event (which took place on the 25th of June, 2019) is incorporated in this updated version. Major changes, as compared to the first version of this document, are listed in the 'Changes Document'.
- Key stakeholders are invited to provide their feedback on this second proposal, through a formal **Online Consultation Round (open from September 15th till November 24th, 2019)**. This feedback will be incorporated in the development process for the CNG Standard criteria. CNG strives for criteria that are practical and realisable, but also sufficiently ambitious to make an impact.
- This proposal takes into account the **IPCC's report '*Global Warming of 1.5 ºC*'** (January, 2019) and complements **ICROA's definition of '*Carbon Neutrality*', post 2020** (May, 2019).
- This document is publicly available for free (from the CNG website) in English (official and binding version) and Dutch.

1. What are the required GHG emission reductions?

The Paris Agreement strives to achieve a **net zero global balance between GHG emissions and reductions by 2050** in order to keep temperature rise limited to an increase well below 2°C by 2050 (and ideally below 1.5°C). The international community (for instance the Dutch in their '*Klimaatakkoord*'), often translates this into the following global emission targets:

- Reduction target for 2030 = 49% GHG emission reductions achieved globally, compared to 1990;
- Reduction target for 2050 = 100% GHG emission reductions achieved globally, compared to 1990.

'*Global GHG emission reduction'* is defined as:

➔ **Any CO_2-eq emission** reduction (carbon dioxide or other GHG, converted to the equivalent amount of carbon dioxide), achieved in **any place in the world**, but **only 'counted'/'claimed' once** (i.e. for voluntary market, national compliance market).

2. How is this applied to our CNG Certification Program?

The global reduction targets defined above will be converted into SMART criteria for CNG clients in the new CNG Standard, so that clients can reduce their emissions accordingly in a practical and realizable manner. However, CNG wants to be more ambitious than these global targets, for two main reasons:

1. When formally applying the Paris Agreement definition given above, both **internal reductions** (achieved by the organisation itself) as well as **external reductions** (achieved elsewhere, i.e. through eligible offsetting[1]) can be used by clients to reach their own reduction targets. **Technically speaking, this means that in 2050, when a global net balance of zero emissions is required, corporates can still emit and would still be able to (fully) compensate with offsetting.** CNG is of the opinion that offsetting is a very functional interim solution, but not solving the 'problem at its core'.
2. Since the Paris Agreement was signed, the international climate community has advanced its studies, resulting in new findings and new dialogues. For instance, It has become evident that the original (well-below) 2°C scenario is insufficient, and **temperature rise needs to stay under 1.5°C**[2] in order to mitigate the worst effects of climate change. Also, it has become evident that that some highly emitting sectors (in the compliance market) will not be able to meet their targets for valid reasons, the main one being that the needed technologies and alternatives won't be ready in time. Even though it may seem unfair, some therefore need to pitch in more than others, if we want to reach that net zero target by 2050.

CNG's position is therefore:

➔ CNG offers a **voluntary program** that challenges corporates to 'go beyond Paris', so that the **CNG claim really represents a certain level of ambitiousness.** A certain degree of internal reduction is therefore encouraged and enforced through the CNG Standard. These internal reductions should be 'additional', and may not be 'double-counted', e.g. for other compliance targets or nation's own targets (Nationally Determined Contributions, EU Emissions Trading System).

[1] On the condition that these projects meet the most stringent credibility requirements (i.e. no double issuance, counting or selling, and are compliant with ICROA guidelines).

[2] CNG adheres to the 1.5°C scenario which was defined by the IPCC as the minimum needed in order to mitigate the worst effects of climate change, see: https://www.ipcc.ch/site/assets/uploads/sites/2/2018/07/sr15_headline_statements.pdf

3. How will clients be incentivised to make reductions themselves?

- First, CNG believes the **market will partly regulate itself**. Art. 6 of the Paris Agreement sets out principles for voluntary cooperation, which will be reviewed during COP25 in Santiago, Chile (end of 2019). It is expected that, enforced by regulatory changes, the carbon price and the price of offset credits will go up significantly in the coming years, i.e. local reduction initiatives or offset projects may count towards nation's own Nationally Determined Contributions (NDCs), creating scarcity for the voluntary market and making offsetting more expensive. Thus, companies investing in internal reductions today will prevent accumulative costs resulting from (increasingly more expensive) offsets year after year in the future.
- In addition**, internal reduction leads to a range of (long-term) additional benefits** for companies, such as: 1) reduction of operational costs (e.g. energy saving); 2) more efficient use of resources (e.g. material and packaging saving); 3) spur ambition for company innovation; 4) be ahead of new (inter)national emission regulation), and 5) potential access to subsidies (e.g. governmental support).

CNG has recently launched its new '**On Track Program'**, with the aim of encouraging and supporting clients with their internal reduction measures. This entails the following (customised) technical advice: 1) conducting cost-benefit analyses of internal reduction investments compared to the cost of external reductions; 2) co-setting ambitious but feasible emission scopes, boundaries and targets together with clients, and; 3) providing insight as to how the client can achieve its internal reductions, also when company growth results in new emissions. The objective of this program is that each client, with support from CNG, understands its reduction needs, makes a three-year road map as well as a long-term plan based on defined reduction opportunities and then establishes 'green areas' (commitments) and orange areas (nice-to-have's). The first pilot results are positive and demonstrate a good appetite amongst clients for starting the 'On Track Program'.

In addition, CNG proposes to **reward clients that reduce internally more than required** (for at least two consecutive years in a row) as 'good performers', meaning these clients qualify for a lower audit frequency and intensity (thus lower audit costs, see 'Assurance Protocol').

Summarizing:

➔ The amount spent on offsetting, can also **be invested in corporates' own internal reduction plans**, leading to cost saving and additional benefits in the long run. CNG will launch the '**On Track Program'** that helps clients to make internal reductions themselves.

4. How does the CNG Certification Program work?

Practicality is key, yet not by compromising on the level of ambitiousness. The program is thus not about 100% accurate footprint calculations (and spending a lot of effort on that), but rather about collective reduction progress of clients or supply chain partners all together, and making that progress visible. As such, there is a **range of flexibility rules (and some stringency rules) related to the accuracy of the footprint and compliance with the reduction targets**. These rules are described hereunder.

STEP 1: CALCULATING THE FOOTPRINT

During the first year of certification, the total amount of annual GHG emissions is calculated and validated for the scope that the client has chosen, which is either '*certification of the organisation*', or '*certification of one or*

more products or services', or a combination of both. This 'first year' becomes the *'baseline year', and the* '*baseline footprint'* of the organisation or a particular product/service[3] is ascertained.

The table below outlines which emissions are to be included in the footprint calculation. Annex 1 provides a more detailed explanation of GHG scopes 1, 2 and 3.

Option 1: **Certification of the Organisation**	*Option 2:* **Certification of a Product (or Service)**
If a client choses to get certified for its organisation, the baseline footprint shall include all emissions resulting from the organisation's own organisational activities **= total of GHG scope 1 and 2** (see GHG Corporate Standard), **plus 'relevant' GHG scope 3 emissions**[4] (see GHG Value Chain (Scope 3) Standard, or SKAO handbook[5]). **Additional stringency rules:** • **'40% scope 3 rule':** Clients whose total GHG scope 3 emissions (for all products and services combined) exceed 40% of their total GHG scope 1 + 2 + 3 emissions can only qualify for 'certification of the organisation' if they also reduce 40% on GHG scope 3 (in line with the Science Based Targets). Alternatively, these clients can apply for product certification. • **'Sites + sub-contractor rule':** If the organisation operates multiple sites or locations, or sub-contracts activities to other parties, these GHG scope 1 and 2 (and relevant GHG scope 3) emissions are also included in the client's total emission scope for the footprint calculation and subject to the verification and certification process (unless the FC and CB have agreed to grant an exception, e.g. if the client clearly communicates about the boundaries of its emission scope).	If a client choses to get a certain product or service certified, the baseline footprint shall include all emissions that occurred to produce and deliver that product or service to an onward buyer **= scope 3 for that product or service** (see GHG Product Life Cycle Standard)**, plus a 'corresponding portion of GHG scope 1 and 2 emissions'**[6] (see GHG Corporate Standard)**.** In the case of a product, and depending on who the buyer is, the footprint includes all GHG scope 3 emissions from supply chain activities occurring at the level of sourcing, manufacturing, and (optionally) delivery and disposal of that particular product, i.e. from **Cradle-to-Gate/Shelf/Grave.** Together with the Footprint Calculator and Certification Body, it is agreed which supply chain activities are included in the scope. Given the fact that a product is often composed of many ingredients (of which the origin is not always traceable), and supply chains are often very complex and composed of many tiers, the client may choose from **four footprint and compliance approaches** (explained in detail under Step 2), namely: • **OPTION 1** - **'80% Materiality Approach'** • **OPTION 2** - **'Tier Approach'** • **OPTION 3** - **'Mass Balance Approach'** • **OPTION 4** - **'Gradual Improvement Approach'**

[3] To calculate the GHG footprint of a product (or service), a 'Life Cycle Analysis' (LCA) is often conducted. LCA is a method or technique for calculating the environmental impact associated with all the stages of a product's life from raw material extraction through materials processing, manufacture, distribution, use, repair and maintenance, and disposal or recycling. These analyses are very complex and time-consuming, and are used and interpreted in many different ways. Hence, for practical reasons, CNG has decided to use another term: 'footprint of a particular service or product'.

[4] CNG currently deals with certain scope 3 emissions (for instance emissions resulting from business commuting, business flights and packaging) as if they were scope 1 or 2 emissions. This is because those GHG scope 3 emissions can be directly controlled and influenced by the client. In this document, these emissions are referred as 'Relevant scope 3 emissions' and they are added to the footprint of the organisation.

[5] The SKAO handbook is particularly well known in the Dutch market. SKAO's scope definition is acknowledged by CNG, because 'relevant scope 3 emissions' are classified as scope 2 by SKAO, see: https://www.skao.nl/handbook-3.

[6] The 'corresponding portion of scope 1 and 2 emissions' are those GHG scope 1 and 2 emissions that can be directly or proportionally allocated to the certified product or service. This is part of the scope and boundaries definition process, see 'Assurance Protocol'.

FOR STAKEHOLDER INPUT:

- **Q-RC-01: For certification of the organisation:** is the '40% scope 3 rule' reasonable? It is in line with the Science Based Targets, and represents the level of ambition the CNG program stands for but is this doable for clients at this time?
- **Q-RC-02: For certification of the organisation:** is the 'Sites + sub-contractor rule' reasonable? If a certain scope 1 or 2 activity is outsourced, can clients demand reductions from their sub-contractors (e.g. through their procurement/outsourcing agreements with these parties)?
- **Q-RC-03: For certification of a product:** CNG believes it should facilitate all clients being treated fairly and should make the same level of reductions, so that they 'deserve' the same right to use the same logo. In that context, do you believe that the client itself may decide which supply chain activities should be included in the scope and thus which emissions should be included in the footprint calculation? Can the client itself choose between cradle-to-gate, cradle-to-shelf or cradle-to-grave? If so, how to ensure then that e.g. client X and Y (who are direct competitors and may make the same claims once compliant) include the same scope and are equally ambitious?

STEP 2: CALCULATING THE ANNUAL REDUCTION TARGET

By 2030, 49% internal reduction needs to be achieved (compared to the original baseline[7]) and by 2050, the remaining 51% (thus totalling to 100%) needs to be achieved. This means that an *'annual reduction target'* can be calculated:

- For the period between baseline year and 2030: $Annual\ reduction\ target = \frac{49\%}{(2030 - baseline\ year)} = \frac{100\%}{X\ years} = X\ \%$
- For the period between 2031 – 2050: $Annual\ reduction\ target = \frac{51\%}{(2050 - 2031)} = \frac{51\%}{20\ years} = Y\ \%$

	Flexibility rules - baseline definition and reduction target calculation
1	**'Earlier baseline rule':** If the footprint of the organisation, product or service was ascertained and verified by CNG or another credible verifier in the past, this earlier year may function as the 'baseline year', so that any reduction achievements realised since then are incorporated, meaning the annual reduction target for coming years is less steep (see also Section 5, Scenario 2).
2	**'Baseline adjustment rule'**: If the organisation grows (in FTE, volume or revenue), resulting in a corresponding emission growth, the original baseline footprint of the organisation may be adjusted and a new annual reduction target may be defined, which will apply from that year onwards. As such, the annual reduction target is always expressed as a ratio of e.g. FTE, production volume, sales volume, profit, revenue, etc. This rule does not apply to certification of a product or service.

	Flexibility rules – Four options to choose for product certification
3	**OPTION 1 - '80% Materiality Approach'**: • **When?** In the case of complex supply chains, e.g. if the certified product is composed of many ingredients or raw materials (meaning many suppliers), or if the product's supply chain is composed of many links or tiers. • **How?** The client creates a 'supply chain map', and estimates all major and minor ingredients and emitters in the chain adding to the total GHG emissions of the certified product. Emissions caused by minor ingredients and/or minor emitters may be excluded from the footprint calculation (for an

[7] The Paris Agreement takes 1990 as the reference year for reduction setting. Between 1990 and today, a certain degree of reduction has already been realised at global, national and company level. Technically speaking, companies' future reduction targets should therefore also be adjusted taking their reductions already realised since 1990 into account. However, this makes the program rather complex, as the baseline year varies for each client and in many cases earlier reductions are not documented and cannot be proven. Thus, for practical reasons, CNG suggests setting the baseline year at 100% for all clients, whereby 49% reductions need to be achieved by 2030 and 100% by 2050, unless the client can demonstrate credible evidence of earlier reductions.

estimated maximum of 20%). The product's footprint then only includes the major emissions, hence **the annual reduction target is calculated based on only 80% of the product's total GHG emissions**.

OPTION 2 – 'Tier Approach':

- **When?** In cases where the client has strong powers of negotiation or influence over any of its preceding links or tiers in the product's supply/value chain, and these links have similar power over their preceding links.
- **How?** The client creates a 'supply chain map', and estimates which links can be 'influenced' (usually direct suppliers or providers) and how much each can realistically reduce. The client shall include in its contracts with these links the requirement that they reduce their scope 1 and 2 (and relevant scope 3) emissions, so that **all together a total emission reduction is achieved that equals the annual reduction target of the certified product**. In consecutive years, these links may require the same from their preceding links, so that over time reductions are gradually achieved in the entire supply chain.

OPTION 3 – 'Mass Balance Approach':

- **When?** In the case of unknown supply chain links, e.g. if the origin of the certified product's ingredients is (partially) unknown, or if (semi-)finished materials are mixed during later stages in the supply chain.
- **How?** The Mass Balance Approach is a traceability and claims concept commonly used by certification schemes[8]. Applying it to the certification of a product under the CNG Program, it requires that the client make an investment in any supply chain (of the same of similar product), whereby it can be proven that the investment resulted in concrete, additional and quantifiable emission reductions. In turn, the client may count this reduction for its own product's reduction target, corresponding with the amount invested and reduction realised elsewhere. However, as the product's supply chain is unknown, the product's footprint calculation is (usually) based on industry averages (e.g. defined in external literature and databases) or best guesses, which do not necessarily represent reality. To compensate, and to mitigate the incentive to 'abuse the Mass Balance Approach', **an additional 10% of emissions is added to the product's footprint, meaning the annual reduction target is calculated over a (potentially) higher baseline.** If a client chooses to use the Mass Balance Approach, the client shall first draft a proposal for formal consent by CNG and the Certification Body before the investment is made. Example 2 explains the Mass Balance approach in more detail.

OPTION 4 – 'Gradual Improvement Approach':

- **When?** In the case of complex supply chains (like option 1), where the challenge is to ascertain an accurate footprint based on real data from all supply chain partners (like option 3).
- **How?** If no real data is available, the product's footprint is calculated using industry averages (defined in external literature and databases) or best guesses, which do not necessarily represent reality. To compensate, and to mitigate the incentive to 'abuse the Gradual Improvement Approach, like for option 3, an additional 10% of emissions is added to the product's footprint, meaning the annual reduction target is calculated over a (potentially) higher baseline**. The client, however, makes a serious commitment to gradually make efforts to obtain real data and commitment for reduction from its supply chain partners, in return for which the percentage will also be lowered over time.** If a client chooses to use the Gradual Improvement Method, the client shall first draft a proposal, for formal consent by CNG and the Certification Body.

FOR STAKEHOLDER INPUT:

- **Q-RC-04: For certification of a product:** do these four options provide sufficient flexibility for clients so that they can reduce emissions in their scope 3, in line with their annual reduction target

8 Often, it requires that raw materials produced or cultivated at the start of the supply chain meet certain requirements or conditions, which then can be allocated proportionally to finished products at the end of the chain, to make certain claims.

(e.g. annually appr 2.5 – 4.9%)? Should we add more options, or more flexibility, and if so, would you have suggestions?

- In regard to the '80% Materiality Approach', is the 80% feasible?
- In regard to the 'Mass Balance Approach', is the 10% feasible, or should it perhaps be a lower percentage that is increased gradually, year after year?
- In regard to the 'Gradual Improvement Approach', is the 10% feasible or should it gradually be reduced over time once real data becomes available?

STEP 3: ACHIEVING THE REDUCTION TARGETS

Clients who are '**on track**' (= found to be **compliant with the annual reduction targets)**, AND have **offset their remaining emissions** (beyond the on-track curve to net zero) deserve the right to claim to be **'Climate Neutral'**[9]**.**

The table below outlines which internal and external reduction measures qualify to achieve the reduction requirements and which claims are then permitted:

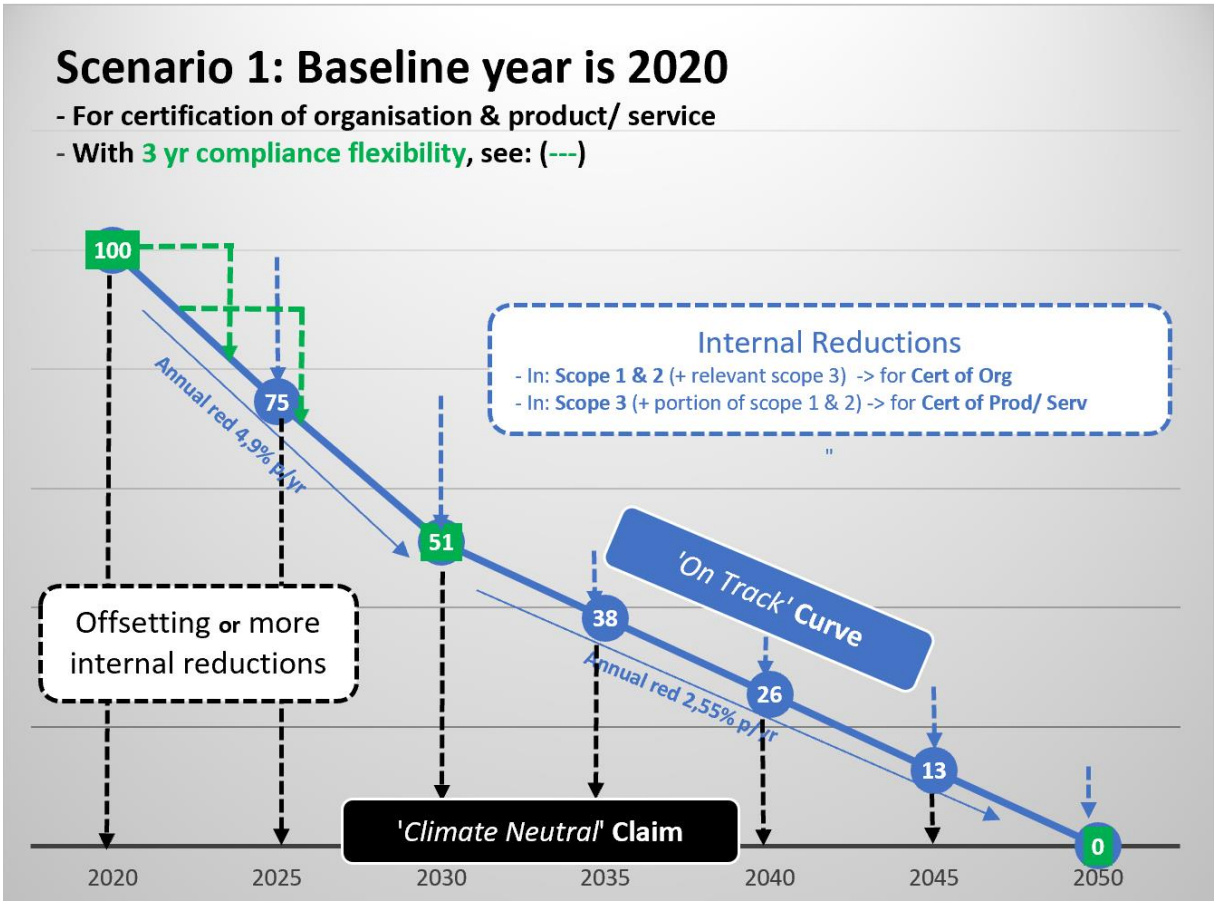
Certification Scope	***Option 1:*** **Certification of the Organisation**	***Option 2:*** **Certification of a Product (or Service)**
Required reductions to get 'On track':	Internal reductions in scope 1 and 2, or 'relevant scope 3' reductions	Scope 3 reductions in that particular product's supply chain **and/or** Internal reductions in the 'corresponding portion of scope 1 and 2'. Supply chains, however, are often very complex and not always known or traceable, therefore the program allows clients to **choose themselves from four options** as to how they prefer to achieve reductions in their supply chain (see table below):
Required reductions to claim: 'Climate Neutrality'	More internal reductions **and/or** External reductions through eligible offsetting	More scope 3 reductions **and/or** External reductions through eligible offsetting
Permitted claims	'**Climate Neutral Organisation**', but only off-pack (i.e. on a company website or brochure)	'**Climate Neutral Product**', but only on-pack (of the certified product only) or online (e.g. on product page) '**Climate Neutral Service**', but only if directly related to that certified service only, or online (e.g. on service page)

	Flexibility rule - compliance with reduction target
3	**'Three-year compliance flexibility rule':** To facilitate compliance with the CNG Standard, clients are given a three-year-period to demonstrate internal reduction results. That means that in year 1 an ambitious internal reduction plan shall be made, but the actual emission reduction only need to be achieved after three years. However, after these three years, the required reductions have accumulated for three years, meaning three times the annual reduction target needs to be demonstrated to remain compliant (see Section 5, Scenario 1).

[9] After a positive audit.

FOR STAKEHOLDER INPUT:

- **Q-RC-05: For certification of the organisation:** should the program offer one claim only, namely 'climate neutral' (with the 'on track' requirement on internal reduction included), or offer two separate claims ('on track' + 'climate neutral)? The 'On Track' claim could be added as an entry level for companies that want to make improvements, but cannot commit yet to climate neutrality, however two claims can also create confusion for consumers.



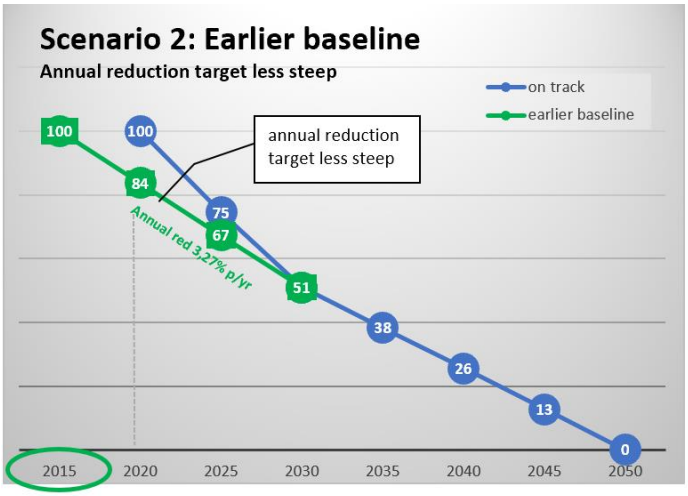
Summarizing:

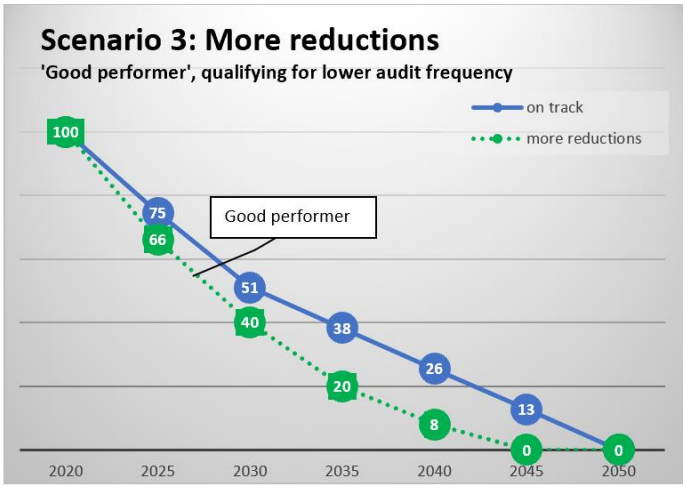
➔ Clients first need to make reductions themselves to be **'on track'**, after which the remaining emissions are offset (or further internally reduced), in order to become **'climate neutral'** and to be entitled to **claim "Climate Neutrality'.** Clients who are certified for their organisation need to achieve internal reductions (mainly) in their scopes 1 and 2, whereas clients 'certified for a certain product or service' need to achieve internal reductions (mainly) in the product's own supply chain (scope 3).

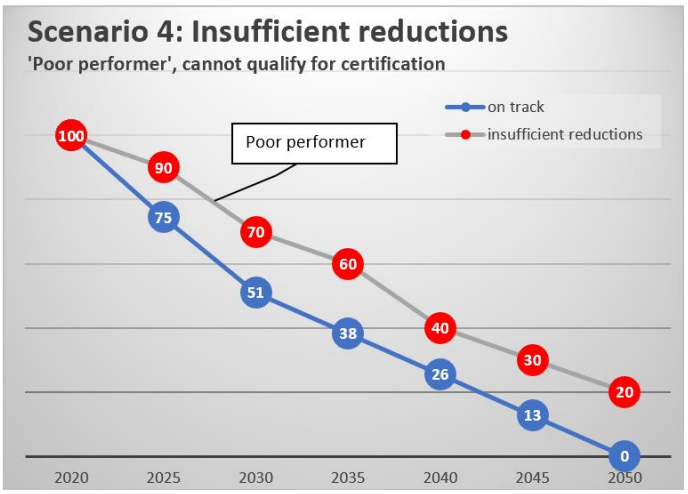
FOR STAKEHOLDER INPUT:

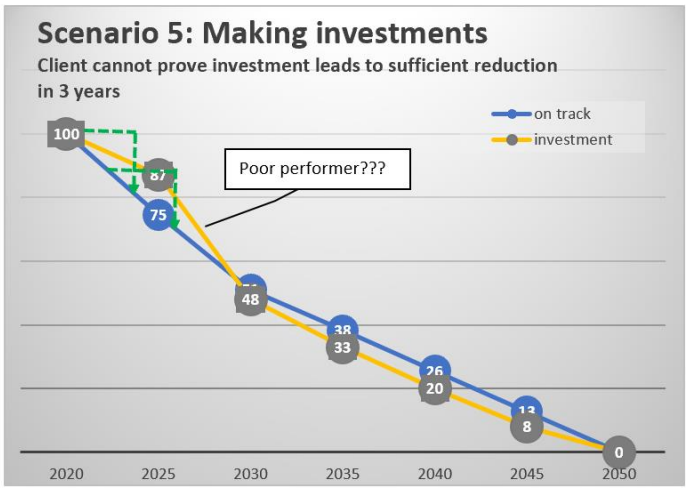
- **Q-RC-06: For certification of the organisation + a product:** Besides the 'three-year compliance flexibility rule', what flexibility should CNG offer in case clients do not achieve the annual reduction targets consistently for a longer timeframe, e.g. due to other pending investments or technical barriers? What 'promises' are acceptable and what are not (anymore)? When is non-certification justifiable? (see also Scenario 5 below).

5. Other scenarios and examples









Example 1 – Certification of an Organisation (option 1) – with 'compliance flexibility rule' (see Scenario 1) and 'revised baseline' (see Scenario 2):

Client X was already verified by CNG against the KNG Standard 2.0 in 2017. At that time, an organisational footprint of 250T GHG emission was ascertained (based on the organisation's 2016 emission data for GHG scope 1, 2 + relevant scope 3). Since then, the client has invested in solar panels, resulting in a new footprint of 200T GHG emissions in 2020. In other words, the client has already reduced its footprint by 20% in three years time. Following Scenario 2, a new annual reduction target may be ascertained in 2020:

- To be 'on track': => client X only needs to reduce the remaining 29% (49% - 20%) in the period 2020 to 2030 (10 years) through scope 1, 2 + rel. scope 3 reductions => $Annual\ reduction\ target = \frac{49\%-20\%}{(2030-2020)} = \frac{29\%}{10} = 2.9\%.$ This means that the client should at least reduce its own emissions by 2.9% * 250 = 7.25T/yr (for the period 2020 – 2030). Based on the 'compliance flexibility rule', the client needs to prove a total internal reduction of 3 * 7.25T = 21.75T for each three years after 2020.

- To claim to be 'climate neutral': => client X needs to meet the 'on track' requirement, and in addition needs to further reduce its emissions resulting from scope 1, 2 + rel. scope 3, through either more internal reduction or eligible external reduction (offsetting) to net zero.

Example 2: Certification of a Product (option 2) **– using the Mass Balance Approach and making more reductions than required (Scenario 3):**

Client Y sources its coffee beans from unknown sources in Vietnam, Indonesia and Ethiopia and produces a random coffee melange as end product. The footprint of the total coffee melange products sold is, based on best guesses, data-base information and external literature on coffee production in above countries, estimated to be 300T GHG emissions. As the exact sources are unknown, the client has chosen for the Mass Balance Approach. This implies that 10% emissions shall be added to the footprint, meaning the total baseline becomes 300+30=330T. The client has invested in a (random) 'coffee cultivation project' in Vietnam and through this investment, a reduction of GHG emissions is achieved of 50T by 2020. The client may claim the 50T GHG reduction for its own coffee melange footprint. Assuming 330T is the baseline, the client needs to bring down the product's emissions in 10 years by 49% (= reduction target of 4.9% annually = 4.9% * 330T = 16.17T per year). With the one-time investment, resulting in 50T reduction, the client has achieved its annual reduction target for the next three years. After these three years, the client could re-invest in the same project, so that its emissions could be brought down even further.

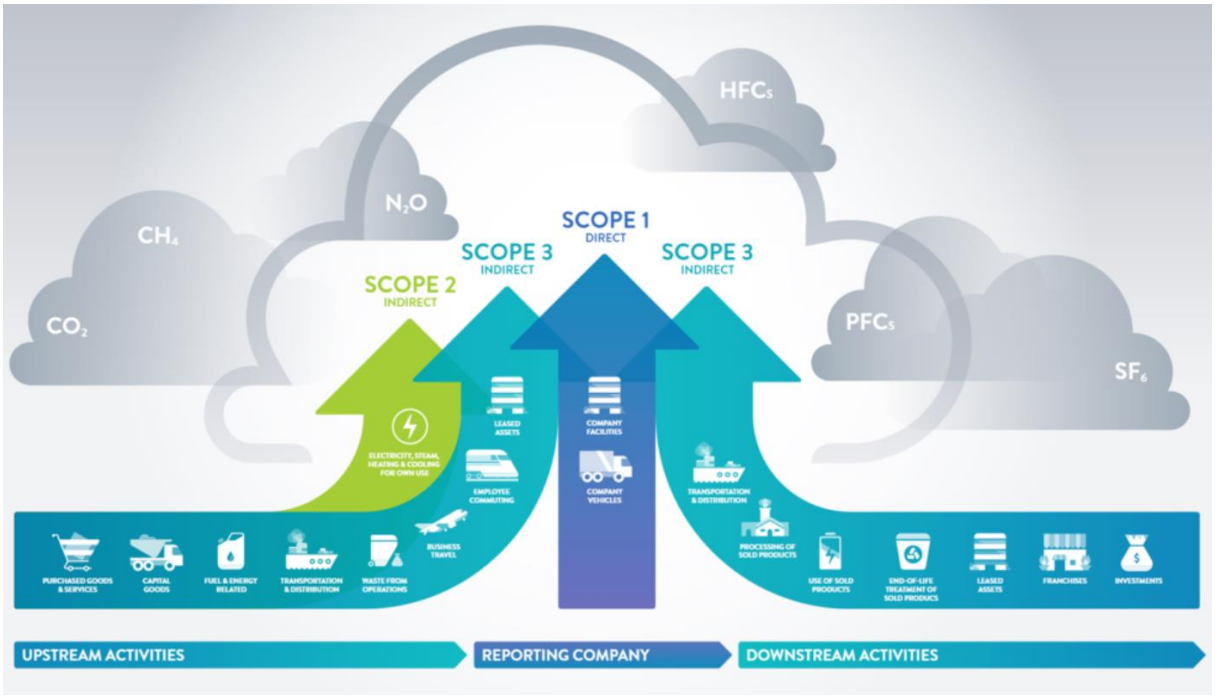
Annex 1: FAQs - GHG scope 1, 2 and 3 [10]

1. What are scope 1, 2 and 3 emissions?

The GHG Protocol Corporate Standard classifies a company's GHG emissions into three 'scopes':

- Scope 1 emissions are direct GHG emissions from owned or controlled sources, e.g. fuels and refrigerants.
- Scope 2 emissions are indirect GHG missions from the generation or consumption of purchased energy, electricity heat or steam.
- Scope 3 emissions are all indirect GHG emissions (not included in scope 2) that occur in the value chain, including both upstream and downstream emissions, such as the extraction and production of purchased materials and fuels, procured transport-related services, electricity-related activities that are not covered in scope 2, outsourced activities, waste disposal, etc.

NOTE: CNG currently deals with certain scope 3 emissions as if they were scope 1/2 emissions. This is because those GHG scope 3 emissions can be directly controlled and influenced by the client, for instance emissions resulting from business commuting, business flights and packaging. In this document these emissions are referred as '*Relevant scope 3 emissions*'.



2. What are product life cycle emissions?

Product life cycle emissions are all the emissions associated with the production and use of a specific product, from Cradle-to-Grave, including emissions from raw materials, manufacture, transport, storage, sale, use and disposal.

[10] Sources:
https://ghgprotocol.org/sites/default/files/standards_supporting/FAQ.pdf
https://www.vitalmetricsgroup.com/ghg-reporting

NOTE: CNG proposes allowing for the 'Cradle-to-Gate', 'Cradle-to-Shelf', and 'Cradle-to-Grave' approach, when calculating the product's footprint, provided that clients clearly communicate ON PACK (e.g. next to the logo) about the product's scope and boundaries.

3. What is the main difference between the different GHG standards?

The **GHG Protocol Corporate Value Chain (Scope 3) Standard** and **GHG Protocol Product Life Cycle Standard** both take a value chain or life cycle approach to GHG accounting. The Corporate Value Chain (Scope 3) Standard accounts for emissions at the corporate level, while the Product Life Cycle Standard accounts for emissions at the individual product level. The Corporate Value Chain (Scope 3) Standard helps companies identify GHG reduction opportunities, track performance, and engage suppliers at a corporate level, while the Product Life Cycle Standard helps a company meet the same objectives at a product level. Together with the **GHG Protocol Corporate Standard**, these standards provide a comprehensive approach to value chain GHG measurement and management.

4. Why are value chain emissions important?

Most of the largest companies in the world now account and report on the emissions from their direct operations (scopes 1 and 2). The new standards close the GHG gap: businesses can now act on the full range of corporate value chain and product emissions as well. Emissions along the value chain often represent a company's biggest greenhouse gas impacts, which means companies have been missing out on significant opportunities for improvement. Companies may find out that value chain emissions comprise more than 90 percent of the company's total emissions. Developing a full GHG emissions inventory – incorporating corporate-level scope 1, scope 2, and scope 3 emissions – enables companies to understand their full value chain emissions and to focus their efforts on the greatest GHG reduction opportunities.

NOTE: It is for this reason that CNG has decided that corporates with high scope 3 emissions (more than 40% of their total emissions) should actively work in their value/supply chains.