# Best practices in corporate climate responsibility

Recommendations to companies and regulators in the Netherlands

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# **Abbreviations**

ACM	Autoriteit Consument & Markt – Dutch Authority Consumer & Market
CDP	Formerly known as the Carbon Disclosure Project
CDR	Carbon Dioxide Removal
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> e	CO <sub>2</sub> equivalent
CSRD	Corporate Sustainability Reporting Directive
GHG	Greenhouse Gas
GO	Guarantee of Origin
IPCC	Intergovernmental Panel on Climate Change
EU	European Union
LULUCF	Land Use, Land-Use Change and Forestry
Mt	Megatonne (10^6 tonne)
REC	Renewable Energy Certificate
SME	Small and Medium-sized Enterprise

# **1** Introduction

Recent years have seen a wave of corporate net-zero targets. These could contribute to meeting the Paris Agreement temperature targets and limiting global warming to 1.5°C above pre-industrial levels (UNFCCC, 2015). To avoid the most dangerous levels of climate change, global carbon dioxide (CO<sub>2</sub>) and greenhouse gas (GHG) emissions must reach net zero by 2050 and 2070, respectively, meaning a drop of 45% by 2030, compared to 2010 (IPCC, 2018). Considering historical responsibilities and current capabilities, industrialised countries should reduce their emissions at a faster rate than the global average (UNFCCC, 2015; Climate Action Tracker, 2021). In light of the Paris Agreement temperature goal, the European Union (EU) committed to reducing GHG emissions by at least 55% by 2030, compared to 1990 and to reach net zero GHG emissions by 2050 (European Commission, 2020). The Netherlands will revise its national climate law to reflect these targets (EZK, 2021). Over a hundred parties, including businesses, were involved in the development of the 2019 Dutch Climate Agreement (Klimaatakkoord), which lays out a range of measures that will help the Netherlands to reduce its 2030 emissions by 49% compared to 1990.<sup>1</sup> (Klimaatberaad, 2019).

In May 2021, the regulatory body *Autoriteit Consument & Markt* (Authority Consumer & Market, ACM) announced it will assess misleading sustainability claims in the energy, dairy and clothing sectors (ACM, 2021). The ACM has requested 170 companies to check their claims; and may impose fines if companies mislead their customers with false sustainability claims (ACM, 2021). Also in May 2021, in the case *Milieudefensie and others versus Royal Dutch Shell*, the District Court of The Hague ruled that Shell must reduce its net emissions by 45% by 2030, compared to 2019 (Rechtbank Den Haag, 2021). The Court noted that there is broad international consensus that every company must work towards achieving net zero emissions by 2050, and that Shell may be expected to do its part (Rechtbank Den Haag, 2021). *Milieudefensie* and other climate activists already indicated they consider to bring other companies to court (Giabardo, 2021; Smit, 2021; Straver, 2021). Customers and shareholders also increasingly demand ambitious climate action from companies and put pressure on them. For instance through the initiative Follow This, which has filed shareholder resolutions in five large oil companies since 2016. The initiative started in the Netherlands and submitted its first shareholder resolutions at Shell's annual shareholder meetings (Follow This, 2021).

Against these developments, Dutch multinationals and small- and medium-sized enterprises (SMEs) alike voluntarily commit to net-zero emissions, carbon neutrality or deep emission reductions. While these targets may reflect a high level mitigation ambition, the manifold approaches for target implementation make comparison between corporate actors difficult and may enable greenwashing (NewClimate Institute and Data-Driven EnviroLab, 2020). In this report, we outline ten criteria for transparent and constructive corporate climate responsibility (Section 3) and offer key recommendations to companies and the Dutch government (section **Error! Reference source not found.**), The Dutch g overnment may use this report's findings to support companies in increasing transparency in reporting; setting meaningful climate targets; and make stronger contributions to the challenge of global deep decarbonisation.

<sup>&</sup>lt;sup>1</sup> In their coalition agreement, presented on 15 December 2021, VVD, D66, CDA and CU provide they will amend the climate law and enhance the 2030 target from a 49% to a 55% reduction from 1990 emission levels. To ensure the government will not fall short of the 55% reduction target, the coalition aims for a reduction of 60% by 2030 in its policies (VVD *et al.*, 2021).

# 2 Terminology and scope

Since the adoption of the Paris Agreement and the release of the IPCC Special Report on Global warming of 1.5°C, an increasing number of corporate actors commit to emission reduction, net-zero or climate neutrality targets. These vary widely in terms of terminology used, emissions covered and target years. Section 2.1 describe the various terms that companies use to describe their pledges and Section 2.2 outlines what emissions fall into scopes 1, 2 and 3.

## 2.1 Terminology

Following the IPCC Report on Global warming of  $1.5^{\circ}$ C, the term **net zero** has seen a stark increase. At the global level, net zero implies that anthropogenic release of GHG emissions equals anthropogenic removal of emissions (IPCC, 2018). Broken down to countries this means that residual emissions are completely balanced with a negative emissions balance, either through land-use, land-use change and forestry (LULUCF) or other removal and storage technologies. When companies commit to "net-zero emissions", they mean that they will balance out the emissions caused by their activities with removals or reductions elsewhere. Companies generally do not use the Dutch translation of "net zero" – "netto nul" – in their Dutch communications but rather use the terms "Klimaatneutraal" – climate neutral - and "CO<sub>2</sub> neutraal" – CO<sub>2</sub> neutral.

By scientific definition, **climate neutral** means that human activities have no net effect on the climate system (IPCC, 2018). This concept goes beyond a balance of GHG emissions and removals, and takes into account the entire global warming impact, such as changes in surface albedo. These non-GHG warming impacts are especially important for sectors like aviation, which have a global warming impact that is 2-3 times larger than the warming impact of their CO<sub>2</sub> emissions alone (Lee *et al.*, 2021).

However, differences in the definition between net-zero emissions and climate neutrality are mostly discussed in a scientific community. Many corporate actors tend to use both terms synonymously. Companies that commit to climate neutrality generally mean that they will balance out unabated and residual GHG emissions with removals or reductions outside their value chain. Unabated emissions are simply those emissions that a company has not yet abated and most relevant on the short to medium term, whereas residual emissions are those that remain after a company has implemented all feasible reduction measures and are most relevant on the longer term.

When other GHGs beyond  $CO_2$  are not taken into account, the terms **carbon neutrality** and **net-zero**  $CO_2$  emissions are used. Both terms mean a global balance of anthropogenic  $CO_2$  emissions and anthropogenic  $CO_2$  removals over a specific time period (IPCC, 2018).

Some companies pledge to have **net negative emissions**. Net negative emissions occur when more GHGs are removed through anthropogenic activities than are released into the atmosphere. Some companies commit to **carbon negative** or **climate positive** activities and pledge to remove more GHGs from the atmosphere than they emit (e.g., Microsoft and IKEA).

Term	Scientific definition	Corporate usage	Synonyms
Net-zero emissions	Anthropogenic release of GHG emissions equals anthropogenic removal of emissions over a specific time period (IPCC, 2018).	A given company's emissions equal reductions or removals outside the company's organisational boundary. Or, in few cases, emissions equal removals within the company's organisational boundary	
Climate neutrality	Human activities have no net effect on the climate system (IPCC, 2018). This concept goes beyond a balance of GHG emissions and removals, and takes into account the entire global warming impact, such as changes in surface albedo.	Same as "net-zero emissions" above.	
Net-zero CO <sub>2</sub> emissions	A global balance of anthropogenic CO <sub>2</sub> emissions and anthropogenic CO <sub>2</sub> removals over a specific time period (IPCC, 2018).	CO <sub>2</sub> emissions equal CO <sub>2</sub> reductions or removals outside the company's organisational boundary.	Carbon neutrality
Carbon neutrality	Same as net-zero CO <sub>2</sub> emissions	Same as "net-zero CO <sub>2</sub> emissions" above.	Net-zero CO <sub>2</sub> emissions
Net-negative emissions	The amount of GHGs that is removed from the atmosphere through anthropogenic activities is higher than the amount of GHGs that are released into the atmosphere.	A given company's emissions are less than the reductions or removals outside the company's organisational boundary that the company supports.	Carbon negative; Climate positive

### Table 1: Overview of commonly used terms

### 2.2 Scope

Corporate climate pledges vary widely in terms of coverage. Whereas some companies set climate targets that cover all **scope 1, 2 and 3** emissions, others commit to reduce scope 1 and 2 emissions only. Table 2 outlines what emissions fall under which scope.

	Coverage
Scope 1	All direct GHG emissions from sources that are controlled or owned by the company. These include, for instance, emissions from installations or company vehicles.
Scope 2	Indirect GHG emissions related to the procurement of electricity, heating and cooling
Scope 3	All other indirect GHG emissions that results from, for instance, procurement, transport and distribution, the use of sold products, end-of-life treatment of sold products, business travel, waste disposal, and investment portfolios. Scope 3 emissions can be divided in <b>upstream</b> and <b>downstream</b> emissions.

### Table 2: Overview of emissions per scope (WBCSD and WRI, 2004)

The term **operational emissions** is widely used to refer to the combined scope 1 and 2 emissions. The term **value chain emissions** is widely used to refer to scope 3 emissions. Scope 3 emissions generally represent the largest share of a company's carbon footprint. CDP (formerly the Carbon Disclosure Project) found that value chain emissions are on average, for companies across all sectors, 11.4 times as high as operational emissions (CDP, 2021b). **Investments and assets** can be an important source of scope 3 emissions.

Importantly, not all emissions of a given Dutch company necessarily occur within the Netherlands. For instance, a company could have production facilities in the United States, purchase raw materials or final products from China or sell their final products to customers in Germany. Therefore, if Dutch companies reduce their carbon footprint, this does not necessarily lead to the same reduction of Dutch national emission levels. Further, most emissions will appear on the GHG inventory of various companies. If one company reduces its emissions, this may lead to a reduction of other companies' emissions too. For instance, if PostNL would reduce its emissions related to delivering parcels, its emission reductions could affect the emissions of Volkswagen and Shell, for the use of vans and fuel use.

# 3 Ten criteria for target transparency and comprehensive climate responsibility

Corporate actors take various approaches to addressing their climate responsibility. Common approaches include directly reducing emissions, procuring renewable energy and claiming neutralisation of emissions through offsetting or the support of carbon dioxide removal outside their own value chain. In response to their climate responsibility a growing number of companies also started to provide support to climate mitigation, adaptation or other appropriate action outside their value chain without claiming compensation of own emissions (NewClimate Institute and Data-Driven EnviroLab, 2020). As companies use a wide range of approaches to claim the reduction of energy-related emissions and to support the reduction of supply-chain emissions, we pay specific attention to these aspects in order to identify real good practices for climate leadership.

As most companies make public claims, it is important that the public is enabled to understand whether targets are suitable and implemented measures are comprehensive enough to support those. In the following, we outline **ten criteria for target transparency and comprehensive climate responsibility**, along which corporate climate pledges can be assessed. These criteria are based on findings from our previous analyses of the climate pledges and approaches of companies (see Kachi, Mooldijk and Warnecke, 2020; NewClimate Institute and Data-Driven EnviroLab, 2020). The ten criteria represent a combination of the best practice approaches that are emerging from companies with ambitious climate agendas. Taken together, these criteria set a detailed assessment grid to identify best practices for ambitious and meaningful corporate climate pledges. While some best practices are well established, many have emerged only very recently since corporate climate responsibility has accelerated, and with it the experimentation with different approaches. As such, companies are still learning from each other's emerging best practices. We are not aware of any company that has integrated all of these best practice approaches yet, although many perform well on several criteria or are on the right track. In order to collectively improve over time, companies should avoid known pitfalls for elements where improvement points are identified.

### 1) Disclosure of greenhouse gas emissions

As a first step, companies **should track and disclose their greenhouse gas emissions at least on an annual basis**. Without the most recent information on the company's climate impact, it is impossible for the company to develop a comprehensive implementation strategy and for externals to assess whether the proposed climate measures suffice to support the company's claims.

As explained in Section 2, scope 1 emissions are direct emissions from sources owned or controlled by the company, whereas scope 2 are indirect emissions from purchased energy. Scope 3 covers all other emission sources, for instance, procurement, business travel, waste, product use, transportation, temperature control and investments. Whereas scope 1 and scope 2 emissions are relatively simple to track, tracking scope 3 emissions is more complicated. For these scope 3 emissions, companies should provide estimates, based on available emission factors that convert activity data into GHG emissions data, and highlight uncertainties in the estimates they report (WRI; WBCSD, 2011).

In April 2021, the European Commission adopted a proposal for a Corporate Sustainability Reporting Directive (CSRD) (European Commission, 2021). The CSRD expands current emission reporting demands and asks for more detailed reporting. The directive may be seen as a minimum reporting standard for corporates.

### 2) Target scope and target year

Clarity on target scope and target year is vital to understand a company's claimed climate ambition and its potential impact on global GHG emissions, as well as to determine whether proposed measures are likely sufficient to reach the goal.

Companies' net-zero and other climate targets range from targets that encompass most of a company's scope 1, 2 and 3 emissions to pledges that cover only specific products. Specifically, many companies exclude scope 3 emissions from their climate targets, although this is not always clearly communicated (NewClimate Institute and Data-Driven EnviroLab, 2020).

Companies also set widely varying target years. Some claim to have reached their target already, whereas others aim for (deep) emission reductions or net zero by 2050 or later. Clarity on the target year is required for a critical evaluation of a company's target. In addition, a clearly formulated and ambitious target year is key to initiate rapid decarbonisation measures in the short- and medium-term.

Companies' target years and decarbonisation pathways should be aligned with the Paris Agreement temperature goals; and will differ per sector. Some sectors can technically decarbonise on the shorter term, while other hard-to-abate sectors will need significantly more time to reach deep decarbonisation targets. As the available decarbonisation pathways are not granular enough to provide information on specific sectors in specific countries, this report does not assess whether corporate climate targets are aligned with the Paris Agreement goals.

### 3) Separate targets for emission reductions and emission removals

Carbon dioxide removals (CDR) are imperative in reaching global net-zero emissions. Companies can demonstrate their commitment to ambitious climate action by contributing to CDR in addition to deep emission reductions within their organisational boundaries (i.e., scope 1, 2 and 3). However, **removals cannot replace the deepest possible emissions reductions,** due in part to uncertainties about the scale of the potential of CDR technologies, the speed at which they can be mobilised, as well as their permanence (Jeffery *et al.*, 2020).

CDR that are used to claim neutralisation of a given company's residual emissions must meet two criteria:

- The removals must be **permanent**: in other words, the sequestered carbon must not be released back into the atmosphere at a later point in time, which would negate any benefits of the sequestration; and
- 2) The **potential availability of the CDR should not be limited** to avoid that individual companies claim scarce resources and global net-zero emissions cannot be achieved.

Forest and soil sequestration are widely used CDR options today, but do not meet the criteria above and are not suitable for neutralisation claims. However, these CDR measures should still be supported as a climate contribution.

While separate targets are most transparent and constructive, companies with a net-zero or climate neutrality target, should at least specify what share of their target will be achieved through a reduction of own emissions and what share through the support of CDR. Without this information, such targets remain ambiguous and their ambition level unclear (NewClimate Institute and Data-Driven EnviroLab, 2020).

Separate targets are important for the following three reasons:

 They increase transparency and enable customers and observers to understand the real ambition of a company's climate pledges;

- 2) They help to understand **what emissions a given company can likely not abate** in isolation or without a more enabling policy environment and to find solutions to these challenges;
- 3) They help to avoid the situation that the limited potential of carbon dioxide removals is claimed in sectors where full decarbonisation is technically possible. In this situation, those removals will not be available to balance out the residual emissions from sectors where technical options for full decarbonisation do not yet exist, and the achievement of economywide net zero will not be possible.

### 4) Emission reduction measures

It is best practice for companies to implement a range of emission reduction measures, targeting all sources of emissions. Companies can reduce emissions across the value chain through operational changes. These operational changes may include, for example, energy efficiency improvements, the switch to renewable energy (see also criterion 6 below), reduction of business travel and recycling strategies (NewClimate Institute and Data-Driven EnviroLab, 2020). Whereas the reduction from scope 1 and 2 emissions is directly in a company's control, scope 3 emissions are generally also controlled by others in the value chain. Companies can actively work to reduce emissions from procurement by engaging with its suppliers and sharing experiences and knowledge on emission reduction measures.

The set of measures that a company implements, must likely be sufficient to reach its climate targets. In addition to implementing adequate measures, it is also crucial that companies share information on these. This transparency allows for a constructively critical judgment of the measures *and* facilitates good practice replication by other companies.

# 5) Identification of and discussion on the challenges and solutions related to deeper emission reductions

With possibly a few exceptions, complete decarbonisation is not a feasible target for most companies in the near future, especially for those operating in or interacting with hard-to-abate sectors, such as heavy industry, agriculture, aviation, and shipping. Further, companies depend on cooperation with their suppliers to bring scope 3 emissions to zero. In addition to reporting on actions that a company takes to reduce its emissions, it is best practice for companies to share information on the obstacles they face and successfully implemented approaches in decarbonising their entire value chain. This **enables solution-finding and facilitates learning** from others, which likely contributes to deeper emission reductions at the national or global level.

### 6) Pursued renewable energy supply constructs

Purchasing renewable energy is a widely used approach to reduce scope 2 emissions. However, procurement of renewable energy does not necessarily justify an emission reduction claim. Due to the complex causal relationships between energy procurement and the installation of additional capacity, the impact of that procurement can rarely be quantified with certainty. **Details on a company's pursued renewable energy supply strategy are key to understand the impact on total renewable energy capacity, and emission levels.** 

There are different options<sup>2</sup> that companies can take to contribute to decarbonisation of the energy system. **Installing an own renewable energy installation** is likely to have the largest impact on reducing the average grid factor and bringing down global emissions. Signing a **Power Purchase Agreement (PPA)** is generally a second-best option. A PPA is a long-term contract between an electricity provider and a consumer under which the consumer agrees to purchase a certain amount of energy from a specific installation against a pre-determined price. PPAs for renewable energy generally

<sup>&</sup>lt;sup>2</sup> We address the most commonly used approaches in this report. Please see our report *Navigating the nuances of net-zero targets* (2020) for a more comprehensive overview.

inform the project investment decision and therefore can contribute to additional renewable energy capacity (Brander, Gillenwater and Ascui, 2018). They are a suitable construct for large companies with a high energy demand, but may be less attractive to smaller companies. Purchasing **Renewable Energy Certificates** (RECs) – in Europe known as Guarantees of Origin (GOs) – is also a popular strategy among corporates, but unlikely to send a meaningful signal to developers of new renewable energy installations due to oversupply and low prices of these credits in major markets (Mulder and Zomer, 2016; Dagoumas and Koltsaklis, 2017). In this situation, the purchase of RECs merely leads to the displacement of carbon-intensive energy to others on the grid. Consumers can purchase bundled RECs – when the energy and RECs originate from the same suppliers - or unbundled RECs – when the consumer purchases energy from one supplier and RECs from another.

Companies can also pay a **capacity expansion premium** separately from or on top of RECs. This premium is used to invest in new renewable energy capacity. While this approach does not immediately lead to an increase in renewable energy grid capacity, it may in the future. Therefore, this approach can lead to fewer emissions in the future.

In addition to transparency on the pursued renewable energy supply constructs, companies should report on **location-based energy-related emissions** and use this estimation as the basis for any emission reduction claims. The location-based method reflects the actual emissions associated with a company's energy demand, as it multiplies the average grid emission factor and a given company's energy consumption (GHG Protocol, 2015). For example, if a given company consumes 100 MWh and the average grid emissions factor is 400 grams per kilowatt hour, the company's energy-related emissions are 40 Mt, regardless of whether the company purchased RECs, has signed a PPA or paid a premium for additional renewable capacity.

Companies can also report **market-based emissions**, which is based on the amount and emissions intensity of the energy that companies purchase. For example, if a company purchases RECs to cover 100% of its energy demand, the market-based method would result in zero scope 2 emissions, regardless of whether the RECs lead to additional capacity being installed (GHG Protocol, 2015). The market-based approach may distract from the need for energy efficiency and other emission reduction measures.

### 7) Regular review of target ambition and climate measures

Companies should **annually review the progress** toward their climate targets to determine whether implemented measures suffice. In addition, new scientific insights, technological breakthroughs and changing social and economic circumstances should regularly inform companies to revise **their target ambition**. While companies should at least consider enhancing their target ambition every five years in line with the Global Stocktake, it is best practice for companies to do so annually.

### 8) Use of a greenhouse gas emissions price

An internal GHG price that is high enough **incentivises the shift away from carbon-intensive activities** (High-Level Commission on Carbon Prices, 2017; CDP, 2021a). The most commonly used internal carbon pricing types include an internal fee, internal trading, a shadow price and an implicit price:

- Internal fee: a price on GHG emissions that leads to (initial) actual costs for the company and which can be used to either fund *additional* reductions measures internally or to support climate actions outside the organisation. There may be no costs on the longer term if reduction measures internally bring savings in the future.
- Internal trading: the price leads to real costs for internal departments, but as the levies are transferred within the business, there is no net cost for the company overall.

- Shadow price: a theoretical price that the company uses to inform business decisions. A shadow price does not lead to real costs.
- Implicit price: the price is calculated retroactively and is based on the cost of implementing emission reduction measures, for instance energy efficiency improvements. An implicit price does not lead to real costs for the company.

The impact of a GHG price depends on four factors: the price level, the emissions coverage, the degree of influence over decision-making processes, and over-time price adjustments (CDP, 2021a). Generally, a high price coupled with broad coverage that leads to real costs is most impactful.

### The price level

Scientific literature contains a broad range of estimates on the explicit carbon-price level consistent with meeting the 1.5°C Paris Agreement temperature limit. The High-Level Commission on Carbon Prices finds that this price level should be at least USD 40-80/tCO<sub>2</sub>e by 2020 and USD 50-100/tCO<sub>2</sub>e by 2030, as long as an enabling policy environment is in place (High-Level Commission on Carbon Prices, 2017). Other approaches consider the actual external costs caused by the remaining GHG emissions. The German Federal Environment Agency assessment shows a cost rate of EUR<sub>2020</sub> 195/tCO<sub>2</sub>e for the year 2020 for the consequential damage caused by carbon dioxide and other greenhouse gas emissions. Not adjusted for inflation, this "social costs" of carbon rate will increase to EUR<sub>2020</sub> 215/tCO<sub>2</sub>e by 2030 (UBA, 2020). However, most companies use an internal GHG price that is significantly lower – in 2020, the median price disclosed by European companies was USD 28/tCO<sub>2</sub>e (CDP, 2021a).

### **Emissions coverage**

An internal GHG price has the largest impact if it applies to all scope 1, 2 and 3 GHG emissions (CDP, 2021a). Most companies cover at least direct scope 1 emissions and the number of companies that also use a carbon price for their scope 2 and 3 emissions is increasing (CDP, 2021a). Considering that scope 3 emissions are on average 11.4 times as high as operational emissions (CDP, 2021b), including those is likely to increase the carbon price's impact.

### Degree of influence

Companies may use a GHG price in various ways, such as to determine their climate impact, to steer business decisions or to raise funds to invest in climate solutions. In addition, companies can use an internal GHG price to manage risks and to prepare for future regulations. How companies use the internal carbon price and, importantly, whether this leads to real costs, determines its effectiveness. Options that result to a real cost are most likely to give an effective signal for change.

### **Over-time price adjustments**

Carbon prices can be static or change over time. The latter is likely more effective, as it accounts for the increasing social cost of carbon. It also has the advantage of better preparing companies for increased climate-related business risks over time (CDP, 2021a).

It is best practice for companies to apply a GHG price that is compatible with the Paris Agreement temperature goals to all emissions (scope 1, 2 and 3). GHG pricing is most effective if the price is levied in real monetary terms and channelled to projects outside the company's organisational boundaries. To ensure that the price signal is aligned with the objectives of the Paris Agreement, companies should annually revisit whether new scientific insights require an increase of the carbon price level.

### 9) Support for climate change action elsewhere

To meet the Paris Agreement's temperature goals, trillions of dollars are needed for emission reduction and carbon removal projects (IPCC, 2018). Ambitious companies that want to contribute to global net-

zero emissions should, **in addition to drastic internal reductions, support emission reductions and removals outside of their organisational boundaries** (i.e. outside scope 1, 2 and 3 emissions).

Many corporate actors purchase carbon offset credits to claim support to climate action elsewhere *and* use these credits to claim a neutralisation of their own carbon footprint. However, offsetting has major limitations: it may restrict incentives for own reductions; reduce transparency; and provide conflicting incentives for ambition in the recipient countries (Fearnehough *et al.*, 2020; NewClimate Institute and Data-Driven EnviroLab, 2020). In addition, the current carbon markets still suffer from a significant oversupply with cheap offset certificates generated by projects that are able to continue their GHG abatement without continued credit revenue (Day *et al.*, 2020). The additional climate impact associated with the procurement of those credits is highly questionable.

The Paris Agreement requires (1) all countries to set and regularly enhance emission reduction targets and (2) global emissions to move to net zero and net negative thereafter (UNFCCC, 2015). In this context, carbon markets need to be radically reoriented from low-hanging fruits to high-hanging fruits, in recognition of the fact that only projects which are objectively inaccessible to recipient countries can be considered truly additional.<sup>3</sup> However, there are very few high-hanging-fruit projects available on the markets, which were designed as cost-efficiency mechanisms. As all sectors decarbonise, the number of projects that belong to this niche will continually decrease.

Further, irrespective of concerns about the quality of carbon offset credits, there is the risk that both a company that purchases such credits and the country where the emission reductions take place, claim these to their GHG accounting (Fearnehough *et al.*, 2020). To avoid such double claiming, recipient countries should apply a corresponding adjustment to the reporting of their progress towards achievement of their NDC targets (Fearnehough *et al.*, 2020).

The contribution claim approach is an alternative to purchasing carbon offset credits to claim the neutralisation of emissions. Under the contribution claim, an actor provides financial support to an emission reduction or removal project without claiming "neutralisation" of its own emissions. The contribution claim allows for providing support to transformational climate action, while remaining transparent about the company's own carbon footprint. Under this approach, the emission reduction stays in the host country where the activity takes place and it counts towards that country's NDC target.

Ideally, the volume of finance that a company channels to emission reduction or removal projects should be informed by a Paris compatible price signal applied to the company's remaining emissions.

### 10) Accountability mechanism

It is imperative that the highest management levels of a company are aligned with the company's climate targets and are held accountable if targets are not met. An **accountability mechanism**, for instance in the form of a bonus/penalty system if climate targets are achieved or missed, can help ensure that long-term climate goals are sufficiently considered in short-term business decisions. For such a mechanism to have an impact, it is important that the company has additionally set short-term climate targets and regularly reviews alignment with a long-term target compatible pathway.

<sup>&</sup>lt;sup>3</sup> NewClimate Institute is currently working on a methodology to identify "high-hanging fruit" emission reduction projects. We will publish this methodology, along with examples from two hard-to-abate sectors in two countries in the first half of 2022.

# 4 Recommendations

### 4.1 Recommendations to companies

Net-zero target setting has accelerated in recent years. Companies are still coming to grips with emerging best practices and to the best of our knowledge, there are no companies that implement best practice across all ten elements outlined in Section 3.

Based on an assessment of ten companies' climate responsibility approaches, we deduced **six key** recommendations for the corporate climate responsibility approaches of the Dutch companies.

- 1) It would be more accurate and constructive if companies refrain from making net zero and carbon or climate neutrality claims if these targets cannot be met inside their own boundaries and actual reduction measures are not aligned with the Paris Agreement goals. Net zero and neutrality claims based on the use of offsets are highly contentious. In most cases these claims are very likely to be inaccurate and misleading, even if the approach is pursued with honest intentions. The limitations of these claims are increasingly recognised by observers, consumers and courts. Rather, companies should be transparent about their emissions footprint and have separate emission reduction and removal targets. By remaining honest and clear about unabated emissions, companies facilitate a constructive dialogue on the obstacles to deeper emission reductions and possible technological solutions to them.
- 2) It would be more accurate if companies refrain from the use emission offsets for neutralisation purposes that are based on biological carbon storage (e.g., forestry), at all times. Several companies commit to, future or present, emission removal projects that are related to forestry projects. However, these have various shortcomings, limited permanence being one of them (see Section 3). Rather, we recommend that companies invest in deep emission reduction measures as much as possible and only turn to emission offsets through CDR for residual emissions that cannot be abated. These emission offsets should have the highest degree of permanence possible (see Section 3). Companies should enhance their understanding of effective emission offsets and should base this on independent advice (see Section 4.2, Recommendation 1).
- 3) Companies can and should continue supporting emission removals and reductions elsewhere under a contribution claim approach without claiming neutralisation. This allows companies to support (developing) countries in ramping up their climate mitigation efforts. The contribution claim model also allows corporates to support projects that are in need of more finance but not suitable for neutralisation claims, such as CDR through nature-based solutions and investments in the research and development of unproven mitigation technologies for hardto-abate sectors.
- 4) Companies should refine their renewable energy supply constructs. Companies can take responsibility for their scope 2 emissions by pursuing energy procurement constructs that are likely to lead to the decarbonisation of the energy system in the future. They should however acknowledge that the potential impacts of those energy procurement constructs will not necessarily lead to a reduction in the emissions associated with the energy consumed in the present. Companies should invest the necessary time to find and implement effective supply constructs, recognising that the easiest options such as RECs entail considerable limitations.
- 5) Companies need to consciously differentiate between carbon neutrality and climate neutrality. The analyses of the ten companies have shown many can improve their use of correct and accurate terminology, as they frequently mixed "carbon neutrality" and "climate

neutrality". Aiming for climate neutrality is a more comprehensive approach, in particular for companies that have significant non-CO<sub>2</sub> GHG emissions.

6) Companies should report on their climate responsibility approaches transparently, yet concisely. Companies should provide a sufficient level of detail, while not overwhelming the audience. Detailed emissions reporting can be presented in a tabular format, in a standardised way and in an easily accessible location. Too much information, spread across different reports, may confuse the audience and can be the opposite of transparent.

### 4.2 Recommendations to the Dutch government

Based on the assessments of the companies' climate responsibility approaches, we have deduced **six key recommendations for the Dutch government** to improve corporate climate responsibility approaches in in the Netherlands.

- 1) The Government should develop clear guidance on the suitability and appropriateness of emission offsets. As several companies depend on inadequate emission offsets, there is a clear need for unambiguous terminology and guidance. We recommend that the Dutch government takes a clear, science-based stance towards the adequacy of emission removals and offsetting and provides in independent advice on appropriate emission offsets. Moreover, the Government could develop guidelines for transparent reporting on the use of offset credits and highlight that reducing emissions should be in the core of corporate climate responsibility approaches.
- 2) Companies frequently mentioned the need for more stringent policies, especially in hard-to-abate sectors. Companies say that they are not able to set ambitious targets or implement ambitious measures if their peers stick to conventional, cheaper practices. They call on the Government for more stringent policies to transform an entire sector, or subsidies for ambitious commitments to avoid the high costs. The Government should not see ambitious climate action from companies as a sign to reduce pressure from policy and regulation. In contrast, ambitious climate action is constrained until national policy reaches the same level of ambition. The government should use these ambitious frontrunners to support their argument for tighter regulation and to spark sectoral transformations, based on real-life examples.
- 3) A higher share of renewable electricity in the Dutch electricity mix is crucial for effective corporate climate responsibility approaches. Many companies depend on electrification of technologies to reduce scope 1 emissions. At the same time, many companies try to reduce their scope 2 emissions by using renewable energy supply constructs that have varying levels of impact. Therefore, there is a clear need for a fast increase in renewable electricity capacity in the Netherlands. The Dutch government should further accelerate this transition, to ensure effective corporate climate action.
- 4) The Government needs to proactively help implementing the new, forthcoming EU guidelines for reporting, and develop guidelines for establishing corporate climate approaches (see Section 3, criterion 1). There is a clear need for (further) standardisation; many of the companies covered by this analysis have different reporting methods and ways of establishing their climate responsibility approaches. However, their methods need to be similar to allow for fair comparison and knowledge exchange between companies. The Dutch government can already proactively implement the EU reporting guidelines and develop stringency based on these, and ask SMEs and smaller businesses to follow the same guidelines. Likewise, the Government can develop guidelines to help companies develop an effective corporate climate responsibility approach for instance, how to formulate targets and find appropriate measures.
- 5) The Government needs to actively engage with sector and company representatives on the issue of climate change, the replication of best practice corporate climate responsibility,

climate leadership and climate action beyond existing standards. The Government could organise more opportunities for companies to share experiences, which in turn could inform policymaking. There is a clear need for knowledge-sharing between companies – companies often identified similar challenges and barriers to deep emission reductions.

6) By implementing these measures and calling for more transparency, ambition and real action, the Government can help build capacity and increase understanding among other institutions, such as the ACM, the advertisement watchdog *Reclame Code Commissie* and NGOs. By enhancing the knowledge within such institutions and organisations, companies face high-quality critique on their corporate climate responsibility approaches more frequently and would be stimulated to improve their approaches to a higher extent. The Government can actively engage with these and other organisations to increase the chances of constructive feedback to Dutch companies.

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