



# Net-zero commitments: Where's the plan?

**Decarbonization transparency and disclosure:  
A guide for companies**

KPMG LLP

---

[home.kpmg/IMPACT](http://home.kpmg/IMPACT)



# Contents





# Executive summary

With 70 percent of GDP now covered by a net-zero target (whether at a national, regional or country level), net-zero is becoming a reality for many companies. But turning commitments into action requires comprehensive planning and an appreciation of the impact of decarbonization upon a business. It's important to set achievable ambitions backed by science, while remaining flexible enough to respond to constantly evolving ideas, technologies and regulations. In this report, KPMG proposes an eight-step robust, practical plan to disclose a path towards net-zero, reassuring investors, employees, government and other stakeholders — and making companies more resilient to disruption caused by climate change.

It is important to be fully transparent about decarbonization. Disclosing reliable, timely performance metrics to shareholders and other stakeholders can build trust and enhances license to operate. This paper has been written in the run-up to the 2021 United Nations Climate Change Conference (COP26) in Glasgow, UK between 31 October and 12 November 2021. Given the urgency of fighting climate change, more and more companies are embracing net-zero. Whilst some of the statistics published here may be out of date by the time you read this paper, the message is clear: companies should back up their net-zero commitments with public transparency.

# KPMG has identified eight key elements to a net-zero plan:

## 1 Disclose your decarbonization governance

to give direction, oversight and accountability

## 2 Be transparent about your emissions covered in your commitment

to show that your organization has a practical plan that acknowledges limitations

## 3 Disclose your full and intermediate net-zero targets

to help ensure that ambitions are realizable with current technology

## 4 Present a detailed, credible net-zero plan

that encompasses the entire value chain and different types of emissions

## 5 Describe how the plan fits into your corporate strategy

outlining how execution is achieved within the organization

## 6 Highlight the plan's risks challenges and uncertainties

such as fluctuating decarbonization costs and political developments

## 7 Detail your plan's impact

on business models, investments, value chain and skills

## 8 Review and report annual progress

setting metrics for an internal and external audience, especially investors



**Anne-Cecile Moreno**  
Climate Risks and  
Decarbonization Lead  
KPMG in the Netherlands



**Mike Hayes**  
Global Head of Climate  
Change & Decarbonization,  
KPMG IMPACT &  
Global Head of Renewables  
KPMG International



**Simon Weaver**  
Partner, Co-Head of Climate  
Risk and Decarbonization  
Strategy  
KPMG in the UK



**Tom Brown**  
ESG Special Adviser  
KPMG International



# Net-zero deadlines

**are closer than  
you think**



If the world is to meet the Paris Agreement goal of limiting global warming to well below 2 degrees Celsius and preferably to 1.5 degrees Celsius, then it should become net-zero by the middle of the century. Companies have a huge role to play in this ambition, but many are struggling to get started.

Despite this broad consensus on the importance of decarbonization, targets vary between countries, cities and companies, with differing levels of maturity in terms of concrete plans, laws and regulations. [A July 2021 report from KPMG and the World Business Council for Sustainable Development \(WBCSD\)](#) found that a lack of clear policies and regulations hindered companies' ability to produce clear net-zero plans.



According to our [November 2020 report "Towards net-zero"](#), 46 percent of total G250\* companies state their ambition to achieve net-zero emissions at or before 2050 in their report, or explain another target. However, only 17 percent of G250 companies clearly describe their company's strategy to achieve decarbonization targets.

The race to net-zero cannot be run alone and should involve other players in companies' value chains, such as suppliers, distributors, packaging and logistics providers, retailers, and other business partners. This is especially the case in high-emission sectors like energy, manufacturing, clothing, food and transport. Decarbonization plans should recognize this, as well as being open about issues that may be beyond control, like emissions in transportation and storage — an approach that can build credibility by showing that companies are thinking about emissions across every part of the business.

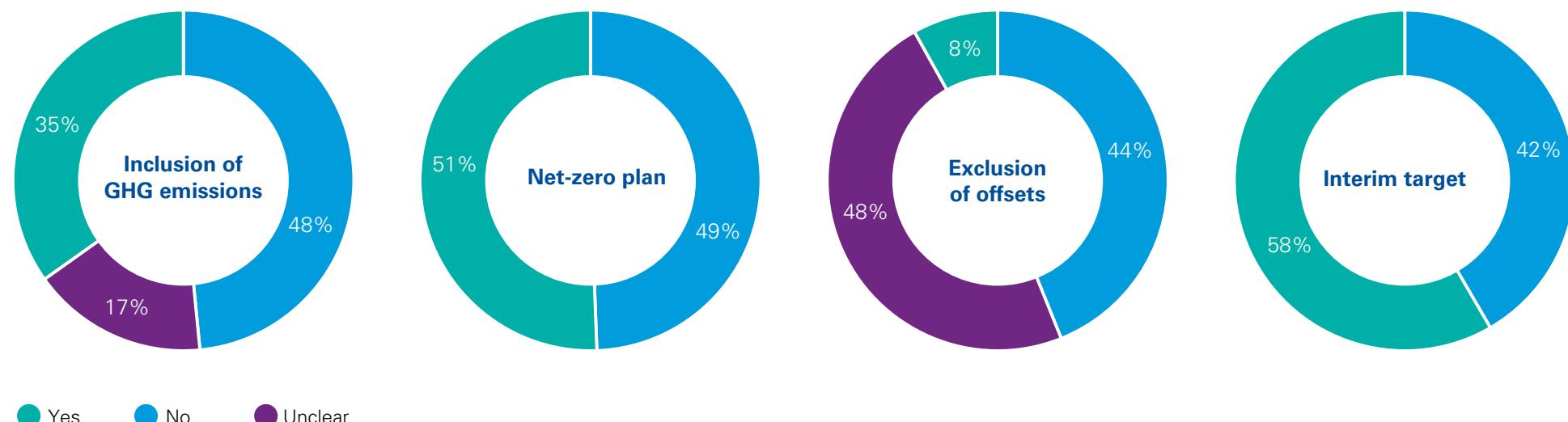
“

Only 17 percent of G250 companies clearly describe their company's strategy to achieve decarbonization targets.

”

Source: [Towards net-zero, November 2020, https://assets.kpmg/content/dam/kpmg/xx/pdf/2020/11/towards-net-zero.pdf](#)

#### Net-zero status for 419 companies



Source: data used from Map | Energy & Climate Intelligence Unit ([eciu.net](#)) (September 2021)

\*To learn more about G250, visit [https://home.kpmg/xx/en/home/insights/2020/11/towards-net-zero.html](#)



# The importance of a robust decarbonization plan

Most companies lack comprehensive plans for achieving their emission targets. This is, to some extent, understandable given the evolving nature of regulations, innovation and government direction. Without knowing which technology is likely to produce the greatest breakthrough, and with uncertainty over future government incentives and/or penalties, there is an inclination to adopt a 'wait and see' approach.

However, despite these concerns, decarbonization should still be treated like any other corporate strategy, with robust financial and operational plans and forecasts — including funding — that set a path to meet the publicly-announced commitments. Failure to do so can bring significant regulatory and business risks.

## An increasingly tough regulatory environment

As governments look ahead to their net-zero commitment deadlines, decarbonization legislation is becoming more prominent — a trend that is only likely to accelerate. This puts pressure on companies to develop plans and, equally important, disclose their performance, in line with expected future recommendations like the ones of the existing Task Force on Climate related Financial Disclosures (TCFD), which aims to foster consistent climate-related financial risk disclosures.

### European Union

Since 2020, emissions have risen to the forefront of the strategic EU plan, known as the European Green Deal, including:

- European Climate Law to enshrine the 2050 climate-neutrality objective into EU law.
- European Climate Pact to engage citizens and parts of society in climate action.
- New EU strategy on climate adaptation to make Europe a climate-resilient society by 2050, fully adapted to the 'unavoidable impacts' of climate change.
- A series of legislative proposals for achieving climate neutrality in the EU by 2050, including the 2030 Climate Target Plan to further reduce net greenhouse gas emissions by at least 55 percent by 2030.
- Substantial reforms to the European Emissions Trading System (ETS) and EU carbon policy sit alongside extensive fiscal programs, as well as reforms to the Energy Taxation Directive (ETD) to make energy excise arrangements greener, and the introduction of a plastics tax.

### USA

The US Securities and Exchange Commission (SEC) has called for public input on climate risks disclosure, in light of demand for climate change information and questions about whether current disclosures adequately inform investors. The SEC has periodically evaluated its regulation of climate change disclosures within its integrated disclosure system. Climate risks are only the start and we expect more requirements about disclosures of companies' decarbonization plan.

“

Decarbonization should still be treated like any other corporate strategy, with robust financial and operational plans and forecasts — including funding — that set a path to meet the publicly-announced commitments.

”



## Emerging business and reputational risks

Companies' environmental credentials are coming under greater scrutiny from customers, investors, governments, the media and NGOs. One notable risk is the accusation of 'greenwashing' — failing to back up pledges with action.

Activists, citizens, cities and nations may bring litigation claims against organizations that have either been too slow to act against emissions or failed to meet stated commitments.

Reputations are also on the line if plans are unrealistic and not backed by scientific evidence, possibly relying on unproven technologies.

Further risks include carbon tax on emissions, investing in nascent technologies that fail to deliver, underestimating the scale and nature of organizational change, and the capabilities and resources required to become net-zero.

## Rising investor expectations

Investors are very aware of the risks of failing to meet decarbonization targets, and are seeking detailed plans and disclosure from companies, all of which impacts their valuations. When considering options in a particular sector, they need comparable, consistent information from different players, along with assurance that any plans are technologically viable. This is made more challenging by the range of reporting standards that make it hard for investors to compare companies' ESG performance. However, we expect to see convergence towards a global standard in the coming years.

Decarbonization is becoming such an integral part of business that investors may shun companies that don't match their ambitions with realizable plans. They expect a clear roadmap, use of internationally accepted metrics for comparability, and realistic assumptions backed with science. Investors are also becoming increasingly vocal about their demands. The Net-zero Asset Managers initiative<sup>1</sup> is an international group of asset managers committed to supporting net-zero, with US\$43 trillion in assets under management as of October 2021 and the Climate Action 100+ group that has also introduced a net-zero benchmark.

<sup>1</sup> <https://www.netzeroassetmanagers.org/>



# Our eight steps for a decarbonization disclosure plan



We have identified eight key elements that companies should consider when creating a decarbonization plan that can be publicly disclosed. Companies could also leverage the structure of the recommendations from the Task Force on Climate-related Financial Disclosures (TCFD), to define the governance, risk management, strategy, metrics and targets in regards to their decarbonization plan. This would allow a holistic understanding of what needs to be considered internally and reported externally.

## 1. Disclose your decarbonization governance

Net-zero is a critical issue and boards should have oversight of decarbonization, set the right 'tone from the top', disclosing how often they discuss the plan, and detailing how they monitor and oversee progress. Management's role in set-up, monitoring and implementation should also be clarified.

Top-down governance provides much-needed direction and senior oversight, while a bottom-up approach helps ensure that those charged with implementation (at site or business unit level) validate the plan's directions and feasibility and embed them into business decision making (e.g. investment decisions, procurement decisions).

Incentives also play an important role, with companies linking progress to executive/board remuneration and wider staff key performance indicators (KPIs).

Finally, overall approval of the plan, and annual progress in delivering on the strategy, could be subject to shareholders' vote.

## 2. Be transparent about your emissions covered in your commitment

Greenhouse gas emissions are categorized into three groups or 'scopes' by the most widely used international accounting standard, the Greenhouse Gas (GHG) Protocol. Scope 1 is direct emissions, scope 2 covers energy purchases, and scope 3 includes all other indirect emissions in a company's value chain, such as transportation and waste disposal. Scope 3 emissions are critical, as they often represent the majority of organizations' carbon emissions.

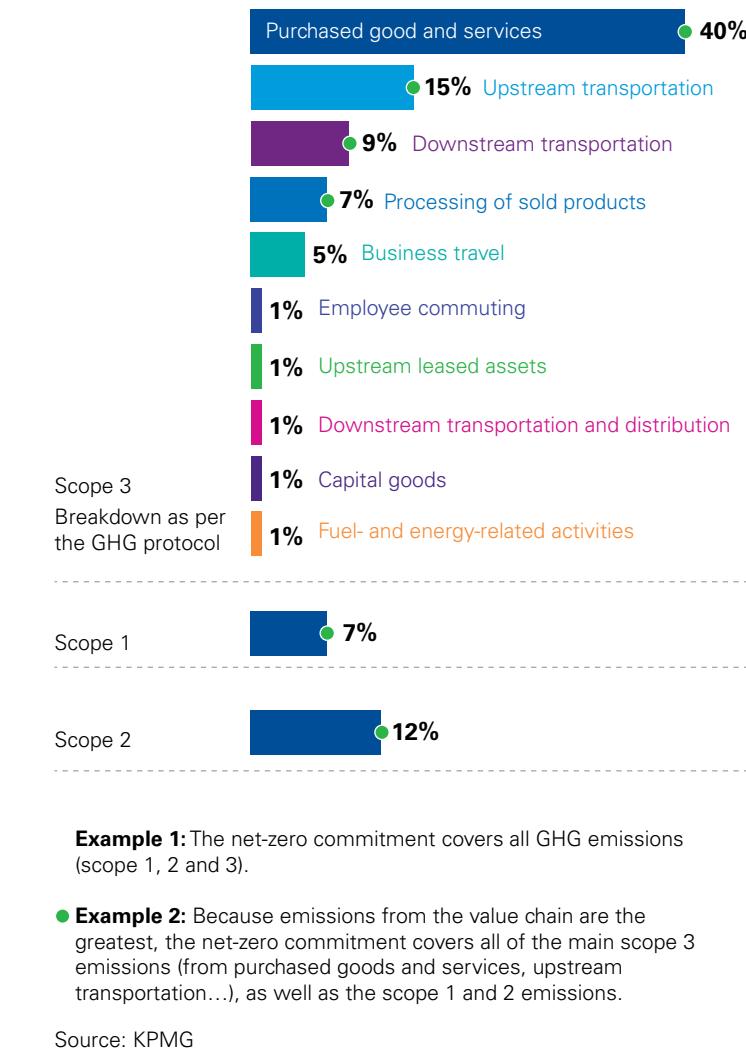
A detailed breakdown of targets shows the world that your organization has a serious plan for addressing climate change. And, by explaining why certain emissions are not included, companies can improve credibility.

You should be clear about the emissions covered by your net-zero commitment, it should cover all material emissions and therefore a sizeable portion of your scope 3 emissions.

### Metric (examples)

- Percentage of total emissions breakdown for scope 1, 2, and 3 emissions.
- Percentage of total emissions breakdown for 3 emissions [following the GHG protocol breakdown].
- Percentage of total emissions (scope 1, 2, and 3) covered by a net-zero target [following the GHG protocol breakdown].

### Disclosure example: Clear disclosure of GHG emissions in scope of the net-zero commitment



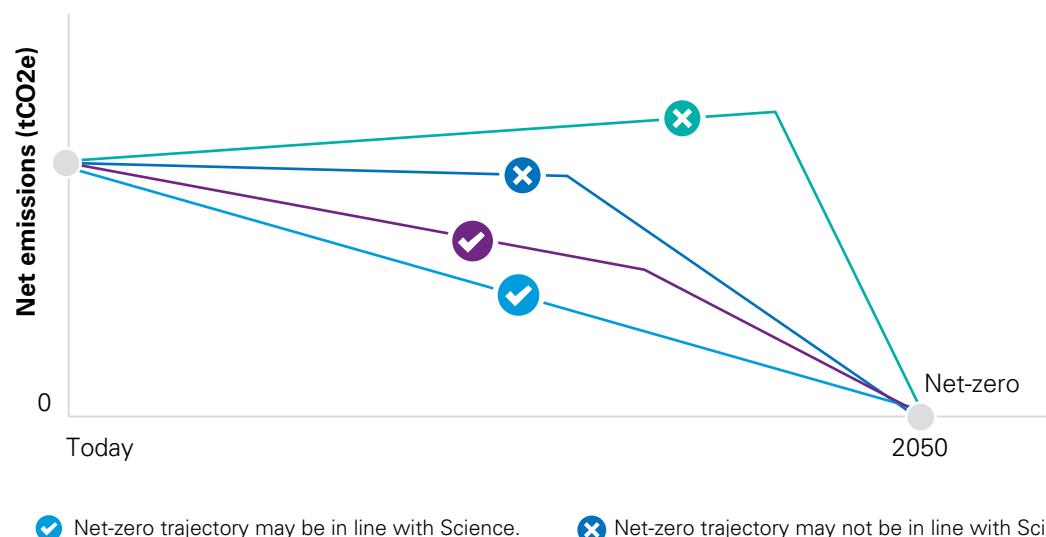
### 3. Disclose your full and intermediate net-zero targets

The target year for the net-zero commitment should not be later than 2050, to help ensure that plans incorporate existing or emerging technologies within predictable scenarios, avoiding uncertainty. An intermediate target date (say, 2030 or 2035) is less distant for investors and stakeholders and puts pressure on companies to act quickly.

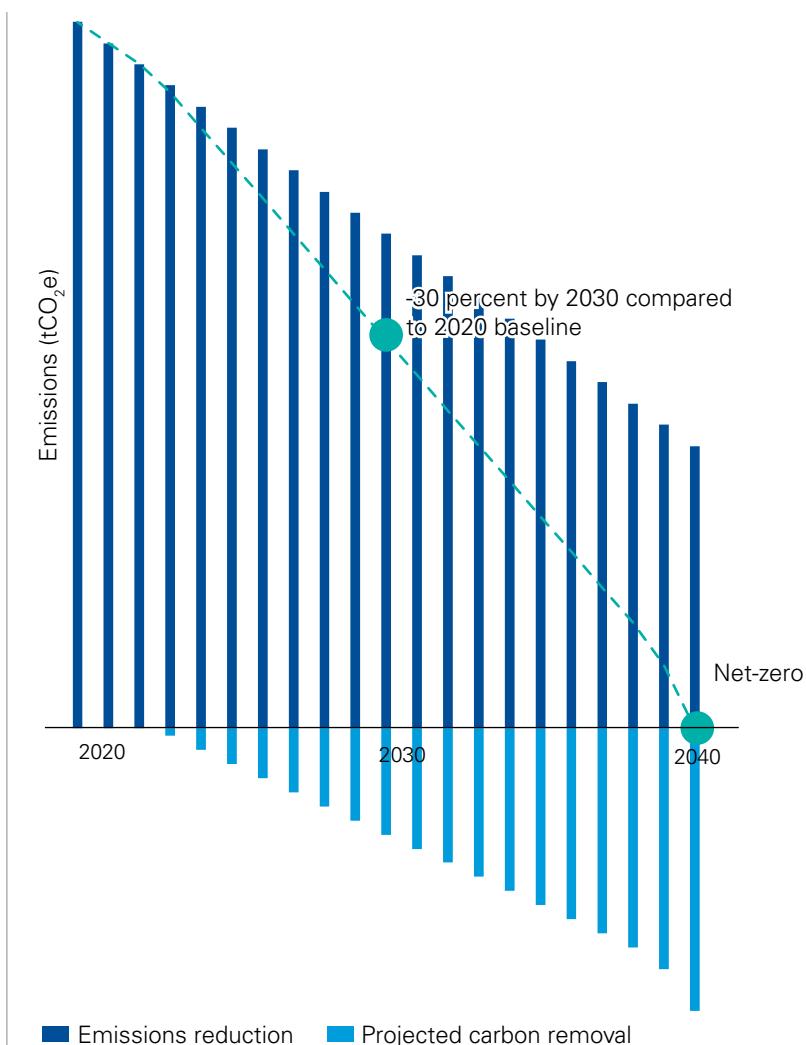
The Science-Based Target Initiative (SBTI) helps organizations define achievable pathways to help reduce emissions, on a year-by-year basis. Governments actions can, of course, impact the plan, with additional regulations, like expanding the EU Emissions Trading System to other sectors, carbon taxation, funds to speed up energy transition, and investments to scale up new technologies.

#### Multiple pathways for net-zero — not all in line with science

There are many scenarios based on scientific research that can bring your organization to net-zero.



Source: KPMG



Source: KPMG

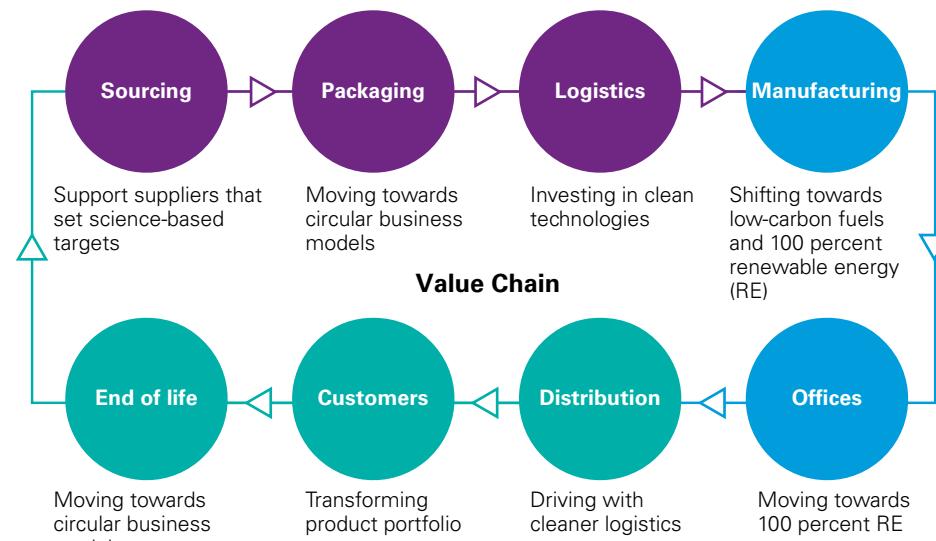
## 4. Present a detailed, credible net-zero plan

### Disclose the pillars of the plan

Companies should present a comprehensive decarbonization strategy that encompasses the entire value chain and clarifies which emissions are covered. The plan would include different rates of progress for different parts of the organization, as well as scenarios for slower and faster rates of decarbonization across the supply chain, manufacturing, etc.

### Example of pillars along a company's value chain

#### Qualitative



#### Quantitative



● Upstream ● Company ● Downstream

● Upstream ● Company ● Downstream

Source: KPMG

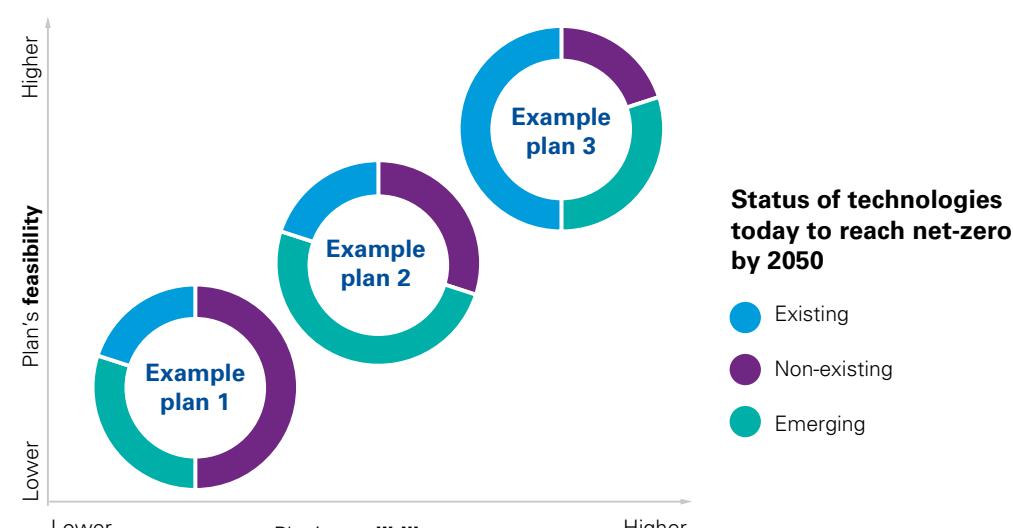
## Disclose the level of maturity of the technologies in the plan

The greater the reliance on existing, tested technologies, the greater the feasibility and credibility. An intermediate plan can set more predictable targets and allows for integration of newer innovations at a later stage.

### Metric (examples)

- Existing technologies versus non-existing technologies.
- Main technologies used to decarbonize along the value chain.
- Technology mix compared to market average.
- Percentage of energy source, e.g. solar, wind (as a percentage of total GJ).

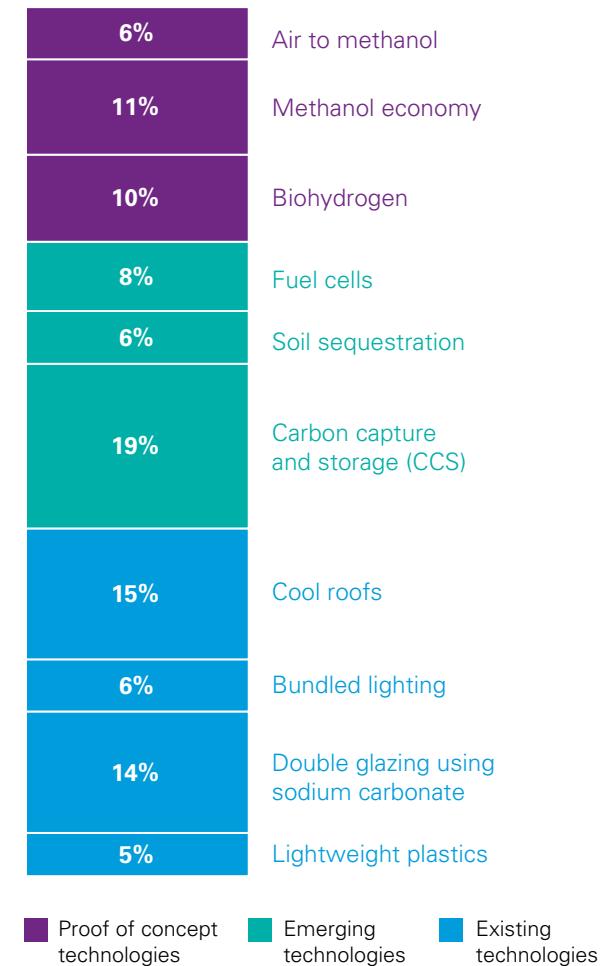
### Using existing technology increases feasibility and credibility



Source: KPMG

## Example of a breakdown of net-zero plan by technology maturity

Breakdown of the net-zero plan per technology expected to be used:



Source: KPMG

## Disclose investment details

Most sectors require significant investment to decarbonize, and companies should include a detailed financial plan including R&D costs. These figures are best presented in a comparable format to strive for maximum impact, so that investors can appreciate the level of commitment to net-zero.

Companies should also explain how they expect to fund the plan — like using carbon funds and impact investing mechanisms.

### Metric (examples)

- Investment needed over time to achieve the target or investment percentage.
- Capex allocation versus Capex flexibility.
- R&D spend plans, including low carbon R&D.
- Investments in companies in low carbon and new energy solutions.
- Venture capital, low carbon project-based funding provided.

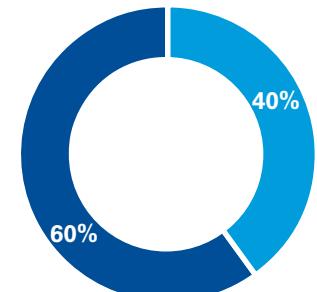
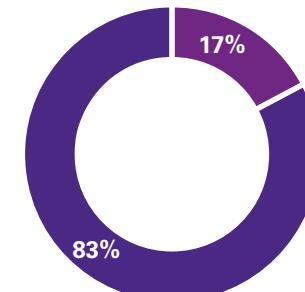
## Disclose the techniques in your plan

**Reducing emissions is not enough:** To reach a point where humans no longer contribute to global warming, society should stop emissions from accumulating in the atmosphere. Carbon removal ('neutralization') neutralizes the impact of emissions, by permanently eliminating an equivalent volume of CO<sub>2</sub>. Carbon offsets ('compensation'), on the other hand, are a last resort and should only be considered for those emissions that can't feasibly be removed. Decarbonization plans should specify the proportion of neutralization and compensation.

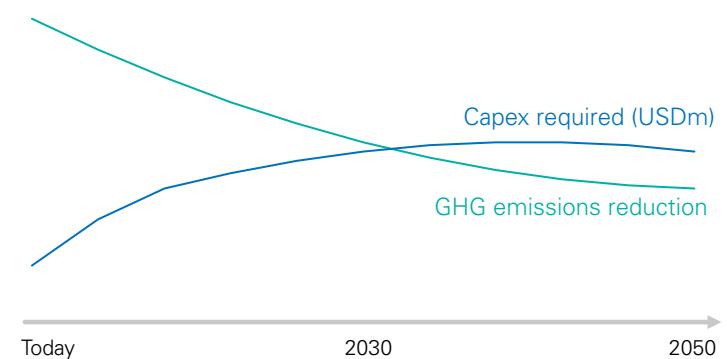
### Metric (examples)

- Percent offset versus actual reduction or percentage of emissions offset versus total emissions.
- Cost of offsets over time.
- Type of offset projects.

## Disclosure example of proportion of Capex and R&D required to achieve the decarbonization plan as a percentage of the total



- Capex (allocated to decarbonization)
- Capex (others)
- R&D costs (allocated to decarbonization)
- R&D costs (others)



Source: KPMG

## 5. Describe how the plan is integrated into your corporate strategy

The plan should be a core business strategy, not just fitting into it. This means outlining, in some detail, how execution of the decarbonization plan is cascaded within the organization, incorporated into business planning and aligned with the overall strategy. In particular, companies should anticipate the future impact of carbon pricing by introducing an internal carbon price, as well as using other mechanisms to inform investment decisions.

### Metric (examples)

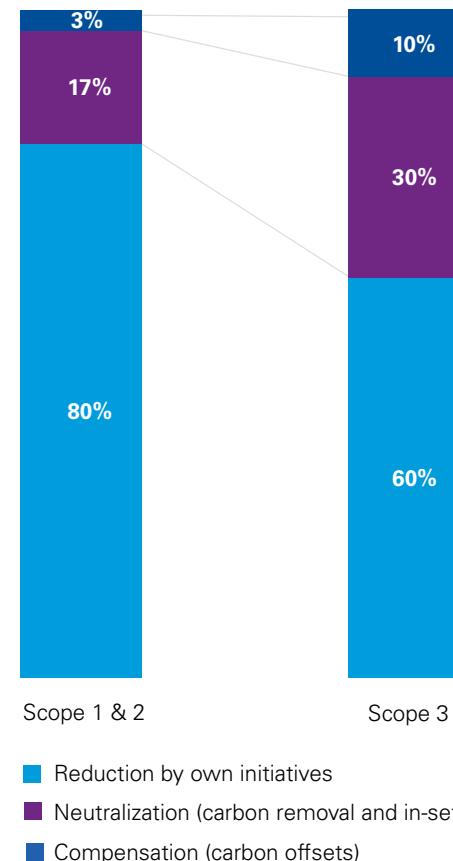
- Price level of the internal carbon price, source of the price (e.g. benchmark, IEA, IRENA...), characteristic (e.g. statics versus evolving, uniform versus differentiated).

## 6. Highlight the plan's risks, challenges and uncertainties

Companies should describe the risks, challenges and uncertainties to achieve the net-zero plan, assumptions made and the source of information for these assumptions.

- **Fluctuating decarbonization costs:** Net-zero plans are dependent on a number of external factors that can cause costs to change significantly — therefore, trends should be monitored carefully.
- **Political development:** Factors such as speed of renewal energy deployment, governments subsidies, and funding will likely all impact the pace of a net-zero strategy.
- **Countries' future energy mix:** Companies should expect to make assumptions and define scenarios based upon changing circumstances.
- **Technological breakthrough:** The speed of development and adoption of innovations will likely influence a company's ability to reduce emissions.
- **Availability of carbon removal techniques:** These are relatively new and should be part of net-zero strategies, for use when it's not possible to reduce emissions. To date, such technologies have not been scaled up globally at an affordable cost, especially for addressing scope 3 (value chain) emissions.
- **Price of carbon offsets and carbon price:** Low prices for carbon/carbon offsets may deter companies from actively reducing their emissions. However, as demand for offsets rises, prices may increase.
- **Controversies over technologies:** Under pressure to make net-zero commitments, companies may choose approaches that are either unproven or controversial, which could impact their reputation.

### Disclosure example percentage offset versus actual reduction and neutralization



Source: KPMG

## 7. Detail your plan's impact

Decarbonization involves a major shift and companies should identify how the plan impacts their strategy in terms of business models, investments, and upstream and downstream value chain including products, business lines, R&D and operations. They may need to invest in new skills for employees, board and executives, which could involve upskilling, partnerships with third parties and academia, as well as defining new roles, responsibilities and organizational structure.

The highest emissions-intensive supplies or products will probably have to be discontinued, with low-emission ones accelerated, using different pricing structures. Companies should also rethink logistics to help reduce transport distances and source locally where possible.

Leveraging the EU taxonomy of environmentally sustainable economic activities, companies should disclose whether they are causing any environmental or social harm through their plan. For example, they should consider the reputational impact of deforestation for installation of solar farms, or installation of wind farms without community engagement.

## 8. Review and report annual progress

Decarbonization plans should be dynamic and evolve as uncertainty reduces over time, as companies get closer to targets or intermediate targets. By setting metrics, it's possible to measure, track and report for an internal and external audience. Investors in particular will likely want to know what's been achieved versus the plan, and how the organization compares against peers.

Companies can disclose their plan and their progress in their annual report, financial filing and also on their website. As a decarbonization plan is expected to tackle many different aspects such as strategy, business models, investment, Capex availability, R&D, people, and supply chain, disclosing the plan in a sustainability context (e.g. sustainability report) is not sufficient. This information is now relevant for investors to understand the financial implications of the plans as well as the risks if plans are not achieved.

“

Decarbonization plans should be dynamic and evolve as uncertainty reduces over time, as companies get closer to targets or intermediate targets. ”

### Upstream

- Suppliers
- Transportation and logistics

### Company

- People
- Manufacturing and production
- Operations and sites
- Due diligence
- Business and product lines
- R&D and innovation
- Investment/disinvestment/new sites/site closures

### Downstream

- Marketing
- Transportation and logistics
- Markets
- Products, product categories, brands
- Customers B2B and B2C
- End of life

Source: KPMG

# Contacts



**Tom Brown**  
**ESG Special Adviser**  
KPMG International



**Mike Hayes**  
**Global Head of Climate Change & Decarbonization, KPMG IMPACT & Global Head of Renewables**  
KPMG International



**Anne-Cecile Moreno**  
**Climate Risks and Decarbonization Lead**  
KPMG in the Netherlands



**Simon Weaver**  
**Partner, Co-Head of Climate Risk and Decarbonization Strategy**  
KPMG in the UK

## US contacts



**Rob Fisher**  
**IMPACT and ESG National Leader**  
KPMG US  
rpfisher@kpmg.com



**Declan McManus**  
**Principal, ESG Climate Advisory**  
KPMG US  
declanmcmanus@kpmg.com

## home.kpmg/socialmedia



Throughout this document, "we", "KPMG", "us" and "our" refers to the global organization or to one or more of the member firms of KPMG International Limited ("KPMG International"), each of which is a separate legal entity.

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2021 KPMG LLP, a Delaware limited liability partnership and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved. NDP264977-1C

KPMG refers to the global organization or to one or more of the member firms of KPMG International Limited ("KPMG International"), each of which is a separate legal entity. KPMG International Limited is a private English company limited by guarantee and does not provide services to clients. For more detail about our structure please visit [home.kpmg/governance](#).

The KPMG name and logo are trademarks used under license by the independent member firms of the KPMG global organization.

Designed by Evalueserve.

Publication name: Net-zero commitment: Where's the plan?

Publication number: 137751-G | Publication date: October 2021

## About KPMG IMPACT

ESG has the power to transform your business. Our IMPACT solutions will help you unlock opportunities to enhance trust, mitigate risk and create new value, starting now. Find out more and sign up for ESG Alerts at <http://visit.kpmg.us/IMPACT>.