



GOING THE DISTANCE

Charting the Journey to Net Zero

Introduction

Climate change isn't a future problem — the crisis is already here. 2020, one of the hottest years on record, also marked unprecedented brushfires in Australia, catastrophic wildfires in the Western United States, a record-setting Atlantic hurricane season, recent Himalayan glacier burst with massive flooding in northern India and increasingly frequent urban flooding in Europe. Extreme weather and rising temperatures pose grave risks to our communities and environment, forcing relocation or migration, causing billions of dollars of damage to infrastructure, triggering severe water scarcity, wiping out natural habitats and putting endangered species at risk.

Climate change also poses risks for business. Climate crisis fills top five places of World Economic Forum's risk report. Beyond the physical health and safety risks are also the financial risks. Climate change implications are interlinked and pose multifaceted risk to environmental, economic, social and technological aspects of the industries. One of the largest natural gas and electric companies in the U.S., San Francisco-based Pacific Gas and Electric Company, filed for bankruptcy in 2019 after it was hit with tens of billions of dollars in claims for its role in the California wildfires. Climate Change has become a boardroom agenda and this served as a warning to corporations everywhere — the climate risk is urgent and the time to act is now.



The Net Zero Promise

Driven by this reality, countries consciously committing for climate neutrality, as well as mounting pressure from societal change, regulatory change, and growing pressure from investors, more companies are committing to net zero greenhouse gas (GHG) emissions. Europe implemented a carbon tax for imports like steel and passed the European Green Deal, which ties capital access to companies' Environmental, Social and Governance (ESG) ratings. As a result, capital is flowing to funds that incorporate ESG factors into their investment processes and investors are evaluating businesses on how well they manage risk.

While the business case for decarbonization and net zero is clear, there is no standardized path to reach this destination. To help businesses kickstart the journey to net zero, in the following pages, we've defined the net zero mindset, outlined the core challenges that must be addressed to succeed, and laid out a roadmap for how to get started with corporate net zero strategies.



Part: 1

The Net Zero Mindset

Net zero is quickly becoming the benchmark for corporate environmental ambition, but what does it mean in practical terms? What exactly are businesses striving for?

At Sphera, we define the net zero mindset with six C's:

- 1 Clean fuel and energy.** Net zero starts with focus on low hanging fruits such as improvement in energy efficiency, lowering the demands for primary fossil sources, electrification of heat and end use sectors while eliminating sources of GHG emissions at the source by making the switch to renewable energy, like solar, wind, geothermal, biomass, and blue and green hydrogen.
- 2 Cooperation between countries.** Global exchange of cutting-edge, low-carbon technologies with dedicated finance will help every country succeed.
- 3 Collaboration with suppliers.** Getting corporate partners on board with net zero is essential to developing low-carbon products.
- 4 Carbon capture and sequestration.** While this process isn't feasible everywhere yet, it will be an important piece of the net zero puzzle for residual emissions.
- 5 Circularity.** Environmental impact doesn't end when the product ships. Businesses are responsible for closing the loop through material recovery, reuse, and recycling and replacement of products.
- 6 Communication to promote awareness and behavior change.** Achieving long-term sustainability requires companies to lead the discussion on climate change and report goals and progress so consumers can support businesses with high ESG standards.



What is net zero?

Actionable goals are specific, and not all climate ambitions are made equal. That's why it's important to know the terminology:

- **Carbon neutral** denotes a commitment to reducing carbon dioxide emissions and balancing any remaining carbon emissions through removals.
- **Net zero** goes beyond that by incorporating all value-chain greenhouse gases emissions into reduction and removal efforts in alignment with the global goal to limit warming to 1.5°C above pre-industrial level.
- **Climate neutral** goals seek to address all human impacts on the climate.

Source: Sphera, IPCC Glossary

What is the significance of 1.5°C?

Net zero implies an alignment with the Paris Agreement's goal of limiting global warming to well below 2°C preferably to 1.5°C above pre-industrial levels to avoid the most disastrous effects of climate change. Nearly 200 countries have signed on to drastically reduce their greenhouse gas emissions and to achieve climate neutral world by 2050.

Part: 2

Top Business Challenges to Net Zero



Across sectors and geographies, businesses face some common challenges on the road to net zero.

1 Setting a clear, meaningful vision. One of the first challenges businesses face in sustainability efforts is articulating a meaningful long-term vision with realistic, short- and mid-term goals for action. Creating a framework for change can be complicated by fragmented reporting standards from initiatives like the Global Reporting Initiative (GRI), the Carbon Disclosure Project (CDP) and the International Integrated Reporting Council (IIRC), to name a few. This further adds challenges in terms of low standards of transparency and accountability leading to create a haven for greenwashing. Sphera recommends setting a mid-term emission reduction target through the Science-Based Targets initiative (SBTi), which evaluates corporate goals for alignment with what science shows us is required to keep warming below 1.5°C. Businesses need to identify and assess the full impact of climate risk and appreciate the deep financial implications of climate risks while establishing sound governance system.

2 Understanding the full environmental footprint. Most companies start their sustainability journey addressing Scope 1 and 2 GHG emissions, which include direct emissions and those from purchased energy for companies' own use. However, truly achieving net zero requires a holistic view of the entire value chain. This means companies should incorporate Scope 3 emissions, which are indirect emissions from upstream and downstream activities, like employee commutes, supplier emissions and end-of-life product processing. Scope 3 emissions are often overlooked because they are difficult to assess and to manage. Sphera recommends working closely with suppliers to ensure accurate and reliable emissions data and to achieve synergies in emissions reductions through collaboration. It is also essential to understand the footprint of different business portfolio for acknowledging transformation to achieve decarbonization.

3 Avoid burden shifting. Many companies default to GHG reduction targets. However, that is only one indicator of environmental impact. Companies should also consider risks like deforestation, biodiversity, and water security.

4 Close system gap. What gets measured gets improved, but sometimes it's difficult to measure what needs to be improved. Sphera recommends investing in an enterprise-level technology system to help establish an accurate baseline environmental footprint, streamline data capture and centralize reporting. This helps create consistency and can support sustainability efforts as they grow and evolve.

In a recent Sphera survey...

87%

of companies have committed to integrating sustainability into companies strategies

71%

of companies have committed to integrating sustainability into product development

44%

of companies manually gather sustainability data in spreadsheets

23%

of companies have no tools or processes in place to manage sustainability performance

Part: 3

A Roadmap to Net Zero

Step 1: Establish your baseline and set realistic incremental goals. To begin, companies need to know where they are now and develop a thorough understanding of their environmental footprint, including scope 1,2 and 3 emissions, to help quantify and identify areas of improvement throughout the entire value chain. This process, combined with setting evidence-based short- and medium-term targets, such as those set through the Science-Based Targets initiative, will help companies chart meaningful progress.

Step 2: Invest in innovation across three verticals: mitigation, neutralization and compensation. Mitigation, or limiting emissions in accordance with the 1.5°C pathway, should be the primary strategy for any net zero organization. It's a high stakes exercise in operational excellence, but also the most sustainable path to net zero. Neutralization efforts, like carbon sequestration, and compensation efforts, which help reduce emissions outside of the value chain, should form the remainder of a company's net zero strategy. Ideally neutralization and compensation will play a smaller role as time goes on. Businesses will need to evaluate and plan their technological pathways to decarbonization combined with plan for a change in their business models.

Step 3: Integrate sustainability into daily business operations. Defining a holistic climate ambition is just the beginning. It's critical to translate sustainability goals into realistic action plan. Leadership should communicate the mission, vision and strategies clearly and ensure that sustainability practices are implemented into day-to-day operations. Setting a corporate net zero target provides a framework that should be transferred to the product level. Life Cycle Assessment and eco-design help companies to get the hands-on sustainability data across the value chains.

Step 4: Develop a reporting framework underpinned by enterprise-level digital technology. Digital tools can help ensure data is accurate, timely and supports actionable insights that drive outcomes. It means sustainability teams, product manager and designers or even marketing can spend less time searching and entering data and more time working with information. Digital tools must be scalable to support measurement as net zero efforts evolve and grow on the product and corporate level.

Step 5: Enhance transparency through data-driven communication. Most companies already report for regulatory compliance. However, in today's business environment, many companies are going beyond compliance and publicly reporting progress of their sustainability initiatives using standards like CDP, GRI, SASB, TCFD just to name a few. These disclosures help improve company's ESG rating, attract investors, partners and new talent.

Conclusion

As the climate crisis escalates, commitments to address climate change are rising in the private sector. Many companies have committed to the ambitious goal of net zero greenhouse gas emissions, in alignment with the Paris Agreement. Putting this ambition into practice requires clarity of vision and strategy to establish a baseline, set meaningful emissions reduction goals and report progress to investors and the public.

An experienced consulting partner can help businesses develop robust decarbonization strategies based on industry data, map a pathway for incremental reductions, and build trust with partners throughout the value chain. Sphera's Product and Corporate Sustainability software solutions provide data-driven insights that help companies achieve net zero emissions target.





About Sphera

Sphera creates a safer, more sustainable and productive world. We are a leading global provider of Environmental, Social and Governance (ESG) performance and risk management software, data and consulting services with a focus on Environment, Health, Safety & Sustainability (EHS&S), Operational Risk Management and Product Stewardship.



www.sphera.com

For more information contact us at:
sphera.com/contact-us

©2021 Sphera. All Rights Reserved.