

Aligning to Net Zero

How CEOs can get on board with the transition



We must act with urgency—winning slowly is the same as losing. The scientific consensus is crystal clear—humanity needs to limit global warming to below 1.5 degrees C to avoid a dramatic increase in adverse climate impacts and unpredictable feedback loops in the climate system. Given the urgency and scale of the challenge, and the accelerating pace of change in the regulatory context, all CEOs now have a responsibility to take immediate action. Different businesses carry different responsibilities and capabilities, but none should ignore this challenge.

CEOs have a historic opportunity and obligation to align their businesses to net zero. Businesses around the world face both existential risks and enormous opportunities from the climate crisis and clean economy transition. CEOs that proactively address the changing landscape will be able to build a long-standing competitive advantage while playing a vital role in shaping a climate-safe global economy. Those who do not may disappear.

Net zero means collectively cutting net CO2 emissions by 50% by 2030 and getting to zero by 2050. Climate change is driven by the cumulative greenhouse gas emissions in the atmosphere. We have known of the risk of climate change for decades and are starting on this transition very late. The pace of our collective response is all-important. To reduce the risks we now face we must move fast to cut emissions and compensate for any residual emissions using nature-based and engineered solutions. **Net zero means eliminating emissions to the greatest extent possible and offsetting any residual emissions with measurable removals.**

Four key questions for all CEOs this year

1. What does my market look like in a net-zero world?
2. What is my business model for succeeding in that market?
3. What changes should I make now to prepare for success?
4. What supporting conditions will I also need and how do I go about winning them?

The transformation is underway—bringing unprecedented opportunities and risks

Net zero implies a complete transformation of the economy. And this is already happening. We are seeing a major scale-up of clean power in a wide range of countries. The automotive sector has begun the transition to a fully electric future and

long-distance transport sectors are developing zero emission propulsion options, including synthetic fuels. Energy efficiency measures are being rolled out, and carbon capture and zero emissions fuels offer to transform processes in the industrial and manufacturing sectors. Farmers are being asked to reduce their carbon emissions and consumers are taking up climate-friendly diets. As well as solutions to cut emissions, we will likely see a huge scale-up in carbon removal solutions to compensate for hard-to-cut activities and historic emissions. Verifiable enhanced removals of greenhouse gases in the atmosphere may include reforestation, peatland and mangrove restoration projects, and direct-air capture technologies.

We will see a massive turnover in capital stock.

High-carbon emitting assets must be retired early to be replaced or retrofitted with low-carbon alternatives. There will be creative destruction and stranded assets in many sectors across the economy; internal combustion engines will be retired early, buildings will be retrofitted rapidly, fossil power generation will be obsolete.

CEOs must anticipate unprecedented physical and transitional risks.

Climate change threatens economic stability, disrupts supply chains, reduces workforce productivity and causes mass migration on an unprecedented scale. Rapid changes in policy, market preferences, norms and technology have impacts on company profit and loss and cause devastating reputational damage for brands. As the climate rapidly deteriorates and governments respond with accelerating commitments, these risks are already hitting many unprepared CEOs hard. Those who anticipate these risks and align their businesses to a net-zero emissions trajectory avoid stranded assets and anticipate spiralling costs of inaction.

Those who act early can capture major opportunities and build a competitive advantage.

CEOs who align their businesses to a net-zero future not only shield themselves from risks but also position their businesses for growth in new green markets. Fortunes will be made and lost in this shift. We have already seen a sizable transition in the power sector with the rapid decreases in wind and solar costs—some players are now reaping the rewards, while others commit to major write-downs. The rapid growth in green financing is enabling those who act now to access lower capital costs for new projects.

Making progress on emissions is becoming table-stakes for brands.

As emissions targets are increasingly added to procurement criteria, climate action is becoming a prerequisite to become a trusted supplier across all sectors of the economy. Increasing expectations among employees and end-consumers means that securing brand equity and attracting future talent now depends on a baseline level of climate action. Those who become “green champions” will streak ahead, while laggards will be increasingly perceived as pariahs.

Those who engage have the opportunity to shape the context. CEOs who take an active role in policy discussions to achieve national net-zero targets and develop sector-level standards with industry peers can shape the context and support needed for full decarbonization. Taking a proactive stance will speed progress and reduce collective risk.

Recommended steps to play our part

Set the overall ambition and low-carbon strategy, then measure and disclose. CEOs and their boards need to ensure they have a fundamental understanding of climate science, climate risks and the implications for their business. They should report on their emissions baseline (e.g., using [TCFD](#) guidelines, and via CDP), set clear short- and longer-term reductions targets (e.g., via the Science-Based Targets initiative) and adjust their business strategy to minimise climate risk and ensure lasting competitive advantage in a net-zero world.

Implement initiatives that save money or cost little. Many emissions reductions measures can save money or have short payback periods on minimal upfront investment. Reducing waste, increasing circularity and implementing energy-efficiency measures are actions every CEO should be looking to roll out immediately while developing the deeper, longer-term transformation needed. Redesigning products for lower-carbon materials and switching facilities to renewable power are major levers.

Collaborate in ecosystems to address more costly levers—especially in hard-to-abate industries. For those sectors where decarbonization costs are high, margins are slim and products are commoditized, it is hard for companies to move alone. Overcoming these hurdles requires a joint effort. Coalitions among industry peers and along value chains

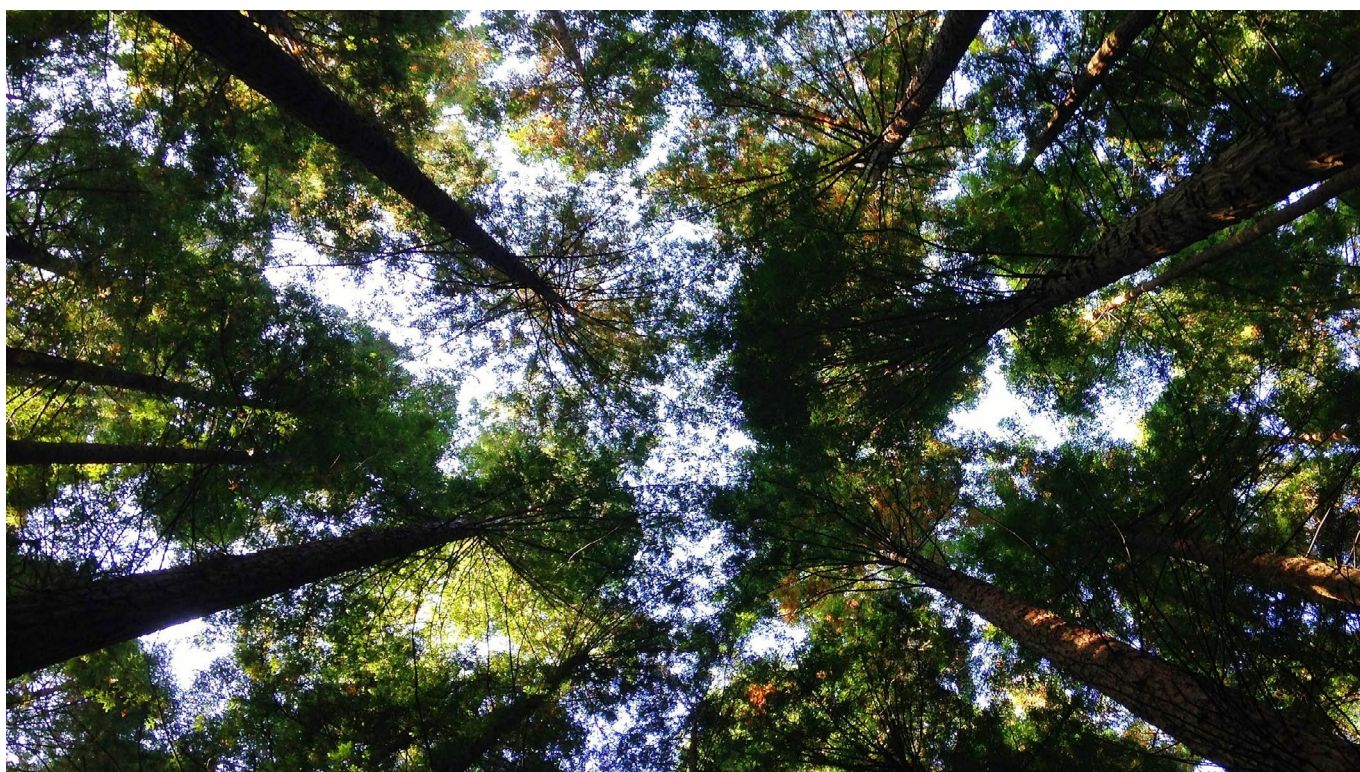
can enable companies to share costs, share risks and shape policies (as, for example, we see in the Forum's [Mission Possible Partnership](#) which aims for sector-level targets and industry collaborations).

Develop new, low-carbon business models. To thrive in the low-carbon future, leading CEOs should explore new revenue streams and invest in the technologies, goods, services and business practices of tomorrow. Develop new premium consumer products with low-carbon inputs, set up green fuel production facilities as demand for zero-carbon shipping and aviation takes off and stay one step ahead of the green technology curve by developing R&D capabilities for further technological innovation.

Engage with the growing base of climate-conscious investors. Recent [analysis by the CFA Institute](#) showed the majority of investors surveyed have net-zero targets. CEOs can take advantage of this to support their long-term transition plans by engaging with those investors who are increasing pressure on sectors to decarbonize.

Enable your organization with a low-carbon governance. CEOs need to align their [organizations to drive net-zero pathways](#) by linking core business functions to decarbonization priorities. Introducing a meaningful carbon pricing mechanism and linking key performance indicators to decarbonization efforts can be a valuable tool to align internal incentives and fund green projects.

Advocate for policy support. To enable the context change that we all need to fully transition the economy to net zero, CEOs should engage in advocating for regulation in their sectors and in the countries where they operate. [Many countries can benefit from investments in a low-carbon economy.](#) Making the case for stronger policy support and promoting a message of green growth and jobs provides reassurance to policy-makers who look to business leaders to confirm support for national net-zero targets and policy frameworks.





Closing words

The transition to net-zero emissions is bringing about a transformation of unprecedented scope and pace. As crucial leaders of the economy, CEOs have a critical role to play in driving the race to net zero—within their own businesses, among their peers and along their value chains, and in relation to the broader ecosystem of investors and governments.

It is up to all of us to use the platform we have for positive change—it is only when every leader acts on their responsibility that humanity will be able to avert the worst of the climate crisis.

Annex

Further information

Limiting warming means sticking to a carbon budget—Net zero by 2050 and 50% GHG reduction by 2030.

Although estimates of our total remaining carbon budget vary, the science is clear. Reducing emissions rapidly enough to avoid catastrophic global heating will involve a blistering pace of change. [The IPCC](#) and others show that for even a [60%] chance of staying within the 1.5-degree goal, we must reduce emissions by 50% by 2030 and hit net zero globally by 2050. The risk of devastating outcomes increases dramatically if heating rises from 1.5 to 2 degrees, and catastrophically with every percentage of a degree higher. We need global emissions to peak and start declining rapidly as soon as possible. Every additional tonne of greenhouse gases emitted today adds to the risks we collectively face. The international goal of the Paris Agreement is that man-made emissions are stopped or compensated fully by removing emissions from the atmosphere.

Net zero means eliminating emissions to the greatest extent possible and offsetting any residual emissions with measurable removals. Immediate action across all sectors is required to reduce emissions dramatically, hitting

the lowest level possible by the middle of the century. Any residual emissions that are impossible to reduce will need to be removed via nature-based and engineered solutions. Those removals solutions must be developed now to reach the scale required by 2050 and deliver negative emissions in the second half of the century. For a detailed definition of [net zero](#) that can serve as a shared point of departure for global business, refer to [SBTi](#).

Useful resources

The World Economic Forum's [Mission Possible Partnership](#) provides a valuable example of an initiative founded to enable collaboration among peers, push sector-level targets and scale demand-side commitments. Other platforms for collaboration include [WBCSD SOS 1.5](#) from We Mean Business, and the Task Force on Climate Related Financial Disclosures ([TCFD](#)).

Companies in different sectors may wish to review net-zero case studies of leaders from their industry. Many are included in the [Race to Zero](#) platform leading up to COP26, and notable examples include:

- Food and beverage: [Nestlé](#)
- Consumer products: [Unilever](#)
- Oil and gas: [Shell](#)
- Shipping: [Maersk](#)
- Aviation: [Airbus](#)
- Steel: [ArcelorMittal](#)
- Power: [Orsted](#)
- Mobility: [Volkswagen](#)

Finally, we suggest reviewing other World Economic Forum reports and Global Future Councils on related topics. First, the [Net-Zero Challenge report](#) provides further background information on this topic and [The Supply Chain Opportunity](#) shows how an end-to-end supply chain view provides companies with an opportunity for multiplied impact by tackling Scope 3 emissions. Related Global Future Councils include [Nature-Based Solutions](#), [Clean Air](#), and [Energy Transition](#).