



THE 1.5°C BUSINESS PLAYBOOK

**Build a strategy for
exponential climate action**

**This playbook is to prepare
businesses for the fastest
economic transition in history
and help them drive it.**

**EXPONENTIAL
ROADMAP**

www.exponentialbusiness.org

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INTRODUCTION

Climate change is already harming societies and the global economy. Evidence shows that humanity is taking grave risks with the stability of the Earth's life support system if global average surface temperature continues to rise. Reducing this risk means working together to stabilise temperature rise to a maximum of 1.5°C above pre industrial temperatures.¹

To achieve the 1.5°C ambition, global greenhouse gas emissions* must stop growing by 2020 and we must halve emissions every decade to approach net-zero by 2050, while at the same time removing some of the carbon already emitted into the atmosphere.^{1,2} Doing this will require the fastest economic and societal transition in history – but one which is both necessary and achievable, and will bring significant benefits from reduced pollution to improved health and potential economic growth.^{1,3}

It is critical to mobilise the entire business sector for the 1.5°C ambition and to halve emissions by 2030. Businesses will contribute in several ways. First, by rapidly reducing their own emissions. Second, by reducing emissions in their value chains. Third, and most importantly, by scaling products, services and projects that cut emissions or even remove carbon from

the atmosphere. Finally, by displaying climate leadership and influencing wider action in society.

Business Ambition for 1.5°C campaign: a joint effort of the SBTi, the We Mean Business Coalition and UN Global Compact, announced in September 2019.⁴

"The next decade is critical. The recent report from the Intergovernmental Panel on Climate Change (IPCC) warned of severe consequences of a failure to prevent global warming exceeding 1.5°C. To limit temperature increase to 1.5°C, emissions need to halve by 2030, and drop to net-zero by the middle of the century for the best chance of avoiding the worst impacts of climate change. By taking this pledge you are formalising your increased ambition and signaling your commitment to a zero emissions future to your peers, investors, policy makers, customers, suppliers, civil society organisations, and other stakeholders."

* "greenhouse gas emissions" are also referred to as "emissions" in this document

WHO IS THIS PLAYBOOK FOR?

This playbook is developed for companies and organisations of all sizes that want to align with the 1.5°C ambition. Small, medium and larger companies may find it useful both for strengthening their own strategy and to help in engaging suppliers and setting requirements.

Companies with advanced climate strategies that have already joined sector climate initiatives can use it to benchmark their approach and raise ambitions. In this capacity, the playbook will help to establish a clear climate strategy, define targets aligned with science, set requirements for suppliers and align supply chains and value propositions with a 1.5°C ambition. This guide is grounded in the latest science and focuses on **simplicity** and **speed**.

It is designed to work in harmony with existing standards and key initiatives such as the Greenhouse Gas Protocol (GHG)⁵, Science Based Targets initiative (SBTi)⁶, CDP⁷, RE100⁸, Mission Innovation's 1.5°C Avoided Emissions Framework⁹ and the Chambers Climate Coalition.²⁵

The climate crisis is the most urgent threat for society today but it must not be addressed at the expense of wildlife and vulnerable groups. By implementing a 1.5°C-aligned strategy, companies can also help to support the UN Sustainable Development Goals and safeguard wildlife, water, land and oceans, all of which are strongly interrelated.^{1,10}

CARBON LAW

The UN climate report (Global Warming of 1.5 °C, 2018)¹ concludes that we need to keep global warming to a maximum of 1.5°C to avoid high risk of catastrophic consequences for people and our living environment.¹¹ To do so, the world needs to stop emissions growing by 2020 and halve them every decade until 2050. This simple rule of thumb, called the Carbon Law², can be applied to everyone: companies, cities, nations and citizens. But, the Carbon Law outlines the global average and must be viewed as a minimum ambition. Everyone should decarbonise as rapidly as possible and the wealthiest should go fastest.

To halve emissions every decade is a huge challenge but also an enormous opportunity. The first halving is the biggest, but for many companies it is the easiest.

Exponential Roadmap

The Exponential Roadmap^{*} highlights 36 key solutions that together can halve global emissions by 2030. These solutions are all market-ready: they are affordable (like wind and solar), can scale rapidly (like reduced food waste) and can save money (like building efficiencies). For businesses, reducing carbon emissions and providing solutions that help customers and society to cut their emissions opens up new exponential growth opportunities and an opportunity to reduce costs and increase performance and profitability.^{12,13,14}

* The Exponential Roadmap integrates solutions from several research projects such as Project Drawdown and the Low Energy Demand scenario, which are also referenced in this playbook. www.exponentialroadmap.org

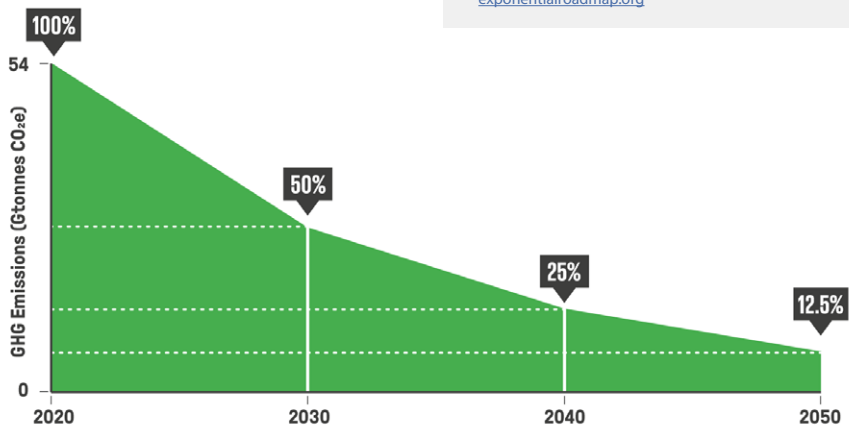


Figure 1. The Carbon Law – halving global greenhouse gas emissions every decade. The estimated 2020 emission level is 54 billion tonnes of carbon dioxide equivalents.¹²

PLANETARY STEWARDSHIP DRIVING COMPETITIVE ADVANTAGE

It's looking likely that the 2020s will see the fastest economic transition in history as several forces combine to accelerate transformation:

- A technological and digital revolution will transform or disrupt most existing businesses – from transportation to energy, food and materials.
- Youth climate movements are demanding political action, climate-friendly services and products, and that businesses support a low-carbon future.
- Political momentum to achieve the Paris Agreement goals is growing and results in new laws, regulations and adopted emission trading systems impacting business. Over 1,000 jurisdictions and local governments covering 545 million citizens, and most recently the European Parliament, have announced climate emergencies and this number is growing fast.¹⁵
- The price of climate solutions continues to fall rapidly. The best option for the climate is now often cheaper than other alternatives. Markets for clean energy systems, transport solutions, agriculture, buildings, finance and industry are opening up and growing exponentially. This brings opportunities for companies that transform their business models early to become market leaders.

The finance sector will play an important role in this transformation. There are important measures it can take to enable and accelerate the transition to a low-carbon and climate-resilient future. These include stopping the financing and investing in fossil energy, increasing investments in new technology and using the power as owners and lenders to influence company behaviours and disclosure practices. The Task Force on Climate-Related Financial Disclosures¹⁶ and the UN-convened Net-Zero Asset Owner Alliance¹⁷ are examples of initiatives that will demand increased disclosure practices. Specifically, the EU is developing a taxonomy to help inve-

stors and companies make informed investment decisions on environmentally friendly economic activities¹⁸. This is expected to have a major impact on company behaviour.

Customers, employees and governments are also stepping up requirements on companies to show full transparency of emissions, targets and results, and to align strategies and solutions with strong climate ambition.

Increasingly, companies acknowledge a responsibility towards society as a whole, not just their shareholders.¹⁹ Companies that build climate leadership into their core strategies seem to be outperforming those that fail to do so.^{20,21} A study of 200 companies in Sweden found an overwhelming consensus that climate

action strengthens a brand, improves customer loyalty and boosts recruitment – on top of the direct benefits that reducing emissions brings.²² Research shows that CEOs are aware of the importance of building a social enterprise and a 2019 study found that they regarded their impact on society, including the environment, as their most important measure of success.²³

Companies and organisations that take a leading position today will become the cornerstones of the sustainable value chains of tomorrow. In the process of becoming planetary stewards, they can win new business and gain a competitive advantage.



SETTING A FOUR-PILLAR CLIMATE STRATEGY

This guide focuses on the four pillars that need to be addressed in a company's climate strategy.

The first pillar focuses on a company's activities to reduce its own emissions*, aligned with a 1.5°C pathway.

The second pillar focuses on a company's activities to reduce its value chain emissions†, with the same goal.

The third pillar addresses the alignment of the company's portfolio and value proposition with a 1.5°C ambition and acceleration of solutions that drive down and removes emissions. It means prioritising products and services that significantly help to cut customer emissions‡ and suppressing solutions with an adverse climate impact. It also includes investing in projects outside a company's value chain which help remove or avoid emissions.

The fourth pillar describes how to contribute to the 1.5°C ambition beyond your own business. This means, for example, influencing

government policy, helping employees to shift towards sustainable lifestyles, supporting industry initiatives to align with 1.5°C and making sure that organisations that the company belongs to do not counteract the company's own actions.

The pillars should preferably be integrated into a company's iterative planning cycle, starting by measuring and analysing the current situation, then setting targets and priorities, and then moving to implementation. To measure the outcome, take corrective actions and re-evaluate the strategy completes a first loop.

The pillars are not strictly ordered in terms of timeline and implementation and will vary depending on the type of business, but there is a logic to the order. Pillars 1 and 2 are requirements that all companies should do their utmost to comply with. Pillar 3 represents an opportunity for companies to fully integrate climate impacts into their business strategy and goes beyond the basic footprint of the company. Last but not least, pillar 4 complements pillars 1, 2 and 3 by considering the wider role of a company as a societal actor.

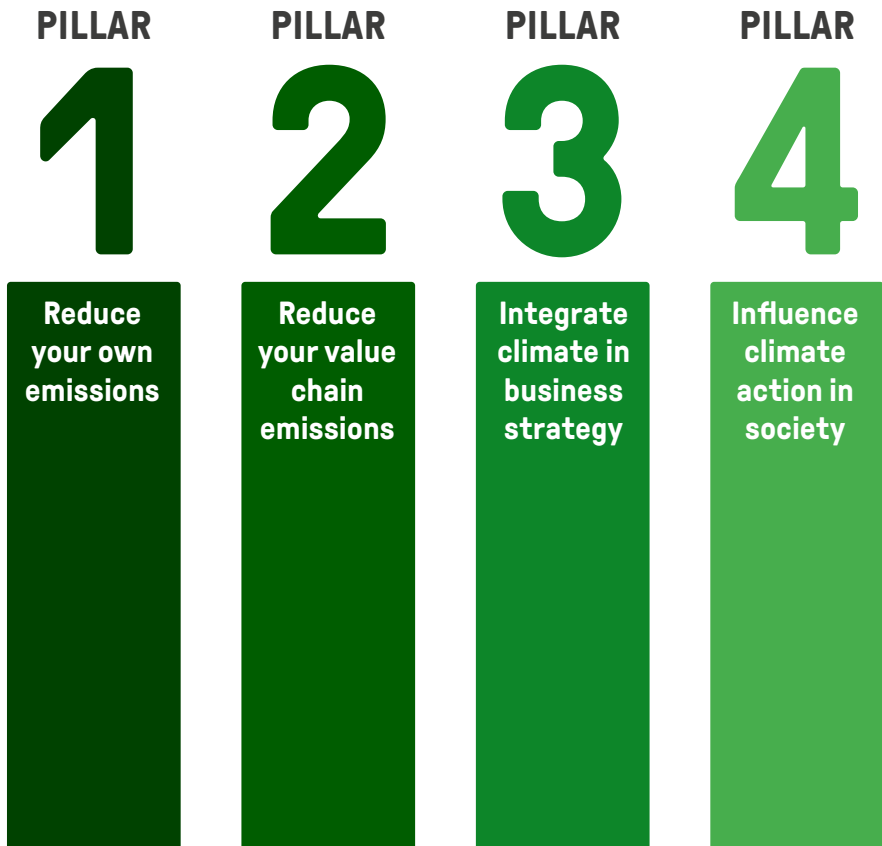
* Own emissions is described as scope 1 and 2 emissions in the Greenhouse Gas Protocol and a well-established area that major companies already report on.

† Value chain emissions is described as scope 3 emissions in the Greenhouse Gas Protocol including upstream and downstream emissions

‡ Avoided emissions is also referred to as "scope 4 emissions"

Different companies might implement different strategies to achieve the optimal business and climate impact:

- Established companies with large emissions and a conventional business model may start from pillar 1 and 2 and extend to pillars 3 and 4 in a stepwise approach.
- An established company implementing transformational new strategy may start from pillar 3 by rethinking its business model to be aligned with 1.5°C, while addressing pillars 1, 2 and 4 in parallel.
- A disruptive fast-growing company using climate as a business driver may build and accelerate its business from pillar 3, while keeping track of pillars 1, 2 and 4.



PILLAR

1

Reduce your own emissions

Target net zero and a first halving of emissions in less than 10 years

Prioritise, plan and reduce scope 1 and 2 emissions

Assess and analyse scope 1 and 2 emissions and results of reductions and disclose those results publicly

PILLAR

2

Reduce your value chain emissions

Target net zero and a first halving of emissions in less than 10 years

Prioritise, plan and reduce scope 3 emissions

Assess and analyse scope 3 emissions and results of reductions and disclose those results publicly

SET TARGET
AND STRATEGY

IMPLEMENT

MEASURE

PILLAR

3

Integrate climate in business strategy

Integrate positive climate impact in vision and mission, value proposition, products, services and R&D roadmaps

Shift to circular business models and drive products/ services which help customers avoid emissions

Invest in carbon credit projects, counterbalancing remaining emissions

Measure positive and negative climate effects of your solutions portfolio, disclose that information publicly

PILLAR

4

Influence climate action in society

Influence society and contribute to the 1.5°C ambition beyond your own business

Accelerate climate action by working with customers, suppliers, employees, industry, local and national government, and key organisations

Evaluate the impact of your societal influence and disclose those results publicly



SET TARGET
AND STRATEGY



IMPLEMENT



MEASURE



ASSUME CLIMATE LEADERSHIP – COMMIT TO THE 1.5°C AMBITION

Action begins by making a commitment as a company to align with the 1.5°C ambition and to assign the required resources. This requires climate leadership from top management. But it is also about democratising climate work, to ensure that all employees can contribute, and identifying and empowering potential climate leaders across the organisation.

ACTIONS

- Contribute to the 1.5°C ambition by:
 - » deciding to do your utmost to halve emissions across your own business and across your value chain in 10 years or less – by 2030 or earlier.*
 - » deciding to reach net-zero or negative carbon emissions by no later than 2050, preferably much sooner.
 - » deciding to integrate climate opportunity and risk in your business strategy and management process.
 - » deciding to drive climate action in your wider role in society.
- Assign responsibility, mandate and resources.
 - » e.g. create a climate action unit that includes executives from across the company, with a direct line to the C-suite and board.
- Make an assessment of your current emissions, carbon risks, and climate business opportunities and decide on strategy.
- Start to measure and commit to publicly disclosing your company's greenhouse gas emissions, climate action and results.
- Start to educate your employees about climate change and empower them to drive climate action and innovation in their daily work.
- Integrate climate remuneration targets for executive management and employees. Also consider including climate as a priority parameter and target for your purchasing and R&D department.
- Announce your commitments to the rest of society.
 - » e.g. sign the Business Ambition for 1.5°C pledge²⁴;
 - » set science-based 1.5°C targets.
 - » Chambers of commerce and local business leaders should consider committing to the Chambers Climate Coalition.

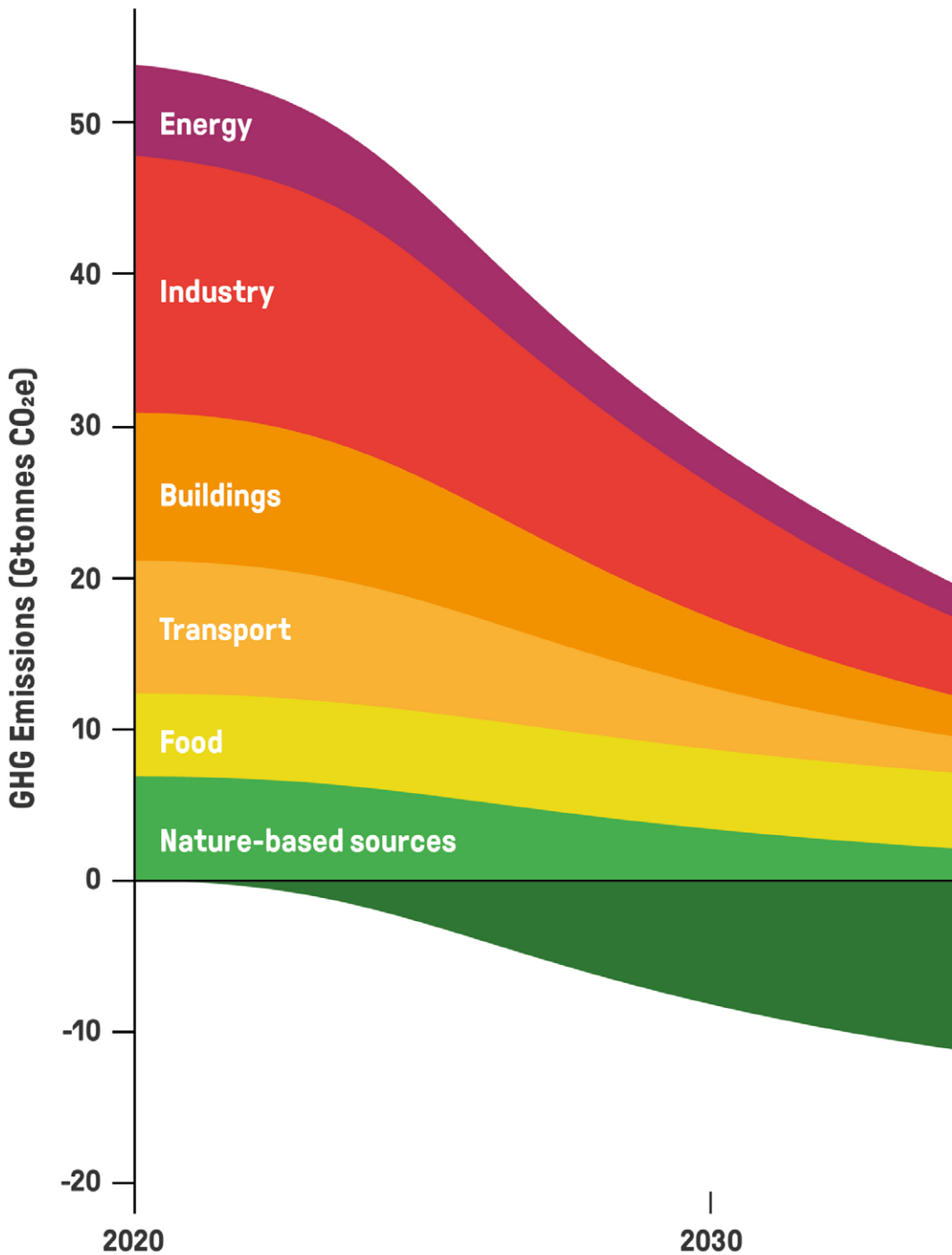
* For example, Telia Company has set a goal to be carbon neutral throughout the value chain by 2030.

Chambers Climate Coalition²⁵

2,100 chambers of commerce have signed up to the Chambers Climate Coalition, an unprecedented grassroots mobilisation of local business leaders committed to setting climate targets across their operations and value chains aligned with limiting global temperature rise to 1.5°C.

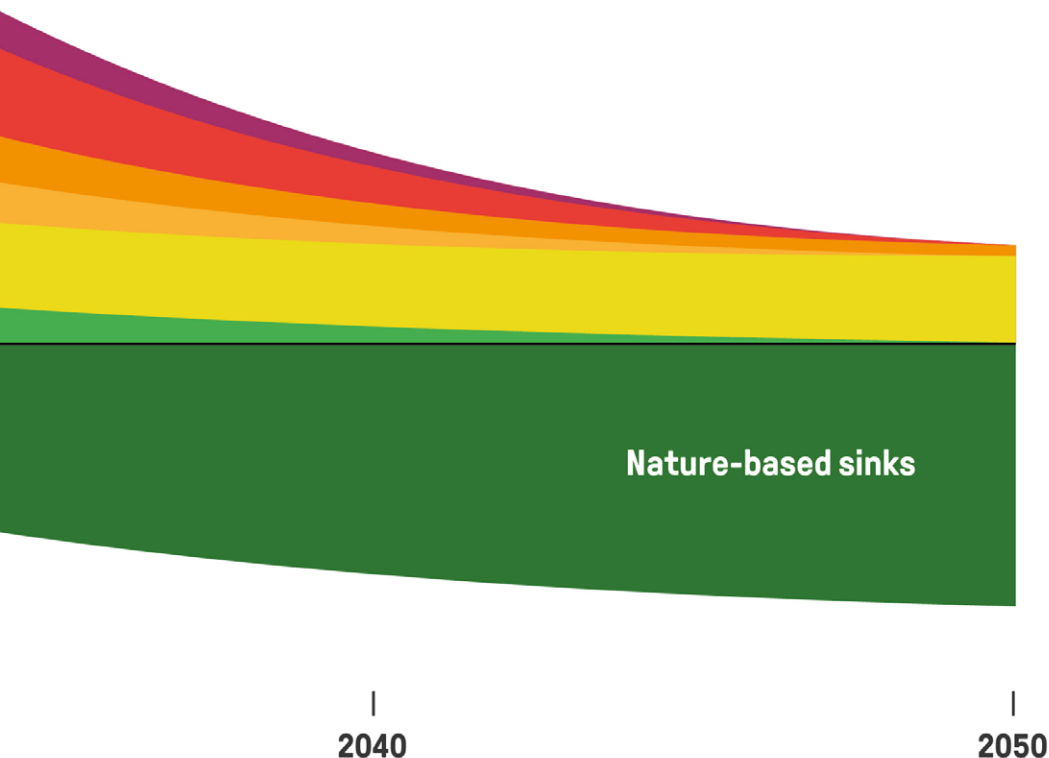
During the United Nations Climate Action Summit September 2019, John Denton, ICC secretary general, stated that “Our only future is one where we achieve net-zero emissions by 2050 and limit global temperature rises to 1.5°C. Less ambition is, simply put, not an option.”

2030 **LET'S HALVE
GLOBAL
EMISSIONS BY**



EXPONENTIAL EMISSION REDUCTION PATHWAYS TO LIMIT GLOBAL WARMING TO 1.5°C

Emissions reduction pathways for different sectors, following the Carbon Law. Energy emissions only include emissions related to the process of energy production – not energy emissions from other sectors.²⁸



PILLAR 1. REDUCE YOUR OWN EMISSIONS



To be aligned with a 1.5°C ambition, the minimum requirement is to halve your own emissions at least every 10 years. These emissions are referred to as scope 1 and 2 emissions of the Greenhouse Gas Protocol⁵. They include emissions from in-house sources such as furnaces, vehicles or leakage from refrigerants, and also from purchased electricity, cooling and heating. It is

also recommended to include emissions from business travel in pillar 1 even though they are formally part of scope 3, since they are directly controlled by the company. Your own emissions may represent a small part of your total emissions but can normally be reduced more easily since they are under the company's direct control.

ACTIONS

- Map out your own greenhouse gas emissions, if you haven't already done so. Make sure you include the main sources of carbon emissions – your hot spots – and that your plans include how to mitigate these.
- Decide your base year. A base year is the year when reductions start and will be used as a comparison to show progress.
 - » Set the base year no more than two years back in time.
 - » Historical emissions reductions deserve acknowledgement and can be highlighted*, but they cannot be a part of your next halving.
- Set a target within three months of making your commitment and decide on the target year.
 - » Your minimum goal should be to halve emissions every ten years, but preferably faster. Halving in ten years means a 7% year-on-year reduction. Halving in five years will mean 13% emissions reductions and halving in three years will mean a 20% annual emissions reduction rate. Break down your plans into yearly targets and milestones.

* Companies that have significantly reduced emissions historically will benefit from being able to disclose a lower and better carbon intensity performance value in benchmarks (total emissions divided by net revenue) but should still strive to halve total emissions at least every decade.

- Decide in which order to eliminate emissions and develop a plan on how to reach the targets.
 - » Start immediately with the “low-hanging fruit” which are economically attractive, bring other co-benefits and create positive momentum in the organisation. Energy efficiency, shifting to renewable energy, building space, transportation and business travel emissions are often good candidates.
- Disclose your company’s own carbon emissions, plans to reduce them and emissions reductions as part of your public reporting annually. Clearly explain and motivate any slower pace than halving every decade.*
- Evaluate results, take corrective actions and update your plan on a yearly basis.

* Rapidly growing companies that provide solutions which avoid or remove emissions as their core business may contribute most to the climate by keeping emissions at a low level but not halving them.

KEY REDUCTION MEASURES

- Immediately start implementing use of renewable energy, fuel and electricity for all possible processes, buildings and sites.
- Consider buying renewable energy through power purchase agreements and collaborate to accelerate adoption.
- Consider generating your own renewable electricity, if it is not provided by your grid operator.
- Improve energy efficiency for buildings through retrofitting and digital automation.
- Demand and implement low-carbon cooling, heating, ventilation and refrigerants for all building sites you operate in.
- Optimise the use of building space in all operations, in order to reduce emissions and costs.
- Move towards a zero-emissions vehicle fleet, including own and leased company cars.
- Require zero-carbon buildings and clean grid energy when expanding or establishing new businesses in a region.
- Systematically reduce energy, resource and material waste in all operations.
- Set up a plan to reduce emissions from business travel by shifting to low-carbon travel (for example a “train first” policy over air travel) and use digital meeting technologies to avoid unnecessary travelling.

PILLAR 2. REDUCE YOUR VALUE CHAIN EMISSIONS

2

Value chain emissions include all the emissions “outside the company walls”. They normally represent the largest share of a company’s total footprint and must therefore be addressed. As an example, IKEA’s value chain emissions represent 97% of the company’s total emissions and for Max Burgers they represent 99%.

Value chain emissions are emissions from upstream (e.g. supplier activities) and downstream (e.g. use of sold products) activities associated with the operations of the reporting company, and are referred to as scope 3 emissions in the Greenhouse Gas Protocol⁵. Upstream activities include emis-

sions all the way to raw material extraction and downstream activities including customer final use and end-of-life. The largest emission sources in this category tend to be **purchased goods and services** and the **use of sold products**, but proportions vary between sectors and companies.

You should work actively to drive down value chain emissions. This can be done in many ways – examples include procurement guidelines and supplier code of conduct criteria, changes in the design of products, collaborations with suppliers and customers, and by reassessing your business model and investments.

ACTIONS

- Map out the carbon emissions associated with your value chain to understand which are the most substantial and start tracking them systematically. Strive to include all emission categories which exceed 1% of total emissions.
- Within the first year, set a target for the first halving of absolute value chain emissions.
 - » Apply the same baseline year as for your own company’s emissions (scopes 1 & 2).
 - » Your minimum goal to align with 1.5°C should be to halve every ten years (7% year-on-year reduction), but preferably faster.
 - » Break the plan down into yearly targets and milestones.
- Decide in which order to reduce carbon emissions, based on a ROI analysis, and develop a plan on how to reach the targets.

- Disclose value chain emissions and plans to reduce them as part of your public reporting annually. Clearly explain and motivate any slower pace than halving every decade.*
- Evaluate results and update your targets if necessary on a yearly basis.

* Rapidly growing companies that provide solutions which avoid or remove emissions as their core business may contribute most to the climate by keeping emissions at a low level but not halving them.

KEY REDUCTION MEASURES

- Ask your suppliers to implement the pillars in this playbook and/or additional applicable frameworks aligned with 1.5°C, such as SBTi 1.5°C⁶, and include it in procurement criteria and your supplier code of conduct.
 - » This will drive reductions of upstream emissions from purchased goods and services.
- Integrate strong climate criteria at the heart of your R&D, product and service design processes to improve energy performance of sold products, require less material, use recycled materials and low-carbon materials, and build low-carbon and circular economy solutions for customers.
- Include climate measures and targets on product use and end-of-life to steer your product development.
- Evaluate and choose suppliers of materials, transport and products based on transparency of emission data and climate strategy, and collaborate with other industry partners to strengthen purchase requirements.
- Consider inseting investments in emissions reduction projects within your supply chain, e.g. related to use of material (wood, cement, plastics).
- Evaluate and improve the energy and resource efficiency of your own product and service mix. Optimize them for the use of renewable energy.
 - » This will enable a reduction of downstream emissions from the use of sold products.
- Set up a plan to reduce emissions from business travel if this has not been handled as part of pillar 1.
- Set up a plan to enable reduction of commuting travel emissions e.g. through promoting and sponsoring low-carbon travel to and from work, and enabling employees to work from local green office hubs, closer to home.
- Evaluate and reduce the footprint of your financial investments, including pension funds, to make sure they are in line with your 1.5°C commitment. Shift investments to zero/low-carbon business opportunities and influence investees to adopt 1.5°C aligned strategies.

PILLAR 3. INTEGRATE CLIMATE INTO YOUR BUSINESS STRATEGY

3

To limit global warming to 1.5°C and to ensure the long-term stability of the climate, value propositions and product portfolios which avoid emissions and remove carbon will need to scale exponentially. This includes solutions for renewable energy and energy storage, plant-based sustainable food production, energy-positive buildings, sharing of vehicles, space and things, zero-carbon materials, and circular usage of materials.

Many industries must be fundamentally redesigned to be decarbonised in line with a 1.5°C pathway. Business models will need to change from ownership towards usership, from product-based towards service-based and from linear to circular business models – most often enabled by digital technologies.

Your business proposition is the biggest determining factor to your contribution to a 1.5°C planet. For example, you can create new fossil-free materials, renewable energy solutions, use electric vehicles and more

to replace carbon-intensive alternatives. You can help shift consumer patterns in a sustainable direction through vehicle sharing, circular economies or close-to-home tourism. If your services and products are influencing consumer and company decisions – such as social and e-commerce platforms, advertising and management consultancy – you can both enable and encourage customers to make decisions that are positive for the climate. As a company, you will want to be on the forefront of this change to safeguard your competitive advantage. This may require transforming your business model.

Map out the net-zero future of your company. Define what it would look like and what needs to be achieved in order for your company to get there. Find business opportunities by exploring new offerings, business models and addressing climate-conscious customer groups. Identify business practices that need to be phased out to reduce adverse climate impacts.

ACTIONS

- Assess and analyse if and how your value proposition, solutions portfolio and business model are aligned with a 1.5°C planet trajectory. If not, start transforming them. This is also a way to mitigate climate-related risks.¹⁶
- Review and update your vision, mission statement, strategy and processes to reflect your climate commitment. Start transforming your value proposition to one which is service-based and circular, with higher efficiency and minimal emissions.
- Move your portfolio towards solutions which help your customers avoid emissions and scale these solutions exponentially. Phase out those that increase emissions.
- Integrate your climate strategy in your services and product road-maps and require all new solutions to be compatible with the 1.5°C ambition.
- Collaborate strategically with key partners to build circular and carbon-free value chains.
- If your services and products are influencing consumer and company decisions, such as digital platforms, advertising and management consultancy, ensure that your services clearly enable and encourage your customers to make purchase and investment decisions which are positive for the climate and in line with the 1.5°C ambition, never against.
- Consider making qualitative and quantitative assessments of your solutions' climate impact, and setting measurable goals. This can be done for example using the Mission Innovation 1.5°C Avoided Emissions Framework.⁹
- Consider accounting for a price on carbon to make climate an integral part of your investment procedures.

INVEST IN CARBON CREDIT PROJECTS REMOVING CARBON FROM THE ATMOSPHERE

In parallel to halving emissions by 2030 on a global scale, natural carbon sinks, such as forests and wetlands, must be protected and restored to safeguard the climate. It is important that business sectors causing the emissions today take responsibility to accelerate the required investments. Therefore, emissions that cannot be immediately removed* should preferably be counterbalanced through investment in high-quality projects which remove carbon from the atmosphere, or alternatively, avoid emissions.

* Examples of such hard-to-abate emissions can be those involved in the manufacture of steel and cement, which cannot immediately be eliminated.

Investing in carbon credit projects is a solution which you should only use as a complement to deep decarbonisation and should not be a substitute for reducing emissions and creating new solutions to reduce global heating. To ensure impact, it is important to carefully decide from where carbon credit should be purchased. We recommend using third-party certified carbon credit projects, such as those under the Gold Standard scheme²⁶. These projects should be aligned with the Sustainable Development Goals and meet high standards.

ACTIONS

- Determine the remaining emissions from your company and value chain which cannot be immediately removed.
- Purchase carbon credits at least equivalent to these emissions, financing high-quality, third-party certified projects which remove carbon from the atmosphere, or alternatively projects that avoid emissions. To ensure climate impact, it's good practice to over-invest, perhaps doubling your calculations, to take uncertainties into consideration.
- Disclose carbon credit projects separately in your annual reporting.
- Follow up on those projects to ensure that they are delivering in accordance with their promises.
- If you are applying concepts like carbon neutral, or climate positive, be sure to follow solid recommendations and standards. Be transparent, specific and do not give the impression that the organisation has gone further than it has.

PILLAR 4. INFLUENCE

CLIMATE ACTION IN SOCIETY

4

Becoming a societal climate leader means using your company network and wider sphere of influence to support and accelerate climate action in line with the 1.5°C ambition. This can be done by influencing and working with customers and suppliers, employees, industry, government, cities, research organisations and NGOs beyond your own business interests. It could

include proposing or demanding policy changes that support rapid economic transition and behavioural change, contributing to climate awareness among customers, and developing solutions and sharing best practices with your industry and community. It also includes activities related to investments and financial routines and membership of different industry organisations.

ACTIONS

- Develop and invest in sectoral industry roadmaps and define and drive the required strategies and actions for halving emissions and reaching net zero, in collaboration with customers, suppliers and other partners.*
- Collaborate with suppliers and customers to enable innovative technologies and sustainable transformation of value chains, including sharing of methodologies and competences.
- Integrate a 1.5°C climate commitment in overall public affairs and corporate policies, including those related to finance and financial investments.
- Join and contribute in business/trade organisations which are committed to a 1.5°C ambition, avoid those that are counteracting those ambitions. Participate in national and international events which demonstrate concrete solutions to help scale best-practice solutions.
- Influence local and national policymakers to step up climate action and policies in line with a 1.5°C ambition. Advocate for regulatory bodies to promote industry-wide action.
- Educate your board and management regularly on climate and the SDGs and your company's positive and negative contributions.
- Help your employees and owners start halving their own emissions and shift towards 1.5°C lifestyles†, e.g. through sharing educational materials, and climate calculation tools.

* One example is the fossil-free roadmaps developed by industries in Sweden: <http://fossilfritt-sverige.se/in-english/roadmaps-for-fossil-free-competitiveness/>

† One example is "100 smart ways to live sustainably" developed by Sitra: <https://www.sitra.fi/en/projects/100-smart-ways-to-live-sustainably/>

REPORT ON PROGRESS

An integral part of all pillars is the disclosure of carbon emissions, targets, activities and achievements. It will be required by all stakeholders; customers, investors, employees, media and financial analysts – and it will help you to position your company as a serious climate leader.

Make your customers, suppliers, employees and investors, as well as other stakeholders, aware of your efforts and progress through proactive, well-grounded, honest and balanced communication. It can strengthen your brand and it is an effective way to influence others to accelerate climate action.

BASIC PRINCIPLES

- Integrate reporting of greenhouse gas emissions and reductions, set targets in your annual reporting and provide updates in your quarterly reports aligning with the principles for financial reporting.
 - » Follow format standards to make data comparable and easily accessible to external data services.
- Apply the Greenhouse Gas Protocol standards⁵ and ensure that the data is consistent, complete and preferably audited by a third party.
- Include scopes 1, 2 and 3 in your reporting and strive to include at least 95% of the total emissions.
 - » Be clear on which scope 3 categories you report on and be sure to include the most material ones.
 - » Make separate reporting of scope 1, 2 and 3 emissions, and specify land-use change emissions, carbon capture and storage, and carbon sequestration when applicable.
- Report on avoided emissions solutions, carbon credit projects and societal influence activities, applying best available standards and methods.
- Consider the opportunity to get your 1.5°C targets approved by the SBTi⁶ and consider reporting carbon emissions and progress to the CDP⁷.
- Consider the opportunity to disclose climate risks and opportunities in accordance with the TCFD¹⁶ recommendations in your annual reporting.
- Communicate your targets, strategies and results transparently, both internally and externally. Also include ongoing discussions on necessary steps and changes in sustainability reporting.

ABOUT THIS PLAYBOOK

This playbook is a spin-off from the Exponential Roadmap project, aimed specifically at scaling climate action in the business sector.²⁷ The purpose of the playbook is to help achieve a critical mass of companies aligned with a 1.5°C pathway. It has been developed by experts from a number of contributing and supporting organisations during 2019 (see below). It is developed as an open-source solution and intended to be used by other projects, e.g. linking to recommended tools and resources,

leading company examples and procurement guidelines. The playbook will evolve over time, based on user feedback, new scientific findings and upcoming standards. Companies and organisations are welcome to support the playbook publicly by working towards the principles of the playbook, using it and promoting it. The project was initiated and led by Johan Falk, co-founder of the Exponential Roadmap project, and supported financially by Vinnova in Sweden.

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28. Diagram from www.exponentialroadmap.org: Sectoral emission reduction pathways (through avoiding emissions and sequestering greenhouse gases) for halving global emissions every decade from 2020–2050 (Carbon Law). The pathways on the positive y-axis indicate emissions avoidance whereas on the negative y-axis they indicate ramping up natural sinks for greenhouse gas sequestration. According to this scenario, net-zero greenhouse gas emissions is achieved in 2039, and after that, greenhouse gas sequestration is greater than emissions. Note that the energy sector's emissions address only emissions related to the process of energy production (energy supply) and do not include electricity- and heat-related emissions in buildings, industry and the transport sector. In the food sector, solutions draw down emissions from 5.6 Gt in 2020 to 5.0 Gt (planetary boundary for food) in 2050.

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