THE 1.5°C BUSINESS PLAYBOOK

Building a strategy for exponential climate action towards net-zero emissions

EXPONENTIAL ROADMAP INITIATIVE

RACE TO ZERO

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

EXPONENTIAL ROADMAP Initiative

RACE TO ZERO

SME Climate HUB

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[*] should peak by 2020 and halve by 2030 to reach net zero by 2050, while at the same time removing some of the carbon already emitted into the atmosphere.[1,2] Any delay will increase the risk of dangerous climate change and require even more dramatic reductions. 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 biodiversity loss and pollution to improved health and economic development.[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 enable reduction of emissions or even remove carbon from the atmosphere. Finally, by displaying climate leadership and influencing wider action in society.

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

LET'S HALVE GLOBAL EMISSIONS BY 2030

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 and net-zero ambition. It contains solid guidelines for companies of all sizes to set targets, strategy and actions.

It focus on **simplicity** and **speed** and is grounded in the latest science. Companies with advanced climate strategies can use it as a tool to benchmark their approach and raise ambitions. In this capacity, the playbook will help to establish a clear climate strategy, define targets, set requirements for suppliers and align value propositions with a 1.5°C and net-zero ambition.

It is compatible with existing standards such as the Greenhouse Gas Protocol (GHG),[5] and aligned with the UNFCCC Race to Net-Zero starting line criteria,[8] Science Based Targets initiative (SBTi),[6] CDP,[7] Mission Innovation's Net-Zero Compatible Innovations Initiative[9] and the Chambers Climate Coalition.[25]

The climate crisis is not only the most urgent threat for society today, but also directly linked with the acute threat towards wildlife, water, land and the ocean. Climate action must help safeguard wildlife and vulnerable groups, and companies and organisations are encouraged to complement climate action goals with goals for the protection and restoration of nature for human prosperity and equity. [30]

By implementing a 1.5°C and net-zero-aligned strategy, companies will help support the UN Sustainable Development Goals.[1,10]

CARBON LAW

The UN report on 1.5°C (IPCC, 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 peak emissions by 2020 and halve them every decade until 2050. This simple rule of thumb, called the Carbon Law,[2] 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 business 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 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

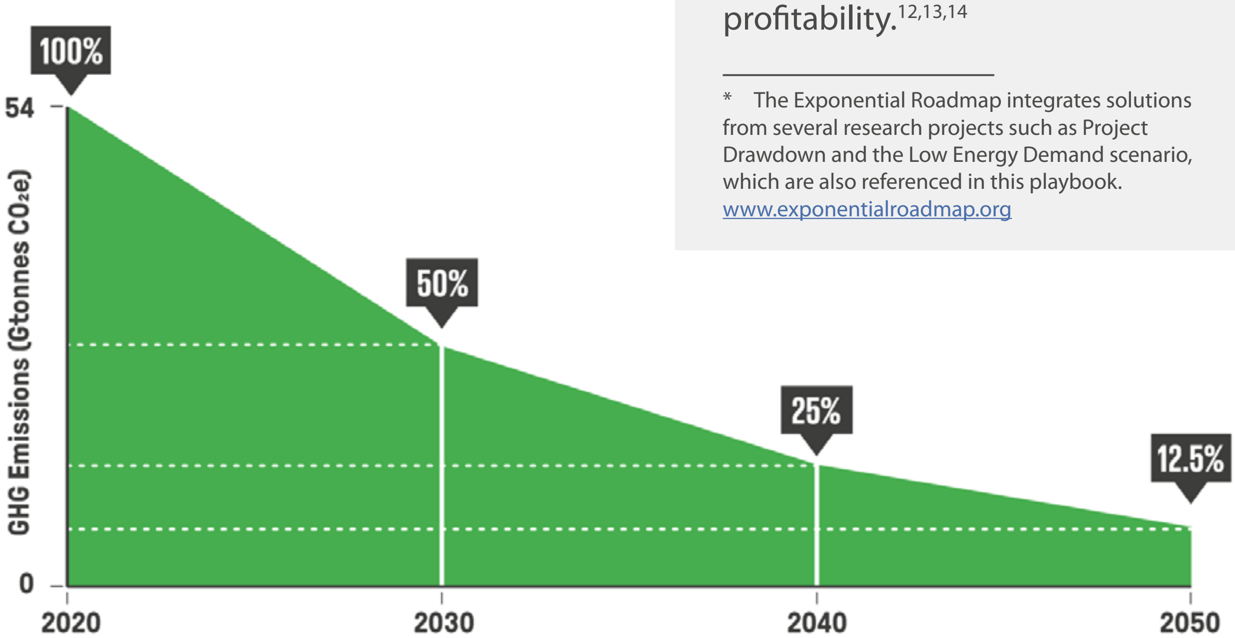


Figure 1. The Carbon Law – halving global greenhouse gas emissions every decade. The estimated yearly emission level for 2020* is 54 billion tonnes of carbon dioxide equivalents.[12]

* This estimate represents the expected situation pre COVID-19 outbreak.

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:

- The COVID-19 pandemic has shown that profound changes in behaviour and business models are possible. We have learned that the way we move, live, eat and work can change and that many activities can be moved online. Many of these changes open up long-term strategies that can reduce emissions.
- A technological and digital revolution will transform or disrupt *all* 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 fossil-free future.
- Political momentum to achieve the Paris Agreement goals is growing and results in new laws, regulations and adopted emission trading systems impacting business. 1,700 jurisdictions and local governments covering 820 million citizens, and also the European Parliament, have announced climate emergency and this number is growing fast.[15]
- The price of key 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. Digital technologies enable light- and resource-efficient asset/material business-models to become highly competitive. This brings opportunities for companies that shift focus towards 1.5°C-aligned solutions and 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 extraction, virgin fossil materials and deforestation, increasing investments in new green technologies and using the power as owners and lenders to influence company behaviours and disclosure practices. The Task Force on Climate-Related Financial Disclosures[16] and the UN-convened Net-Zero Asset Owner Alliance[17] are examples of initiatives that will demand increased disclosure practices and sharper strategies. Moreover, the EU has developed a taxonomy to help investors and companies make informed investment decisions on environmentally friendly economic activities.[18] 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 adressed 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 vision, strategy, value proposition, products and services with the 1.5°C ambition. It means prioritising products and services that enable reduction and removal of customer and societal emissions, enabling resource-efficient lifestyles and consumption patterns, and suppressing solutions with an adverse climate impact.

The fourth pillar describes how to contribute to the 1.5°C ambition beyond your own business. This means, for example, influencing government policy, 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. It also includes to help management and employees to adopt sustainable practises and funding projects outside a company's value chain that help remove or avoid emissions.‡

The pillars should preferably be integrated into a company's iterative planning cycle, starting by measuring and analysing the current situation,

* 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.

‡ Often referred to as carbon credit projects or offsetting.

Small and Medium Sized Enterprises (SMEs)* should reduce their own emissions (pillar 1) and are asked to identify and implement key actions for pillar 2 (scope 3). Typically, SMEs are expected to have more limited impact on their suppliers but might impact pillar 2 through their selection of suppliers. SMEs may also have fewer opportunities to impact pillars 3 and 4 but are encouraged to evaluate their opportunities to do so. SMEs that have their core business in climate solutions will build their strategy from pillar 3 and are encouraged to bring forward their contribution.

* Here defined as companies with up to 500 employees.

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 to reduce their footprints. Pillar 3 represents the opportunity for companies to align their visions, business and innovation strategies and portfolios with a 1.5°C and net-zero ambition to enable reduction of overall emissions in society. Last but not least, pillar 4 complements pillars 1, 2 and 3 by considering the wider role of a company as a societal actor.

Companies and organisations need to form individual business and climate plans to achieve the optimal impact by tailoring their implementation of the 4 pillars:

- 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 a transformational 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 start-up 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

PILLAR 2

Reduce your value chain emissions

PILLAR 3

Integrate climate in business strategy

PILLAR 4

Influence climate action in society

	PILLAR 1 Reduce your own emissions	PILLAR 2 Reduce your value chain emissions
SET TARGET AND STRATEGY	Target net zero and a first halving of emissions in less than 10 years	Target net zero and a first halving of emissions in less than 10 years
PLAN AND PROCEED	Prioritise, plan and reduce scope 1 and 2 emissions	Prioritise, plan and reduce scope 3 emissions
MEASURE AND DISCLOSE	Assess and analyse scope 1 and 2 emissions and results of reductions and disclose those results publicly	Assess and analyse scope 3 emissions and results of reductions and disclose those results publicly

	PILLAR 3 Integrate climate in business strategy	PILLAR 4 Influence climate action in society
SET TARGET AND STRATEGY	Integrate climate strategy into your vision, mission, value proposition, products, services and R&D roadmaps, aiming at positive overall impact	Influence society and contribute to the 1.5°C ambition beyond your own business
PLAN AND PROCEED	Move towards products/ services that help customers avoid and remove emissions and implement circular business models	Accelerate climate action by working with the industry, investors, governments, em-ployees and civil society groups. Invest in quality climate projects, counterbalancing remaining emissions
MEASURE AND DISCLOSE	Measure climate impact of your solutions portfolio and its change, disclose that information publicly	Evaluate the impact of your societal influence and disclose those results publicly

ASSUME CLIMATE LEADERSHIP – COMMIT TO THE 1.5°C AMBITION

Action begins by acknowledging the climate crisis and committing 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

- Commit 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 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.
  - reporting targets and results transparently on a yearly basis.
- Assign responsibility, mandate and resources.
  - e.g. create a climate and digital transformation programme with business development, R&D and sales executives, 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.
- Integrate climate remuneration targets for executive management and employees. Also consider including climate as a priority parameter and target for your purchasing, R&D, business development and other departments.
- Start to educate your employees about climate change and empower them to drive climate action and innovation in their daily work and life.
- Announce your commitments to

* Reaching net-zero emissions for a company means achieving a state in which the activities within the value-chain of a company result in no net impact on the climate from greenhouse gas emissions. The impact of any remaining greenhouse gas emissions – which we recommend should not exceed 10% of base year emissions – should be counterbalanced with an appropriate amount of carbon removals.

† For example, by fitting carbon capture and storage to current industrial processes.

customers, suppliers, employees and to the rest of society e.g. through:

- signing the Business Ambition for 1.5°C pledge[24] and submitting a 1.5°C aligned target to SBTi.[6]
- Chambers of commerce and local business leaders should consider committing to the Chambers Climate Coalition.

Race To Zero[8]

A global campaign to rally leadership and support from businesses, cities, regions, investors for a healthy, resilient, zero carbon recovery that prevents future threats, creates decent jobs, and unlocks inclusive, sustainable growth.

It mobilizes a coalition of leading net zero initiatives, representing 449 cities, 21 regions, 995 businesses, 38 of the biggest investors, and 505 universities. These 'real economy' actors join 120 countries in the largest ever alliance committed to achieving net zero carbon emissions by 2050 at the latest. Collectively these actors now cover nearly 25% global CO_2 emissions and over 50% GDP.

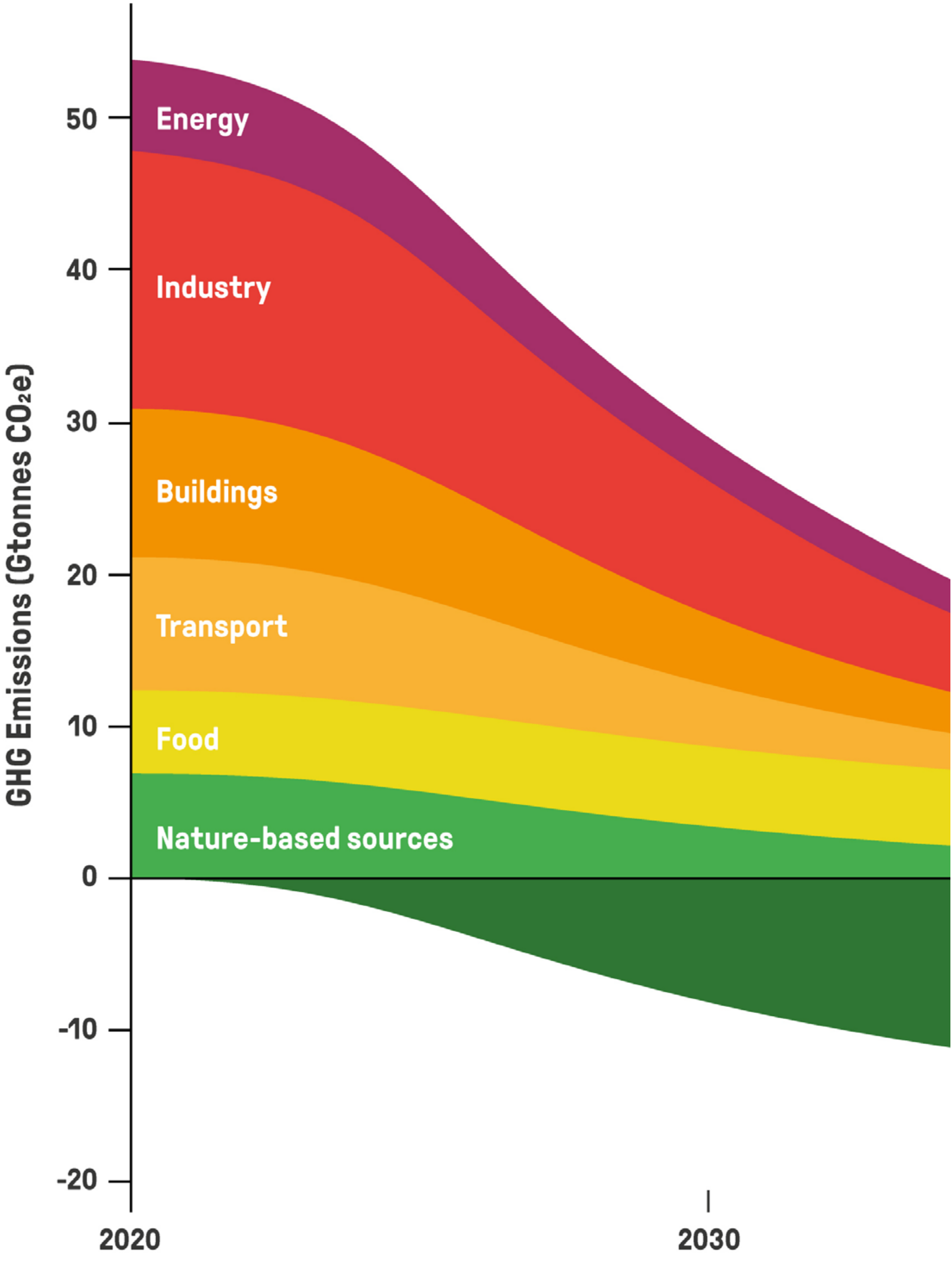
Business Ambition for 1.5°C campaign: a joint effort of the UN Global Compact, SBTi and We Mean Business Coalition, announced in September 2019.[4]

"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."

Chambers Climate Coalition[25]

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.

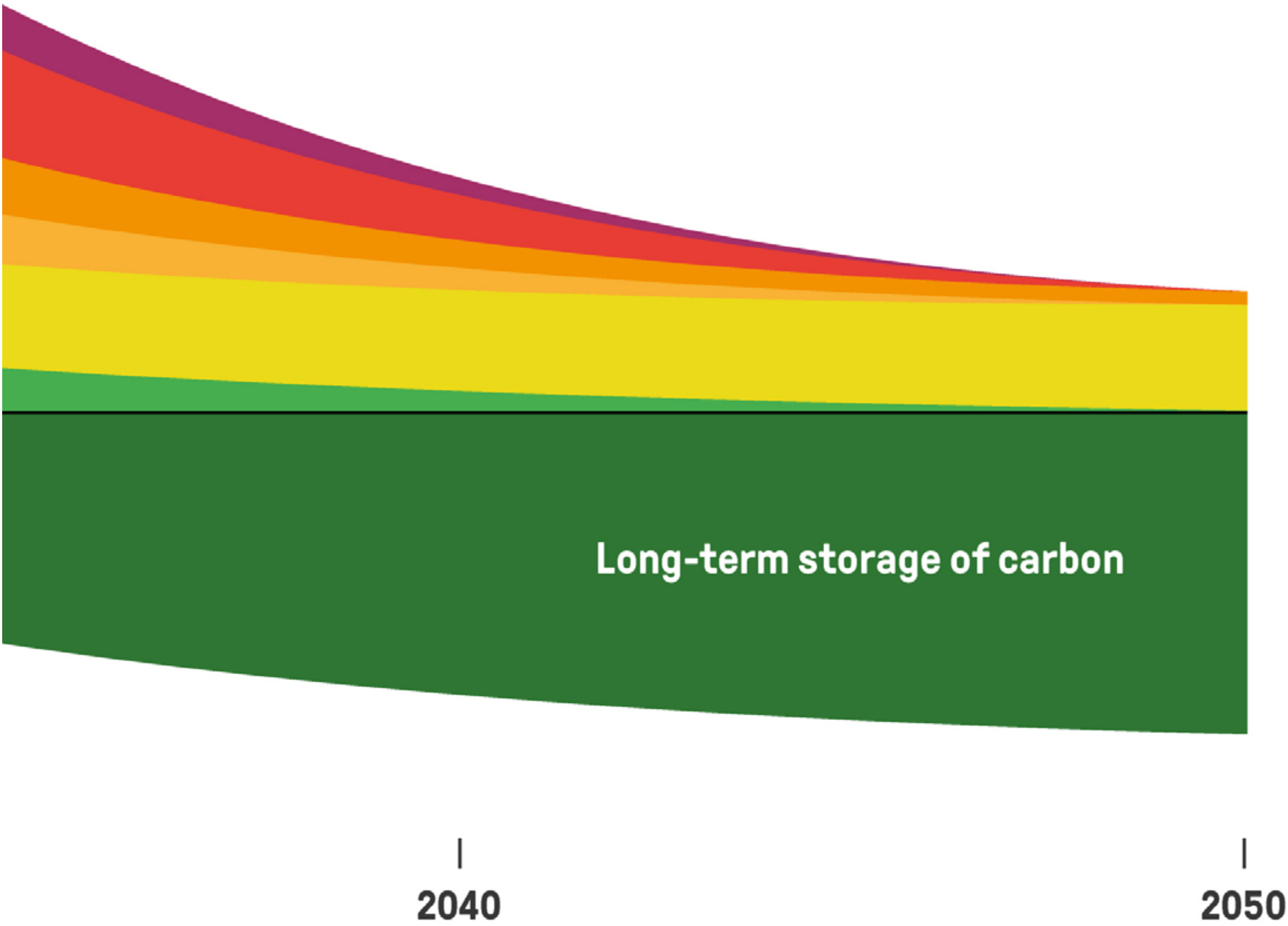
During the United Nations Climate Action Summit September 2019, John Denton, ICC secretary general, stated that "Our only future is one where we achieve net zero emissions by 2050 and limit global temperature rises to 1.5°C. Less ambition is, simply put, not an option."



GHG Emissions (Gtonnes CO2e)
50
40
30
20
10
0
-10
-20
Energy
Industry
Buildings
Transport
Food
Nature-based sources
2020
2030

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

Emissions reduction pathways for different sectors, following the Carbon Law. Note that 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

1

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 Protocol.[5] 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 emissions – your hot spots – and that your plans focus on how to mitigate these.
- Decide on 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 pace should be to halve absolute 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 21% 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 and bring other co-benefits. Energy efficiency, shifting to renewable energy, building space, transportation and business travel emissions are often good candidates.
  - We recommend setting specific targets for hot spot areas, for example 100% renewable energy and halving business travel emissions.
- Disclose your company's own carbon emissions, plans to reduce them and emissions reductions as part of your annual public reporting. Clearly explain and motivate any slower pace than halving every decade.*
- Evaluate results, take corrective actions and update your plan on a yearly basis.

* Fast growing companies that provide solutions which avoid or remove emissions as their core business do not have to commit to halving their absolute emissions, but should halve their intensity (as a minimum) and show that their growth is 1.5°C compatible.

KEY REDUCTION MEASURES

- Immediately start implementing use of renewable energy, fuel and electricity for all possible processes, buildings and sites with the goal to reach 100% as soon as possible.
  - Consider buying renewable energy through power purchase agreements and collaborate to accelerate adoption.
  - Consider generating your own renewable electricity.
- 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 and enable employees to work from home, in order to reduce emissions and costs.
- Move towards a zero-emissions vehicle fleet, and implement a low-emission policy requirement for owned 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 material) 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 Protocol.[5] Upstream activities include emissions all the way from 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 and reducing them systematically. Strive to include all significant emissions categories so that maximum 5% of overall emissions are omitted.
- Within one year, set a target for the first halving of absolute value chain emissions.
  - Apply the same base year as for your own company's emissions (scopes 1 & 2).
  - Your minimum goal to align with 1.5°C should be to halve emissions by 2030 (7% year-on-year reduction), but preferably faster.
  - Break down the plan into yearly targets and milestones.
- Decide in which order to reduce emissions, and develop a plan on how to reach the targets.

- Disclose value chain emissions and plans to reduce them as part of your annual public reporting. 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 do not have to commit to halving their absolute emissions, but should halve their intensity (as a minimum) and show that their growth is 1.5°C compatible.

KEY REDUCTION MEASURES

- Request your suppliers commit to the 1.5°C ambition and halve emissions by latest 2030, by applying this playbook and/or other applicable frameworks, such as SBTi 1.5°C,[6] and include it in procurement criterias and your supplier code of conduct.
  - » This will drive reductions of upstream emissions from purchased goods and services.
- Evaluate and choose suppliers of transport and data services, materials and products based on their climate strategy and transparency of emission data, and collaborate with other industry partners to strengthen and align purchase requirements.
- Consider investing in emissions reduction projects within your own supply chain.
- Integrate strong climate criteria at the heart of your R&D, product and service design processes to improve energy performance of 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 improve the energy and resource performance of your own product and service mix. Optimise 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 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 home and green office hubs, closer to home.
- Provide and/or promote the choice of plant-rich, healthy food whenever it is possible for you to influence.
- 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.*

* This concerns investors and finance institutes and would belong to pillar 4 for other types of companies.

PILLAR 3. INTEGRATE CLIMATE IN 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 – 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, provide electric vehicle services and more to replace carbon-intensive alternatives. You can help shift consumer patterns in a sustainable direction by guiding people to analyse their lifestyles and providing solutions to the most effective and suitable sustainable behaviours/choices, such as product renting, sharing and repairing. If your services and products are influencing consumer and company decisions – such as social and e-commerce platforms, media, 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 a future of your company, which is positive for the climate, nature and people. 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 front-runner climate-conscious customer groups. Identify business practices that need to be phased out to reduce adverse climate impacts.

ACTIONS

- Review and update your company's vision and mission statement to reflect your commitment to contribute to the sustainable 1.5°C ambition.
- Assess and analyse if and how your value proposition, solutions portfolio, algoritms and business model are aligned or not with a 1.5°C ambition. Decide to transform them to address societal needs rather than just upgrading existing products. This is also an essential way to mitigate climate-related risks.[16]
- Move your portfolio towards solutions and projects that help your business customers avoid or remove emissions and help consumers to achieve 1.5°C lifestyles. Phase out any that increase emissions.
- Start transforming to a model that is service-based and circular, with higher efficiency and minimal emissions. If your value proposition includes materials, move towards a need-based and resource-efficient circular model that reduces, reuses and recycles materials.
- Encourage and enable purchase and investment decisions that are positive for the climate and in line with the 1.5°C ambition, never against. This is specifically important if your services are influencing consumer and company decisions – such as digital platforms, advertising, finance and management consultancy.
- Integrate your climate strategy in your services, products and project roadmaps and require all new solutions to be compatible with the 1.5°C ambition.
- Help build 1.5°C aligned, circular and emission-free value chains by collaborating strategically with suppliers and customers.
- Consider making qualitative and quantitative assessments of the climate impact of your solutions, and set measurable goals. This should be done in a structured and transparent way, following a framework such as the one developed under the Mission Innovation Net-Zero Compatible Innovations Initiative[9] or in recent research.[31]
- Make climate an integral part of your investment procedures: consider accounting for a price on carbon.

PILLAR 4. INFLUENCE CLIMATE ACTION IN SOCIETY

4

Becoming a 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 employees, and sharing best practices with your industry and community. It also includes influence through investments and membership of different industry organisations and initiatives.

ACTIONS

- Educate your board, management, employees and business network on climate, the SDGs and your company's alignment and contribution.
- Evaluate how your organisation most efficiently can contribute to the 1.5°C ambition in society and decide on strategy.
- Develop and invest in sectoral industry roadmaps and define and drive the required strategies and actions for halving emissions and reaching net zero through the value chain, in collaboration with customers, suppliers and other partners.*
- Collaborate to enable key climate-enabling technologies and share best known examples and methodologies.
- 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.
- 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.
- Contribute to national and international events which demonstrate concrete solutions to help scale best-practice solutions.
- Help your management, employees and owners start halving their own emissions and adopt 1.5°C lifestyles,† e.g. through sharing educational materials, and personal climate calculators and supportive policies.[29]

* 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/

INVEST IN CLIMATE PROJECTS

In parallel to halving emissions by 2030 on a global scale, natural carbon solutions, 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 investments required to protect and restore. Therefore, emissions that cannot presently be removed* should preferably be directly counterbalanced by funding high-quality projects which remove carbon from the atmosphere, or alternatively, avoid emissions. At net zero, any remaining emissions should be counterbalanced with an appropriate amount of carbon removals which are permanent.

Funding carbon credit projects is a solution that you should only use as a **complement** to halve emissions before 2030 towards net zero, and should never be a substitute for reducing emissions and creating green solutions to reduce global heating. To ensure impact, it is important to carefully decide where to purchase carbon credits from. We recommend using certified, relatively new carbon credit projects, which should be aligned with the Sustainable Development Goals.

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

ACTIONS

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

REPORT ON PROGRESS

An integral part of your 1.5°C commitment is to disclose your direction, targets, emissions and emissions reduction (pillars 1 and 2), progress in integrating climate in business strategy (pillar 3) and societal action (pillar 4) annually, e.g. as part of your public reporting. It will be required by customers, investors, employees, media and financial analysts – and it will help you to position your company as a relevant and serious climate leader.

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

BASIC PRINCIPLES

- Describe how climate is a material topic for your organisation, i.e. your industry context and the opportunities and risks climate change impose.
- Follow the Greenhouse Gas Protocol Standards[5] to ensure that the GHG inventory appropriately reflects the value chain emissions of the company, and that the data is consistent and complete. Include qualitative descriptions of emission sources where data is lacking.
- Disclose the yearly emissions in tons of CO_2e divided into scopes 1, 2 and 3. Strive to include at least 95% of the total emissions and a minimum of the top three material categories in scope 3.
  - » Clearly and separately describe the emission sources of each scope and their corresponding emissions.
  - » For categories that are not yet quantified list them and explain how you plan to include them and if possible, an estimate of how they contribute to the overall footprint.
  - » Specify land-use change emissions, carbon capture and storage, and carbon sequestration separately when applicable.
- Report and discuss the annual percental reduction of emissions that have been achieved and provide an outlook.

- Report concrete actions that have been taken to reduce your emissions, e.g. by using the listed key reduction measures of pillars 1 and 2 as a baseline.
- Explain your management approach and how climate is integrated in your business strategy. Disclose your work e.g. on the suggested actions in pillar 3.
- Share your influential activities in society, including climate investment projects outside your value chain.* Disclose your work, e.g. by using the listed actions in pillar 4.
- Consider having your reporting audited by a third party.
- Consider getting your 1.5°C targets recognised by the SBTi.[6] Also, consider reporting carbon emissions and progress to the CDP.[7]
- Consider the opportunity to disclose climate risks and opportunities in accordance with the TCFD[16] recommendations.

* Also referred to as carbon credit or offset projects.

ABOUT THIS PLAYBOOK

This playbook is a spin-off from the Exponential Roadmap Initiative, 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 and updated in September 2020. It is developed as an open-source guideline and will be complemented by recommended software tools, resources and leading company examples. The playbook will be regularly updated, based on learnings from users, latest science and upcoming standards. Companies and organisations are welcome to support the playbook by using it, endorsing it and promoting it publicly. On June 5 2020, the International Chamber of Commerce (ICC) and the Exponential Roadmap Initiative, with the support of the United Nations Framework Convention on Climate Change (UNFCCC), announced a new partnership – the "SME Exponential Race to Zero" – to explore the development of a global platform to help SMEs build business resilience by providing them with concrete climate action tools and financial resources necessary to thrive in a post-COVID-19 world.
Building on the The 1.5°C Business Playbook and the ICC's Chambers Climate Coalition network, the new initiative seeks to help SMEs build business resilience by providing them with concrete tools to work towards halving emissions by 2030 and achieving net zero emissions by 2050 at the latest, while reducing costs, enhancing access to capital and increasing business preparedness.

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* The Exponential Business ecosystem is continuously growing and this list was compiled in September 2020.

WE WELCOME YOUR FEEDBACK AND IDEAS

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“As a sustainability pioneer in the private sector, we have been an advocate of climate action and developed solutions that can support our society. We are convinced that connectivity and leveraging digital technologies such as 5G and IoT will be fundamental to halve emissions by 2030. Ericsson will be carbon neutral in own operations by 2030. The 1.5°C Business Playbook is a framework for company strategy and action, that we use, to help our supply chain business partners to set 1.5°C aligned targets. We need all companies to be bold and join this journey towards a more sustainable and connected world.”

Börje Ekholm
CEO and President, Ericsson

“Now is the time for businesses to step up and take bold climate action for the future of humanity. ICC is proud to support the 1.5°C Business Playbook to provide companies of all sizes with a tool for actionable and ambitious climate policies that will accelerate the adoption of net-zero emissions targets across the private sector.”

John W. H. Denton
AO, ICC Secretary General

”The world needs exponential climate action. At Telia we enable a better future through connectivity and digital solutions that can speed up the transition into a resilient, low-carbon and circular economy. We work to reach zero CO2 & zero waste by 2030, including the ambition for a climate neutral value chain, and the 1.5°C Business Playbook is an excellent tool when inviting our customers, suppliers and other partners to join us. The knowledge and the necessary technology exist: so let’s make the 2020s a decade of action that matches the urgency of the situation.”

Allison Kirkby
President and CEO, Telia Company

“The science makes clear that we need a fundamental reshaping of business and finance. Every board and every company must show a credible strategy to align with 1.5°C. This Playbook is an excellent guide for the necessary journey to net-zero emissions, to prepare business for the fastest economic transition in history and help them drive it. It’s a guide for preserving a more liveable planet for future generations.”

Christiana Figueres
Former head of the United Nations Framework Convention on Climate Change, Convenor of Mission 2020

“This Playbook is aligned with the target to limit global warming to just 1.5°C. The only pathway left is massive emissions reductions across all business sectors in the next decade. We show that this is achievable.”

Johan Rockström
Co-director, Potsdam Institute for Climate Impact Research, Executive Director, Stockholm Resilience Centre, Co-chair, Future Earth

”The 1.5°C business playbook provides a great framework aligned with the Race to Zero campaign, available today for companies to use. Focusing on simplicity and speed, it will help companies to halve emissions by 2030 towards net-zero well before 2050. The playbook is particularly relevant for SMEs, who comprise the vast majority of businesses worldwide and who need concrete tools for action to make the decisions that will improve earnings, market share and avoid economic repercussions of future existential threats.”

Nigel Topping
High Level Champion for Climate Action COP26

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