

MAKING SENSE OF CLIMATE CHANGE

CLIMATE DISCLOSURE AND ACTION – A GUIDE FOR COMPANIES

JANUARY 2022

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THE PURPOSE OF THIS GUIDE

1. As a fund manager incorporating sustainability into all investment decisions, Generation has high expectations of disclosure and action on climate change at companies in which we invest. But we know that this can be a confusing landscape. It can be hard for companies to work out how to get started, make sense of the multiplicity of initiatives, or understand what good looks like. We have developed this guide as a resource for companies to try to make things easier, whether a company is starting out on its climate change journey or seeking to attain the very best level of practice.

BACKGROUND - THE CLIMATE CRISIS

2. Our climate is in crisis due to man-made greenhouse gas (GHG) emissions. The global average temperature is already 1.1°C above pre-industrial levels¹. We see the results in a constant stream in the news: heatwaves, storms, floods, droughts, forest fires, melting ice, rising sea levels, ocean warming and ocean acidification. If we do not cut GHG emissions, temperatures could rise 3°C or more above pre-industrial levels by 2100, causing irreversible damage to the earth's ecosystems, its ability to sustain human life and the economy².

THE GOALS OF INTERNATIONAL CLIMATE POLICY

3. The 2015 Paris Agreement set the goal of holding global warming well below 2°C and pursuing efforts to limit it to 1.5°C³. In 2018 the Intergovernmental Panel on Climate Change (IPCC) issued a special report on the impacts of global warming of 1.5°C, advising on the impacts that could be avoided by limiting global warming to 1.5°C compared to 2°C or more, and warning that a temperature rise of 1.5°C or higher increased the risk associated with long-lasting or irreversible changes⁴.
4. The only way to stabilise the climate system is to achieve net zero human-caused emissions of GHGs. A goal of net zero emissions by 2050 is often cited. This goal was identified by the IPCC as consistent with limiting warming to 1.5°C, as long as human-caused emissions of CO₂ fall in the meantime by approximately 45 percent from 2010 levels by 2030. This implies a 50% reduction in CO₂ emissions from 2019 levels by 2030, so we have a huge and urgent task this decade.
5. 90% of global GDP is now covered by government net zero targets. The United States, the European Union, Japan and the UK have all committed to net zero by 2050, China has committed to net zero by 2060, and India by 2070.

WHY ARE INVESTORS SO CONCERNED?

6. Climate change has risen up investors' agenda because it is seen to pose clear investment risk; and the transition to a net zero economy is seen as an investment opportunity. Larry Fink, Chairman and Chief Executive of BlackRock, devoted his annual letter to CEOs to climate change in January 2020, writing "climate change has become a defining factor in companies' long-term prospects". He warned that "because capital markets pull future risk forward, we will see changes in capital allocation more quickly than we see changes to the climate itself"⁵. Generation has stressed that "the ruthless maths of climate science" means that we must think in terms of the Time Value of Carbon. Corporate emissions cut today are worth more than cuts promised in the future; while companies that take early action will benefit, those that delay will pay for it.⁶ As of November 2021, 220 asset managers managing \$57 trillion of assets were members of the Net Zero Asset Managers initiative⁷ and had committed to support the goal of net zero emissions by 2050 or sooner.

¹ For the latest science on climate change, see the Intergovernmental Panel on Climate Change (IPCC), 'Climate Change 2021, The Physical Science Basis, Summary for Policy Makers': https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM_final.pdf

² For more information on the climate crisis, see The Climate Reality Project, founded by Generation's Chairman, former US Vice President Al Gore. We would be pleased to facilitate participation in the training: <https://www.climateRealityProject.org/>

³ For more information on the Paris Agreement, and its text, see: <https://unfccc.int/process-and-meetings/the-paris-agreement/what-is-the-paris-agreement>

⁴ The IPCC report on the impacts of global warming of 1.5°C is available here: <https://www.ipcc.ch/sr15/>

⁵ Larry Fink's 2020 letter to CEOs is published here: <https://www.blackrock.com/corporate/investor-relations/2020-larry-fink-ceo-letter>

⁶ Generation's Insights piece on The Time Value of Carbon is published here: <https://www.generationim.com/our-thinking/insights/the-time-value-of-carbon/>

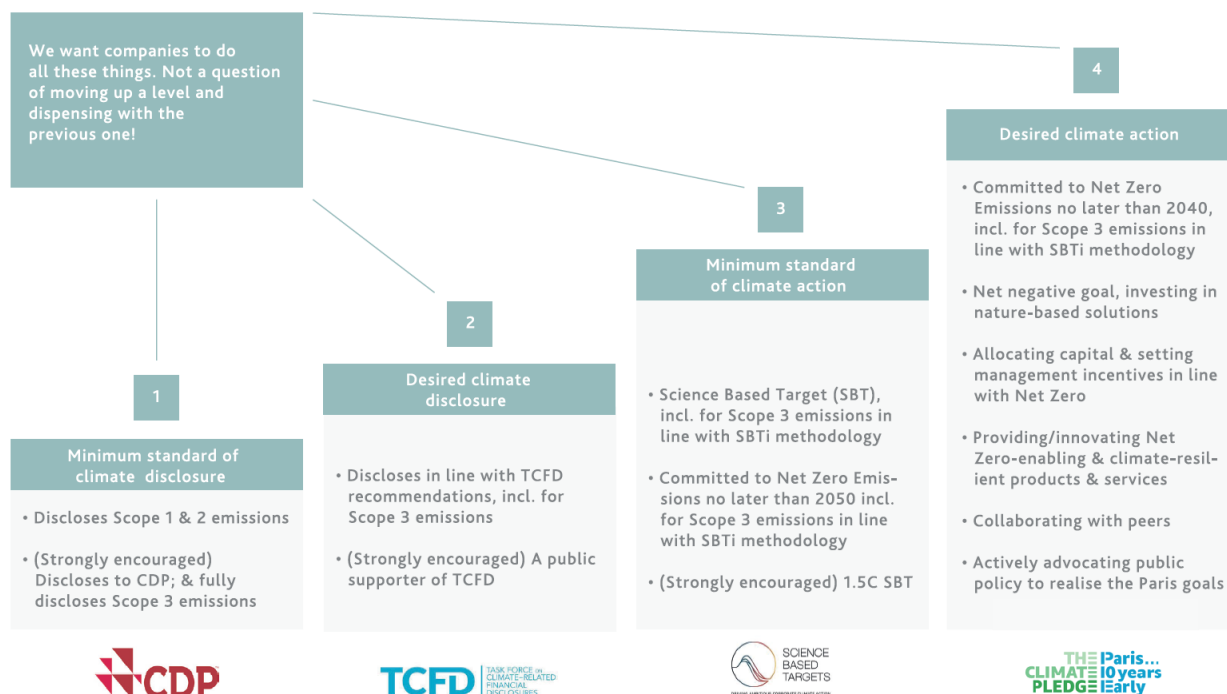
⁷ The Net Zero Asset Managers initiative website can be found here: <https://www.netzeroassetmanagers.org/>

7. Corporate climate disclosure provides investors with the information that is essential for them to assess companies' management of climate risk and opportunity. Corporate climate action provides investors with the assurance they need that companies are prepared for rapid policy and technological change as the transition to a net zero emissions economy gathers pace.
8. Many companies have set net zero goals. These include Amazon (2040), Apple (2030), Ford (2050), Ikea (2030), Microsoft (2030), Unilever (2039), Volkswagen (2050) and Walmart (2040). To limit warming to 1.5°C, companies able to achieve net zero emissions well before 2050 must do so.

CLIMATE CHANGE IN GENERATION'S INVESTMENT PROCESS

9. At Generation, we operate an investment process that fully integrates sustainability analysis into our decision-making and is focused on long-term performance. We think about the dynamics that drive and influence the performance of companies and construct portfolios of sustainable companies with the confidence derived from deep research and analysis. We invest in companies that we believe have a role in a sustainable future.
10. We believe that a sustainable company is one:
 - i. whose current earnings do not borrow from its future earnings
 - ii. that provides goods and services consistent with a low-carbon, healthy, fair and safe society
 - iii. whose sustainability practices, products and services drive revenues, profitability and competitive positioning, and
 - iv. that focuses its external communication on long term issues.

GENERATION'S CLIMATE CHANGE FRAMEWORK



11. Generation's climate change framework identifies four stages of company responses to climate change. We look for all companies to take all the actions set out in the framework. The steps are not necessarily sequential. While companies may find it easier to approach them in sequence, we have also seen companies successfully take a number of these steps at once, or even start off by setting out a high level of climate action ambition, and backfill actions from there.

CLIMATE DISCLOSURE (MINIMUM - CDP)

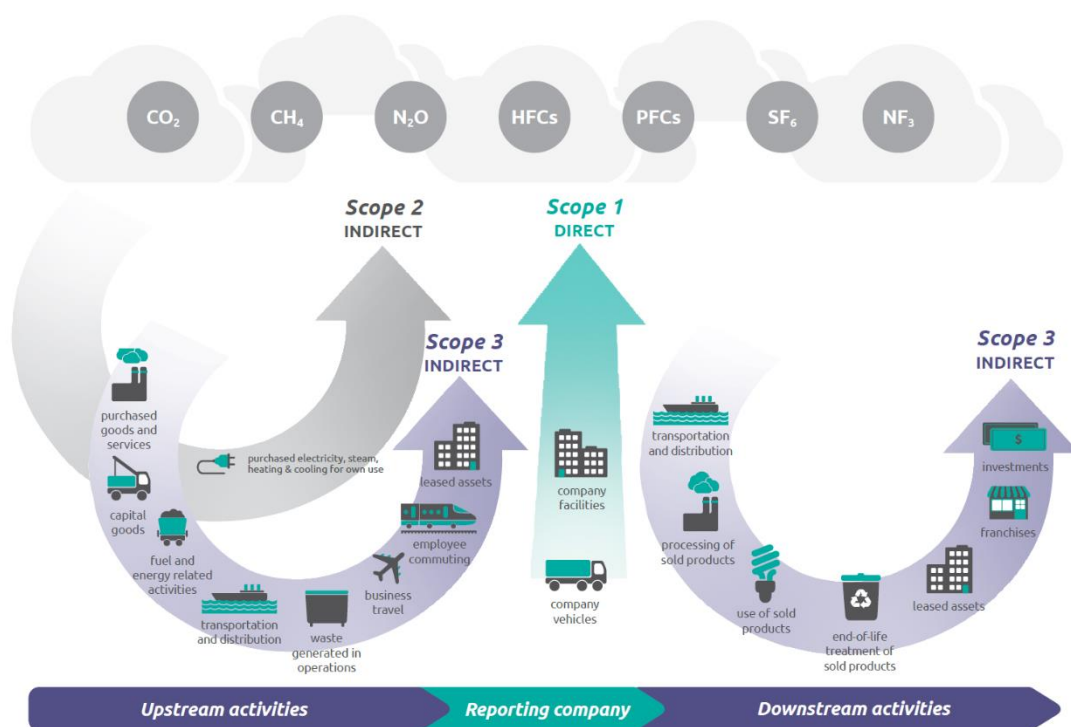
12. Climate disclosure is a long-established feature of corporate reporting. Without data, investors cannot assess companies' sustainability and companies cannot begin to make progress on it. As Sir Christopher Hohn, founder of The Children's Investment Fund Management, put it to the Financial Times in 2019: "Investing in a company that doesn't disclose its pollution is like investing in a company that doesn't disclose its balance sheet."
13. The Carbon Disclosure Project (known now simply as CDP) was founded two decades ago to promote and support climate disclosure and has been backed by Generation since our inception. Today, CDP requests information on climate risk and opportunity on behalf of 590 institutional investor signatories with a combined \$110 trillion in assets⁸. Companies who have not received a disclosure request from CDP can register to disclose on a self-selected basis⁹.
14. Generation looks to companies to disclose all emissions across their value chain – Scopes 1, 2 and 3 (explained in the box below).

What are Scope 1, Scope 2 and Scope 3 emissions?

The Greenhouse Gas (GHG) Protocol is a partnership between the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). It establishes comprehensive global standardised frameworks to measure and manage GHG emissions from private and public sector operations, value chains and mitigation actions.

The [Corporate Standard](#) classifies a company's GHG emissions into three 'scopes'. Scope 1 emissions are direct emissions from owned or controlled sources. Scope 2 emissions are indirect emissions from the generation of purchased energy. Scope 3 emissions are all indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions.

There are 15 [categories of Scope 3 emissions](#). Major categories include purchased goods and services (i.e. supply chain emissions) and use of sold products (i.e. product emissions).



⁸ CDP's website can be found here: <https://www.cdp.net/en>

⁹ For details on how to disclose to CDP in the absence of a disclosure request from CDP, please see: <https://www.cdp.net/en/companies-discloser/how-to-disclose-as-a-company/faqs-for-companies#4-request>

15. **Generation strongly recommends that disclosure is made both in a company’s own sustainability disclosures and via reporting to CDP.** Reporting to CDP provides companies a structured way of compiling disclosure in line with evolving investor expectations, means that a company is always making its key climate disclosures in line with the latest good practice and ensures that emissions disclosures are fed into ESG data providers.

CLIMATE DISCLOSURE (DESIRED - TCFD)

16. The Task Force on Climate-related Financial Disclosures (TCFD) was established by the Financial Stability Board (FSB) in 2015 and presented its recommendations in 2017¹⁰. The TCFD recommendations map out a comprehensive scheme of climate-related financial disclosure for use by investors and other stakeholders. The risks covered include physical, liability and transition risks¹¹. Helpfully, the CDP questionnaire is designed to elicit the disclosure recommended by the TCFD.
17. As of September 2021 the TCFD was supported by over 2,600 organisations¹². It is backed by the world’s largest investors. In his January 2022 letter to CEOs, Larry Fink reiterated that BlackRock expected all companies to disclose climate-related risks in line with the TCFD’s recommendations, including their plans for the transition to a net zero world, which would transform “every company and every industry”¹³. Companies making insufficient progress integrating climate risk into their business models or disclosures are subject to voting action, typically comprising votes against the directors BlackRock holds responsible for the inadequate disclosure¹⁴.
18. Other investor supporters include Fidelity Investments, JPMorgan Chase & Co, State Street Global Advisors & Vanguard. The TCFD recommendations are being incorporated into official disclosure requirements in multiple jurisdictions, including the EU, UK, Switzerland, New Zealand and Hong Kong. **Generation expects companies to disclose against the TCFD recommendations in full.** This includes disclosing quantitative and qualitative climate-related scenario analysis.

CLIMATE ACTION (MINIMUM – SCIENCE BASED TARGET)

19. The Science-Based Target Initiative (SBTi) is a collaboration between CDP, the United Nations Global Compact (UNGC), World Resources Institute (WRI)¹⁵, and the World Wide Fund for Nature (WWF). A Science Based Target (SBT) is a target adopted by a company to reduce GHG emissions – including material Scope 3 emissions – in line with what the latest climate science says is necessary to meet the goals of the Paris Agreement. SBTs therefore provide companies with a clear pathway to cut their emissions in step with international climate policy. As of January 2022, 1100 companies have set an SBT, and a further 1200 companies have committed to do so¹⁶.
20. SBTi is retiring the option of “well-below 2°C” targets and from 15 July 2022 will only validate 1.5°C SBTs. Companies setting a near-term SBT (5-10 years) can also set a long-term net zero target under the initiative. This is consistent with both government and financial institution commitments to net zero emissions by 2050. Momentum in the financial sector for net zero by 2050 or sooner is remarkable: it was announced at COP26 in November 2021 that the Glasgow Financial Alliance for Net Zero (GFANZ) had reached more than 450 signatories, responsible for assets of over \$130 trillion, across banks, asset owners, asset managers, insurers and financial-sector service providers. At the same time, SBTi announced that it had mobilized more than a thousand companies worldwide to commit to set ambitious 1.5°C and net-zero aligned targets, just two years after the Business Ambition for 1.5°C campaign was launched¹⁷.
21. SBTi can demonstrate unequivocally that SBTs work. Its progress report in January 2021 stated that companies with SBTs had reduced their combined emissions by 25% since 2015 and that, since setting a SBT, a typical SBTi company reduced its annual emissions at a rate that exceeded the rate needed to limit warming to 1.5°C¹⁸. Initial

¹⁰ Full information about the TCFD is available here: <https://www.fsb-tcfid.org/>. Please note that Generation’s Senior Partner, David Blood, is a member of the TCFD.

¹¹ The TCFD final recommendations are published here: <https://www.fsb-tcfid.org/publications/final-recommendations-report/>

¹² TCFD supporters are listed here: <https://www.fsb-tcfid.org/tcfid-supporters/>

¹³ Larry Fink’s 2022 letter to CEOs is published here: <https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter>

¹⁴ See BlackRock ‘Climate risk and the transition to a low-carbon economy’ here: <https://www.blackrock.com/corporate/literature/publication/blk-commentary-climate-risk-and-energy-transition.pdf>

¹⁵ Please note that David Blood, Senior Partner at Generation, is Co-Chair of WRI’s Global Board of Directors

¹⁶ The SBTi website can be found here: <https://sciencebasedtargets.org/> the number of companies in the initiative is stated on the homepage

¹⁷ See the SBTi Business Ambition for 1.5°C, COP26 Status Report: <https://sciencebasedtargets.org/resources/files/status-report-Business-Ambition-for-1-5C-campaign.pdf>

¹⁸ See SBTi Annual Progress Report 2020: <https://sciencebasedtargets.org/resources/files/SBTiProgressReport2020.pdf>

cuts are often made through improved energy efficiency and swift moves to achieve 100% renewable electricity and 100% electric vehicles¹⁹.

22. **Generation expects all companies across all our investment strategies to set 1.5°C Science Based Targets validated by SBTi.** We have set public targets of 60% SBT coverage across all assets under management by 2025 and 100% coverage by 2030 (both targets relate to SBTs set).



Do 'avoided emissions' count towards carbon reduction efforts?

'Avoided emissions' are emissions that do not occur because a company's product or service is a substitute for a similar, but more carbon intensive, alternative – e.g. a wind farm avoids emissions that would otherwise result from the generation of electricity from fossil fuels, and building insulation prevents emissions that would otherwise result from an uninsulated building powered by fossil fuel energy.

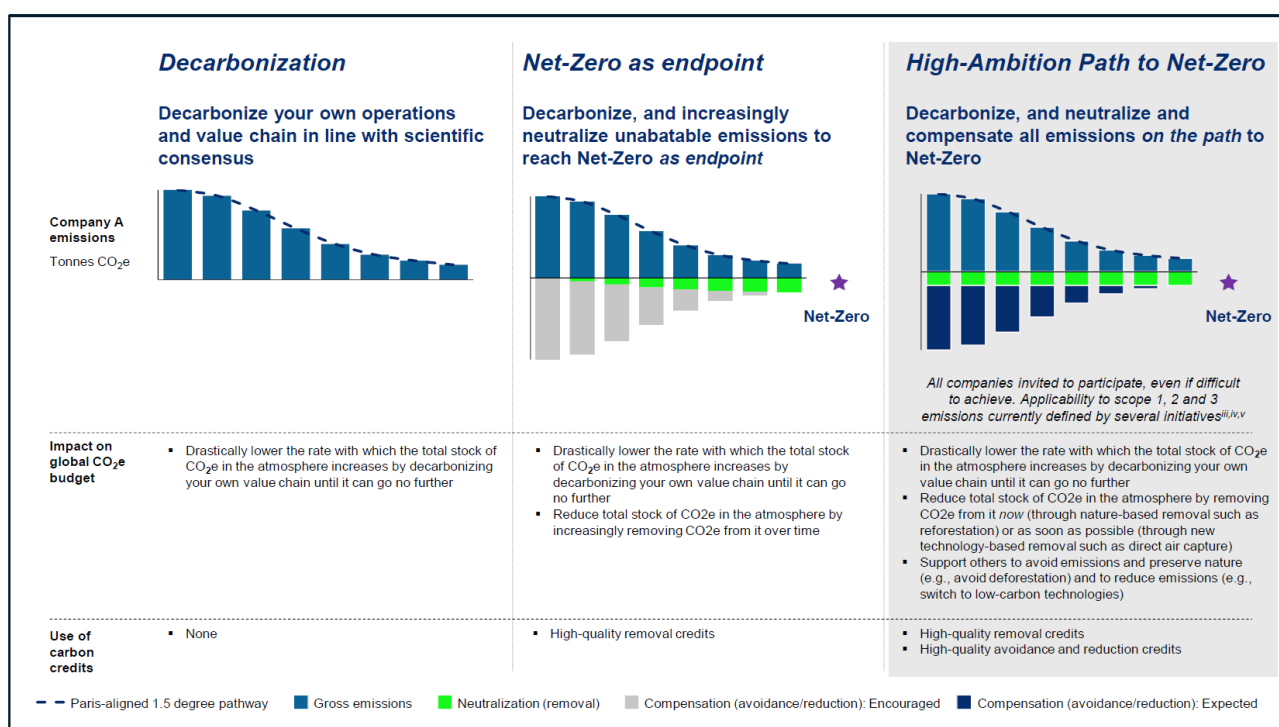
Avoided emissions are often an important feature of our sustainability case for making an investment and we welcome and encourage their disclosure. However, there is currently no standard to account for avoided emissions within Scope 3 emissions data and avoided emissions should be reported separately from a company's GHG emissions inventory. Avoided emissions cannot be used to offset a company's Scope 1-3 emissions.

CLIMATE ACTION (DESIRED – NET ZERO BY 2040)

23. Generation has set a goal of aligning the investment portfolios we manage with net zero GHG emissions by 2040 or sooner, and notified our clients of this in July 2020. We believe that it is right for us to set an early goal for net zero emissions given our mission to promote sustainable capitalism and the fact that we do not invest in companies operating in the hardest to abate sectors. Our desired standard of climate action, net zero emissions no later than 2040, therefore simply reflects what we require of portfolio companies if we are to meet our net zero target, and what the world requires of our portfolio companies if it is to achieve the goals of the Paris Agreement.

¹⁹ RE100 (<https://www.there100.org/>) and EV100 (<https://www.theclimategroup.org/ev100>) are dedicated initiatives for companies seeking to achieve 100% renewable electricity and 100% electric vehicles

24. Guidance on setting net zero targets is available from SBTi²⁰. There is also an initiative co-founded by Amazon for companies committed to net zero emissions by 2040 – the Climate Pledge²¹. It is important to understand what is meant by a state of net zero emissions. **Net zero emissions are achieved when a company has eliminated all GHG emissions from its value chain, save for residual emissions that are unfeasible to eliminate, which are neutralised by permanently removing an equivalent amount of CO2 from the atmosphere.**
25. Net zero emissions is a very different standard to “carbon neutral”, which typically involves purchasing offsets to compensate for emissions, and implies neither the reduction of emissions on a 1.5°C pathway, nor an end point in which the only emissions that are left are residual emissions that are genuinely unfeasible to eliminate. **Most companies require deep decarbonisation of 90-95% to reach net zero.**
26. Generation’s desired standard of climate action is that companies set net negative emissions goals. Net negative emissions are achieved when a company permanently removes from the atmosphere more CO2 than is required to neutralise its residual emissions. Microsoft for example has pledged to be carbon negative by 2030 and by 2050 to have removed from the atmosphere the equivalent of all the CO2 the company has emitted directly or by electrical consumption since its founding in 1975. Between 2020 and 2024, Microsoft will deploy \$1 billion of capital to accelerate the development of carbon reduction and removal technologies that will help the company and the world to become carbon negative.
27. Permanent emissions removal can be achieved in a number of ways, to differing degrees of permanence, including by afforestation and reforestation, soil carbon sequestration, bioenergy with carbon capture and storage (BECCS) and direct air capture (DAC).
28. **Generation strongly encourages companies to invest in nature-based solutions while they are reducing their emissions to net zero.** This responsible practice ensures that emissions are compensated for while they are being reduced to net zero. Destruction of primary, tropical forests accounts for at least 10% of annual global GHG emissions and we cannot restrict warming to 1.5°C without halting the degradation of nature. It has been estimated that nature-based solutions have a carbon sequestration potential of 11 billion tonnes per year by 2030²² but this will not be achieved without hundreds of billions of dollars of annual cash flows. This approach has been characterised by Mark Carney and others as the “High Ambition Path to Net Zero” and is represented in the infographic below.



²⁰ Guidance and support from SBTi for net zero commitments is available here: <https://sciencebasedtargets.org/net-zero/>

²¹ The Climate Pledge website can be found here: <https://www.theclimatepledge.com/>

²² See Griscom et al: <https://www.pnas.org/content/114/44/11645>

ENDING DEFORESTATION

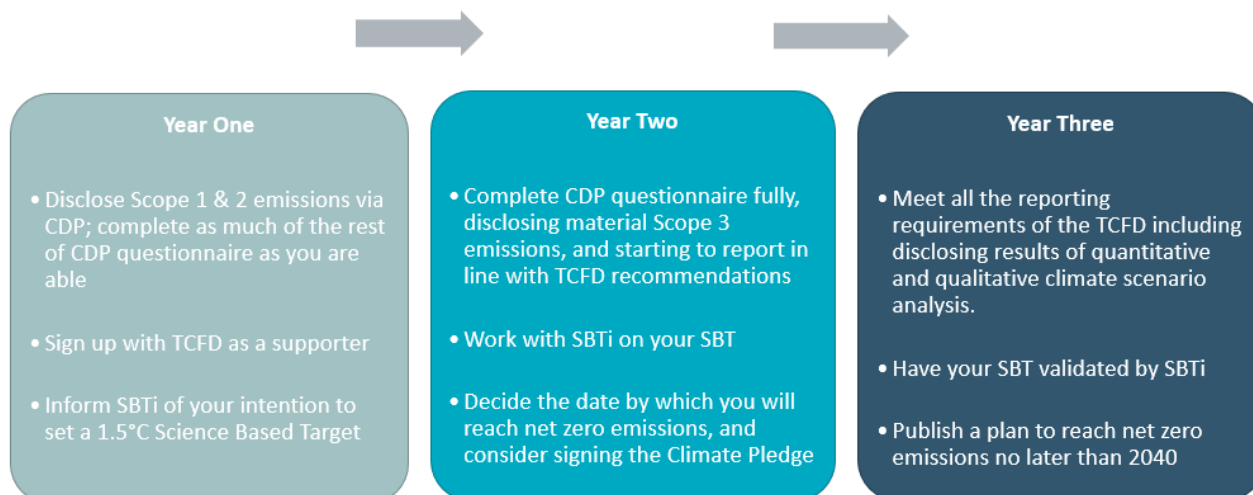
29. As noted above, we cannot get to net zero without ending deforestation. Generation is a signatory to the Financial Sector Commitment Letter on Eliminating Commodity-Driven Deforestation²³, launched at COP26 in Glasgow in November 2021. As signatories, Generation commits to seek to eliminate forest-risk agricultural commodity-driven deforestation activities at companies in our investment portfolios by 2025. These forest-risk commodities are: palm oil, soy, cattle and wood products. We expect companies procuring these commodities to:

- set a policy to eliminate deforestation from their supply chains by 2025;
- institute a process of assessment and disclosure, including transparency on suppliers;
- conduct ongoing due diligence; and
- adopt a jurisdictional approach to avoid displacement of deforestation.

30. Relevant companies will be engaged directly on this issue²⁴.

A SUGGESTED THREE-YEAR TIMELINE TO MEETING GENERATION'S EXPECTATIONS

31. We believe that a company can position itself to meet our climate expectations within no more than three years, and illustrate this with the potential timeline below.



32. Achieving these milestones will require internal sustainability resource, sponsorship from the Board and leadership from the Chief Executive, and normally external assistance.

RESOURCES TO HELP YOU

33. There are resources to help you at every stage of your climate journey:

Climate disclosure

- CDP's website is here: <https://www.cdp.net/en>
- CDP runs workshops on climate disclosure and sustainability strategy. See: <https://www.cdp.net/en/events/workshops>
- The TCFD's website is here: <https://www.fsb-tcfd.org/>
- TCFD runs an online knowledge hub with resources: <https://www.tcfdhub.org/>
- TCFD also offers online courses: <https://www.tcfdhub.org/online-courses/>

²³ The full finance sector commitment letter on eliminating commodity-driven deforestation can be found here: <https://racetozero.unfccc.int/wp-content/uploads/2021/11/DFC-Commitment-Letter-.pdf>

²⁴ The Accountability Framework initiative is an excellent resource for companies exposed to forest-risk commodities: <https://accountability-framework.org/>

Climate action

- The Science Based Targets initiative website is here: <https://sciencebasedtargets.org/>
- SBTi resources are available here: <https://sciencebasedtargets.org/resources/>
- SBTi resources include sectoral guidance for setting Science Based Targets (e.g. ICT and apparel & footwear)
- SBTi is one of the We Mean Business Coalition commitments. We Mean Business has produced a guide to corporate climate leadership: <https://www.wemeanbusinesscoalition.org/wp-content/uploads/2020/09/Climate-Leadership-Now-9-20.pdf>
- The Climate Pledge website is here: <https://www.theclimatepledge.com/>
- Examples of comprehensive net zero transition plans can be found here:
 - <https://www.nestle.com/sites/default/files/2020-12/nestle-net-zero-roadmap-en.pdf>
 - <https://assets.unilever.com/files/92ui5egz/production/bbe89d14aa9e0121dd3a2b9721bbfd3bef57b8d3.pdf/unilever-climate-transition-action-plan-19032021.pdf>

SERVICE PROVIDERS AND OTHER INITIATIVES

34. CDP maintains a list of organisations with whom it partners who can support companies to take action on climate change. Services covered include carbon reduction, climate change consultancy, education and training, renewable energy, Science Based Targets, software and verification: <https://www.cdp.net/en/info/accredited-solutions-providers/all-accredited-service-providers>. Generation does not endorse individual service providers.
35. Information on other useful initiatives that can help you achieve your climate disclosure and action goals is included in the annex.

YOUR PARTNERS ON CLIMATE CHANGE

36. Generation stands ready to support you every step of the way through advice from the Generation team and introductions to others who can help, including peers at other companies in our network who have trodden this path before you. We are keen to help and partner you.
37. Please do give us feedback on ways we could improve this guide.

ANNEX: OTHER USEFUL INITIATIVES

Chapter Zero – An initiative to help non-executive directors engage with the risks and opportunities of climate change for their businesses and take this discussion into their boardrooms. A UK network but its materials are of wider use. Website: <https://www.chapterzero.org.uk/>

Climate Governance Initiative – A World Economic Forum Initiative to support boards as they oversee management efforts to manage climate risks, identify opportunities and embed a viable transition strategy into their business models. Website: <https://www.weforum.org/projects/climate-governance-initiative>

Conservation International²⁵ – A US non-profit, one of whose activities is to facilitate investment in nature-based solutions: <https://www.conservation.org/priorities/working-with-corporations>

Mission Possible Platform – A coalition of businesses and expert organizations (and governments), convened by the World Economic Forum in partnership with the Energy Transitions Commission, committed to reducing heavy industry greenhouse gas (GHG) emissions by creating and delivering technology, policy, and financing solutions. Website: <https://www.weforum.org/mission-possible>

The Nature Conservancy²⁶ – A US non-profit, one of whose activities is to facilitate investment in nature-based solutions: <https://www.nature.org/en-us/about-us/who-we-are/how-we-work/working-with-companies/companies-investing-in-nature1/>

RE100 – a global initiative bringing together businesses committed to 100% renewable electricity. Website: <https://www.there100.org/>

SASB (the Sustainability Accounting Standards Board) – An initiative to help businesses around the world identify, manage and report on the sustainability topics that matter most to their investors. Endorsed by global investors including BlackRock, Capital Group, Fidelity, Franklin Templeton, Goldman Sachs Asset Management, Legal & General Investment Management, Morgan Stanley Investment Management, Neuberger Berman, Norges Bank Investment Management, Northern Trust, PIMCO, State Street Global Advisors and Vanguard. Website: <https://www.sasb.org/>

Transform to Net Zero – A business initiative that aims to deliver guidance and business plans to enable a transformation to net zero emissions, as well as research, advocacy, and best practices to make it easier for the private sector to not only set ambitious goals—but also deliver meaningful emissions reductions and economic success. Website: <https://transformtonetzero.org/>

We Mean Business – A global non-profit coalition working to catalyse business leadership to drive policy ambition and accelerate the transition to a zero-carbon economy. Website: <https://www.wemeanbusinesscoalition.org/>

²⁵ Please note that Mark Ferguson, Co-Chief Investment Officer at Generation, sits on Conservation International's Board of Directors

²⁶ Please note that John Bernstein, Partner and head of Generation's long term equity business, sits on The Nature Conservancy's Board of Directors