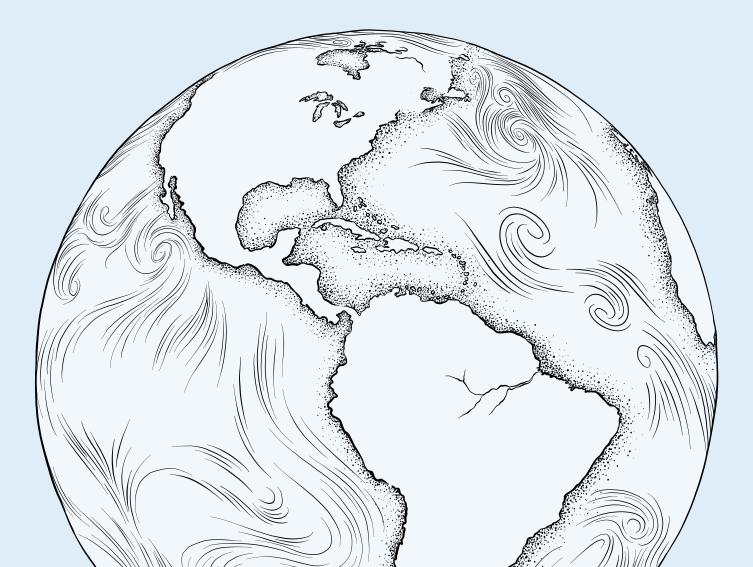
Executive Summary

With global temperatures climbing and the impacts of climate change growing more extreme every year, the need to combat planetary warming is urgent and clear. Emissions of carbon dioxide and other greenhouse gases (GHGs) must be rapidly and drastically cut, with overall global emissions approaching net zero by 2050, to prevent the potentially catastrophic impacts of climate change.



This rapid decarbonization will require sweeping changes, transforming every sector in every country. Industrial processes that can't be decarbonized may disappear. Business models will evolve across the whole economy, not just within energy systems. Everything from industrial processes, buildings, transportation, food and consumer goods will be impacted. Without dramatic improvements in solutions to deliver low- or no-carbon hydrocarbons or reduction in the cost of carbon capture technologies that can offset GHG emissions, fossil fuel reserves risk becoming stranded and potentially requiring a write down in value. At the same time, the need to decarbonize is already creating a myriad of new opportunities, stimulating a powerful new wave of innovation that is rapidly bringing down the costs of many low-carbon technologies, while creating new technologies and business.

It is not enough for companies to identify their capacity to economically abate emissions. Doing so must be among their most urgent priorities.

Companies face the same increasingly severe physical impacts of climate change, such as more extreme floods, droughts, and heatwaves, as their stakeholders. In addition, they are under growing pressure from investors, regulators, suppliers, customers, and competitors to reduce their emissions, to disclose their climate and financial risks, and to create viable plans to transition to a low-carbon economy. They are grappling with technological uncertainties, including future changes in regulation, carbon prices and cost of alternative technologies, and the challenge of acting when data are incomplete or lacking. That lack of data is hobbling efforts to accelerate the transition to a low-carbon economy.

Until companies make detailed disclosures and develop decarbonization plans based on credible and objective data, investors and markets will find it difficult to accurately value companies or predict their future performance. Equally important, companies that do not have decarbonization plans are likely to miss key opportunities to maximize long-term returns and gain competitive advantages by finding efficient transition paths ahead of the competition. Thousands of companies globally have already committed to net zero, but in many cases, it is unclear whether these companies have credible plans for achieving their commitments. Many companies have already taken constructive action, backing up their pledges to cut emissions with investments in renewable energy, cuts in operational emissions, and other vital steps. During recent discussions at the CPP Investments Insights Institute, which brought together other asset owners, asset managers, accountants, academics, consultants, and index providers, we found widespread agreement on a fundamental issue: there is insufficient information available to determine the ability of most companies to transition to a low-carbon future.

Some companies have made commitments to net-zero emissions without clear pathways to achieve those goals, putting them at risk of negative market reactions when investors realize the goals are not achievable. Others have yet to even create a governance framework to address the issue or assess their current GHG emissions, the essential first steps to decarbonization and sustainability according to the Task Force on Climate-related Financial Disclosures (TCFD).

These failures expose companies to a number of risks, including higher energy costs, higher costs of capital, and market share losses to more climate-aware competitors. They also risk impaired future competitiveness as the transition to a low-carbon future progresses, greater potential for being burdened with stranded assets, failure to spot new business opportunities, and potential litigation if their climate guidance is discovered to have been made without an appropriate basis.

To address these issues and to encourage more companies to take action, last year CPP Investments proposed a broad. Abatement Capacity Assessment Framework ('Framework') and standardized template for assessing a company's potential for reducing emissions. The idea is conceptually simple. First, determine a company's current baseline emissions. Second, identify actions that can cost-effectively cut emissions now (the current "abatement capacity"). And third, assess steps and strategies that can cost-effectively reduce emissions in the future under different carbon price assumptions (the "projected abatement capacity").

The Framework serves as a starting point for the development of transition plans and determining their economic feasibility.

Additionally, the Framework would enable companies to comply with the sustainability reporting standards currently being developed based on recommendations from the TCFD, while also meeting the demands of shareholders and other investors for climate-related disclosures.

Since we proposed the Framework, we conducted a successful pilot with one of our portfolio companies, with encouraging and informative results. In addition, via the CPP Investments Insights Institute, we have brought together roundtables of asset managers, consultants, and accountants to explore the strengths and possible limitations of the Framework. We are in the process of conducting several other pilots and assessing our own internal operations using the Framework, as part of our commitment to bringing our portfolio and operations to being net zero by 2050.

Meanwhile, the regulatory landscape is changing. Both the United States Securities and Exchange Commission (SEC) and the Canadian Securities Administrators (CSA) have proposed mandatory reporting requirements for GHG emissions, emissions-reduction targets, exposure to climate hazards and financial risks, and transition plans. In addition, the International Sustainability Standards Board is developing climate standards that are expected to become a global baseline for reporting on climate-related issues.

This confirms the role we see for the proposed Framework. In June 2022, we provided comments to the SEC in response to its proposed rules to enhance and standardize Climate-Related Disclosures for Investors. In our comments, we note that rather than needing to be used as a standalone separate exercise, the Framework can complement and support the coming regulations by offering a roadmap for the work needed to meet those requirements. In particular, the Framework provides an approach for reporting on the economic feasibility of delivering on companies' emissions reduction commitments without giving away any competitive secrets. Supporters of the Framework also believe it can elicit information that the market can utilize to drive fundamental changes in the economy across industries and countries, and perhaps help guide the regulations themselves. We believe that market actors, especially capital providers, will want to advocate for the kind of rigor and transparency this

Framework represents. As regulators put rules in place, it is in the best interest of investors and their beneficiaries that these rules provide decision-useful insights both to price risk and to ensure capital is allocated to support the transition.

Our overall message remains clear as outlined in our original 'The Future of Climate Change Transition Reporting' report. Climate change—and the resulting need to rapidly cut emissions and prepare for the coming transition—is an urgent issue that requires immediate attention from corporate boards and senior executives. They will need to ensure they have the necessary resources to develop and share their transition plans. This includes increasing the company's climate literacy, using the Framework to quantify the company's decarbonization capacity, and prioritizing the removal of emissions where economically possible, while simultaneously developing strategies for abating those emissions that are currently more costly to abate. Failure to focus on decarbonization as a core function of management and business strategy means boards and management are not acting in the best interests of their companies, shareholders, and other stakeholders.

Developing and assessing the viability of decarbonization and transition plans should not be viewed as an onerous new exercise. Instead, companies should embrace the process as a key mechanism for identifying major opportunities and gaining competitive advantages. Assessing a company's abatement capacity enables its management and board of directors to better understand how it can benefit from "greener" and more efficient technologies, and to accelerate the development of new low-carbon technologies. The Framework helps companies build businesses focused on the long term, gain market share over competitors with higher carbon intensities, prove to investors they can survive and thrive in a low-carbon world, maximize their own long-term returns, and help accelerate the economy-wide transition to net zero. In addition, the Framework enables companies to share the underlying assumptions for their net-zero commitments in a transparent manner without compromising commercially sensitive data.