

WHITE PAPER

Companies Need to Explicitly Integrate Climate Into Their Strategies


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By James Tilbury, Whitney Merchant, Anita Oh, Sam Farley and Tony Chen



Boston Consulting Group partners with leaders in business and society to tackle their most important challenges and capture their greatest opportunities. BCG was the pioneer in business strategy when it was founded in 1963. Today, we work closely with clients to embrace a transformational approach aimed at benefiting all stakeholders—empowering organizations to grow, build sustainable competitive advantage, and drive positive societal impact.

Our diverse, global teams bring deep industry and functional expertise and a range of perspectives that question the status quo and spark change. BCG delivers solutions through leading-edge management consulting, technology and design, and corporate and digital ventures. We work in a uniquely collaborative model across the firm and throughout all levels of the client organization, fueled by the goal of helping our clients thrive and enabling them to make the world a better place.

A person in a dark jacket and trousers is walking across a gap between two large, dark rock formations. The person is captured in mid-stride, with one foot on the left rock and the other leg extended towards the right rock. The background is a vast, hazy landscape of mountains under a dramatic, orange-hued sky at sunset or sunrise. The overall mood is one of challenge and achievement.

Current frameworks for allocating human and financial capital under-estimate the downside risk of inaction... and the upside potential.

For many years, companies developed climate strategy in isolation or as an addendum to core strategy; today, companies separate them at their peril. We are now in a new economic reality where choices about how to decarbonise and capture green growth opportunities go to the heart of an organisation's purpose, direction, and talent and capital allocation. Companies that get this right are being rewarded by capital markets, with lower cost of capital (0.2-0.6 percentage points) and higher valuations (up to 20%), while those that get it wrong risk misallocating human and financial capital.

Integrating climate and sustainability into core strategy isn't easy; it requires deeper changes to how a company operates than is evident at first glance. Internal decision-making, strategic prioritisation and investment frameworks are three areas for companies to revisit.

Markets Are Rewarding Green Companies

Markets are actively pricing both debt and equity based on climate performance and exposure. For example, the spread between the weighted average cost of capital (WACC) for oil & gas and renewable energy companies in Australia is more than 6 percentage points (12% vs 5% at top of range) and widening. The impact is also seen in valuations directly. We analysed valuations for mining, chemicals, energy, and steel companies and found a spread of more than 20% in valuations between the top and bottom quintile performers on emissions.

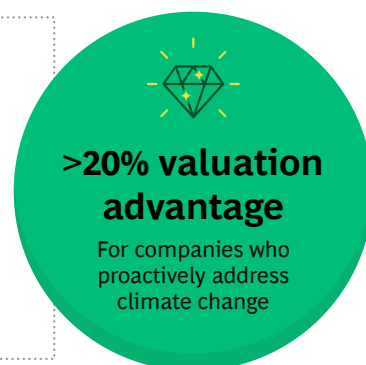
Investor pressure for companies to act is likely to increase. Climate-related shareholder resolutions are gaining support and shifting away from risk assessment towards transition plans. BlackRock has been particularly vocal and threatened to sell shares in companies that are performing poorly on climate measures.

Investor pressure to act on climate also needs to increase for national climate targets to be met. To transition to a net zero economy, more than a trillion dollars of additional investment will be needed each year and a significant proportion of this will need to be deployed by existing companies (not just startups). However, under current capital allocation and decision frameworks, climate investments often struggle to compete for capital on their own right. To allocate their share of those trillions of dollars efficiently, companies need to change their assumptions and models.

Exhibit 1: Sustainable Companies Are Rewarded With Higher Valuation

Difference in valuation from median, all else equal
(2014-2018)

Emissions performance		Mining	Chemicals	Energy	Steel
Lowest	Top Quintile	+12%	+12%	+12%	+14%
	2 nd Quintile	+6%	+6%	+6%	+7%
Emission intensity	Median	0%	0%	0%	0%
	4 th Quintile	-5%	-6%	5%	6%
	Bottom Quintile	-10%	-11%	-10%	-12%
Highest					



Sources: BCG ValueScience-Smart Multiples® regression model analysis on differential in valuation across client and peers through a set of 200+ financial and management variables

It Isn't Easy Becoming Green

Investors and executives might agree that decarbonising and exploring green growth opportunities is good strategy at a high level, but the waters get muddled when it comes to making decisions on the ground. An organisation's own checks and balances – developed to mitigate poor financial decisions – can inadvertently block climate initiatives before they reach executive-level consideration. Internal decision-making criteria, such as only approving investments that have a payback period of less than a year or pass a specified hurdle rate of return, can be effective during business as usual but not in the face of industry-wide disruptions and when the rate of change is much shorter than the payback period.

It's not just existing decision-making tools that create hurdles; it's also the culture they foster. If a certain category of ideas is rarely approved because of an organisation's decision-making logic, then employees will be less likely to raise them or even identify them in the first place. Employees soon stop raising ideas that are traditionally shot down, which is a problem when climate has such wide-reaching implications. The whole organisation needs to be engaged to develop the most effective response.

FINANCIAL DISCIPLINE IS STIFLING CLIMATE CREATIVITY

A hard-to-abate industrial player embarking on its net zero strategy and roadmap was surprised to find its employees had been self-censoring climate initiatives – even NPV-positive ones. The organisation had a strong 'value orientation' and financial discipline steeped in decades of history, which manifested in employees only putting forward ideas that met a specific IRR percentage. This meant good climate initiatives – including ones with a positive IRR, and a risk management benefit – were not being presented by lower levels of the organisation on the assumption they would be rejected. Senior management was surprised by this consequence of the company culture and adjusted their net zero roadmap to revisit and refresh the investment framework so that these opportunities were not stifled before they could be properly considered. This realisation is leading to significant changes, with fundamental implications for their strategy.

Many internal investment frameworks haven't been adjusted for the new economic reality. Decarbonisation investments are often seen as a pure cost, without considering the cost of inaction – such as losing customers, employees and investors – or the strategic benefits of new markets and adjacencies. Traditional investment frameworks can lead to growth opportunities for existing 'grey investments' (those based on consumption of fossil fuels) being compared incorrectly, as historic growth rates are likely to be very different to future growth rates for fossil fuels versus low carbon products. The challenge is one of uncertainty. While grey investments can be considered against established, recorded performance,

green investments require predicting demand. The result is a misallocation of capital between green and grey investments, which locks a company into a pathway that is fundamentally riskier than investment metrics under current frameworks would imply.

Furthermore, it's common practice for businesses to apply a consistent cost of capital across the board. However, a more nuanced approach is needed to allocate capital efficiently if a company is faced with decisions relating to varying levels of climate impact. The same cost of capital shouldn't be used to evaluate a gas expansion and a renewable energy project.

New Tools for Evaluating Investments

Companies that operate in an emissions-intensive industry, such as steel, cement or ammonia production, particularly need to take different approaches to internal decision-making and capital allocation.

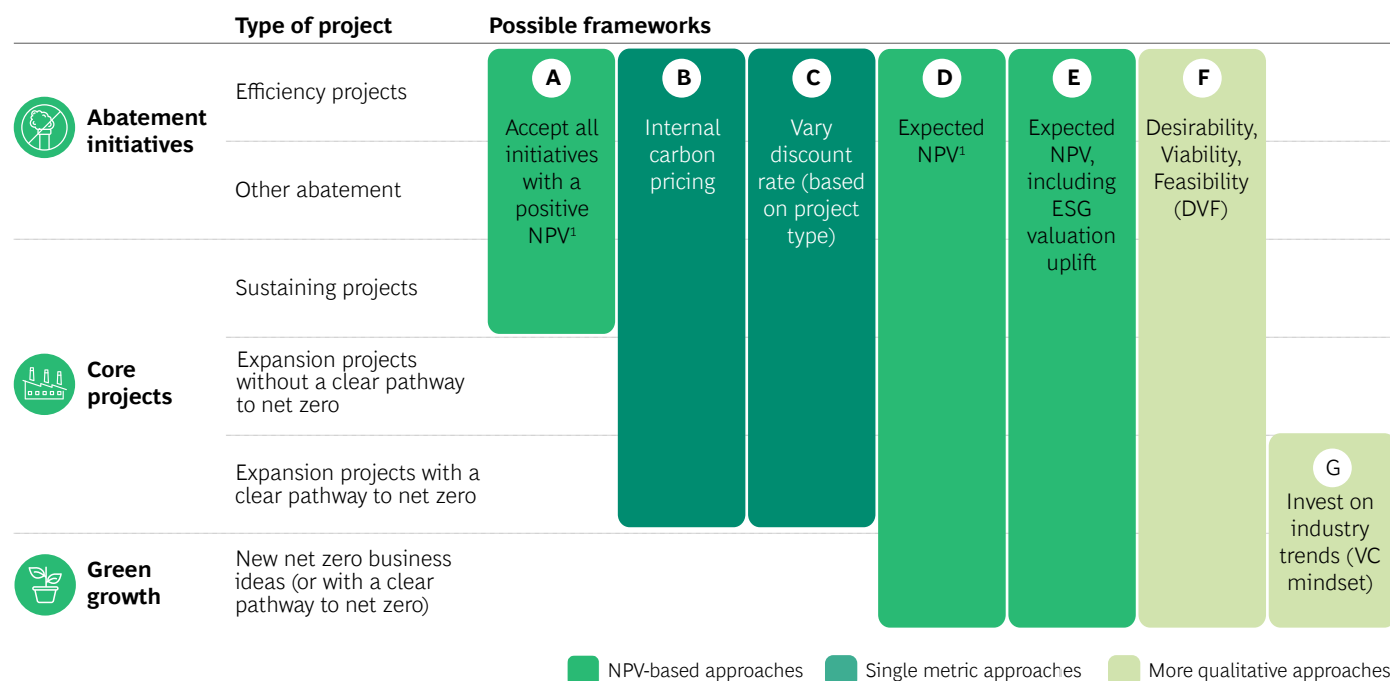
First, your strategy needs to move away from deterministic planning, to considering a range of scenarios – including the level of climate action, and incentives and disincentives. Dynamic approaches to strategy, such as BCG's SODA loop, are even more important when faced with rapid changes brought about by climate change and the efforts to mitigate it. Second, the impact of the scenarios needs to be quantified and applied to your decision-making tools.

Here we list 7 tools that companies can use to evaluate different types of green investments. Decisions about which tool to use for each project will differ for each company, based on context, existing decision-making approach, and culture. In practice, the best approach may require a combination of tools.

A common theme across these decision-making approaches is incorporating more investment frameworks into internal decisions. While there are a plethora of approaches, we see 7 major frameworks as being relevant for evaluating green investments:

- A. NPV: Accepting all initiatives with a positive NPV
- B. Internal carbon pricing (and allowing for multiple scenarios)
- C. Discount rate variance based on project time
- D. Expected NPV: Estimating NPV once government grants and other funding sources are applied
- E. Expected NPV accounting for valuation / cost of capital impacts
- F. Desirability, Viability and Feasibility (DVF)
- G. Investing in future trends

Exhibit 2: There Are a Range of Options To Better Evaluate Investments



1. After government grants and other funding sources

It is critical to deploy these frameworks appropriately against different types of green investments.

Classic NPV calculations are rightfully a cornerstone of evaluating and prioritising investment trade-offs. However, given the large amount of market, consumer and supply factors that today's strategy needs to account for, they are most useful for core and abatement projects.

For core and abatement projects, perhaps the most obvious factor to incorporate is a carbon price. For companies operating in a jurisdiction with a carbon price, this will already be embedded. For companies operating in countries like Australia without a widely applied carbon price, this is less straightforward. Many companies simply don't incorporate a carbon price into their decisions and those that do often apply them inconsistently (e.g., as a sensitivity rather than a decision-making factor). But when evaluating core and abatement projects, it's important that scenarios are run with different carbon prices being introduced at different points and increasing along different trajectories. While it's uncertain how carbon prices will play out in the future, it's clear that every company will feel the impact of carbon prices in the medium to long term. Meaningful carbon prices therefore act as a proxy for future investment risk.

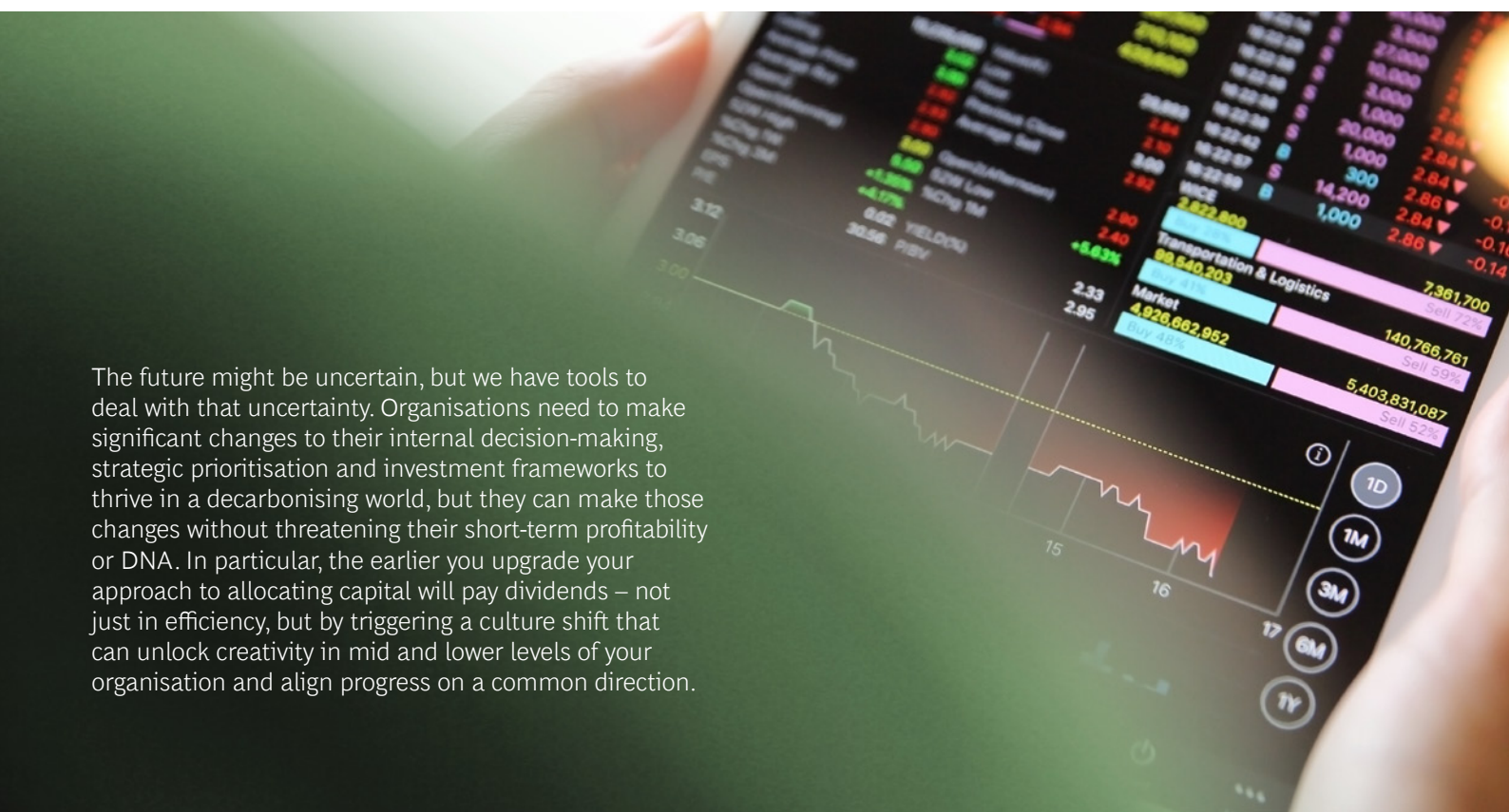
For all projects – from abatement through to growth, we recommend evaluating the Expected NPV –, accounting for all the funding sources available:

Government grants and tax incentives are another source of funds that can be easily overlooked. There is an increasing amount of funding available globally for certain

activities that reduce emissions. For example, in 2021 the Australian Clean Energy Regulator introduced a method for carbon, capture and storage projects to generate carbon credits. Often decisions around government funding are handled separately to investment decisions but need to be incorporated to make the most of the opportunities presented. While this may seem obvious, surprisingly often it is not fully considered in decision making, as the funding is not necessarily seen as 'certain'. Changing this paradigm so it is incorporated – at least towards conditional approval – is critical. It also opens the door for more constructive dialogue between industry and government about what is needed to do more, and faster, to address climate challenges.

Similarly, for all projects we recommend using a DVF estimation. Customers' willingness to pay a green premium is another factor important to decision-making that is often overlooked. At present, there is only modest evidence that customers are willing to pay a premium for green products. However, such willingness is likely to increase, particularly in segments such as high-end retail where carbon neutrality offers a marketing advantage, and the green premium is a small percentage of the purchase price. Alternatively, this may manifest as a grey discount – if competitors move towards greener products and other jurisdictions are more forward leaning on their decarbonisation requirements, then products and services that have not decarbonised may face a 'grey discount' (up to equal with the carbon pricing noted above).

The future might be uncertain, but we have tools to deal with that uncertainty. Organisations need to make significant changes to their internal decision-making, strategic prioritisation and investment frameworks to thrive in a decarbonising world, but they can make those changes without threatening their short-term profitability or DNA. In particular, the earlier you upgrade your approach to allocating capital will pay dividends – not just in efficiency, but by triggering a culture shift that can unlock creativity in mid and lower levels of your organisation and align progress on a common direction.



About the Authors



James Tilbury is a climate specialist in the Sydney office of The Boston Consulting Group
Tilbury.James@bcg.com



Whitney Merchant is a Partner in the Sydney office of The Boston Consulting Group
Merchant.Whitney@bcg.com



Anita Oh is a Managing Director and Partner in the Sydney office of The Boston Consulting Group
Oh.Anita@bcg.com



Sam Farley is a Managing Director and Partner in the Melbourne office of The Boston Consulting Group
Farley.Sam@bcg.com



Tony Chen is an Associate in the Melbourne office of The Boston Consulting Group
Chen.Tony2@bcg.com

For further contact

If you would like to discuss this white paper, please contact the authors.

