

The investment industry and climate change | framing the problem

Part of a series of articles from the 1.5°C investing working group





1.5°C investing working group

This document has been written by members of the Thinking Ahead Group 2.0 (Tim Hodgson, Liang Yin) following the research and discussion conducted by the Thinking Ahead Institute's 1.5°C investing working group. The authors are very grateful to the members of the working group for their input and guidance but stress that the authors alone are responsible for any errors of omission or commission in this paper.

The key objective of this working group is to produce research outputs that can usefully guide investors' behaviours to ultimately become a driving force in transforming global economy to be compatible with the 1.5°C climate target while in the same time fulfilling their fiduciary duties.

The members of this working group are as follows:

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- Andrew Cave (Baillie Gifford)
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Why should the Thinking Ahead Institute get involved in climate change?

Each investment organisation, and each institution in the economy beyond, has its own objective function – the ‘good’ that it is seeking to maximise on behalf of those stakeholders it deems important. A perfect alignment of those objective functions is an odds-against proposition. And yet economies tend to operate rather than splinter, suggesting that perfect alignment is not necessary. But adequate alignment is likely to help.

The scale of the climate problem, and the lack of meaningful progress so far, could engender a defeatist attitude. But it can also encourage a certain humility, and a focus. We, as the executive team supporting the work of the Thinking Ahead Institute, have a degree of experience in bringing together asset owners and asset managers with their differing objective functions to address common problems. We also have long experience of holistic, systems-thinking. It is by collaborating with members on this supremely important topic that we can hope to surface the influential ideas and change the dialogue within the investment industry. And from there we can hope to see changed behaviours and actions of industry participants to make the significant reallocation of capital that is needed.

The task, then, is to do what we can – and to persuade others of its merit. This paper seeks to frame the climate change problem in a way that allows the investment industry to engage with it. We start by defining our terms.

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Climate change, global warming or existential crisis?

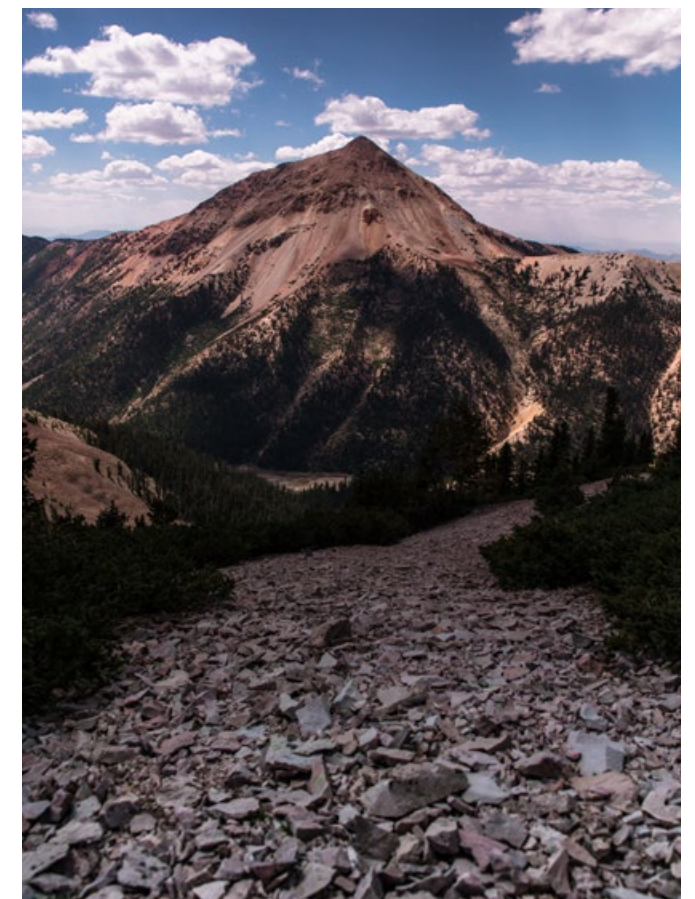
There is an idea in circulation that someone, somewhere ordered that the term “global warming” be replaced by the less-threatening term “climate change”. This is almost certainly a myth. However, Google Trends does show that the interest in “global warming” as a search term peaked in April 2007 (index value = 100) and then fell steadily over time (index value in July 2020 = 6). The use of “climate change” as a search term seems to be more constant through time, albeit with a sharp peak in September 2019 – Greta Thunberg’s appearance at the UN climate conference in New York, perhaps?

Both terms are important, as they mean distinctly different things. Global warming refers to the rise in the global average surface temperature. Given the accuracy of the recording instruments, the rising temperature is not disputed. Climate change refers to a disruption in patterns of rainfall, wind and local temperatures. Again, we have been able to measure these accurately for many decades, so climate change is also not in dispute.

The term “existential crisis” is not used much, and nor should it be. However, as we have previously written on extreme risks¹ we will note that this is the ultimate tail outcome for our species. IF greenhouse gas emissions are not reduced, AND climate tipping points turn out to be true, THEN there is a non-zero probability of runaway and catastrophic global warming. This should focus our minds and our efforts on managing this tail risk down as far as possible.

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The main point we wish to make in discussing these terms is that language is important. One of the papers we discuss below² pushes this further. It states that the evidence now supports phrases such as “climate and nature emergency”, “climate crisis”, “climate breakdown” and “global heating” (these are already used by the UN, the UK’s Met Office and the Guardian newspaper). The report suggests discontinuing the use of problematic phrases such as “business as usual” and “current trends” as their blandness masks climate disruption.



¹ <https://www.thinkingaheadinstitute.org/en/Library/Public/Research-and-Ideas/2019/09/Extreme-Risks>

² Exponential roadmap 1.5, September 2019, see <https://exponentialroadmap.org/>



This is planet-scale stuff. How are investment organisations involved?

Climate scientists have been telling the world for 30+ years what the consequences of our actions will be. Carbon emissions have risen steadily throughout that time. The significant efficiency gains we have harvested have been more than offset by greater demand for energy. Why hasn't the global system (actually, a whole set of interrelated systems) been able to adjust to the inconvenient truth? The answer given by Mark Carney, in 2015, was that climate change is a tragedy of the horizon. The "catastrophic impacts of climate change will be felt beyond the traditional horizons of most actors". Most, but not all. Many asset owners have an open-ended life span ahead of them. Asset managers can, if they choose, consciously run themselves for the benefit of future generations.

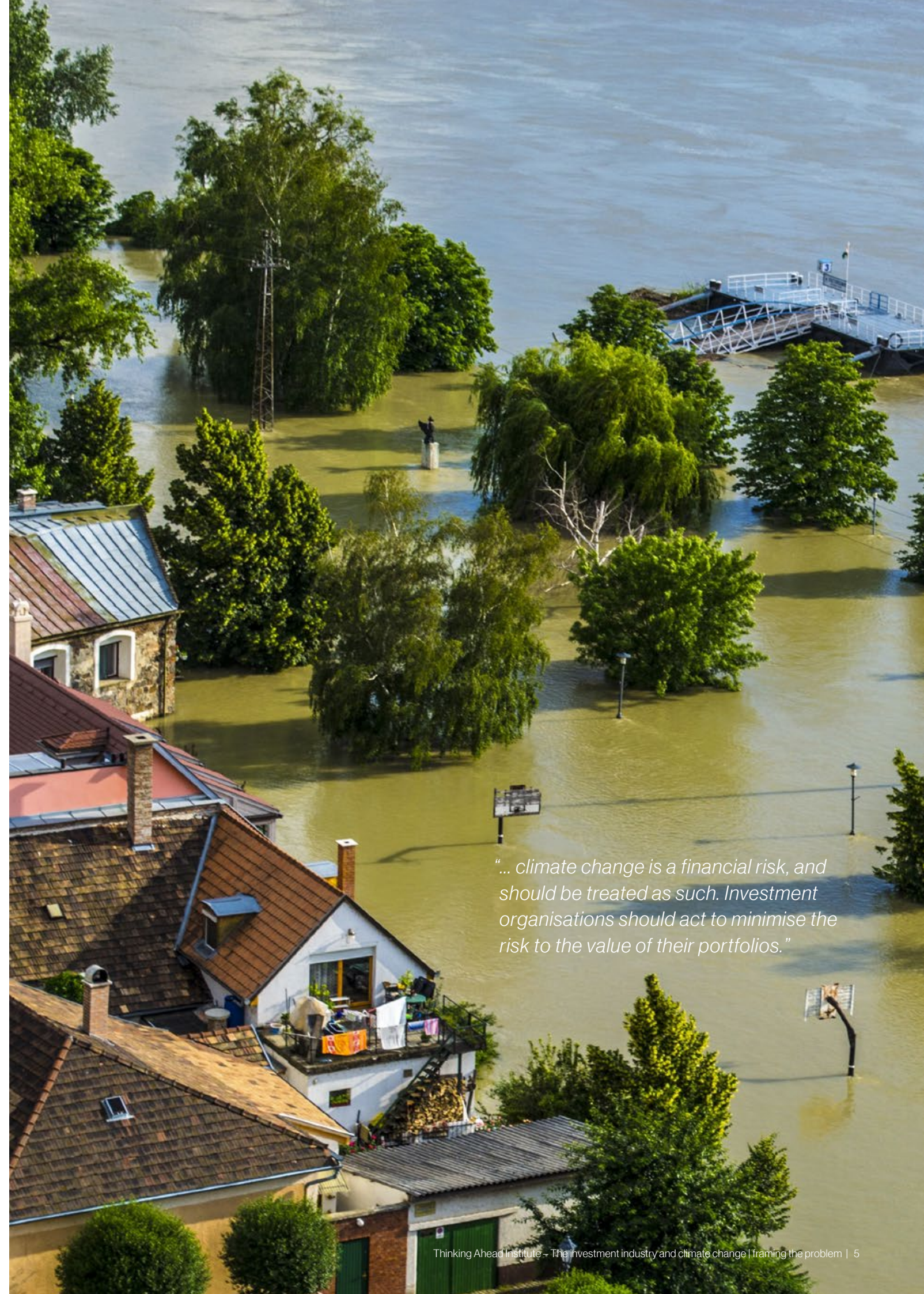
So, at minimum, investment organisations are involved because part of the current value of their assets relates to cash flows in the distant future. We know that the market is a forward-looking mechanism, so a re-pricing of distant cash flows can happen in the shorter term. This is the position that Mark Carney pushed at the Bank of England: climate change is a financial risk, and should be treated as such. Investment organisations should act to minimise the risk to the value of their portfolios.

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There are other angles that can be explored. The difficult and contentious angle can be labelled "moral considerations". An exploration of this area would take us via an organisation's licence to operate, the shifting *zeitgeist* and whether the ownership of an investment security carries responsibilities as well as rights. For example, our receipt of a dividend from a fossil fuel company implies that the investment industry provided capital to that business in the past. It could have been us, or we may have bought the shares from the one who provided the funding. We have profited from the cheap release of carbon into the atmosphere (an externality) – do we carry any responsibility for that impact? This will quickly lead us to a legal angle, and fiduciary duty.

And then there is the whole angle of new opportunities. But that will involve us providing new capital to fund these businesses. Do we have any responsibility to think through possible unintended consequences that might arise years later?

Given the range of issues in play, we broke out a separate working group to consider the ones that relate to "duty of ownership". The 1.5°C investing working group continues to consider the issues that relate more to the investment model.



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Climate change in the era of Covid-19

This research stream had its genesis before the world encountered the SARS-CoV-2 virus, but formally launched at the start of 2020. The first working group call was on 13 February and, at that stage, the world was hoping that the (apparently draconian) lockdown of a Chinese region would prevent the further spread of the virus. The ultimate economic cost of locking down economies can only be guessed at. But locking down economies has had a swift and quantifiable impact in terms of reducing greenhouse gas emissions (and other pollutants). And so, we have been given an extraordinary glimpse into the complexities of both climate change and economic life, and their interaction.

“The ultimate economic cost of locking down economies can only be guessed at. But locking down economies has had a swift and quantifiable impact in terms of reducing greenhouse gas emissions (and other pollutants)”.

Differing arguments over how we should emerge from lockdown appeared almost immediately. Simplifying, it is a case of restarting the known economic machine and recognising that any transition to a lower-carbon future will necessarily be delayed by changed sovereign finances and the priority of restoring jobs, versus a desire to make permanent the reduced emissions and restart down a different economic pathway. For our part, we choose to recognise this shorter-term tension while re-focussing on the longer-term goal of carbon neutrality by 2050. The current pandemic has affected almost all humans in some way, and in a very dramatic way for many. In a less dramatic manner, but with increasing cumulative significance, climate change will also (absent changes to the way we run our economies) affect almost all humans. We therefore see it as critical to continue to work on this topic.



What is the task?

At the highest, planetary level the task is straightforward. It is to reconfigure the economic machine to produce the same, or higher, level of benefits but without the waste products that cause climate change and global warming. The goal is a carbon-neutral economy, and the timeframe is generally set as 2050.

For the investment industry, as owners / funders of a subset of the economic activity, the task is more complex because the objectives are fuzzier. Can we own a carbon-positive set of assets in 2050 because the public sector has gone carbon-negative? Or, is there more money to be made from owning a set of carbon-negative assets? Do we even get an unconstrained choice in this matter, or will be forced into certain actions by the inevitable policy response as proposed by the PRI³?

From one vantage, then, the task is about making better decisions under conditions of uncertainty. In our past we have worked on both the theory and practice of that⁴.

From another vantage, the task is to set our organisations up for success. This has multiple components including: setting a strong purpose; clarity of mission and goals; understanding sustainable value creation; refining values and beliefs; and making our culture fit for the change that is coming. Again, we have worked on all of those⁵.

And from a third vantage, the task is about the continuous management of a portfolio of assets through this highly-uncertain future. “A” portfolio, not “the” portfolio. Just as every investor has their own context, mission and goals, set of liabilities, and risk tolerance, it is reasonable to expect their portfolio to be somewhat different to those of other investors. So, the task is not to create the perfect climate change index. It is to provide practical guidance and / or tools to assist in the management of a portfolio through a changing climate.

While it is true that every investor will manage their own unique portfolio, it is also true that the only portfolio that matters for climate change is the aggregate portfolio. The beneficiaries of a particular portfolio will experience both the financial returns of that portfolio and the wider consequences of the real-world temperature. The real-world temperature will be driven by the characteristics of the aggregate portfolio not those of the beneficiaries' own portfolio.

³ See <https://www.unpri.org/sustainability-issues/climate-change/inevitable-policy-response>

⁴ Visit www.thinkingaheadinstitute.org and search for 'decision making' for a number of papers, thought pieces and other materials

⁵ Many of these items can be found at our culture, leadership and diversity hub: https://www.thinkingaheadinstitute.org/en/Library/Public/Research-and-Ideas/2020/03/Culture_Leadership_hub

Laying the foundations

Among the first tasks of the working group was a review of what others had written. Two papers were selected as foundational for the thinking and ongoing work of the group:

1 *Climate risk and response – physical hazards and socioeconomic impacts*⁶, McKinsey Global Institute (with Woods Hole Research Centre producing the scientific analyses of physical climate hazards).

There is a standard taxonomy for climate risks to be considered under the headings (a) physical risks, (b) transition risks and (c) liability risks. This study aims to help decision-makers understand the nature and extent of physical risk and its socioeconomic impacts from a changing climate over the next three decades (to 2050), absent adaptation and mitigation. Essentially it tries to answer this question: if we don't take any actions to address it, how much (physical) damage can climate change inflict?

The global socioeconomic impacts of climate change could be substantial. A changing climate directly affects human, physical and natural capital. The research also includes a geospatial assessment that examines potential socioeconomic impact (liveability, workability, food systems, physical assets, infrastructure services and natural capital) in 105 countries. To understand how much damage climate change can inflict on our portfolios and future expected returns, we need to first understand how much damage it can cause to the human, physical and natural capital, from which we derive those investment returns.

2 *Exponential roadmap, scaling 36 solutions to halve emissions by 2030*, lead authors Johan Falk, Future Earth, Stockholm Resilience Centre, Internet of Planet, and Owen Gaffney, Potsdam Institute for Climate Impact Research, Stockholm Resilience Centre.

The roadmap is to halve carbon emissions over the decade to 2030, then again for each of the following two decades. It invokes the spirit of Moore's law, and the halving is what yields the exponential. The biggest message of the report is that "Achieving a 1.5°C planet will require the fastest economic transition in history. This transformation is both necessary and achievable." It presents 36 economically viable solutions to cut global greenhouse gas emissions 50% by 2030 and the strategies to scale this transformation.

A copy of our summaries of these papers can be requested from the [Thinking Ahead Institute](#).

In light of these papers and working group discussion, the group agreed to adopt the exponential roadmap as the foundation for its future work⁷. This means working to achieve 7% per annum reductions in emissions through to 2050. The speed of the transition implied by this path effectively limits the number of businesses that can transition within the proposed framework. There is therefore a crucial role for the public sector in enabling the transition. The private sector should aim to influence the policy makers to channel capital in line with the exponential roadmap framework.

⁶ <https://www.mckinsey.com/business-functions/sustainability/our-insights/climate-risk-and-response-physical-hazards-and-socioeconomic-impacts>

⁷ This was done by anonymous electronic voting against a super-majority test. 78% of the group agreed the adoption and 22% said they can live with it.

Where to from here?

With this understanding to act as a framework, the next stage of work for this research stream is to consider the climate beliefs that investment organisations will need to grapple with to allow meaningful progress with our roadmap. We cover this in the next article in this series titled: [Climate actions start with beliefs](#).

Limitations of reliance

Limitations of reliance – Thinking Ahead Group 2.0

This document has been written by members of the Thinking Ahead Group 2.0. Their role is to identify and develop new investment thinking and opportunities not naturally covered under mainstream research. They seek to encourage new ways of seeing the investment environment in ways that add value to our clients.

The contents of individual documents are therefore more likely to be the opinions of the respective authors rather than representing the formal view of the firm.

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The Thinking Ahead Institute

About the Thinking Ahead Institute

Mobilising capital for a sustainable future.

Since establishment in 2015, over 60 investment organisations have collaborated to bring this vision to light through designing fit-for-purpose investment strategies; better organisational effectiveness and strengthened stakeholder legitimacy.

Led by Tim Hodgson, Roger Urwin and Marisa Hall, our global not-for-profit research and innovation hub connects our members from around the investment world to harnesses the power of collective thought leadership and bring these ideas to life. Our members influence the research agenda and participate in working groups and events and have access to proprietary tools and a unique research library.

Join the Thinking Ahead Institute

We seek collaboration with like-minded organisations to achieve our vision, so for more information about us please contact:

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About the Thinking Ahead Institute

The Thinking Ahead Institute seeks to bring together the world's major investment organisations to mobilise capital for a sustainable future. Arising out of Willis Towers Watson's Thinking Ahead Group, formed in 2002 by Tim Hodgson and Roger Urwin, the Institute was established in January 2015 as a global not-for-profit group comprising asset owners, investment managers and service providers. Currently it has over 40 members with combined responsibility for over US\$12trn.

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