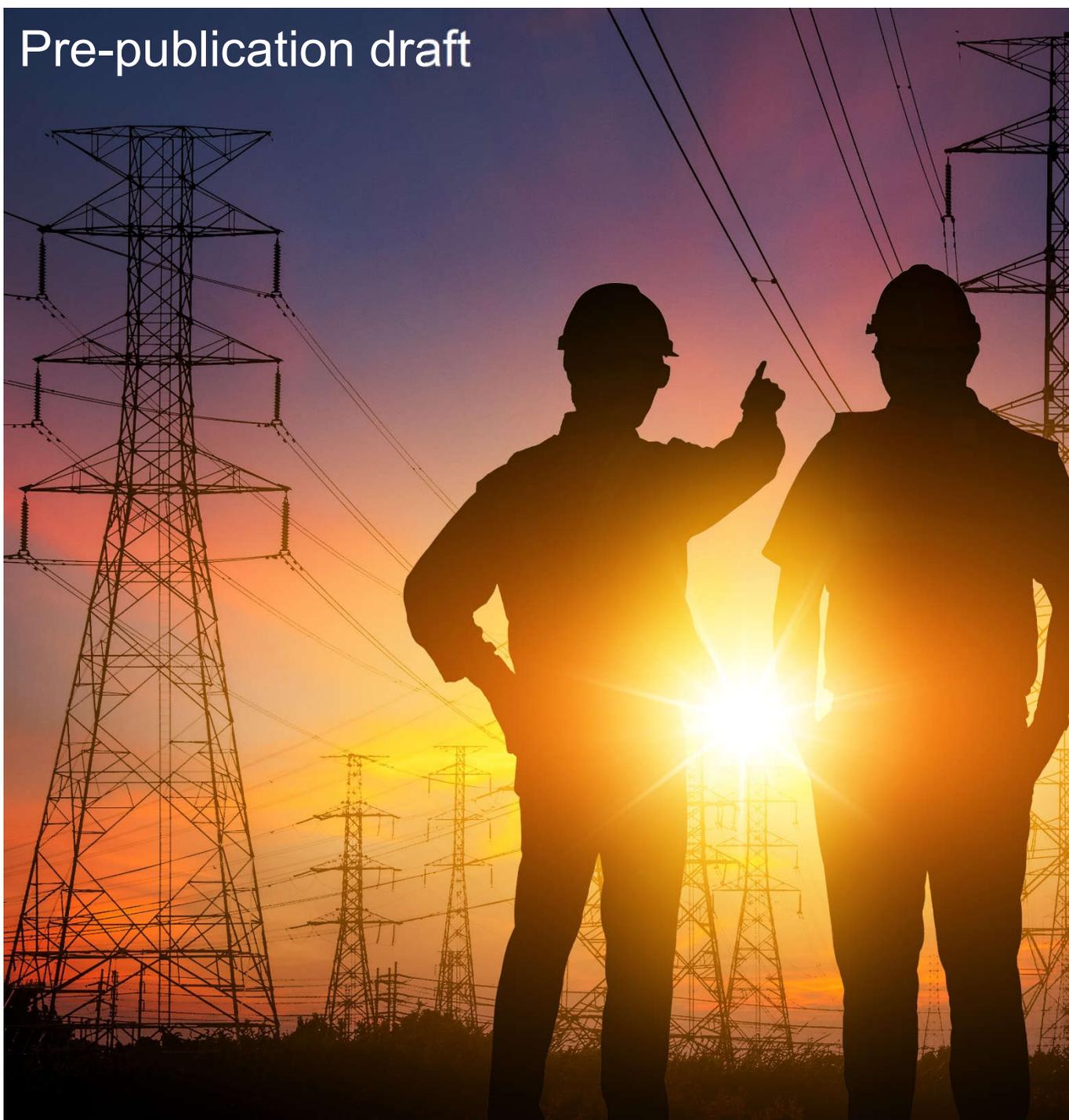


Thinking Ahead Institute

We've decided to address climate change | getting our own house in order

Part of a series of articles from the investing for tomorrow
working group

Pre-publication draft



Investing for tomorrow working group

This document has been written by members of the Thinking Ahead Group 2.0 (Tim Hodgson and Jess Gao) following the research and discussion conducted by the Thinking Ahead Institute's investing for tomorrow (IFT) 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 to establish and set a pathway to achieve their climate ambitions. Beyond this, we hope the outputs help them to become a driving force in transforming the global economy to be compatible with the 1.5C climate target.

The members of this working group are as follows:

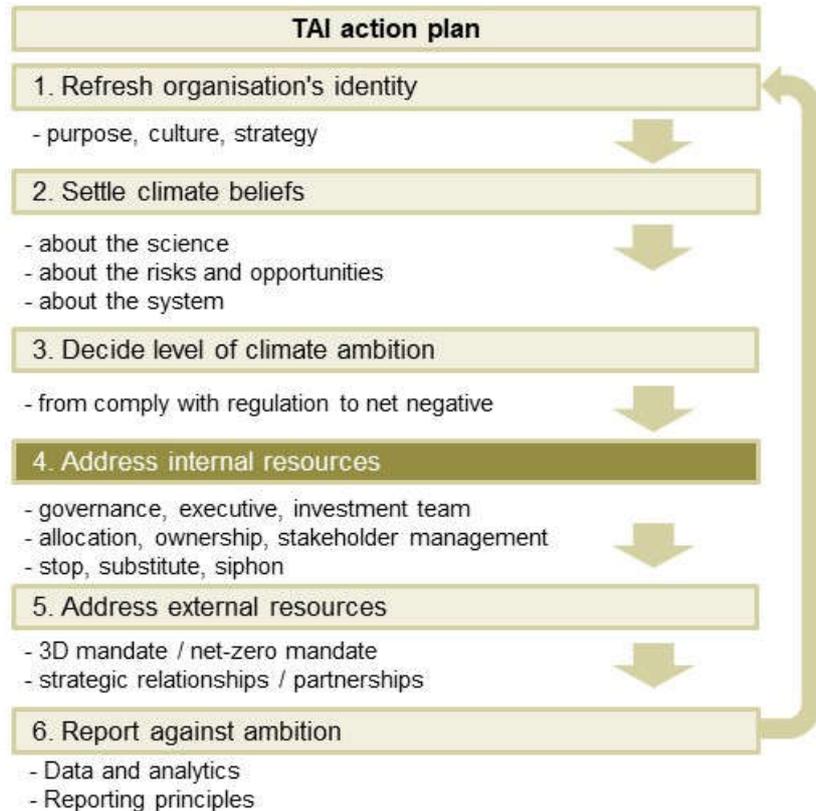
- Jyoti Banerjee (North Star Transition)
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- Tracy Burton (Coronation)
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- Nacho Valiñani (Pensions Caixa 30)
- Jaco van der Walt (RBC Global Asset Management)
- Sarah Wilson (Nuveen)
- Debra Woida (Willis Towers Watson)

In short...

This paper, indeed this series of papers, is written from the perspective of the asset owner. It is the decisions of asset owners in respect of how to deal with climate change that will have the biggest impact on the actions of other organisations in the investment chain.

We present 32 ideas for actions that asset owners can take to implement their climate ambition. The first 16 actions relate to decarbonising an organisation's own portfolio, but also form a foundation for the second set of 16 actions which target changing the climate trajectory. We do not see these ideas as a complete list. For

example, we do not include more 'indirect' actions like knowledge sharing and/or setting a good example through policies and actions regarding an organisation's own emissions.



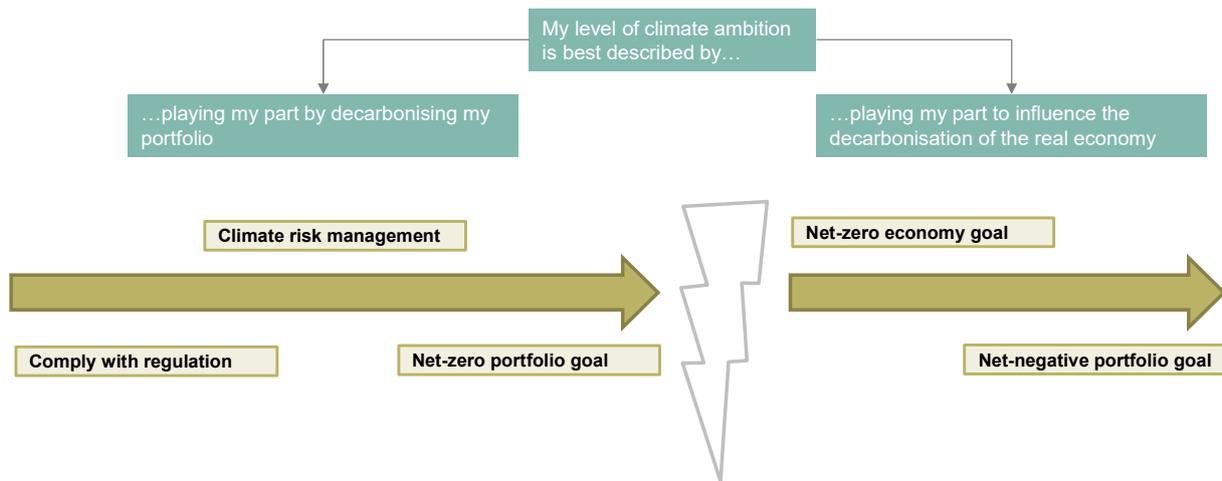
The practicality of some of the actions can be debated. The intention here is to provide clarity on what needs to be done if we truly wish to see net-zero emissions in future. Having achieved the necessary clarity, we will then be able to judge whether our more practical actions will help or harm our achievement of the long-term objective.

We also note that these actions are specifically targeted at climate change. There is growing awareness that climate issues are unlikely to be adequately addressed without simultaneously addressing other issues such as biodiversity loss, inequality and the circular economy. These issues will feature in our future paper on climate beliefs.

Recap | choosing your level of climate ambition

In paper two of this series, *Our house is on fire?!¹*, we introduced a spectrum of increasing climate ambition. At the left-hand end, the minimum position is defined as complying with regulation (which either is, or is likely to become, more onerous). At the right-hand end, the most ambitious position is defined as running an investment portfolio so as to assist the creation of a net-negative-emissions economy. The paper further noted that the spectrum contains a discontinuity. To the left of the discontinuity, the focus is all about decarbonising the portfolio while to the right, the ultimate goal becomes a decarbonised economy. This is illustrated in the figure below.

¹ *Our house is on fire?! Should we do something? | setting your climate ambition*, Thinking Ahead Institute, 2021



In passing, we note that a public net-zero commitment automatically places the investment organisation to the right of the discontinuity.

We've chosen our level of ambition | what's next?

In essence, this paper is a list of 32 actions that asset owners can take to implement their climate ambition. However, there is some framing we can provide which will helpfully make that list less daunting and/or more appealing.

First, we take as a given that the executive team at every asset owner is already fully and gainfully employed. In the short term, therefore, resources must be considered as a constraint. For this we invoke a principle that gained a lot of airtime within the working group: "we do what we can with what we've got". In the short term this is a prioritisation exercise and, potentially, an invitation to stop doing some other things. Over the longer term, resources can be added and this will allow a greater number of actions to be adopted. In case it serves as a useful data point, we polled the working group members on what "the asset owner response to net-zero commitments, in terms of internal resources, will be (NB not 'should be')" – 37% believed there would be an increase in headcount (at asset owners) to reflect the additional work, 44% believed headcount would be static but the quality of personnel would be upgraded, and 19% believed there would be no material response.

Second, we suggest that it is useful to use different lenses to view the climate change problem in more manageable pieces. We use three lenses which we label function, action and activities, as described below. The function and action lenses relate to actions that can be taken to decarbonise the portfolio. The activities lens describes the high-level activities that are necessary to reduce, and eliminate, the emissions from the underlying economy.

Function lens

We describe the functions within an asset owner as comprising of governance, an executive and investment. For all but the largest asset owners, the investment function is typically outsourced to an asset manager. The executive function can be outsourced (to a fiduciary manager, or OCIO), and this has been a growing trend over the last few years, albeit that the majority of asset owners still retain

this function in-house. The governance function, of course, cannot be delegated. We allocate some of the actions that apply to these different functions.

The big issue here, arguably amplified by climate change considerations, is whether asset owners are adequately resourced in these functions. Previous polling within the Thinking Ahead Institute suggested that governing teams are generally weaker than they need to be (see box). In addition, many asset owners have a small executive, and no underlying investment team. In this light, it is sobering to reflect on the opinion of the Australian financial services regulator that a superfund (asset owner) with an asset value below A\$30bn (US\$23bn) should consider itself sub-scale.

Governing boards are generally weaker than they need to be to act as counter-balance to executive teams (55 votes, 2019 TAI IOOT events)

| | |
|-------------------|-----|
| Strongly agree | 29% |
| Agree | 40% |
| Neutral | 22% |
| Disagree | 9% |
| Strongly disagree | 0% |

Action lens

The actions an asset owner undertakes comprise of allocation (or portfolio construction), ownership (engagement), and stakeholder management. Similar to the governance function above, we believe that stakeholder management is the only action that cannot be outsourced. Ownership, or engagement, efforts should be intensified, but can be outsourced. The allocate action includes strategic asset allocation, total portfolio approach, divestment, primary investment and anything else that changes portfolio weights.

Activities lens

We suggest there are three high-level activities that are necessary to create a net-zero world – stop, substitute and siphon.

- **Stop:** means shutting down financially-productive but emitting assets before their natural end of life, implying a likely loss in capital value. The likely loss in capital value can be considered an insurance premium that we are willing to pay in order to protect the rest of our portfolio. If emissions are allowed to continue, the rise in global temperatures is likely to exceed 3C, at which point portfolio values are likely to be significantly and permanently impaired
- **Substitute:** means investing in assets / business models (new or scale up) that substitute for the emitting activities that must stop. Examples of substitutes include renewable electricity and batteries instead of fossil fuels, building with wood rather than concrete and steel where possible (and with climate-neutral cement and steel where not possible), natural shading and ventilation instead of air conditioning etc.
- **Siphon:** means investing in negative emissions technologies now if we wish to see impact at scale in 20 years' time. These negative emissions technologies can be nature-based solutions as well as new technologies such as carbon capture.

Actions targeted at decarbonising the portfolio

The first 16 actions below are compatible with a desire to decarbonise an asset owner's own portfolio. Or they can be considered as foundational steps for asset owners that wish to implement the second list of 16 actions targeted at changing the climate trajectory.

Function lens | governance

1. Appoint climate expert(s) to board and/or independent climate advisors

An asset owner can only really take action to address climate change with the support of its governing board. It follows that the board will be able to provide better support if it has access to trusted climate expertise – either in the form of one or more board members, and/or from independent climate advisers.

2. Increasing time allocation to climate on governance agenda and/or new climate committee

Governance board agendas are always full and therefore, this action is essentially calling for an appropriate priority and time allocation to be given to climate implications.

3. Determine if internal resources are adequate given fund's size and organisational preferences and beliefs, including buy vs build decision

Decarbonising a portfolio will require an ongoing series of difficult decisions far into the future. It is part of the board's responsibility to ensure that the fund has access to the appropriate resources to ensure that quality decisions are made in a timely manner.

Function lens | executive

4. Increase/reallocate internal resources between allocate, ownership and stakeholder management

The executive's role is to implement the decarbonisation strategy agreed with the governing board. This will involve decisions over resource allocation between the different actions they can take.

5. Set climate training policy

We believe all asset owners (and all investment organisations) should make a deliberate decision regarding formal climate training, which will carry budget implications. We further believe that best-in-class climate training uses external climate experts, and is compulsory for all employees.

Function lens | investment

6. Enhance investment decision making with better climate data and analytics

This suggested action is more a destination than an event. It does, however, imply a shift in resource allocation through the purchase of better data and/or commitment of more resource to analysis of existing data.

Action lens | allocate

7. Move along the spectrum away from strategic asset allocation (SAA) towards total portfolio approach (TPA)

One of the key characteristics of TPA is that all assets pre-qualify for consideration on equal terms and are considered on their merits, whereas SAA introduces constraints (the asset class bucket may already be 'full'). Future climate solutions may not fit typical asset class buckets – a TPA process ensures these do not “slip between the cracks”.

8. Move to 3D-lite mandates for managers

In a climate context, 3D mandates will set risk, return and decarbonisation objectives for the asset manager. 3D-lite mandates will seek to achieve these through integrated ESG and engagement. Full-on 3D mandates would target real-world decarbonisation and will be explored below.

9. Consider divestment from high emission assets without adequate transition plans

While we have a preference for engagement as in #8 immediately above, divestment is an option for decarbonising a portfolio.

Action lens | ownership

10. Improve engagement and voting policy and/or employ overlay specialist

To assist with the necessary transition, we believe greater attention and resources should be given to engaging with investee companies. One way to increase the effectiveness of these efforts is to benefit from the scale provided by an overlay specialist...

11. Join at least one climate collaboration group

...and a second way to access the benefits of scale is to join a climate collaboration group.

12. Increase public policy engagement

To achieve certain climate-related ends there are some actions that are more effectively done, or only possible to be done, by the public sector. This implies a need to increase investment industry efforts at engaging with the public sector. In this first list of 16 actions, we might be asking for a formalisation of things like a “say on climate”.

Action lens | stakeholder management

13. Improve climate communication and reporting policy (eg climate impact dashboard)

We believe reporting on progress, or not, towards the goal of decarbonising the portfolio is a fundamental part of good stakeholder management¹.

14. Alignment (on climate) among governance board, executives, the investment team and third-party providers

¹ Two existing TAI papers are relevant here, and the subject will be covered again later in this series. Please see [How warm is your portfolio? Our take on the temperature rating of portfolios](#) and [Climate dashboard reporting](#).

Overall effectiveness is enhanced when the different functions and actors are aligned. The task here is to allocate sufficient time to conversations in order to allow differences to be identified and discussed.

15. Manage relationships and communication among members, sponsors, internal team and external providers

16. Produce a public statement of the organisation's forward-looking plan on decarbonisation

Public statements are typically uncomfortable as they carry a degree of risk. However, they also provide transparency and accountability, and therefore a degree of external 'support' to follow through on the plan.

Actions targeted at changing the climate trajectory

For those asset owners that wish to go further than decarbonising their own portfolio, we now provide 16 additional actions targeted at changing the climate trajectory. This group will include those asset owners that have made a net-zero commitment. For the avoidance of doubt, these asset owners are now pursuing two objectives as they now have an explicit climate objective in addition to their risk-adjusted return objective. As a consequence, they have entered the world of 3D investing, where they need to manage risk, return and impact. We will discuss 3D mandates in the next paper of this series.

We ask the reader to note that we are attempting to create a useful framework here. To do so, we are taking a somewhat 'purist' position rather than a practical or pragmatic position. We have chosen this position because it provides greater clarity; practicality and pragmatism can be added in later. To illustrate by example, consider a fossil fuel company that we will label an 'emitter'. However, the company could also have a renewable energy division (we will label as 'substitute'), or even be developing carbon capture and storage technologies ('siphon'). The question then becomes whether it is acceptable for all three divisions to exist in 2050 and for the whole to be considered a net-zero company. From our previous paper, [Our house is on fire?!](#), we discussed the belief around net-zero emissions versus absolute-zero emissions and concluded, because of higher wildfire and melting permafrost emissions in a hotter future, we should aim for absolute-zero emissions. Consequently, the position we take in this paper, and in the actions below, is that 'emitters' must be shut down, not allowed to continue with 'siphon' offsets. For the company we are considering here, then, by 2050 it would have two divisions of renewables and carbon capture.

As can be seen in the table, we have allocated the actions targeted at changing the climate trajectory to the intersection of the action and activities lenses. As one further note before we dive in, some of the actions need to be considered at the same time. For example, we would suggest #18 (underweighting emitters) is more powerful alongside #24 (forcing transition on the unimprovables) and #25 (encouraging transition for the improvables).

| | Allocate | Ownership | Stakeholder management |
|------------|---|--|---|
| Stop | 17. Do not subscribe to new capital raisings (inc debt) ¹ 18. Underweight emitters ¹ | 24. Force transition on the unimprovable (eg no new fossil fuel exploration, no new fossil fuel infrastructure, wind-down / net-zero plan) 25. Encourage transition for the improvable 26. Amplify voice (collaborate or overlay) 27. Lobby public sector | 30. Create and publish policy(ies) 31. Publish investment case justifying actions to stop emitters |
| Substitute | 19. Overweight substitutes ¹ 20. Subscribe to new capital raisings ¹ 21. Primary investment, including public-private partnerships – renewables capacity, distribution, electrification, energy efficiency, replacement technologies (can be old (eg wood) or new (eg hydrogen)) 22. Track changing consumer preferences | 28. Support substitutes ('be a good, long-term owner') – encourage, advise, provide network introductions 27. Lobby public sector | 32. Ensure any 'carbon hump' does not breach pre-agreed decarbonisation pathway |
| Siphon | 23. Primary investment into carbon capture and storage (eg Sky Diamonds) [apply usual future economic viability filter] | 29. For climate investments, trust existing private market model (GP ownership decisions), or create new buy-and-hold platform 27. Lobby public sector | 32. Ensure any 'carbon hump' does not breach pre-agreed decarbonisation pathway |

Action lens | allocate

17. Do not subscribe to new capital raisings (including debt)¹ [stop]

The end game is to help emitting businesses wind down and cease operations. The immediate action therefore is to stop providing them with new capital.

18. Underweight emitters¹ [stop]

The action is to underweight, not to divest. The aim is to send a signal similar to that sent by divesting, but to retain a voice and right to engage (see below). If the climate thesis is correct then this action will also be good for (relative) returns as the value of emitting businesses should fall (but will be less good, privately, than divesting).

19. Overweight substitutes¹ [substitute]

Again, this action is about sending a signal of support. It should also be good for returns (relative and absolute) if the climate thesis is correct.

20. Subscribe to new capital raisings² [substitute]

This allows the substitute companies to scale-up faster than through re-investing cash flow alone. This action would be expected to be good for returns, risk reducing and positive on impact through aiding the transition to a more sustainable economy.

21. Primary investment, including public-private partnerships [substitute]

The amount of capital required to transition the economy to a decarbonised form is estimated to be around several trillions of dollars per annum. Investment is required in renewables capacity, electricity distribution, electrification, energy efficiency, and replacement technologies (can be old (eg wood) or new (eg hydrogen)).

22. Track changing consumer preferences [substitute]

Transitioning an economy will be a leap into uncertainty, and so we cannot be certain which substitutes will be required. This will require monitoring and agility.

23. Primary investment into carbon capture and storage [siphon]

¹ Oil majors present a particular challenge as they could be raising capital for their renewables business while still spending capital on exploration for fossil fuels. Emitters with a valid decarbonisation plan and/or making a contribution to the decarbonisation of the real economy should not necessarily be underweighted.

We have argued that the ability to remove carbon from the air will be a necessary part of changing the climate trajectory. There will be multiple opportunities to invest new capital to scale up this activity – both via nature-based solutions and new technologies. Not all of these can be expected to produce a positive return and so we must apply the usual future economic viability filter.

Action lens | ownership

24. Force transition on the unimprovable (eg no new fossil fuel exploration, no new fossil fuel infrastructure, wind-down / net-zero plan) [stop]

25. Encourage transition for the improvable [stop]

Here we divide ‘emitters’ into ‘unimprovable’, where the objective initially is to engage forcefully so that their emissions do not grow, and then systematically reduced as the business is deliberately shrunk; and ‘improvable’ where there is a transition path to an emissions-free future for that business.

26. Amplify voice (collaborate or overlay) [stop]

As the objective of the engagement (shutting down profitable businesses) runs counter to the current incentives, all avenues must be explored to make the engagement as effective as possible, by recruiting as many owners to the cause as possible.

27. Lobby public sector [stop | substitute | siphon]

[stop] Reducing emissions will be easier with public sector support, which could be in the form of changing the economics of an emitting business (eg carbon tax) or making activities illegal (eg banning sales of machines which burn fossil fuels – such as vehicles or home boilers / furnaces). The importance of this action is magnified when we consider the size (and head-start) of the lobbying coming from the fossil fuel industry. Lobbying to reduce the power of their lobbying would also qualify here.

[substitute] Persuade the public sector to make life easier / remove obstacles so that substitute companies can grow more quickly.

[siphon] Persuade the public sector to create a supportive environment for the expansion of nature-based solutions and the long-term investment required to develop and scale negative emissions technologies.

28. Support substitutes [substitute]

The action here is to ‘be a good, long-term owner’ – which could comprise encouraging company management to continue with their strategy, providing advice gleaned from what works in other portfolio companies, and/or providing network introductions.

29. For climate investments, trust existing private market model (GP ownership decisions), or create new buy-and-hold platform [siphon]

The current general partner (GP) model in private equity is up for debate over the net value created. The choice here is work with the model that exists, or create a new model – we suggest an asset owner-owned private market platform that would have more of a focus on buy-and-hold (and scale up) rather than buy-and-sell for short-term financial gain.

Action lens | stakeholder management

30. Create and publish policy(ies) [stop]

We anticipate that the decisions required to pursue a net-zero strategy / target changing the climate trajectory will become increasingly hard over time. This is partly because the easy decisions will be taken first, and partly because of the issues around justice as the economic transitions will accumulate rather than dissipate. Consequently, we see published policies as helpful both in the decision making, but also in staying the course.

31. Publish investment case justifying actions to stop emitters [stop]

Committing to shutting down emitting business models will be controversial. We therefore see it as essential for risk management to create and publish an investment case which describes the benefits that will accrue to beneficiaries as a result of the actions.

32. Ensure any 'carbon hump' does not breach pre-agreed decarbonisation pathway [substitute | siphon]

Many things that are currently deemed essential to a zero-carbon future, such as battery factories, electric vehicles, solar panels and wind turbines, all cause greenhouse gases to be emitted during their construction and transport. This can be thought of as a 'carbon hump' that must be cleared to reach the zero-carbon future on the other side. An asset owner wishing to invest in climate solutions that entail a carbon hump will need to monitor and ensure that they do not breach any decarbonisation pathway they have committed to – and will need to report to stakeholders accordingly.

OK, done that, where next?

The 32 ideas above are all aimed at asset owners, but many of them have implications for their asset managers and other service providers. We will pick up that thread in the next paper in this series.

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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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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