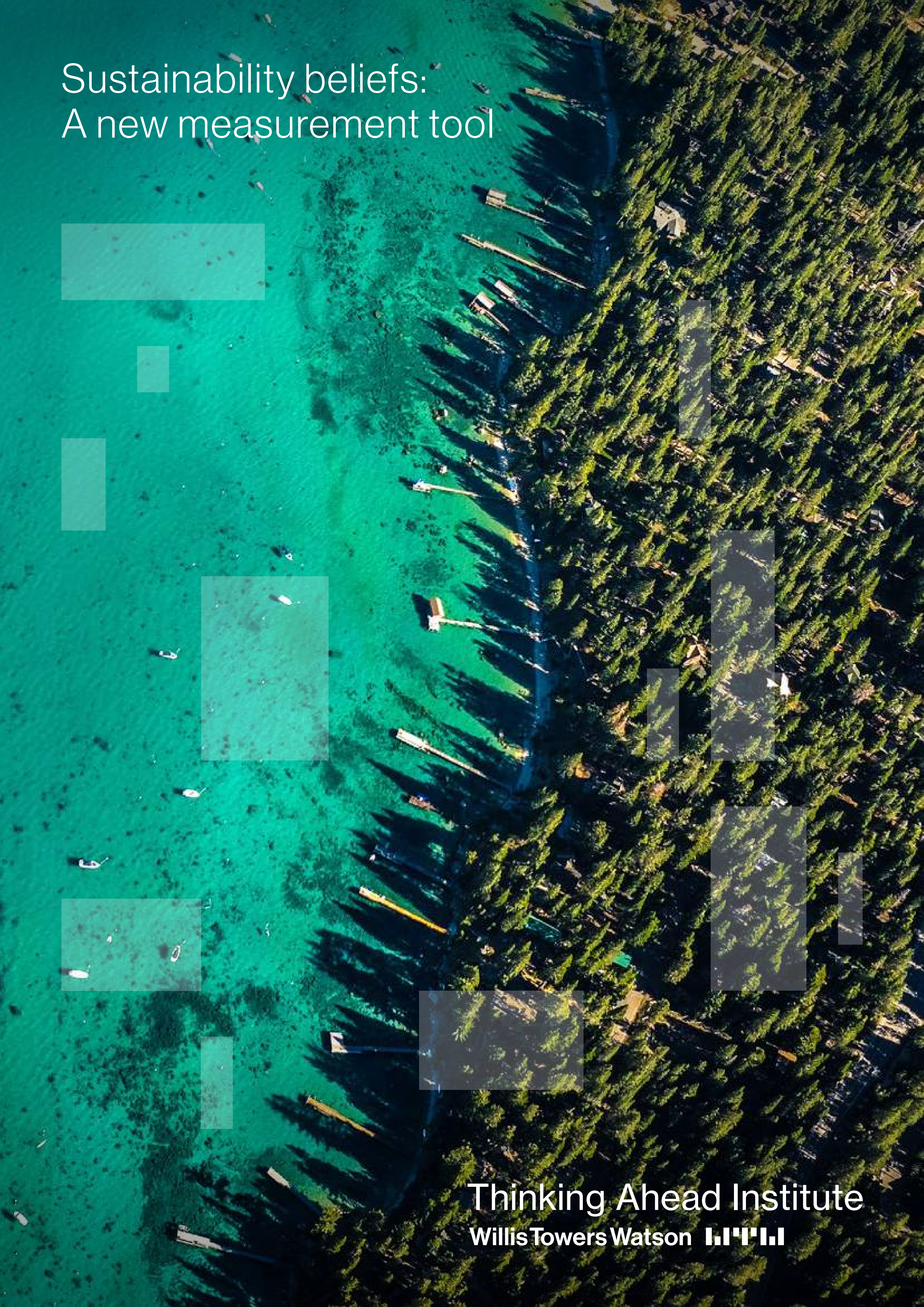
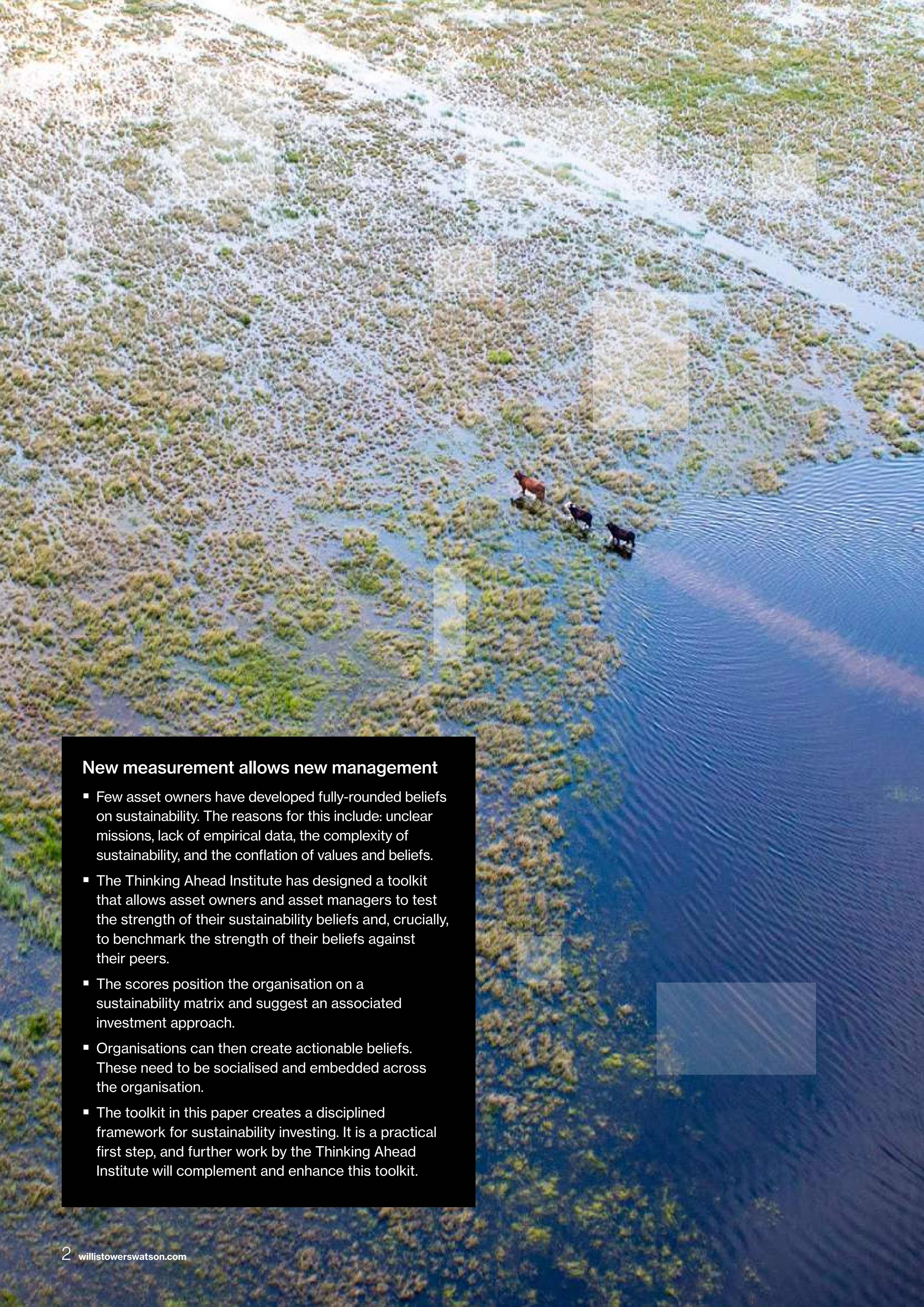
Sustainability beliefs: A new measurement tool



Thinking Ahead Institute
Willis Towers Watson

Sustainability beliefs: A new measurement tool

Contents



New measurement allows new management

- Few asset owners have developed fully-rounded beliefs on sustainability. The reasons for this include: unclear missions, lack of empirical data, the complexity of sustainability, and the conflation of values and beliefs.
- The Thinking Ahead Institute has designed a toolkit that allows asset owners and asset managers to test the strength of their sustainability beliefs and, crucially, to benchmark the strength of their beliefs against their peers.
- The scores position the organisation on a sustainability matrix and suggest an associated investment approach.
- Organisations can then create actionable beliefs. These need to be socialised and embedded across the organisation.
- The toolkit in this paper creates a disciplined framework for sustainability investing. It is a practical first step, and further work by the Thinking Ahead Institute will complement and enhance this toolkit.

Introduction
The genesis of a world-first solution

Even institutional investors that want to, struggle to incorporate sustainability into their portfolios. Definitions of sustainability are elusive, existing data is confusing[1] and the subject is complex. As a result, investors find it hard to develop beliefs around sustainability.

We explain why beliefs are foundational to sustainability. We then show how to develop these beliefs, based on a benchmarking against peers.

We believe this toolkit is a world-first. That is, it is the first to both score the strength of an organisation's sustainability beliefs and to compare them against a peer group. This benchmarking should give both asset owners and asset managers greater confidence to tilt their portfolios to strategies and assets in which they have stronger beliefs than the market overall.

The toolkit should be viewed as only the first step towards developing a practical solution to a hitherto intangible problem. But it should provide discipline around a subject many investors currently view as impenetrable. And it has been validated by an academic with specialist knowledge of the subject.[2]

Importantly, the toolkit facilitates action. That means portfolios can be higher conviction and better reflect the sustainability beliefs of organisations and their clients/stakeholders.

[1] We are aware that correct English would read 'data are confusing' but choose to use the singular for reading ease.

[2] *Measurement and Analysis of Sustainable Investment Beliefs: Evaluating a New Approach by Willis Towers Watson* – Dane Rook PhD, Stanford University.

Sustainability:
The two-minute cheat sheet

Most investors have an intuitive understanding of sustainability. But few have a working definition, let alone a fully-integrated investment strategy. To invest sustainably, a working definition would seem to be the minimum requirement.

For the purposes of this paper, we have taken a broad definition of sustainability, going beyond the traditional ideas of environment, society and governance (ESG).

For investment, sustainability:

- Involves a deep understanding of the **material factors that affect long-term value creation** (how it impacts long-run returns)
- Aims to generate long-term enduring value through an **efficient and balanced approach** that is **fair to successive generations**
- Emphasises **adaptability, governance and stewardship** as delivery mechanisms
- Has to be **actively managed** at the asset owner, asset manager and investee company levels.

Our definition of sustainability involves the wider societal impact of corporate and investment activity. This puts the emphasis on reputation and the asset owner's 'license to operate'. We refer to these as extra-financial factors.

It is also helpful to consider sustainability risks (see *Figure 1*). The sustainability risks inherent in financial and retirement systems, in the depletion of resources and in business disruption together make up a sizeable portion of the risks that all investors face. In other words, the potential impact of sustainability risks are substantial.

Sustainability should therefore be considered holistically, as outlined in *Figure 2*. Asset owners will need their own definition of sustainability before developing their sustainability beliefs.

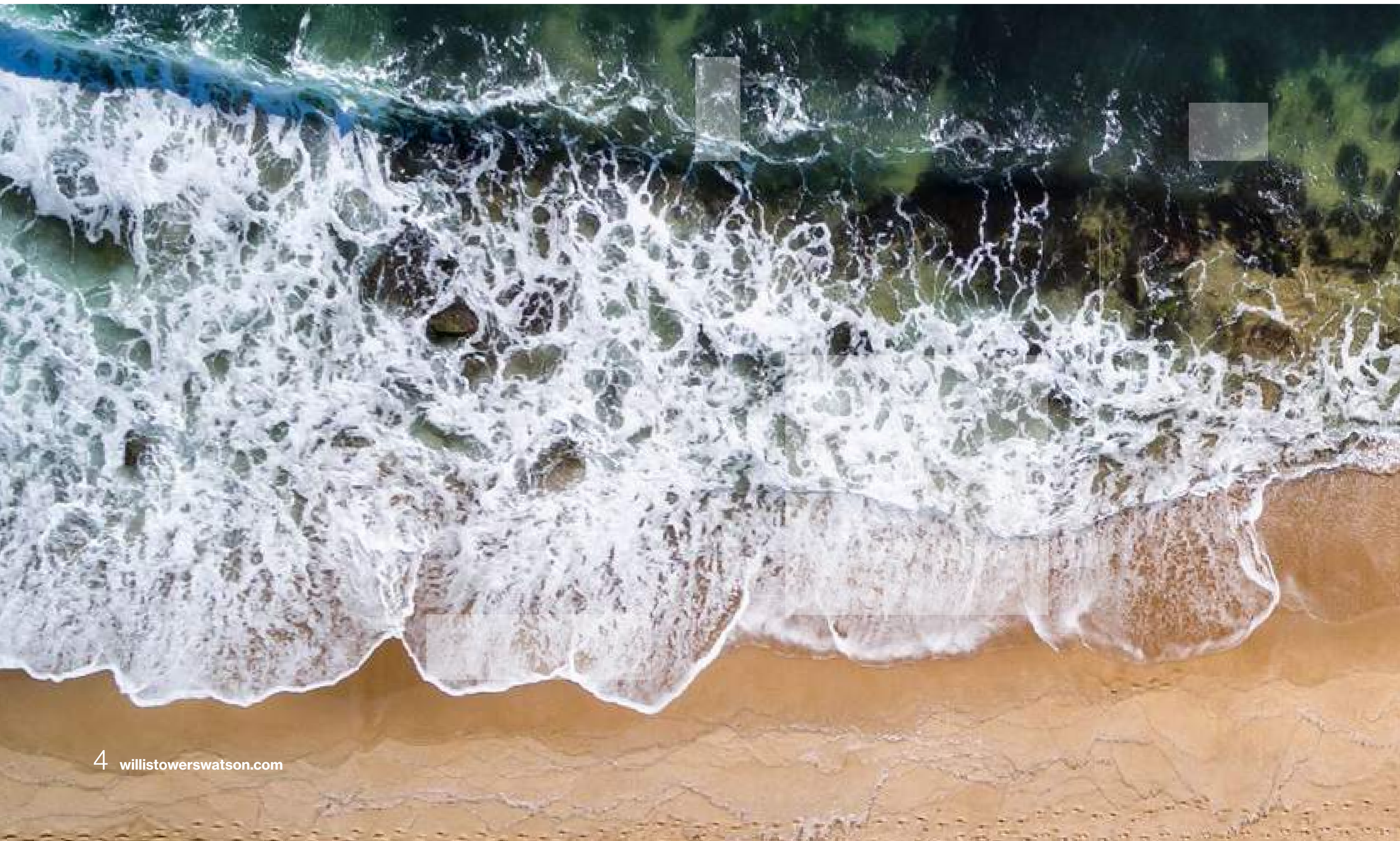
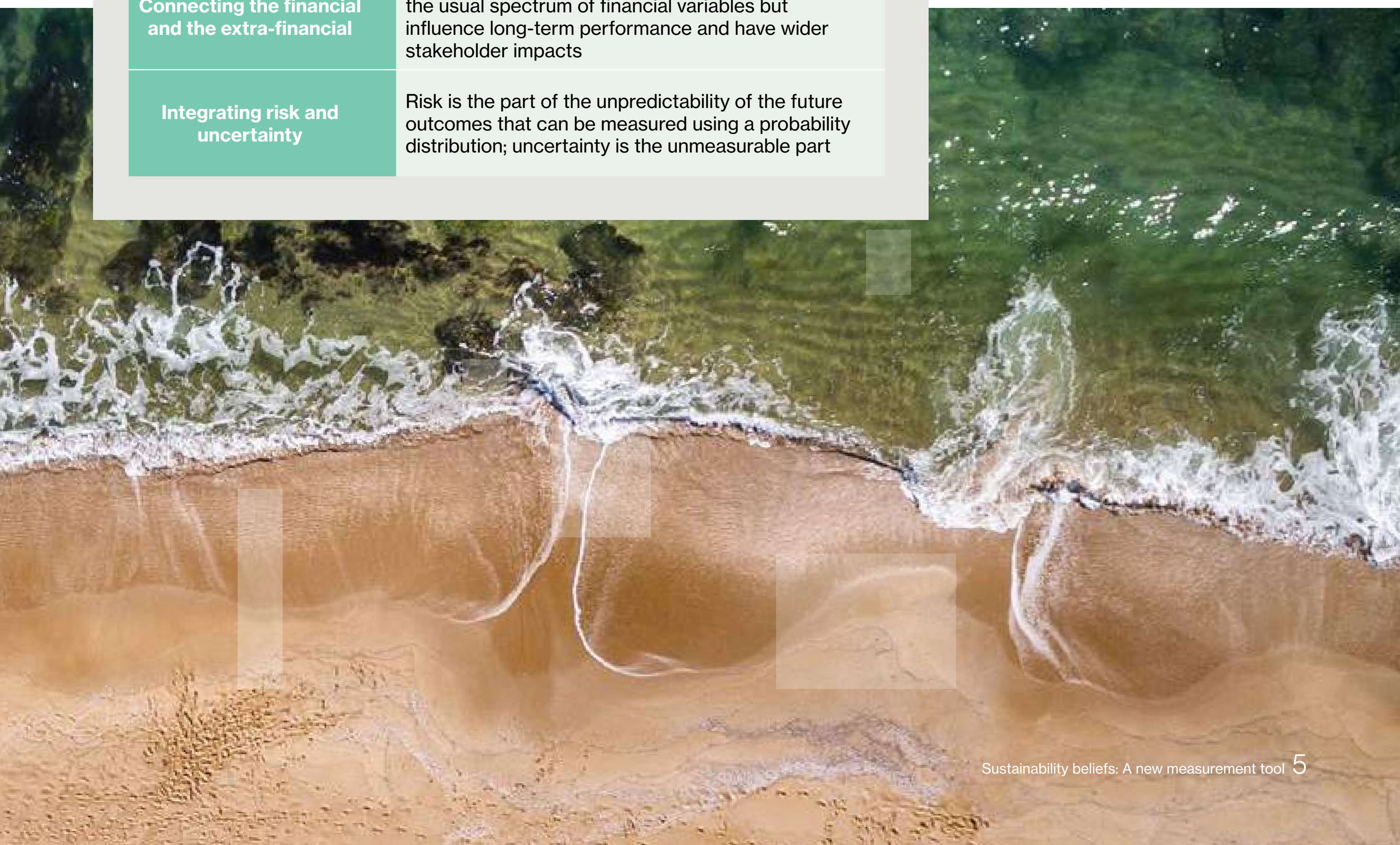


Figure 1. **Asset owners confront sustainability risks in several dimensions**

Financial system	Potential disruption by systemic risks	Alternative socio-political models/civil unrest
Retirement system	Low return environment; inappropriate solutions	Diminished motivation to save/loss of confidence in savings vehicles
Resource & environment	Disruption to entire economy; inability to sustain current consumption levels	Cost of provision of goods and services outstrips returns on saving
Business disruption	New technologies and business models	'Old economy' being replaced – often by unlisted/'private' new entities

Figure 2. **Sustainability in investing demands holistic thinking**

Connecting the short- and long-term	A strategy with good sustainability will not compromise long-term outcomes through short-term preferences
Connecting the financial and the extra-financial	Extra-financial factors, like ESG, lie outside the usual spectrum of financial variables but influence long-term performance and have wider stakeholder impacts
Integrating risk and uncertainty	Risk is the part of the unpredictability of the future outcomes that can be measured using a probability distribution; uncertainty is the unmeasurable part



Believing in beliefs

Why develop beliefs at all? The complexity of implementing a strategy for sustainability is considerable. Given the impossibility of reducing market behaviour and portfolio uncertainty to a series of equations[3], a system of beliefs is needed as the foundation of an accountable, methodical investment process.

We think effective investment belief systems should include most or all of the elements identified in *Figure 3*.

Few asset owners have developed beliefs around sustainability. The reasons for this are various, but we see three chief challenges:

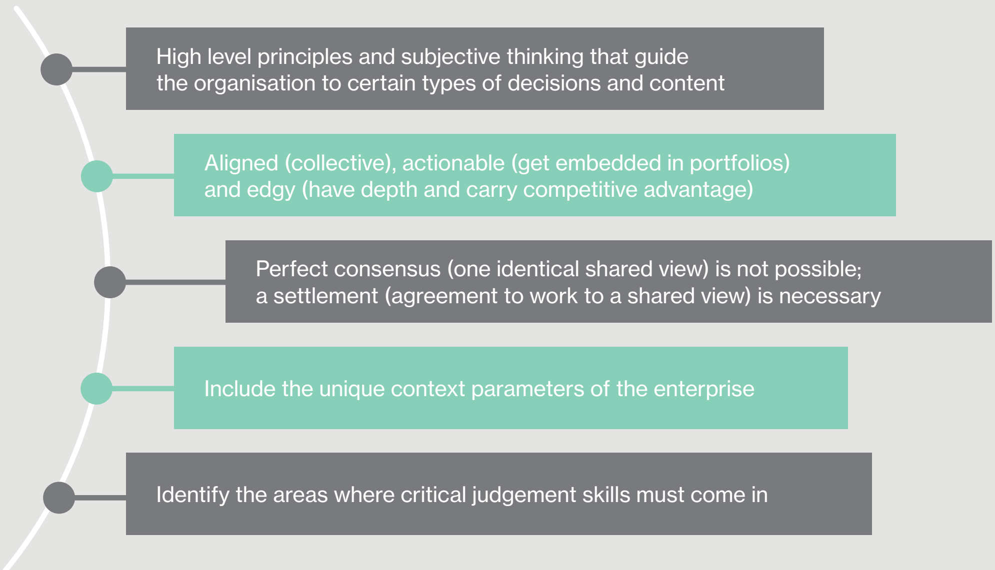
1. **Clarity of mission.** The case for sustainability to cover societal impacts raises questions around the asset owners' responsibilities
2. **The need to invest effectively.** Sustainability is one of multiple influences on the investment landscape – and one whose repercussions are often opaque
3. **Conflation of values and beliefs.** Where personal values and objective beliefs are hard to disentangle, a coherent investment strategy is particularly difficult.

As an illustration of the last challenge, sustainable strategies often conflate financial factors with extra-financial factors (like carbon footprint), thereby mixing objective and subjective data.

CalPERS is a publicly-known case of an asset owner struggling with their sustainability beliefs, and they took some time to settle them. In other words, for asset owners trying to do sustainability better, you are not alone in (a) caring about this subject and (b) having a problem with it.

As for asset managers, we believe they are increasingly incorporating sustainability factors into their investment approach. But without clear demand from asset owners, most have been unwilling to publish definitive beliefs in this area.

Figure 3. **Effective belief systems**



[3] *Going above and beyond: stronger investment theory and practice* – Thinking Ahead Institute

Surveying the scene

We propose a process which starts with investment beliefs, compares these beliefs against a peer group, reflects any differences in the policies and approach, and ends with a mandate (see *Figure 4*).

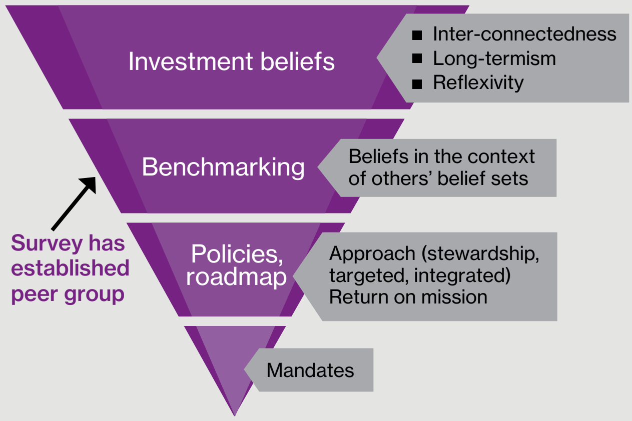
...benchmarking is also challenging because of weak understanding of other organisations' positions.

We have just noted the difficulties involved in developing beliefs. But benchmarking is also challenging because of weak understanding of other organisations' positions. This is relevant for dealing with reflexivity, or how your actions can alter others' positions and hence impact on the success of an investment.

We set out to design a survey that would allow benchmarking relative to other organisations (as well as see how strong their own convictions were). The survey was designed to test beliefs on a range of sustainability-related issues. The outputs measure conviction, motivation and coherence. There was a good response, from asset owners and asset managers, some TAI members and some not.[4] The response data is summarised in the appendix.

[4]At the time of writing, the survey had garnered 392 individual responses, from 42 investment organisations.

Figure 4. **Proposed framework for sustainability**



Validation: Third-party assessment

Our survey methodology was assessed by Dane Rook, PhD, of Stanford University. His report, *The Measurement and Analysis of Sustainable Investment Beliefs: Evaluating a New Approach*, is supportive. The report states: "Thinking Ahead Group at Willis Towers Watson has proposed and deployed a new approach for measuring and analysing aspects of sustainable investment beliefs. This report evaluates that approach, and finds it to be a valid and valuable addition to the best practice toolkit for generating insights about investment beliefs at the organizational level."

Benchmarking beliefs against peers

The responses to the survey allowed us to score six vectors – materiality, mispricing, financial, extra-financial, consistency and uniformity. These suggest an overall positioning of an organisation's sustainability beliefs (See *Figure 5*).

The score varies between 0 and 1 for each vector. A median score for mispricing of 0.7 across all respondents in an organisation, for instance, indicates that the organisation has a fairly strong aggregate conviction that sustainability factors are mispriced by markets.

The position relative to the appropriate peer group[5] adds further value. If peers score 0.6 on average, then the belief of the organisation is relatively strong. This can help the organisation reposition its portfolio to reflect this belief. Equally, if peers score 0.8, then the belief is relatively weak and the organisation is unlikely to have an advantage in exploiting mispricing.

Figure 6 shows sample output from the analysis. The chart compares the distribution of outcomes for a particular organisation (anonymised to ABC) against its peer group. We see that this organisation has a lower belief than its peers both that sustainability-related issues are material and that they are mispriced by the market. Its financial motivation for considering sustainability issues is in line with its peers, while it has a higher extra-financial motivation and may be more conscious of its societal positioning as an investment organisation. Its consistency and uniformity scores are in line with its peers.

At a more granular level, organisations can view their relative strength of agreement with individual questions. This gives further insight and a basis for differentiating the organisation's beliefs from its peers. This in turn indicates how an organisation might position itself on particular sustainability considerations.

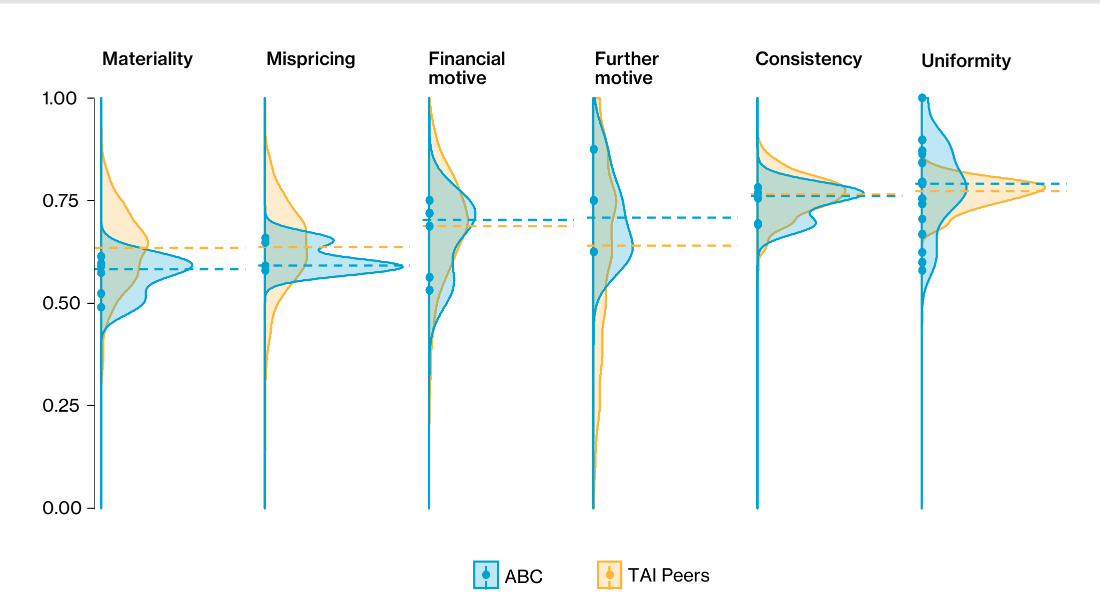
Figure 5. **The six vectors used to frame the results**

Cluster	Vector	Description	Presentation of data
Conviction	**Materiality**	The extent to which respondents believe that sustainability factors are material to investment outcomes	Scores calculated for individual respondents; mean, median and standard deviation are across-respondent stats
	Mispricing	The extent to which respondents believe that sustainability factors are mispriced in the market	
Motivation	**Financial**	The strength of belief in a financial motive (risk-adjusted return) for integrating sustainability into investing	
	Extra-financial	The strength of belief in extra financial motive (for example, investing for a better future) for integrating sustainability into investing	
Coherence	**Consistency**	The degree to which an individual's responses are internally consistent – if statements A and B are similar, consistency suggests an individual's beliefs in these statements should be too	Scores calculated for individual questions; mean, median and standard deviation are across-questions stats
	Uniformity	The extent to which individuals in the group share beliefs. Too much uniformity might suggest group-think, while too little indicates disparate organisational beliefs	

Source: Thinking Ahead Institute

[5]Results for an organisation can be shown relative to several different peer groups, depending on the context in which the organisation is evaluating its outputs.

Figure 6. **Vector plots for organisation ABC relative to peer group**

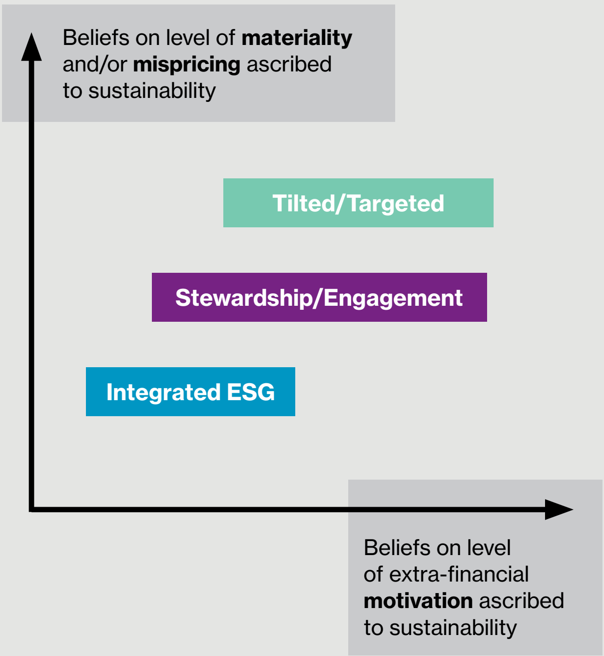


Source: Thinking Ahead Institute

Absolute positioning:
Finding your dot on the matrix

For clarity, this section is written from an asset owner perspective but the read across to asset managers is straightforward. Once an asset owner knows the strength of its sustainability beliefs it is able to assess its positioning over the two dimensions of motivation and conviction. These (sometimes opposing) beliefs can be mapped, as shown in *Figure 7*.

Figure 7. **Strategic responses to sustainability beliefs**



Source: Thinking Ahead Institute

The 'integrated ESG' position is consistent with an organisation that believes sustainability factors pose certain risks which need to be factored into its investment process, but does not set sustainability as a portfolio objective. The second approach, 'stewardship', is more onerous and results in engagement with investee companies to gain comfort they are dealing with sustainability issues. The 'tilted/targeted' approach allows sustainability factors to drive portfolio weights where there is a strong belief that the factors are both material and mispriced.

We can plot the positions of 15 of the world's leading asset owners on this matrix[6] (shown in *Figure 8*). They are generally clustered around the stewardship approach, with just two adopting the most progressive tilted/targeted strategy.

First, we note that there are no sustainability agnostics among this group of sophisticated investors. All of the investment organisations surveyed at least believe that sustainability is material, even if three of them have a 'finance-only mission'. They are mindful of sustainability risks, but lack either the resources or motivation to be more proactive.

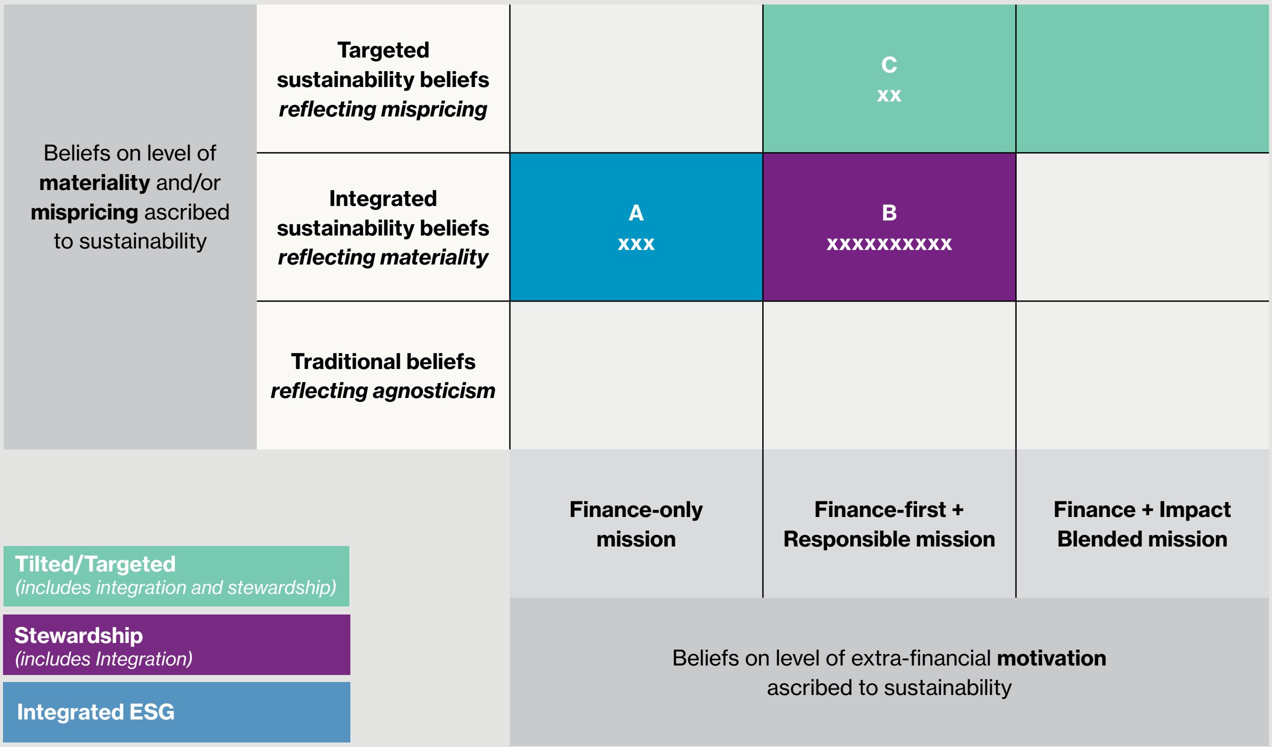
The bulk of respondents, clustered in the middle, believe they have a responsible mission alongside the financial mission. The impact of their investment is factored into decisions to one degree or another. This can be termed a 'finance-first plus responsible mission'. Responsibility implies a refusal to sit on the side-lines. They typically seek to engage with investee companies. Reputation is important to these organisations and they are aware that their size and influence means they require a societal license to operate.

Two of the respondents occupy the top row of the grid, reflecting their strong belief in the mispricing of sustainability risks. They sense a strong opportunity to profit or to manage risk. In this way, they are directly dealing with sustainability, enabling them to better decide when to put risk on or take it off. This is a highly-targeted approach to sustainability.

No asset owner in this study currently occupies the third column in the table in *Figure 8*. This is the 'finance plus impact' blended mission. This mission is more explicitly concerned with non-financial impacts and is comfortable accepting small financial compromises in order to deliver on its non-financial objectives. This mission is therefore easier to adopt for an asset owner not subject to a fiduciary constraint (such as family office or foundation). An interesting pension fund example is Caisse de Depot et Placement du Quebec (CDPQ), which is instructed by the Quebec government to invest with an explicit awareness of the environmental impacts of its capital allocation decisions.

[6] *Smart leadership. Sound followership* – Willis Towers Watson. A 2017 study conducted on behalf of the Future Fund of Australia

Figure 8. **Where are asset owners positioned on sustainability?**



Source: *Future Fund/Willis Towers Watson Peer Study 'Top 15'*, January 2017 data based on $4 trillion AuM.
Dispersion of funds' positioning on sustainability policies on 'beliefs/values grid'.
Some funds still in (A), increasing cluster in (B), small cluster in (C).

Next steps:
How ambitious are you?

So where does all this leave us? The toolkit gives organisations an understanding of their beliefs relative to peers and their positioning on the matrix, but it does not spit out a useable set of sustainability beliefs, or show how to map this to investment portfolios. We suggest the toolkit is the first stage in a process, as *Figure 9* illustrates.

Simple beliefs may add little value to the portfolio. Complex beliefs are likely to be more valuable, but are much harder to socialise.

To create actionable beliefs (stage 2) and ensure engagement (stage 3) probably necessitates forming a working party within an organisation's executive. Stage 1 (the survey) is likely to show stronger agreement on simpler beliefs. However simple beliefs may add little value to the portfolio. Complex beliefs are likely to be more valuable, but are much harder to socialise. One 'trick' is to invite stakeholders to vote on the strawman beliefs using three choices: like it, can live with it, can't live with it.

We would suggest a 75% hurdle for 'like' and/or 'can live with it' before beliefs can start to be incorporated into investment guidelines. During and following this process, the beliefs can be socialised more widely within the organisation, engaging both investment professionals and non-investment staff.

Figure 9. **Beliefs process**

Process stage	Core tool or action	Outcomes
1. Survey at all levels	**Primary beliefs assessed based on single factors**	▪ Conviction vectors
2. Develop beliefs into actionable beliefs	**Working beliefs developed by exec derived from primary beliefs**	▪ Strawman working beliefs
3. Settle the working beliefs	**Adopt socialising/settlement phase.** **Integrate with corporate values** *Apply triage process**	▪ Final working beliefs
4. Map working beliefs to policies to portfolios	**Map working beliefs into investment guidelines**	▪ Principles and policies document ▪ Portfolios comply
5. Socialise more deeply	**Socialise beliefs and build out greater organisation-wide understanding**	▪ Organisation-wide beliefs measured in associate engagement

*Triage process. Test strawmen beliefs under independent agree/can live with/don't agree choices.
Move to adopt belief if agrees get 50% majority and agrees + can live withs get 75% majority.

Case study:
Benchmarking in action

Asset owner XYZ, chosen from the sample, has a strong belief (0.64) in the **materiality** of sustainability. However, as can be seen below, this belief is no more pronounced than the asset owner peer group (also 0.64). It does, however, have a slightly higher belief in the **mispricing** of sustainability.

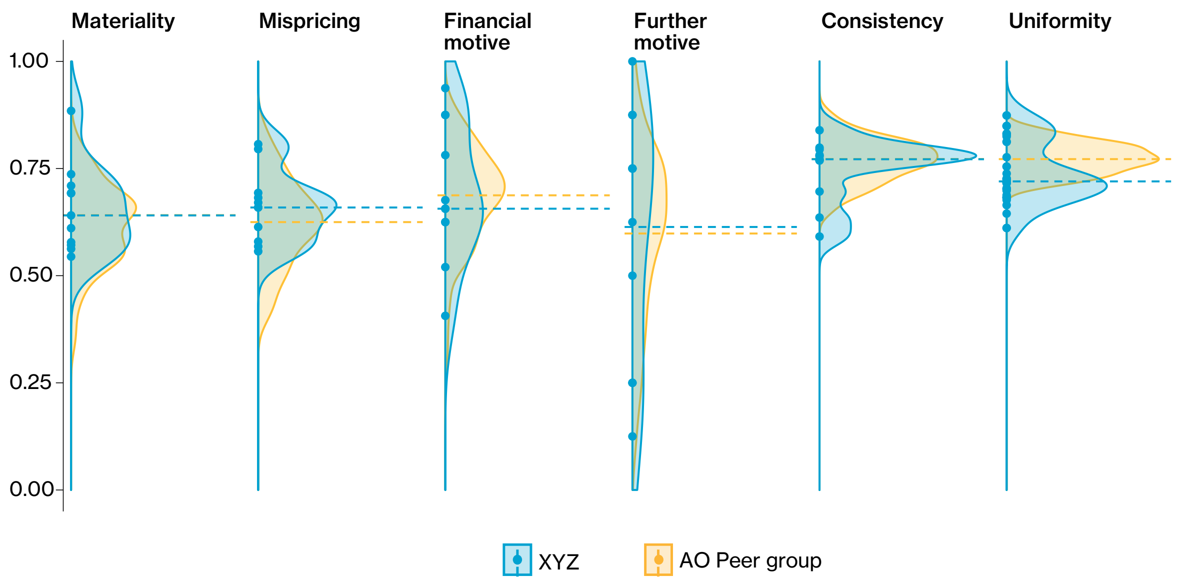
XYZ's belief in the **financial motive** for integrating sustainability is slightly below that of its peer group, perhaps implying XYZ feels the fiduciary constraint more keenly. Conviction in the **extra-financial motive** is in line with that of other asset owners.

We have used **consistency** of individual responses as a proxy for how well-settled beliefs are on sustainability. Overall results suggest that XYZ is in line with its peer group in this regard.

The level of **uniformity** of beliefs across individuals within XYZ is lower than for its peer group. We suggest that there is a 'sweet spot' for uniformity – too high might indicate that group-think has taken hold within an organisation, while too low suggests dissonance that will impede the formation of a cohesive set of organisational beliefs.

Figure 10. **Vector charts: XYZ relative to asset owner universe**

Mean	0.66	0.62	0.66	0.62	0.69	0.69	0.61	0.60	0.75	0.77	0.74	0.77
Median	0.64	0.64	0.66	0.62	0.66	0.69	0.75	0.62	0.77	0.77	0.72	0.77
Std deviat'n	0.10	0.10	0.08	0.10	0.16	0.11	0.29	0.20	0.08	0.05	0.07	0.03

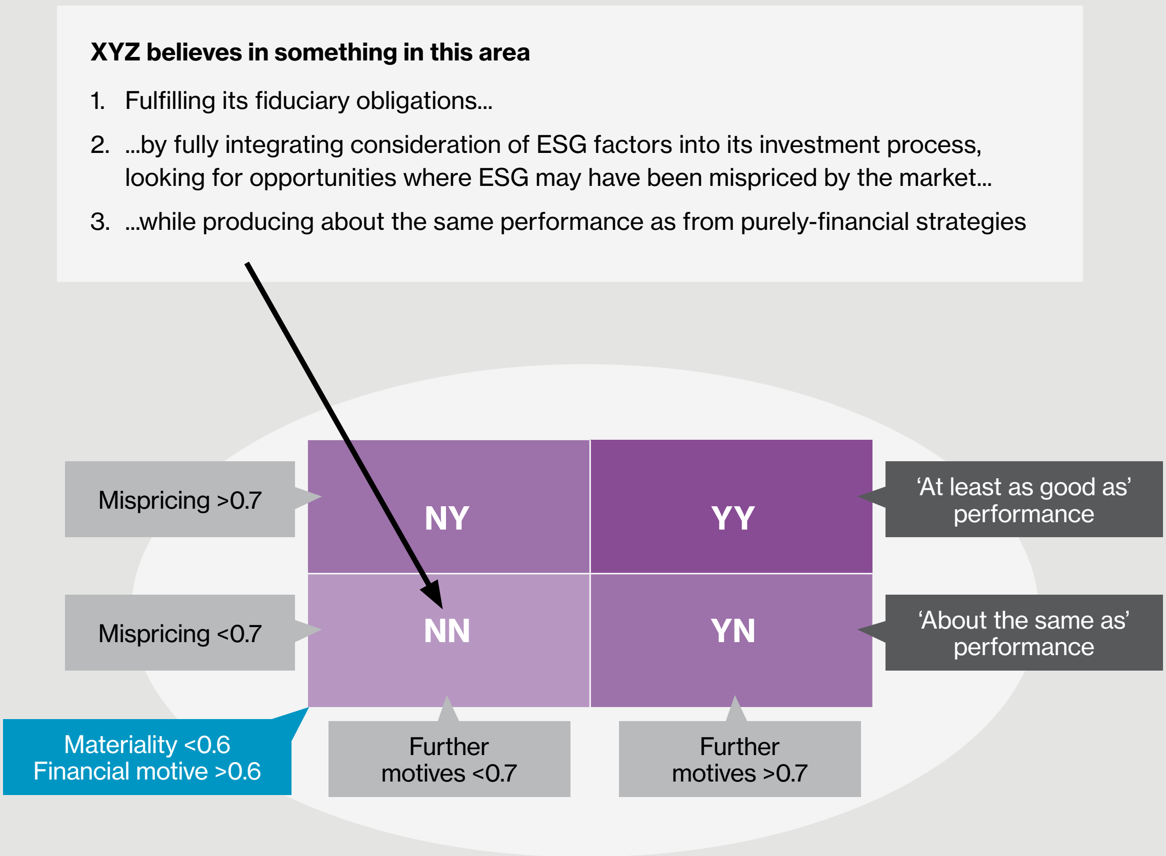


Source: Thinking Ahead Institute

From the vector charts, we can ascertain where asset owner XYZ sits on the sustainability matrix.

There is no great belief relative to the peer group in terms of mispricing, or in terms of financial or further motives, so XYZ can be said to have an 'integrated ESG' mission.

Figure 11. **Differentiating beliefs positions within the 'stewardship box'**



Source: Thinking Ahead Institute

A more detailed view of XYZ's beliefs relative to its peer group can be obtained with reference to its specific survey responses. The five statements with which XYZ agreed with most, relative to peers, are shown below in *Figure 12*.

Figure 12. **Agreement: XYZ versus asset owner peer group**

✓ XYZ		✓ Peers	
30.	Climate change will only create material impacts for society over the very long term	**19.**	The execution of ownership rights can increase performance and lower risk over time
12.	Considering ESG issues will lead to better analyses and decisions	**5.**	I am willing to accept a lower return in the s t to deliver higher l-t returns
19.	The execution of ownership rights can increase performance and lower risk over time	**12.**	Considering ESG issues will lead to better analyses and decisions
34.	We can ignore stranded assets in anticipation of adaptive organisational and market responses	**7.**	Sustainability in investing is broader than considering ESG factors
7.	Sustainability in investing is broader than considering ESG factors	**24.**	Excluding what proportion of an equity index would create the risk of a 'significant financial detriment'

Source: Thinking Ahead Institute

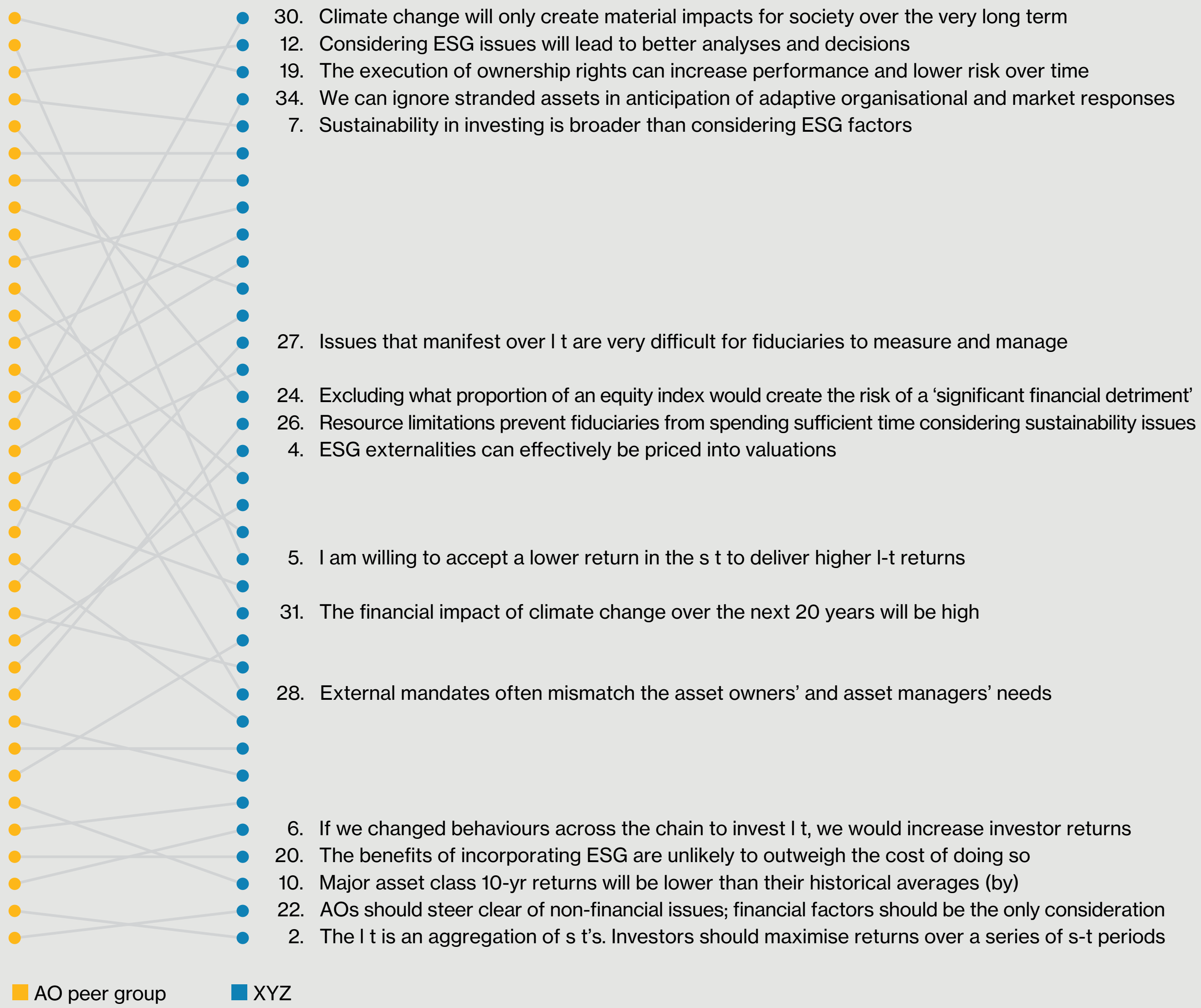
These responses can then be set out as *Figure 13*, opposite, showing the hierarchy of all XYZ's beliefs versus its peers'. The steepness of the connecting lines shows the degree of disagreement with peers.

As an example of how this can be used, consider statement 34:

"We can ignore stranded assets in anticipation of adaptive organisational and market responses".

This statement ranks high up for organisation XYZ, but lower down for the peer group. This suggests that XYZ has a stronger belief than its peers that 'stranding' is reflected in market prices.

Figure 13. **Agreement plot relative to asset owner peer group**



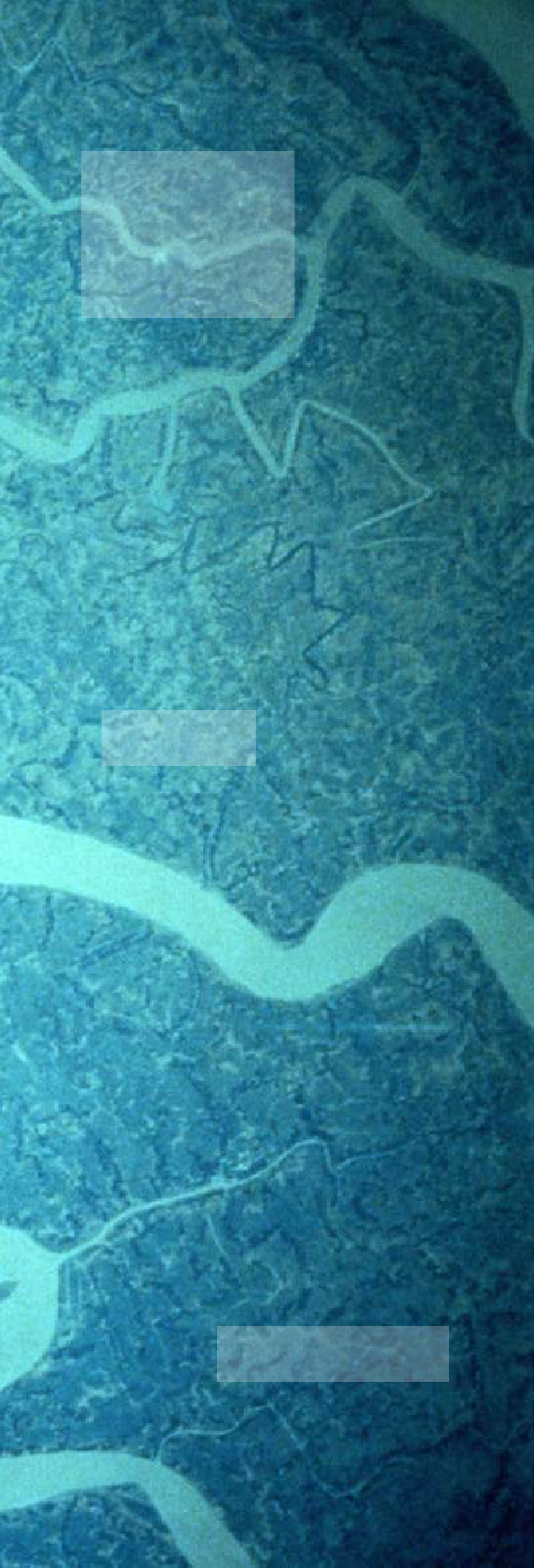
Source: Thinking Ahead Group, XYZ

Conclusion
Reinvigorating a flagging conversation

The toolkit outlined in this paper is designed to encourage and help investment organisations take the first step on a complex journey. It is admittedly not a total solution but it provides investment organisations with a reference point for initial discussions and subsequent actions.

We think it starts to address a substantial gap in understanding the implications of sustainability for investing. This gap has left many investors frustrated and effectively sitting on the side-lines. For them, conversations about sustainability have stalled.

We hope that, with the new roadmap set out in this paper, conversations can now restart. As ever, we would value your views on this paper.



The Thinking Ahead Institute

The Thinking Ahead Institute seeks to bring together the world's major investment organisations to be at the forefront of improving the industry for the benefit of the end saver. 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 global not-for-profit group comprising asset owners, investment managers and service providers. It has over 40 members with combined responsibility for over US$13 trillion and aims to:

- Build on the belief in the value and power of thought leadership to create positive change in the investment industry
- Find and connects people from all corners of the investment world and harnesses their ideas
- Work to bring those ideas to life for the benefit of the end saver.

At the Institute we identify tomorrow's problems and look for investment solutions, which, we strive to achieve through:

- A dynamic and collaborative research agenda that encourages strong member participation through dedicated working groups
- A global programme of events including roundtable and key topic meetings, webinars and social events
- One-to-one meetings between Institute member organisations and senior representatives of the Thinking Ahead Group.

The solutions we collectively develop fall into three overlapping areas:

- Better investment strategies
- Better organisational effectiveness
- Enhanced societal legitimacy.

This framework guides the Institute research agenda and the desired output of each research project. The Thinking Ahead Group acts as the Institute's full-time executive. The Institute has a governance board comprising both Institute members and Thinking Ahead Group representatives.

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.

Limitations of reliance – Willis Towers Watson

Willis Towers Watson has prepared this material for general information purposes only and it should not be considered a substitute for specific professional advice. In particular, its contents are not intended by Willis Towers Watson to be construed as the provision of investment, legal, accounting, tax or other professional advice or recommendations of any kind, or to form the basis of any decision to do or to refrain from doing anything. As such, this material should not be relied upon for investment or other financial decisions and no such decisions should be taken on the basis of its contents without seeking specific advice.

This material is based on information available to Willis Towers Watson at the date of this material and takes no account of subsequent developments after that date. In preparing this material we have relied upon data supplied to us by third parties. Whilst reasonable care has been taken to gauge the reliability of this data, we provide no guarantee as to the accuracy or completeness of this data and Willis Towers Watson and its affiliates and their respective directors, officers and employees accept no responsibility and will not be liable for any errors or misrepresentations in the data made by any third party.

This material may not be reproduced or distributed to any other party, whether in whole or in part, without Willis Towers Watson's prior written permission, except as may be required by law. In the absence of our express written agreement to the contrary, Willis Towers Watson and its affiliates and their respective directors, officers and employees accept no responsibility and will not be liable for any consequences howsoever arising from any use of or reliance on this material or the opinions we have expressed.

Contact details

Tim Hodgson
+44 1737 284822
tim.hodgson@willistowerswatson.com

About Willis Towers Watson

Willis Towers Watson (NASDAQ: WLTW) is a leading global advisory, broking and solutions company that helps clients around the world turn risk into a path for growth. With roots dating to 1828, Willis Towers Watson has 40,000 employees serving more than 140 countries. We design and deliver solutions that manage risk, optimise benefits, cultivate talent, and expand the power of capital to protect and strengthen institutions and individuals. Our unique perspective allows us to see the critical intersections between talent, assets and ideas – the dynamic formula that drives business performance. Together, we unlock potential. Learn more at willistowerswatson.com.

Willis Towers Watson
71 High Holborn
London
WC1V 6TP

willistowerswatson.com/social-media

willistowerswatson.com

Thinking Ahead Institute

Willis Towers Watson