

# HOW CAN NET ZERO FINANCE BEST DRIVE POSITIVE IMPACT IN THE REAL ECONOMY

Discussion Paper, Finance Sector  
Expert Group for Race to Zero and  
Race to Resilience, UN High-Level  
Champions for Climate Action.

April 2022

**Authors:** Ben Caldecott, Jakob Thomae, James  
Mitchell and Matt Scott

# ABOUT FSEG

The Finance Sector Expert Group for Race to Zero and Race to Resilience (“FSEG”) was established in 2021 by the UN High-Level Champions for Climate Action (the “Champions”) to advise them on consistent, fair, and rigorous interpretation guidelines of the Race to Zero and Race to Resilience criteria for the finance sector.

Where appropriate and in consultation with partners, the FSEG will produce guidance to support finance actors participating in Race to Zero and Race to Resilience, support the Expert Peer Review Group (EPRG) deliver its review and advisory functions for finance actor-related networks and initiatives, and support the creation and maintenance of a community of practice for finance actors participating in Race to Zero and Race to Resilience.

FSEG comprises experts and practitioners with relevant experience, including representatives from Race to Zero and Race to Resilience Partners. FSEG members serve in their individual capacity, not as representatives of their organisations, and are not compensated or remunerated for their time. The FSEG full Terms of Reference can be accessed [here](#)<sup>1</sup>.

## Members of FSEG:

- Ben Caldecott (University of Oxford) – Chair
- Amal-Lee Amin (CDC)
- Barbara Buchner (Climate Policy Initiative)
- Herry Cho (Singapore Exchange)
- Cynthia Cummis (World Resources Institute)
- Margaret L. Kuhlow (WWF)
- Kate Levick (E3G)
- James Mitchell (Rocky Mountain Institute)
- Gustavo Pinheiro (Instituto Clima e Sociedade)
- Matthew Scott (Willis Towers Watson)
- Stacy Swann (Climate Finance Advisors)
- Vladimir Stenek (International Finance Corporation)
- Jakob Thomae (2° Investing Initiative Deutschland)
- Wang Yao (Central University of Finance and Economics, Beijing)



DISCLAIMER: In 2025, 2° Investing Initiative became the Sustainable Finance Observatory (The Observatory). This research is the intellectual property of The Observatory.

<sup>1</sup> <https://unfccc.int/sites/default/files/resource/Finance%20Sector%20Expert%20Group%20for%20RtZ%20and%20RtR%20-%20Terms%20of%20Reference%20-%2001.01.2021.pdf>

## Suggested citation

Caldecott, B., Thomae, J., Mitchell, J., & Scott, M. (2022) *How can net zero finance best drive positive impact in the real economy*. Discussion Paper. Finance Sector Expert Group for Race to Zero and Race to Resilience, UN High-Level Champions for Climate Action.

## Disclaimer

The views expressed in this paper represent those of the authors and do not necessarily represent those of the Finance Sector Expert Group for Race to Zero and Race to Resilience, UN High-Level Champions for Climate Action, or other institutions or funders. The paper is intended to promote discussion and to provide public access to results emerging from our work.

# EXECUTIVE SUMMARY

The Race to Zero and Race to Resilience are gathering pace, both in the private sector and in public policy. At COP26 in Glasgow, financial institutions with assets totalling over \$130 trillion in assets committed to net zero and the UK became the first country to commit to transition its financial sector to net zero by 2050.

Net zero finance represents a significant turning point, building on the leading practices already being implemented by banks, insurers and investors, the actions by central banks and supervisors to integrate climate-related risk into mainstream finance and initiatives such as the Task Force on Climate-related Financial Disclosures (TCFD) to promote mandatory climate disclosure.

Net zero is important, as aligning the global economy with the Paris Agreement ('Paris alignment') entails achieving net zero in every sector quickly enough to hold the increase in the global average temperature to well below 2 degrees above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 degrees. Net zero is a necessary condition to stabilise global temperatures at any level, but achieving well below 2 degrees and aiming for 1.5 degrees requires a very steep emissions reduction pathway, with 50% cuts by 2030 and global net zero achieved by around 2050.

As attention turns to executing new climate-related finance commitments, important nuances are emerging in the application of 'Paris alignment' and 'net zero' to financial institutions and finance sub-sectors as compared to other sectors.

For example, a variety of market participants<sup>2</sup>, civil society organisations, and researchers are highlighting that short-term actions to decarbonise portfolios – such as rebalancing away from fossil fuel companies into technology companies in listed equity portfolios through secondary market transaction – may not be an effective way to support Paris alignment in the real economy.

The actions that financial institutions need to take to drive positive change towards Paris alignment will almost certainly be quite different. But what are they and how should financial institutions design and execute plans to support Paris alignment? This discussion paper seeks to acknowledge these nuances and explore frameworks that may be helpful to support financial institutions in driving outcomes in the real economy – in other words, to 'maximise real economy impact'.

Given the nascent and evolving nature of the topic, the paper is intended to inform discussion, present selected research from the research community and frame a set of questions to begin exploring the theme of 'real economy impact' in the context of Paris alignment in more depth. It does not intend to set out a definitive framework at this stage.

---

<sup>2</sup> For example, <https://www.ipe.com/special-reports/pensiondanmark-real-world-impact-and-active-ownership/10055971.article>

Specifically, the paper:

- i. Highlights views and practices that are emerging from the financial sector with respect to the application of Paris alignment, net zero, and the theme of 'real economy impact'.
- ii. Introduces an illustrative sample of relevant research and literature, for example, emerging distinctions between impact alignment and impact generation and investor impact and company impact, to help inform discussions.
- iii. Sets out a potential TCFD-based approach to maximise impact generation and help financial institutions to systematically support Paris alignment in the real economy.
- iv. Discusses the use of metrics for 'real economy impact', and the merits of greater transparency and academic research to advance our collective understanding.
- v. Invites responses to four consultation questions by **1st July 2022**. Please [email jakob@2degrees-investing.org](mailto:jakob@2degrees-investing.org) with your responses.

Given its focus on reducing 'real world' emissions, and therefore mitigating system-wide risks from a disorderly transition or a future 'hot-house' world scenario, the paper may also be of interest to central banks and financial regulators, for example, in the oversight of strategic and ambitious responses to climate change to meet supervisory expectations and responsibilities to address systemic risks embedded in stewardship codes.

# 1. EMERGING NUANCES OF APPLYING NET ZERO TO THE FINANCIAL SECTOR

The Race to Zero and Race to Resilience presents a whole economy approach to placing climate considerations at the heart of business and finance. New net zero and climate resilience commitments are driving innovation across the corporate and finance sector to accelerate a just transition to a Paris aligned and climate resilient economy.

At the same time, as financial sector commitments begin to be implemented in practice, market participants, civil society organisations, and researchers are noting the application of net zero target setting for financial institutions can be more nuanced than for other sectors. For example:

- Net zero finance alliances are recognising the need to channel net zero commitments in a way that drives outcomes in the real economy (see Box 1). And the recent consultation by the Science-based Targets initiative (SBTi) recognises the goal of the initiative is for target setting to result in emissions in the real economy.<sup>3</sup>
- Joint regulator and industry forums, such as the UK's Climate Financial Risk Forum (CFRF), are setting out illustrative climate disclosure dashboards which are inclusive of, and much broader than, monitoring progress against portfolio decarbonisation targets. This includes noting important distinctions between impact metrics – such as the carbon intensity of a portfolio – and financial risk metrics, such as the change in asset valuations under a 'well below 2C' scenario.
- Asset owners (see Box 2) are pioneering approaches to enhance the transparency of progress in decarbonising their portfolios, including differentiating between:
  - a. the reduction in portfolio decarbonisation that has resulted from companies in their portfolio reducing their carbon footprint; and
  - b. the reduction in portfolio decarbonisation that has resulted from changes in holdings within the portfolio.

More broadly, market participants are also highlighting that short-term actions to decarbonise portfolios may not necessarily be aligned with actions required to decarbonise the economy<sup>4</sup>, particularly with reference to the need to accelerate financial flows into emerging markets.

With these developments in mind, and to ensure the effectiveness and integrity of financial sector commitments, we would welcome views on the first consultation question outlined below:

## Consultation question 1

- 1. Is there a need for financial firms to provide further information on how they will generate impact to support Paris alignment in the real economy?**

<sup>3</sup> SBTi finance project - <https://sciencebasedtargets.org/sectors/financial-institutions>

<sup>4</sup> For example, commentary by Ninety-One's CEO, Henrik du Toit.

## Box 1: References to real economy impact in commitments from net zero finance alliances

Net-Zero Alliance / Initiative	Mentions of the real economy impact
Net-Zero Asset Owner Alliance (NZAOA)	<p><b>In the target-setting document:<sup>5</sup></b></p> <p>“In order to enable members to meet their fiduciary duty to manage risks and achieve target returns, this Commitment must be embedded in a holistic ESG approach, incorporating but not limited to, climate change, and <b>must emphasise GHG emissions reduction outcomes in the real economy.</b>” (p. 18)</p> <p>“In line with the above commitment, the Alliance and its members are committed to supporting the <b>real economy</b> in its transition to a net-zero world, while, at the same time, being guided by science. It is important to note that the <b>real economy</b> is not moving as fast as the science recommends and this departure creates a substantial challenge for Alliance members who <b>are committed to holding a net-zero portfolio as well as investing in a net-zero world.</b>” (p. 19)</p> <p><b>“It is important to understand the difference between reducing emissions in an investment portfolio and reducing emissions in the real economy.</b> While many mechanisms and strategies may contribute to lowering investment risks, meeting customer demands, or supporting climate targets, <b>they do not contribute equally to lowering emissions in the real economy.</b> The Alliance seeks to draw on the most effective, legally compliant strategies, such as engagement, capital allocation strategies and investment opportunities to enable change and to benchmark progress to show the global investment community <b>how investors can drive real world emissions reductions.</b>” (p. 20)</p> <p>“If the proceeds [of divestment] are used in such a way that they contribute to a change in the financing cost or liquidity for activities considered to yield <b>positive impacts on the real economy</b>, it could be argued that a divestment strategy can contribute to real world change.” (p. 21)</p> <p>“The likelihood of [sector weighting and best-in-class] strategies contributing to emissions reductions in the <b>real economy remains uncertain</b> as the empirical evidence is limited. The rationale is similar to other capital alignment approaches where the argument is that these ‘best-in-class’ leaders would enjoy a lower cost of capital and higher market values as they are recognised for their positive contribution to climate targets. The likelihood of these strategies contributing to measurable impacts in the real economy depends on the proportion of investors applying the same strategy (i.e., achieving critical mass) and the cost for the company to implement the necessary reforms to improve their performance.” (p. 22)</p> <p>“[...] investors are more likely to <b>reduce real economy emissions</b> if they target companies that are already constrained in their growth prospects by external market conditions such as access to financing (Kölbel, Heeb et al., 2019).” (p. 22)</p>

<sup>5</sup> UN-convened Net-Zero Asset Owner Alliance, “Target Setting Protocol: Second Edition,” January 2022, <https://www.unepfi.org/wordpress/wp-content/uploads/2022/01/NZAOA-Target-Setting-Protocol-Second-Edition.pdf>

	<p>“[...] defining net-zero portfolio pathways will reflect both the requirements of science and the needs of the real economy, while also considering implications for a Just Transition [...] Each time that an Alliance member adopts its targets following scientific pathways while the global economy does not move as required by science, <b>the gap between the Alliance member’s target setting and the real economy widens</b> [...] This widening ‘gap’ represents a <b>decoupling of the Alliance member’s (or other net-zero committed investor’s) targets from the real economy pathway</b>. Eventually, if not very soon, this will force members to divest from entire sectors to bring their portfolios in line with the set target range and reduce the flow of capital to those highly capital-intensive sectors which require financing to transition (such as aviation, transport, and materials). This outcome would be <b>highly harmful to the speed of the planetary transition to net zero as the real economy is left behind, hence limiting the real impact on global warming</b>. The Alliance member can only de-couple from the real economy benchmark to a certain extent before its portfolio no longer reflects the sectors, of which, a net-zero economy would be comprised [...] Thus, the integration of the commitment via engagement—with corporates, but also policymakers, asset managers, and others—is considered a core component of the Protocol to ensure that not only the Alliance members’ portfolios transition to net zero, but that the actions of Alliance members also have an <b>impact on the real economy</b> [...] Thus, the 2025 interim target must be ambitious enough to signal an Alliance member’s expectations while taking into account that the real economy is only just beginning its net-zero transition.” (pp. 25-26)</p> <p>“[...] in the short-term, some Alliance members may choose lower range reduction targets (following an ‘s’ shaped curve, rather than a linear pathway to net zero) <b>in order to support the transition in the real economy</b>.” (p. 27)</p> <p>[Regarding the Protocol scope] “While several approaches exist, no single stand-alone methodology was determined to be suitable to drive GHG emissions reductions in the real economy on a long-term basis. Furthermore, it is generally thought that a <b>multi-faceted approach is likely to be more successful in addressing a challenge as complex as the net-zero transition</b>.” (p. 30)</p> <p>“Sector targets inform the need to invest in climate solutions, track changes in the underlying holdings in line with a net-zero trajectory, as a direct or indirect result of engagement and policy actions. This is done by tying emissions reductions in the overall portfolio to real economy sector emitters held in the portfolio.” (p. 58)</p> <p>“The reason for not recommending setting targets on absolute emissions only is to limit the risk of divestments and to <b>stimulate emissions reductions in the real economy</b>, as well as capture carbon efficiency gains related to business transition.” (p. 60)</p>
<p>Net-Zero Banking Alliance (NZBA)</p>	<p><b>In the CCCA/NZBA Guidelines:</b><sup>6</sup></p> <p>“Impact in the real economy: <b>targets shall focus on achieving an impact in the real economy</b>.” (p. 3)</p> <p>“Signatories to the Collective Commitment to Climate Action are required to: [...] Drive and facilitate the <b>necessary transition in the real economy</b> through their client relationships, products and services.” (p. 15)</p> <p><b>In the Net Zero Banking Commitment Statement:</b><sup>7</sup></p> <p>“We will meet this commitment through: facilitating the necessary <b>transition in the real economy</b> through prioritising client engagement, and offering products and services to support clients’ transition; engaging on corporate and industry (financial and real economy) action, as well as public policies, to help support a net-zero transition of economic sectors in line with science and giving consideration to associated social impacts; and supporting innovation, the near-term deployment of existing viable technologies, and scaling up the financing of credible, safe, and high-quality climate solutions that are compatible with other Sustainable Development Goals.” (p. 2)</p>

<sup>6</sup> UN Environment Programme Finance Initiative, “Guidelines for Climate Target Setting for Banks,” April 2021, <https://www.unepfi.org/wordpress/wp-content/uploads/2021/04/UNEP-FI-Guidelines-for-Climate-Change-Target-Setting.pdf>

<sup>7</sup> UN Environment Programme Finance Initiative, “Net-Zero Banking Alliance Commitment Statement,” <https://www.unepfi.org/wordpress/wp-content/uploads/2021/04/UNEP-FI-NZBA-Commitment-Statement.pdf>

<p>Net Zero Asset Managers Initiative (NZAMI)</p>	<p><b>In the Net Zero Asset Managers Commitment:<sup>8</sup></b></p> <p>“In order to fulfil [NZAMI] commitments my organisation will: [...] Prioritise the achievement of <b>real economy emissions reductions</b> within the sectors and companies in which we invest.”</p>
<p>The Institutional Investors Group on Climate Change (IIGCC) / Paris Aligned Investment Initiative (PAII)</p>	<p><b>Under PAII description:<sup>9</sup></b></p> <p>“The [PAII] initiative has the following objectives: [...] Support investors to implement these best practice methodologies and approaches, addressing challenges and barriers, in order to drive real economy transition towards a net zero and resilient future.”</p> <p><b>In the PAII-Net-Zero-Asset-Owner-Commitment-Statement:<sup>10</sup></b></p> <p>“In this context, my institution commits to the following consistent with our fiduciary obligations: [...] 2. Implementing this commitment with the aim of achieving <b>real economy emissions reductions</b> and undertaking a comprehensive set of actions available to investors, drawing on the Paris Aligned Investment Initiative’s Net Zero Investment Framework.” (p. 1)</p> <p><b>In the Net Zero Investment Framework 1.5C Implementation Guide:<sup>11</sup></b></p> <p>“The Framework recognises that investors have a range of levers at their disposal to drive decarbonisation and increase investment in climate solutions, and these should be used to ensure <b>progress in the real economy as well as reaching targets for the portfolio itself</b>. It provides recommended methodologies and actions which asset owners and asset managers should use to assess and undertake alignment of their portfolios towards net zero, to maximise their contribution to the decarbonisation of the real economy.” (p. 7)</p> <p>“The investment strategy should define how the investor considers these targets and actions to represent the maximum possible effort to <b>achieve real economy emissions reductions</b> and increase allocations to climate solutions, subject to fiduciary and regulatory constraints.” (p. 9)</p> <p>“At the portfolio level, set the following reference targets, and review and update at least every 5 years: [...] “evidence of how the target has been determined and a) reflects net zero pathways that will meet absolute emissions reductions required over time, and b) is adjusted to take account of factors that are not related to <b>real economy emissions reductions</b> as relevant.” (p. 10)</p> <p>“The key driver for achieving net zero targets and securing <b>emissions reductions in the real economy</b> is the increasing alignment of assets to net zero pathways within asset class portfolios.” (p. 13)</p> <p>“In this context, my institution commits to the following consistent with our fiduciary obligations: [...] 2. Implementing this commitment with the aim of achieving <b>real economy emissions reductions</b> and undertaking a comprehensive set of actions available to investors, drawing on the Paris Aligned Investment Initiative’s Net Zero Investment Framework.” (p. 28)</p> <p>“Specifically, my organisation commits to: [...] <b>3. Prioritise the achievement of real economy emissions reductions within the sectors and companies in which we invest.</b>” (p. 29)</p>

<sup>8</sup> Net Zero Asset Managers Initiative website, <https://www.netzeroassetmanagers.org/#>

<sup>9</sup> IIGCC PAII website, <https://www.iigcc.org/our-work/paris-aligned-investment-initiative/>

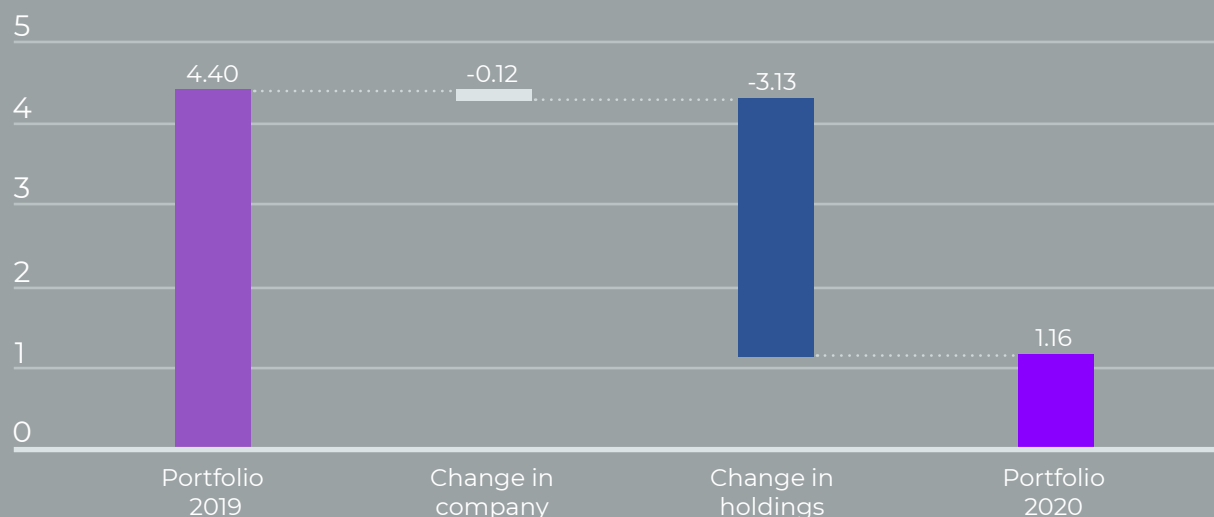
<sup>10</sup> The Paris Aligned Investment Initiative Net Zero Asset Owner Commitment, <https://www.parisalignedinvestment.org/media/2021/03/PAII-Net-Zero-Asset-Owner-Commitment-Statement.pdf>

<sup>11</sup> IIGCC PAII, “Net Zero Investment Framework 1.5C Implementation Guide,” Version 1.0 from March 2021, [https://www.parisalignedinvestment.org/media/2021/03/PAII-Net-Zero-Investment-Framework\\_Implementation-Guide.pdf](https://www.parisalignedinvestment.org/media/2021/03/PAII-Net-Zero-Investment-Framework_Implementation-Guide.pdf)

## Box 2: Portfolio Decarbonisation disclosures by AP2

### GRAPH 3. ATTRIBUTION OF THE CAUSES OF THE CHANGE IN CARBON FOOTPRINT BETWEEN 2019 AND 2020

Footprint CO<sub>2</sub>e (mio tonnes)



## 2. RELEVANT RESEARCH TO INFORM DISCUSSION

As the need for ‘real-economy impact’ is increasingly recognised, there is a growing literature on what it means to have impact through finance and investment, as referenced in Annex 1.

By way of illustration, this section discusses two key areas of relevant research, notably the distinction between impact alignment and impact generation, and the distinction between outputs, outcomes, and impact. Section 3 then seeks to build on the discussion by exploring how the Governance, Strategy, Risk Management and Target and Metrics framework used by the TCFD could be applied to the area of ‘real economy impact’.

In discussing this research, and providing an overview of relevant literature listed in the Annex, we invite responses to its second consultation question below:

### Consultation question 2

**Is the research outlined in this paper helpful in considering ‘real economy impact’? Are there other sources of literature and research in this area that may be helpful?**

#### 2.1 Impact-alignment vs impact-generation

There is a growing literature on what it means to have impact through finance and investment, for example, see Brest et al. (2013, 2018a), Busch et al. (2021), Caldecott (2020a, 2020b, 2020c), and Kölbel et al. (2020a). This literature, while deploying different terminologies and concepts, all focuses on the key distinction between the concept of ‘impact-alignment’ and ‘impact-generation’, two terms adapted from Busch et al. (2021).

- Impact-alignment is seeking to increase portfolio exposures to companies and assets that create or are on a pathway to creating the impact a financial institution is seeking to have on the real world. In terms of climate change mitigation, this is companies and assets that are on a pathway to being net zero or are already net zero today.
- Impact-generation is seeking to drive real-world climate outcomes not just by investing in companies that are aligned but actively contributing to overall decarbonization objectives.

The reason it is important to distinguish between impact-alignment and impact-generation is that impact-aligning a portfolio does not necessarily create impact. This is especially the case for secondary market transactions in large public markets, where there are deep pools of capital and many buyers and sellers.

Typically, climate or carbon footprinting exercises and climate alignment analytics at the moment only measure impact-alignment, and not impact-generation. There are however first attempts to move towards impact-generation measurement, explored in further detail later in this report.

A core principle of this concept is that impact in the real economy can be allocated to different economic actors and that it is important to distinguish between the impact generated by each of them. Kölbel et al. (2020a) distinguish notably between company and investor impact, but of course impact can also be generated by governments, NGOs, etc. This complexity is one of the barriers to meaningfully driving impact management systems in financial markets.

It is also important to note that we are not claiming that impact-alignment cannot create impact, merely that impact-alignment is not necessarily sufficient to create impact. As we consider the financial sector’s role in delivering the Paris Agreement, we need to ensure that financial institutions are making a difference and in many cases this will mean going beyond impact-alignment.

## 2.2 Outputs vs. outcomes

With the ambition of maximizing the impact of its portfolios on climate change mitigation, a financial institution decides to implement various *climate actions* to reach its ambition - for example, engaging with companies in high carbon sectors. These *actions* lead to *outputs*, namely the direct consequence of the actions – for example, a change in the WACC of targeted companies. These outputs turn into *outcomes* (encouraging growth or improvements) at investee’s activities level – for example, a change in the investees’ capex plans, or a growth in their production. The outcomes finally trigger a reduction of GHG emissions (*impact*). Figure 1 below summarizes these steps.

The path from climate action to impact is not clear:

- A climate action might not result in an output: for instance, excluding high-carbon assets from the portfolio (the action) might not tangibly increase the cost of capital for the underlying high-carbon company (the unachieved output);
- An output might not translate into an outcome: the increased cost of capital resulting from an exclusion policy (the output) might not trigger a change in the investee’s activities (the unachieved outcome), for example due to a disproportion between the incentive to change and the cost of change;
- An outcome might not translate into an impact: a company implements a new green project as a result of an FI action (the outcome), but it fails due to competition.

Each type of climate action is subject to these uncertainties; however, the depth of the uncertainty varies depending on the climate action type considered and on the modalities of implementation. Many of these are also highly context dependent. Consequently, the probability that a given action will yield an impact varies. When financial institutions consider how they can maximise impact generation they ought to consider these uncertainties.

Currently, disclosure frameworks largely focus on measuring portfolio actions in terms of asset reallocation and to a more limited degree strategies around engagement. Disclosures related to outputs, outcomes, and impact however are more limited.

**Figure 1: Distinguishing the different components of a climate impact journey**

Impact mechanisms			
The mechanisms through which climate actions can deliver impact			
Actions	Output	Outcome	Impact
The specific initiatives of the financier to influence the real economy towards meeting climate goals	The change arising from the financier's actions that influences the Investee	The measurable change observed in the activities of the investee, as a result of the output	The consequence of the outcome of a financier's action measuring the extent to which its action contributes to climate goals
Divesting coal mining public equity	Increase in WACC of coal mining companies	Retirement of a coal power plant	Reduction in GHG emissions
	Non-market signal that impact matters is perceived	Retirement of a coal power plant	
Offering concessional capital to capital-scarce green start ups	Increased access to capital	Growth of the green company	Increased green product offering leading to product substitution
Implementing granular engagement strategies with transitioning companies	Resolutions passed at the AGM : Successful bilateral meetings	Increased energy efficiency of production: Increased share of renewables in energy mix	Reduction in GHG emissions

## **3. EXPLORING THE APPLICATION OF THE TCFD FRAMEWORK TO FOCUS ON IMPACT-GENERATION**

One way in which greater focus could be placed on ‘real economy impact’ would be to apply the Task Force for Climate-Related Disclosure’s framework to the notion of impact-generation. In the same way that you need clarity on effective governance, strategy, and execution for effective climate-related risk management, you need effective governance, strategy, execution, and metrics and targets to generate and maximize impact.

The TCFD framework consists of four disclosure categories – Governance, Strategy, Risk Management, and Metrics and Targets. For impact purposes, three of these core elements could be retained: Governance (1), Strategy (2), and Metrics and Targets (4) and ‘Risk’ (3) could be replaced with ‘Delivery’. Figure 2 summarizes this approach and is discussed further below. The approach is expanded upon in Annex 2. In light of this, we welcome views on the third consultation question:

### **Consultation question 3**

**Is a TCFD-based framework to help maximise impact generation to support Paris alignment appropriate and, if so, can it be enhanced? Are there other approaches that could be considered?**

**Figure 2: Components of a TCFD-oriented impact strategy**

<b>Governance</b>	<b>Strategy</b>	<b>Delivery</b>	<b>Metrics and Targets</b>
<i>Disclose the company's governance around impact-generation</i>	<i>Disclose the intended impact(s) and the means available to the company to generate them</i>	<i>Disclose the activities the company will execute to generate the intended impact(s)</i>	<i>Disclose the metrics and targets to measure progress towards achieving the intended impact(s)</i>
a) Describe the board's oversight of impact-generation	a) Describe intended impact(s) to be generated	a) Describe the company's resource allocation to creating impact(s)	a) Disclose the metrics used by the company to assess intended impact(s) in line with its strategy and delivery plans
b) Describe management's role in assessing and managing impact-generation	b) Describe how the company will create these impact(s) and the levers available to it that could bring about change	b) Describe how creating intended impact(s) will be integrated into the company's business lines	b) Disclose the metrics used by the company to assess the contribution the company itself has made (i.e. attribution) to create the intended impact(s) in line with its strategy and delivery plans
	c) Describe coordinated actions with other stakeholders and key partnerships that will help the company achieve change	c) Describe how the company will adjust its business model(s) and business line(s) to create intended impact(s)	c) Describe the short-, medium- and long-term targets used by the company to assess performance relative to governance, strategy, and delivery

**Governance**

Governance is focused on ensuring that strategies and delivery plans are designed appropriately and that progress to achieving them is accountable at the board-level. It should be clear how the board has oversight of intended impact-generation and it should be clear how this is distinct from the role of management.

**Strategy**

Strategy is about being clear about the intended impact(s) and the means by which they can be achieved. Central to this is developing a theory of change that describes the specific outcome(s) and how activities can generate these outcomes.

A theory of change should be coherent (e.g. consider all the relationships that interact with each other to achieve that outcome), comprehensive (e.g. consider the different levers available to achieve the intended change) and evidence-based (e.g. consider the evidence that suggests

this theory of change will be realistic and achievable).

Consideration should also be given to the role of collective climate actions. Almost all climate actions designed to have impact require collective coordination. The strategy should involve a dedicated plan around engaging in collective actions, and the nature of planned contribution to these actions.

The strategy should also define the targeted scope for which impact-oriented climate actions will be designed, notably with regard to asset class, geography and sector, but also potentially discrete universes of assets (e.g. fossil fuel assets).

## **Delivery**

Delivery is identifying the specific activities the company will execute to generate the intended impact(s), and how this will be resourced. It is also essential to consider how the company's business model(s) or business line(s) might change to generate impact(s).

## **Metrics and Targets**

This is about identifying the metrics and targets that can measure progress towards achieving the intended impact(s). This starts with measuring actual outcomes and then measuring the role the company played in realising these outcomes (i.e. attribution). It should also be accompanied by performance targets that are short-, medium-, and long-term.

A specific set of communication principles should be established consistent with regulatory guidance on environmental marketing principles and market standards around how impact and alignment is communicated to the public.

Where possible and identifiable, disclosures should provide specific information (anonymized if necessary) on the evidence of real-world additionality of climate actions taken.

# **4. THE USE OF METRICS FOR 'REAL ECONOMY IMPACT'**

As discussed earlier in this paper, the complexity of allocating causality or responsibility of impacts and outcomes to specific actions is a key barrier to financial institutions from disclosing their impact in a way that is consistent with the academic literature definition of 'impact-generation'.

Understandably, disclosures and targets currently in use for net zero focus primarily on 'impact-alignment' (i.e. net zero target setting) rather than quantifying marginal impact generation. However, there are a number of approaches currently pioneered in the market or developed in academia that can represent meaningful intermediate steps (see Figure 3). As discussed further below, there is also merit in greater transparency and further academic research on these issues to help further our collective understanding of impact more generally.

With this in mind, we would welcome feedback on our fourth consultation question below, focused on metrics:

## Consultation question 4

Does the overview of metrics presented in this paper capture all relevant market practices? Do you think certain approaches outlined here are more or less relevant than others?

Type of metric	Explanation	Example in the literature & practice
<i>Rebaselining of emissions / alignment disclosure</i>	Disclosures provide traditional indicators (e.g. emissions, forward-looking production plans), but rebase indicators based on portfolio vs. investee changes and delineate the distinction	2DII (2020) "A Guide to Science-based Target Setting for Financial Institutions" <sup>12</sup>  GHG Protocol Scope 3 Guidance. <sup>13</sup>  <i>Examples from practice: AP2 TCFD report<sup>14</sup></i>
<i>Disclosure of primary vs. secondary market transactions</i>	Disclosures distinguish between transactions in primary and secondary markets	Wilson & Caldecott. (2021) "Breaking the Bond: Primary Markets and Carbon-Intensive Financing" <sup>15</sup>
<i>Disclosure of climate actions catalogue and impact case studies</i>	Disclosures of set of climate actions, policies, and case studies of impact	SBti (2021) "Science-based Target-Setting for Financial Institutions" <sup>16</sup>  <i>Examples from practice: Hermes<sup>17</sup></i>

## Transparency and research

Beyond the consideration of specific metrics, it is also worth highlighting the role of transparency on climate actions to help build our understanding of real-world impact. The application of rigorous academic research, such as understanding the effects of different climate actions versus control groups, surveys, econometric analysis and related quantitative and qualitative tools can be helpful in this regard.

Applying these tools however also requires a detailed understanding of the specific universe of targeted assets to establish control groups, as well as the specific nature of actions and their scope, in addition to information around actual real-world emissions changes. This is only possible if financial institutions either in-house or in partnership with research organizations provide information and insights to allow for such analysis. Supporting such analysis is thus an important part of target-setting and impact generation strategies.

<sup>12</sup> <https://2degrees-investing.org/wp-content/uploads/2020/11/Bridging-the-Gap.pdf>

<sup>13</sup> [https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporting-Standard\\_041613\\_2.pdf](https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporting-Standard_041613_2.pdf)

<sup>14</sup> <https://ap2.se/app/uploads/2021/03/TCFD-Report-2020.pdf>

<sup>15</sup> [Link](#)

<sup>16</sup> <https://sciencebasedtargets.org/resources/files/Financial-Sector-Science-Based-Targets-Guidance-Pilot-Version.pdf>

<sup>17</sup> <https://www.hermes-investment.com/wp-content/uploads/2019/11/collaborative-engagement-on-climate-change-case-study-dec-2019.pdf>

## Getting started

Firms can begin by focusing on their impact-oriented governance and putting strategies in place, ensuring that their disclosures are consistent with the current available evidence and best practice around mapping real world climate action, and communicating a clear theory of change as to how their individual and collaborative actions are contributing to real economy decarbonization.

This can help firms to develop the necessary capacity and tools to deliver and disclose impact in the coming years as best practices in this nascent field evolve. The box below outlines one possible approach to moving towards a climate impact management system.

### CASE STUDY: Moving toward an 'impact management system

We have outlined a possible framework to intentionally and systematically generate impact and maximise its generation. Here we set out what a seven-step a 'journey' could look like in terms of implementing the framework, using the 2DII Climate Impact Management System.

- 1) **Ambition / Objective** – Define the ambition / objective around real world impact, and ensure they are anchored in the target-setting protocol, the incentives schemes.
- 2) **Initial Diagnostic** – Assess current alignment / portfolio exposure and the external and internal constraints for action, as well as the specific options available to you.
- 3) **Plan** – Plan and develop the strategy as well as the specific actions you seek to take, ensuring the plan is resourced and mechanisms for independent verification mechanisms are in place. The plan should be underpinned by a clear and coherent theory of change, articulate and support collective climate actions, and clearly define targeted scope of assets.
- 4) **Act** – Execute the action plan developed in Step 3.
- 5) **Check** – Review progress of actions in terms of outputs and outcomes and reassess the underlying exposures and climate metrics, protocol actions taken
- 6) **Review** – Engage in continuous improvement.
- 7) **Disclose & Communicate** – Disclose on both the difference between portfolio and real world metrics improvements, as well as how specific strategies and actions have potentially led to real world additionality / impact.

# 5. CONCLUSION AND REVIEW OF CONSULTATION QUESTIONS

The need for 'net zero finance' to drive impact in the real economy and deliver the aims of the Paris Agreement is being increasingly recognised by market participants, regulator and industry forums, civil society organisations, and researchers.

We recognise the need to consult more widely on the topic to ensure the integrity of private sector commitments and, more importantly, to ensure net zero finance initiatives are implemented in way that accelerates a just transition to a net zero economy, consistent with climate goals and a climate resilient economy.

At the same time, we also recognise the nascent and evolving nature of the topic and therefore this paper is merely designed to inform discussion and invite wider contribution rather than set out any definitive framework.

With this in mind, we would welcome views on the questions listed below by **30<sup>th</sup> June 2022**. We look forward to receiving contributions from a broad range of interested stakeholders across the public and private sector, including financial institutions, policymakers, regulators, civil society organisations, and researchers.

**1. Is there a need for financial firms to provide further information on how they will generate impact to support Paris alignment in the real economy?**

Select one:

- Yes
- No
- Unsure or need more information

Provide an explanation for you answer:

**2. Is the research outlined in this paper helpful in considering 'real economy impact'? Are there other sources of literature and research in this area that may be helpful?**

Select one:

- Yes
- No
- Unsure or need more information

Provide an explanation for you answer:

**3. Is a TCFD-based framework to help maximise impact generation to support Paris alignment appropriate and, if so, can it be enhanced? Are there other approaches that could be considered?**

Select one:

- Yes
- No
- Unsure or need more information

Provide an explanation for you answer:

**4. Does the overview of metrics presented in this paper capture all relevant market practices? Do you think certain approaches outlined here are more or less relevant than others?**

Select one:

- Yes
- No
- Unsure or need more information

Provide an explanation for you answer:

1.

## **Annex 1: An initial stock-take of academic literature and relevant articles**

### **1. Investor impact vs. company impact & measurability of impact**

- a. Florian Heeb & Julian Koelbel: [The Investors Guide to Impact](#)

### **2. Additionality & blended finance**

- a. Florian Heeb & Julian Koelbel: [Real World Impact](#)

### **3. Investors must avoid harm, actively benefit stakeholders, contribute to solutions**

- a. Impact Management Project: [ABC framework of investor impact & Investor Impact Matrix](#)

### **4. Climate change is a systemic risk that requires engagement & (forceful) stewardship, also “forceful” in terms of capital allocation for real-world impact**

- a. Ben Caldecott: [Investing in green doesn't equal greening the world](#)
- b. Ellen Quigley: [Universal ownership framework](#)
- c. [The predistribution Initiative \(PDI\)](#)

### **5. Modern Portfolio Theory 2.0 – “beta activists”, “macro stewardship”, responsible and innovative capital allocation – optimising portfolios not just for risk and return but also for systemic impact**

- a. Richard Roberts: [The Investor Activism we need](#)
- b. John Elkington & Richard Roberts: [Aligning Finance to a Net Zero Economy](#)
- c. Dominic Hofstetter: [Transformation Capital logic - strategic portfolios](#)

### **6. Impact aligned investments vs. impact generating investments**

- a. Timo Busch et. al: [Sustainable Finance 3.0](#)
- b. Caldecott et. al: [Sustainable Finance and Transmission Mechanisms to the Real Economy](#)

### **7. Integrated view of performance, common currency for all impact metrics**

- a. Harvard Business School: [Impact Weighted Accounts](#)

### **8. Impact investing principles for pensions**

- a. Impact Investing Institute: [Impact Investing Principles for Pensions](#)

