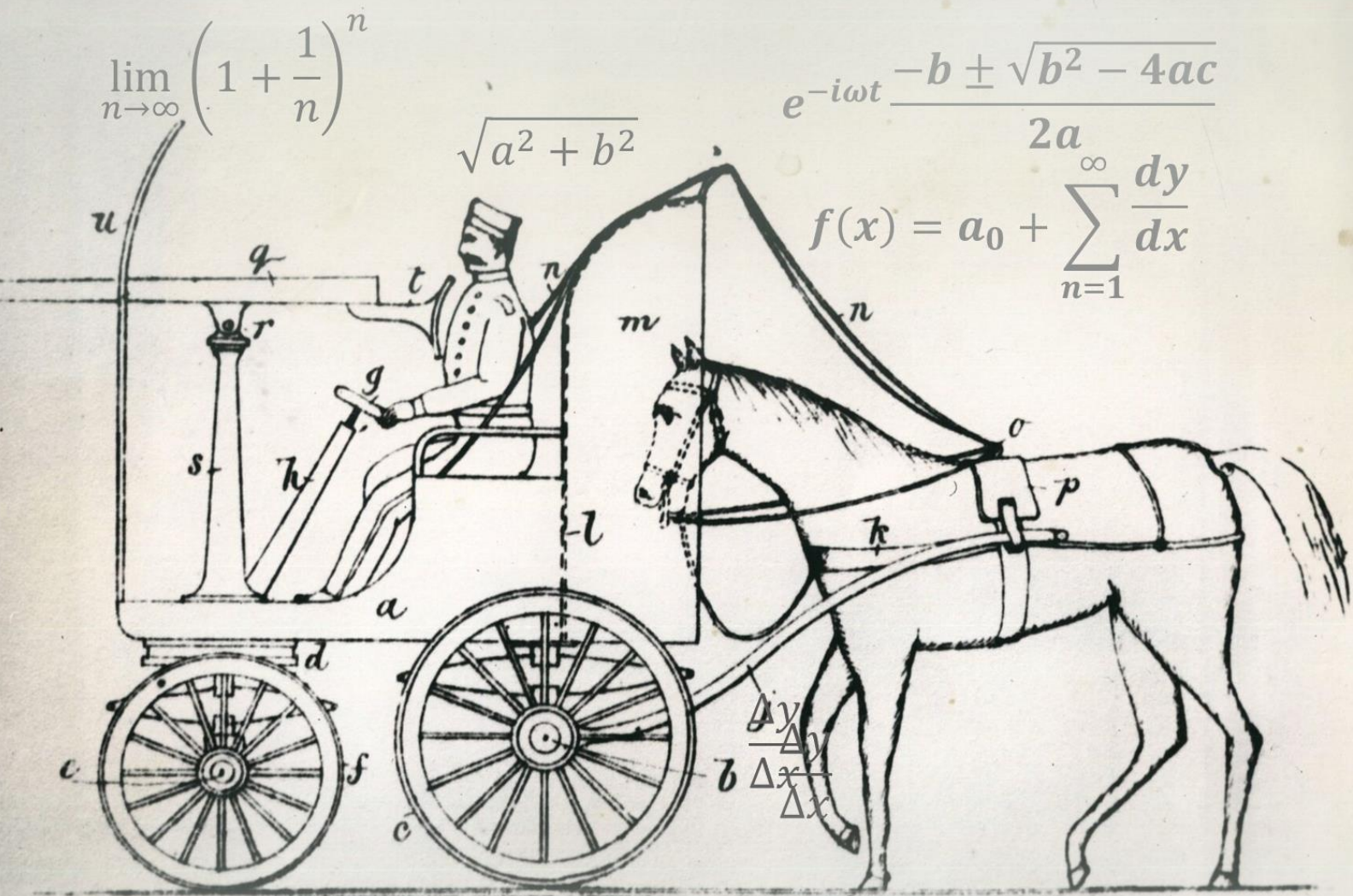


A GUIDE TO SCIENCE-BASED TARGET SETTING FOR FINANCIAL INSTITUTIONS



Contents

Dear Reader,	3
WHERE ARE WE TODAY?.....	4
IF YOU ONLY HAVE 1 MINUTE.....	7
WHAT IS THE SOLUTION?.....	16
IF YOU ONLY HAVE 1 MINUTE.....	17
SOLUTION #1: Defining the boundaries.....	18
SOLUTION #2: Bottom-up definition of the ‘level of ambition’	20
SOLUTION #3: Intentionality as a prerequisite to additionality	22
SOLUTION #4 The concept of progress.....	24
WHAT IS THE BLUEPRINT FOR IMPLEMENTATION?	26
IF YOU ONLY HAVE 1 MINUTE.....	27
a. Historical asset level data and related climate pledges data	30
b. Systematic tracking of climate actions at granular level	30
c. Financial indicators.	31
d. Qualitative evidence collection mechanism.	31
WHAT REMAINS UNRESOLVED?	33
WHAT WILL THE FUTURE LOOK LIKE?	35
Bibliography	37

Dear Reader,

Target-setting initiatives and public climate commitments and pledges coming out of NY Climate Week, Climate Finance Day, COP, and related initiatives have proliferated over the past years. 2° Investing Initiative has been involved in some of these initiatives, supporting as a technical back-office partner.

We think it is time to take stock of where we are, what we have learned, and to consider what science-based target-setting process for financial institutions should or could look like.

This note represents – for us – the summary of a conversation we started roughly 2 years ago, bringing together our learning from our real-world application of our models with NGOs, supervisors, banks, governments, and investors; as well as countless interviews and workshops, where we have tried to get a better understanding of what the way forward is for target-setting. In that sense, it synthesizes all of these conversations. In doing so, it seeks to clarify our technical perspective on the topic, while opening up the conversation to a broader market. We want to hear from you. What do you think about target-setting? Where should the journey go? What is your take on the important issue of “portfolio leakage” and can we address this?

We don’t want this note to close a chapter of a research journey, but rather start a broader chapter for the sustainable finance industry and ecosystem as to what science-based target-setting contributing to real world impacts need to look like.

We recognize that you may not have a lot of time, so we created “1 minute” sections for each chapter summarizing the main idea. As you plan your time to read this report, plan some time to reach out, talk to us about your thoughts. **Contact us for an interview to discuss, tell us where you disagree (or agree) and what elements we may be missing, by emailing contact@2degrees-investing.org.**

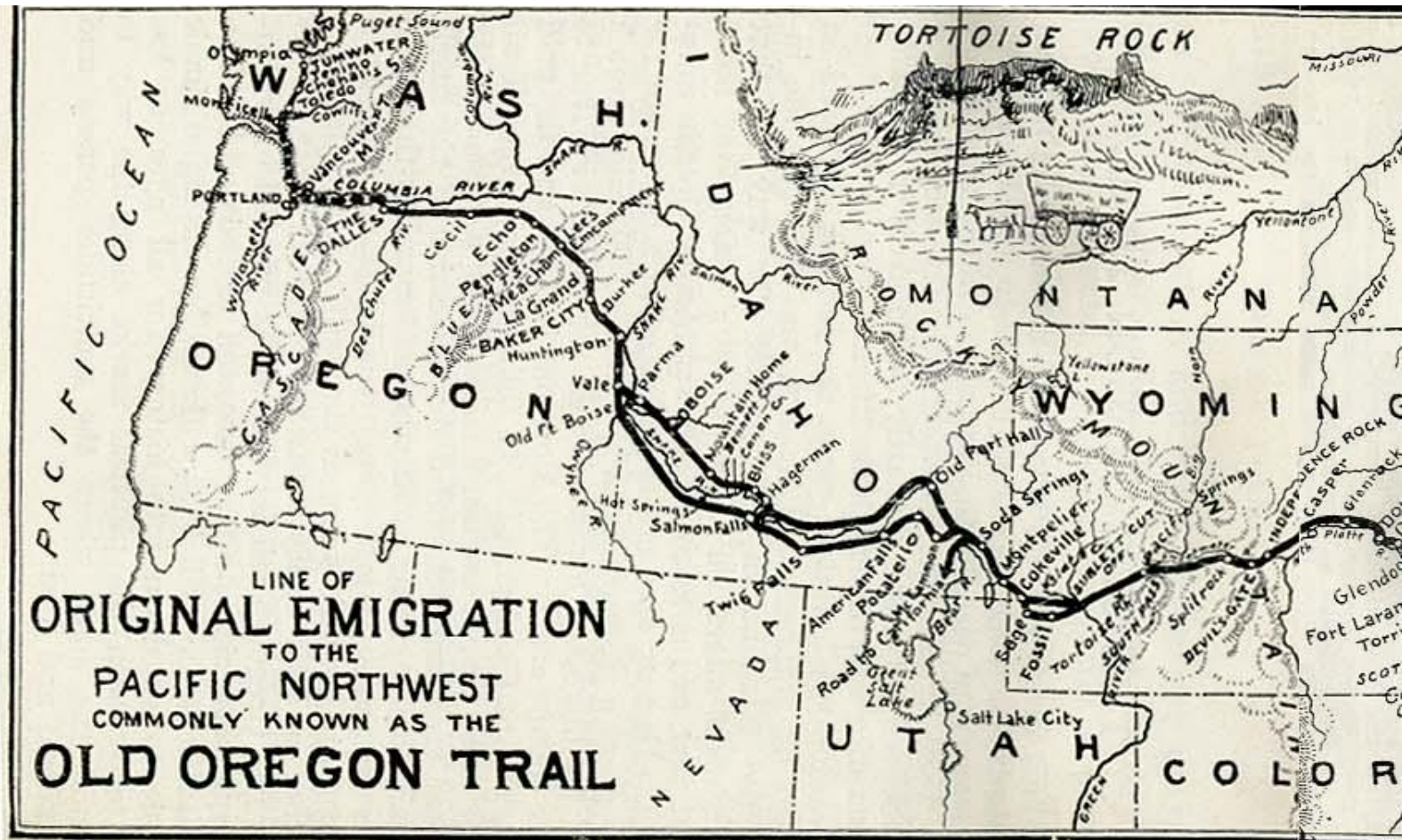
We look forward to the conversation!

Best,

Jakob Thomä (*Managing Director, 2° Investing Initiative*)

February 2020

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



Artwork: Line of Original Emigration to the Pacific Northwest Commonly Known as the Old Oregon Trail, Ezra Meeker, 1907

WHERE ARE WE TODAY?

The concept of companies setting ‘sustainability goals’ has been an integral part of the first generation of corporate responsibility in the 90s and early 2000s. In the context of the Paris Agreement, driven by work from the Science-Based Targets Initiative (SBTI), 2° Investing Initiative and others, this target-setting and ‘sustainability goals’ framework was further developed to allow stakeholders to measure the ambition of sustainability outcomes targeted by companies against ‘planetary boundaries’, in particular as it relates to climate.

To date, none of these approaches have developed a “target-setting framework” for financial markets. Target-setting, where it has been explored, has mostly been seen as a way to measure changes in the climate assessment of their portfolio (e.g. carbon footprint, climate scenario analysis), improving the value of underlying indicator (carbon intensity, reduced exposure to fossil-fuels, and increased exposure to green technologies) to communicate on progress, rather than effectively driving impact in the real economy.

Until now, target-setting has largely focused on portfolio alignment. The challenge is that this conflates reductions in portfolio emissions with emissions reduction in the real economy. This can become a problem from a marketing and communications perspective, but also in particular from the perspective of expectations management by civil society and policymakers. Moreover, depending on the objective, and type, of the financial institution between measuring the climate alignment or the climate impact of its investments, measuring ‘portfolio performance’ can create an artificial bias in favour of divestment or ‘tilting’ strategies over engagement, for instance. That is not to say that divestment may not be relevant, but a bias without evidence is a difficult starting point for a framework looking to be ‘science-based’ and by extension evidence-based.

Ultimately, portfolio alignment can be a steppingstone to impact and, indeed, some financial institutions may end their journey at this stage. Others however will seek to understand the impact they have on the real economy beyond the impact their changes have on their portfolio. This interest will be shared by civil society and policymakers and potentially the financial institutions’ clients and customers. The 2° Investing Initiative, through this note, is looking to support this group of actors in this dynamic.

Over the past decade, the financial industry has been under growing pressure, pushing FIs in various directions in terms of defining their climate strategy, between divestment, portfolio alignment, engagement, etc. to reduce GHG emissions in the real economy. Evidence on the relative efficacy of each of these is largely missing. This paper seeks to provide FIs with keys to understand and overcome the challenges they face in setting targets, as well as offering a constructive pathway that can serve both FIs’ and society’s interest in maximizing their impact toward the mitigation of climate change.

The first section of this paper outlines the technical challenges to applying a target-setting concept for financial institutions and a way forward for target-setting that focuses on impact. The second outlines the key challenges in measuring impact. The third section suggests a roadmap that involves the creation of an impact- framework, evidence based, over time, building on the approaches tested to date.

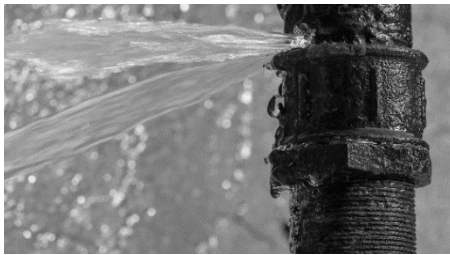
In all this, it seeks to respond to the specific questions posed by some financial institution in the regard of the many challenges they face to make and measure positive contribution in terms of GHG emissions reduction in the real economy.



6

IF YOU ONLY HAVE 1 MINUTE...

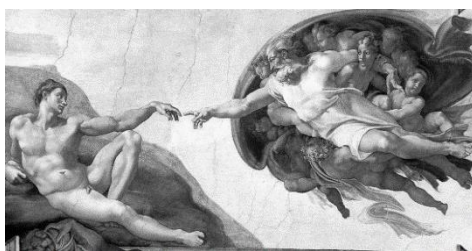
This note is based on a range of interviews, workshops, and desk research of the 2° Investing Initiative team and partners in the financial industry and among NGOs. It is a working paper summarizing our current views on the topic.



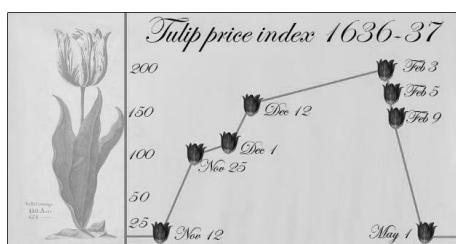
Your portfolio is leaking and will continue to do so in the next fifty years. The concept of ‘portfolio leakage’, where a portfolio’s high-carbon or green share is reduced simply by getting re-distributed to another portfolio, is a major challenge for target-setting. According to the GHG protocol rules, such changes in “operational boundaries” call for the recalculation of the baseline when reporting on progress and setting targets (Section 9.3). Such a recalculation would have to be performed on a frequent and ongoing basis in the case of investment and lending portfolios. While this is technically feasible with new datasets and software being developed in the market, the question is how can you meaningfully set a target on emissions that change constantly and what would be the logic of such an exercise?



Jack of all trades, master of none. Portfolio alignment suggests you can contribute to 1000s or even 10,000+ clients’ alignment at the same time. Look around you and the number of people working on this topic in your organization. You might be spinning too many plates. Measuring the alignment across all your clients / investees suggests you have the capacity and resources to engage with such a large universe. Moreover, even if you do, the level of engagement will be less intense than focusing on a few clients / investees. The CA100+ Initiative has recognized this. One example is geography, where academic studies (and practice⁹ show that investors’ clout is higher in their home markets. Does portfolio alignment make sense if you can only influence a smaller universe of actors?



You are (unfortunately) not god. Unlike for SBTs for companies, Scope 3 targets for financial institutions relate to GHG emissions you only have limited control over. Setting targets on something you can’t control (namely emissions reductions in the real economy) is difficult to sell internally. It’s also hard to communicate this without ‘taking credit’ for GHG emissions reduction that you may only have marginally contributed to. How can you communicate target-setting in this context and create buy-in for setting targets you can’t control? What is a good failure resolution mechanism?



You are part of a complex economic system that is currently not aligning and to whom you have a relationship that is hard to ‘disentangle’. How can financial institutions set targets for alignment when the economy doesn’t align? How can impact be tracked through the system consisting of 1000s of actors and sources of influence?



PROBLEM #1: PORTFOLIOS LEAK

A bank's or investor's portfolio changes constantly. That means that the 'target' in terms of outcome pertains to a different entity over time. Even if banks and investors still have the same 'business', the actual emissions and scope of assets affected by this activity changes constantly. It is not too dissimilar to a situation in the power sector, where a target would be set for a company EON and tomorrow EON sells all its assets and buys all of RWE's assets. The baseline and level of ambition would obviously have to be adjusted to reflect the change. While, of course, turnover in banks' portfolio is not quite as dramatic despite the maturation of loans, the constant fluctuation of portfolios makes the concept of setting a target with a specific boundary somewhat uncertain. This issue comes along with another major problem namely the concept of 'portfolio leakage', where a portfolio's high-carbon or green share is reduced simply by getting re-distributed to another portfolio. According to the GHG protocol rules, such changes in "operational boundaries" call for the recalculation of the baseline when reporting on progress and setting targets (see technical deep dive).

This is also confirmed in the "Consistency" principle of the SBT process which includes a consistent "inventory boundary". Such a recalculation would have to be performed on a frequent and ongoing basis in the case of investment and lending portfolios. While this is technically feasible with new datasets and software being developed in the market, the question is how can you meaningfully set a target on emissions that change constantly and what would be the logic of such an exercise?

To date, investors and banks have been reluctant to perform this recalculation. Moreover, many of them assimilate the change in boundaries (investment in green or divestment from brown) as the main technique to reduce GHG emissions in the real economy (by sending a signal to companies). They therefore want the related changes in "financed emissions" to be accounted.

TECHNICAL DEEP DIVE: HOW IS EMISSIONS TRANSFER ADDRESSED IN EXISTING STANDARDS?

Financial institutions are not the only actors where the concepts of emissions transfer represent a challenge. In order to address this issue for Scope 1 and Scope 2, the “GHG Protocol Corporate Value Chain Reporting Accounting Standard” has defined the following rules

“Companies are required to recalculate base year emissions when the following changes occur and have a significant impact on the inventory:

- *Structural changes in the reporting organization, such as mergers, acquisitions, divestments, outsourcing, and insourcing*
- *Changes in calculation methodologies, improvements in data accuracy, or discovery of significant errors*
- *Changes in the categories or activities included in the scope 3 inventory*

In such cases, recalculating base year emissions is necessary to ensure the consistency and relevance of the reported GHG emissions data. Companies shall recalculate base year emissions for both GHG emissions increases and decreases. Significant changes result not only from single large changes, but also from several small changes that are cumulatively significant. (...) Structural changes trigger recalculation because they merely transfer emissions from one company to another without any change in emissions released to the atmosphere (e.g., an acquisition or divestment only transfers existing GHG emissions from one company’s inventory to another).”

For Scope 3, the framework at this stage is more flexible, notably when it comes to “suppliers”, where there is no re-baselining. Some stakeholders argue that this concept should and can be similarly applied to financial portfolios. The following reasons speak against this:

- **Automatic emissions transfer.** Unlike in the case of suppliers, in equity markets a portfolio shift in one portfolio automatically and immediately increases the emissions of another portfolio. While obviously this exercise can have secondary signalling effects (e.g. related to cost of capital) that reduce emissions, no immediate emissions are reduced. In the case of suppliers, the supplier must find a new client in order to keep emissions at existing levels. In the case of air travel, a company not flying an employee likely leads to an empty seat. In finance, this empty seat in many classes is not actually ‘not used’ but sold to another actor in the market. Even in credit, an ‘auction’-like system in many markets – where e.g. bonds are 6x oversubscribed just means somebody else ‘takes the seat’. The logic here relates to the elasticity of the “offer”. The seat might be empty, and the airplane will still fly, but the elasticity of supply from airlines in response to capacity and demand is high, even if it cannot be traced at individual level. The same cannot be said for most financial transactions, in capital markets.
- **Consistency.** Technically, the purchase of a stock is the equivalent of an acquisition in terms of transfer of ownership (even if it only represents only a small fraction of the company. Categorizing these types of transactions as equivalent to changing suppliers represents a misunderstanding of the nature of financial transactions.
- **The nature of climate actions.** Currently, the entire tracking infrastructure in financial markets focuses on the portfolio as unit of accounting. This makes sense from a financial risk perspective but creates a bizarre dynamic where the impact of climate actions on companies is only tracked if those companies are in the portfolio. It would be the equivalent of seeking to incentivize companies to align with the Paris Agreement by only having companies in the supply chain that already have a science-based target and then tracking that indicator, rather than getting new companies to set SBTs.



Artwork: A Cook Shop, Naples, Sir Frank Brangwyn, R.A. - 1867-1956

PROBLEM #2: JACK OF ALL TRADES, MASTER OF NONE: PORTFOLIO ALIGNMENT CAN BE A DISTRACTION

Portfolio alignment suggests you can contribute to and manage 1,000s or even 10,000+ clients' alignment at the same time. Look around you and the number of people working on this topic in your organization. You might be spinning too many plates. Measuring the alignment across all your clients / investees suggests you have the capacity and resources to engage with such a large universe. Moreover, even if you do, the level of engagement will be less intense than focusing on a few clients / investees. The CA100+ Initiative has recognized this. One example is geography, where academic studies (and practice) show that investors' clout is higher in their home markets (see technical deep dive on next page). Does portfolio alignment make sense if you can only influence a smaller universe of actors?

The dynamic is one of "jack of all trade, master of none", suggesting that the range of different strategies are applicable. For certain financial institutions with resources and clout, engagement may be appearing more relevant. Other financial institutions with more limited resources may look to strategies that are more feasible with the resources available.

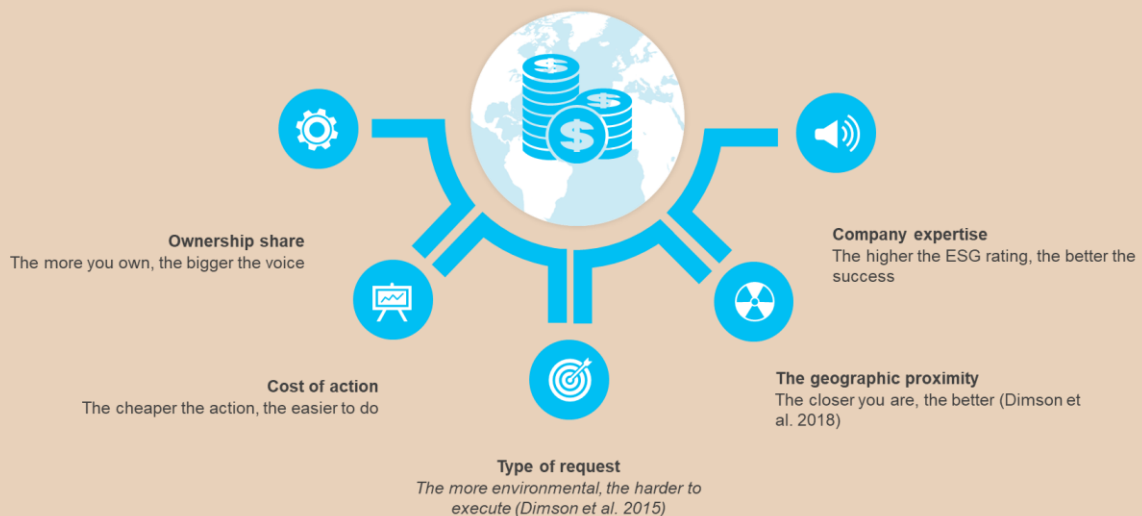
TECHNICAL DEEP DIVE: IMPACT IN ENGAGEMENT

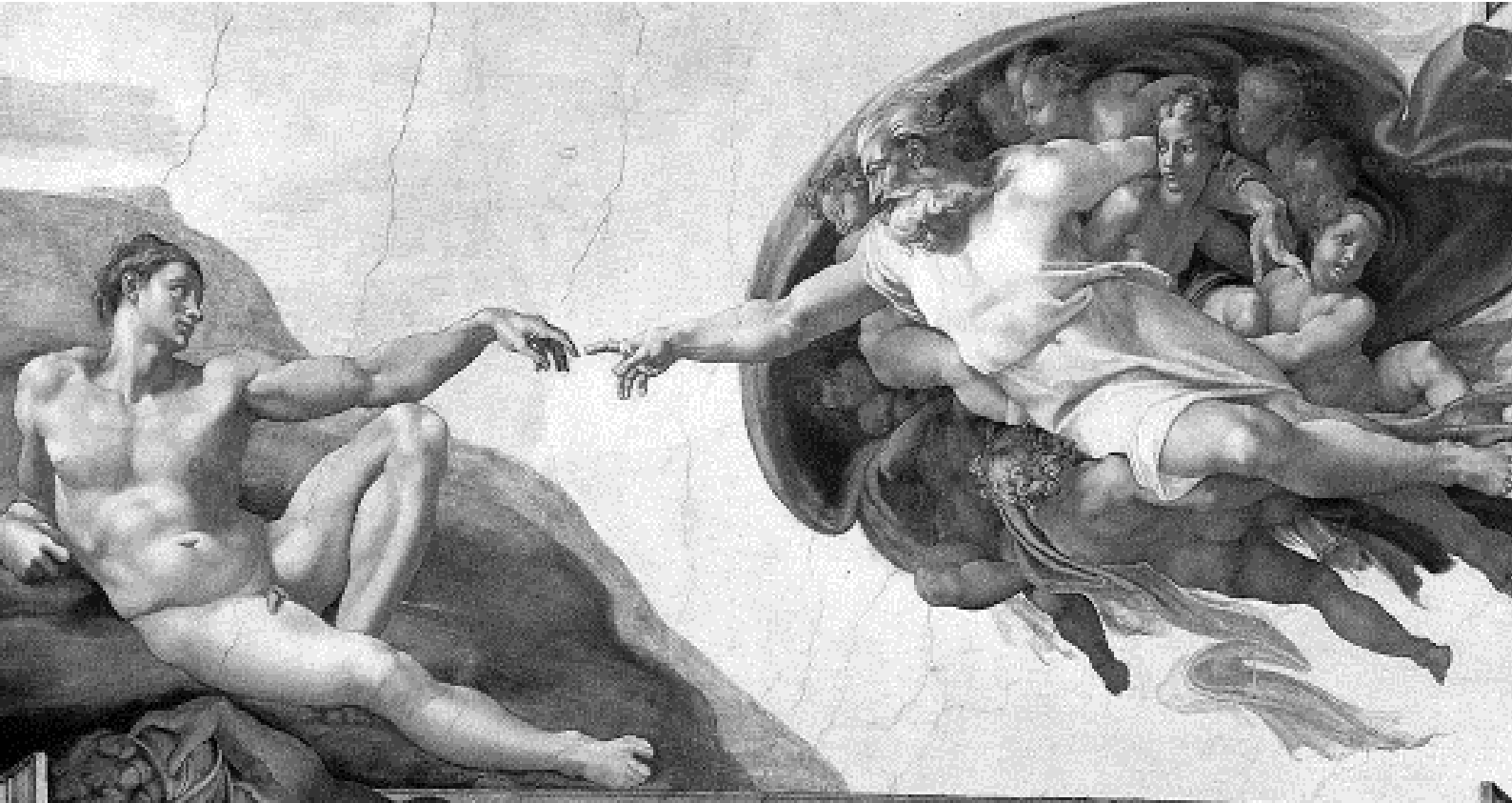
There is extensive academic literature as to the determinants of success of engagement policies by investors vis-à-vis companies. This literature focuses not on the determinants of success in terms GHG emissions reductions, but purely as a function of the achievement of the underlying ask.

A couple of key aspects can be identified in the literature. First, voting share obviously matters. The higher the voting share, the more likely engagement is successful. This should be distinguished from the ownership share however, as for many companies these do not necessarily correlate well (e.g. Facebook). As a result, engagement may be less effective where shareholders have de facto less control over the company.

Second, the cost of the action drives results. Actions easier to implement are more likely to be adopted. This of course risks creating a set of case studies demonstrating successful engagement on 'low-hanging fruits' and incentivizing engagement with companies where the costs of GHG emissions reduction is lower. Related to this point is the nature of the request, where research by Dimson et al. 2015 demonstrates that the more "environmental" the request, the harder to execute.

There also other factors particularly salient to the question of portfolio alignment, notably company expertise and geographic proximity (Dimson et al. 2018). This evidence suggests that it is more effective to engage with companies in the same jurisdiction as you than abroad.





Artwork: *The Creation of Adam*, Michelangelo, C. 1512

PROBLEM #3: Financial institutions are not god. They have very limited operational control over the sustainability outcome itself.

Whereas companies can largely control many of the sustainability objectives they set for themselves, banks and investors can control their actions, but not the “impact” of their actions - or only in very rare cases. In GHG protocol terms, they do not have “operational control” (i.e. management of the relevant decisions), nor “financial control” (i.e. more than 50% of voting rights) on the ‘financed GHG emissions’. While this challenge obviously exists in part for Scope 3 emissions more generally, it is particularly pronounced for FIs. It is arguably paradoxical to set targets on outcomes (financed emissions) that are not under direct control and perhaps only marginally influenced.

The current Scope 3 guidance suggests that “Companies may establish a threshold (e.g., equity share of 1 percent) below which the company excludes equity investments from the inventory, if disclosed and justified.”¹ This threshold would in practice for almost all investors exclude their entire equity portfolio as they are unlikely to own more than 1% in any specific company in the listed equity space (with rare exceptions). This is of course not a sensible concept and approach as a target-setting framework is designed for financial institutions.

This is critical since the entire SBT concept is predicated on emissions reduction / “emissions changes” following the principle of “consistency” and “accuracy”. For example, the “absolute emissions” approach explicitly references a target “in terms of an overall reduction in the amount of GHGs emitted to the atmosphere.”² The GHG Protocol Corporate Value Chain Reporting Standard explicitly develops mechanisms to prevent the transfer of “emissions from one company to another without any change in emissions released to the atmosphere (e.g., an acquisition or divestment only transfers existing GHG emissions from one company’s inventory to another).”³

¹ https://ghgprotocol.org/sites/default/files/standards/Scope3_Calculation_Guidance_0.pdf

² <https://sciencebasedtargets.org/wp-content/uploads/2017/04/SBTi-manual.pdf>

³ https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporting-Standard_041613_2.pdf

BOX: HOW DO YOU ATTRIBUTE EMISSIONS TO FINANCIAL PORTFOLIOS?

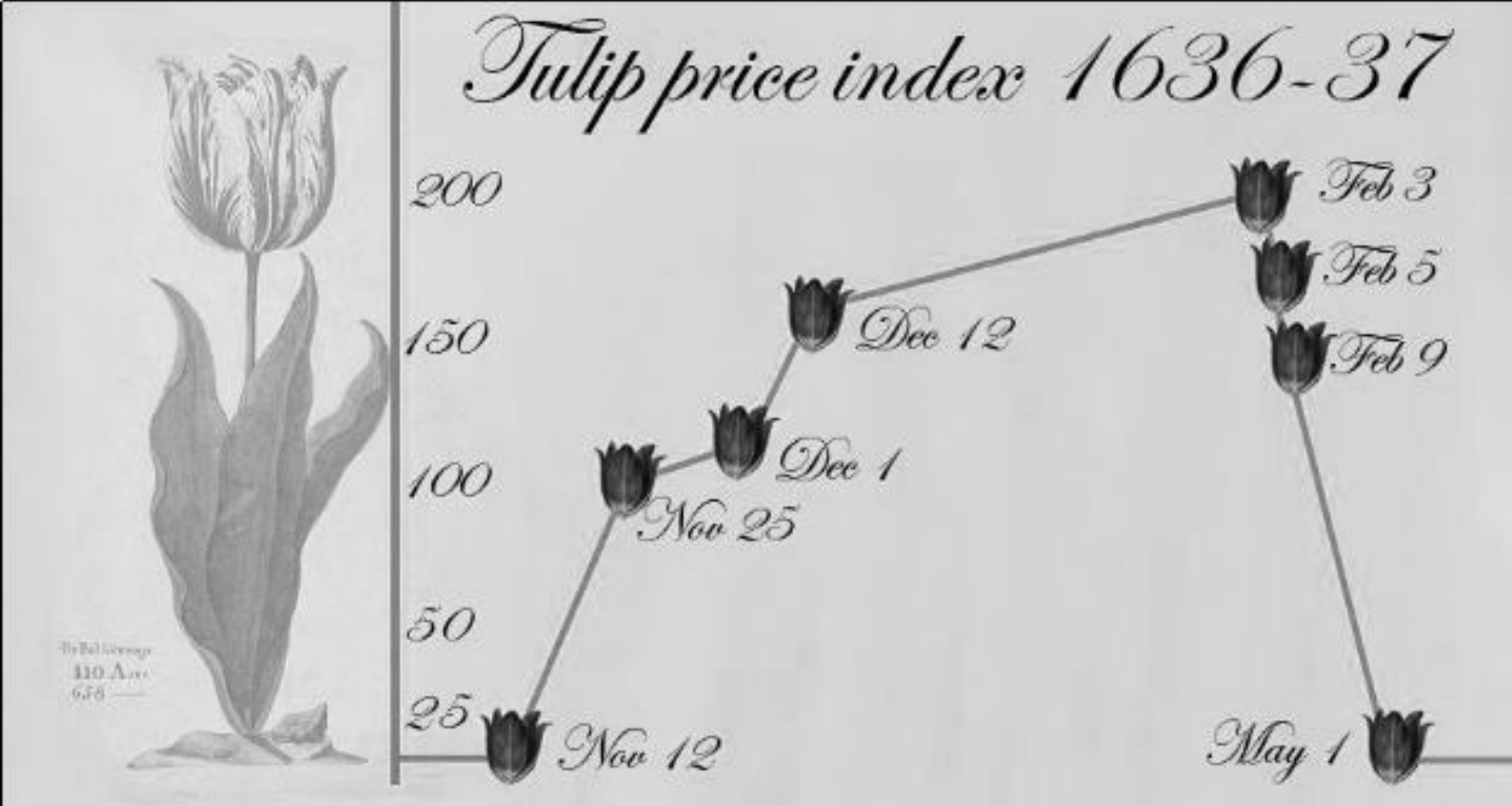
Essentially from the launch of first climate analytics exercise, there have been two dominant approaches associated with climate analysis: the so-called “balance sheet approach” and the portfolio weight approach.⁴ The first allocates emissions (or whatever the climate unit being analysed) to the portfolio based on the relationship of the financial asset to some indicator representing the size of the company (e.g. market capitalization, enterprise value). The second allocates emissions based on the share of the financial asset in the portfolio. The “balance sheet approach” has generally been considered a proxy for ‘responsibility’ or ‘ownership’ and the portfolio-weight either as a proxy for risk or – for credit portfolios – as a representative metric for the capital allocation decisions taken by the financial institution. These allocation rules have also been used in the PACTA model developed by 2° Investing Initiative.

In practice, neither of these two allocation rules are particularly meaningful in the context of ‘alignment’ or contribution. For example, when it comes to ownership, as outlined above, the share of the financial asset in market capitalization for example may represent the ownership share but not the influence. Voting rights may be distributed very unevenly. Similarly, the portfolio-weight approach measures ‘capital allocation’, but not actual the ‘contribution’ of capital in terms of its financing share in the capital and operational expenditure of a company. None of these approaches capture the ‘contribution’ in terms of emissions reduction.

In practice, this suggests new allocation rules need to be explored. The following represents one way to think about this issue based on the research question:

- **What is your risk exposure?** This question is best answered through the portfolio-weight approach.
- **What is your ownership?** This is represented through the balance-sheet approach, albeit focusing exclusively on market capitalization as the denominator to determine allocation.
- **What is your voting “power”?** Here, a new approach is being explored by allocation emissions based on your actual voting power at AGMs.
- **What is your financial contribution?** Answering this question requires a mapping of corporate finance flows, the relative contribution for different funding sources and then the mapping to expenditures. Reports by 2° investing Initiative, Accenture, IEA, and Ceres have sought to explore this question.
- **What is your contribution to emissions reduction?** This of course, the holy grail, may be an approach that can never be developed meaningfully in a scientific way, although of course approximations and proxies can be explored.

⁴ Thomä et al. (2018) “Climate Accounting Principles in Financial Markets” *Sustainability*.



PROBLEM #4: Financial institutions lend to / invest in the economy

A company can 'align with Paris' even if the economy doesn't (e.g. Tesla can be viable selling electric vehicles even if they only have a small overall share of sales in the economy). For a bank or investor lending to / investing in many companies within a sector, a Paris-aligned strategy is difficult in a macroeconomic environment that may not be aligned with climate goals. Some of this is complicated by the fact that – while in theory reflecting the economy – their 'target market' is more constrained than for a company.

Moreover, there may be a moral hazard challenge in 'overbanking' the green economy creating a new set of risks.⁵ For example, certain banks may have legal requirements around only lending locally, thus being a captured service provider to the local economy, which may be very carbon intensive. Of course, these legal constraints also may exist for companies. Similarly, investors may only invest in listed companies, thus not potentially being able to access non-listed companies driving the deployment of e.g. renewable power.⁶

⁵ DNB Waterproof study.

⁶ https://www.transitionmonitor.com/wp-content/uploads/2017/10/2ii_Fog_v0.pdf

TECHNICAL DEEP DIVE: How do you allocate macroeconomic ‘constraints’ to microeconomic actors?

In that sense, the first step of this exercise requires an ‘allocation’ of the macroeconomic responsibility of decarbonizing the global economy to sectors (*done in IAMs⁷ as well as in the IEA scenarios⁸*) and then to individual companies. Various approaches have been developed to ‘downscale’ scenarios to companies to define appropriate levels of ambition, notably:⁹

- **Market share approach:** This approach uses a simple ‘market share’ allocation rule where all sector-level production and capacity trends are proportionally distributed across companies based on market share in the technology or sector. This approach is currently used in the PACTA model.¹⁰
- **“Economic” approach:** This approach uses sector-level output variables, such as demand and price, as a constraint interacting with the production costs of individual companies, arguing that the ‘marginal’ product is produced at the lowest cost. The cost approach uses the cost structure of a company’s existing, planned, and potential capital stock to estimate which assets meet a sector-wide output constraint under the assumption that low-cost assets will be deployed first. This logic has been applied by the Carbon Tracker Initiative for oil, gas, and coal production and capital expenditure (CTI 2014; 2016).
- **The “Convergence / Compression / Contraction” Approaches.** This approach seeks to align the intensities of economic activity with scenario reference points. It is the approach of the Sectoral Decarbonization Approach in the context of the SBT initiative.¹¹

Other approaches involve bottom-up distribution company by company involving e.g. risk / return considerations (*CO-Firm, others*), or consideration of historical responsibilities. Currently, the first three approaches are the most prominent in the market. All these approaches suggest it is possible to define for a microeconomic actor, a set of targets / outcomes that, should they be adopted by all microeconomic actors for a climate scenario associated with a certain probability of meeting climate goals.

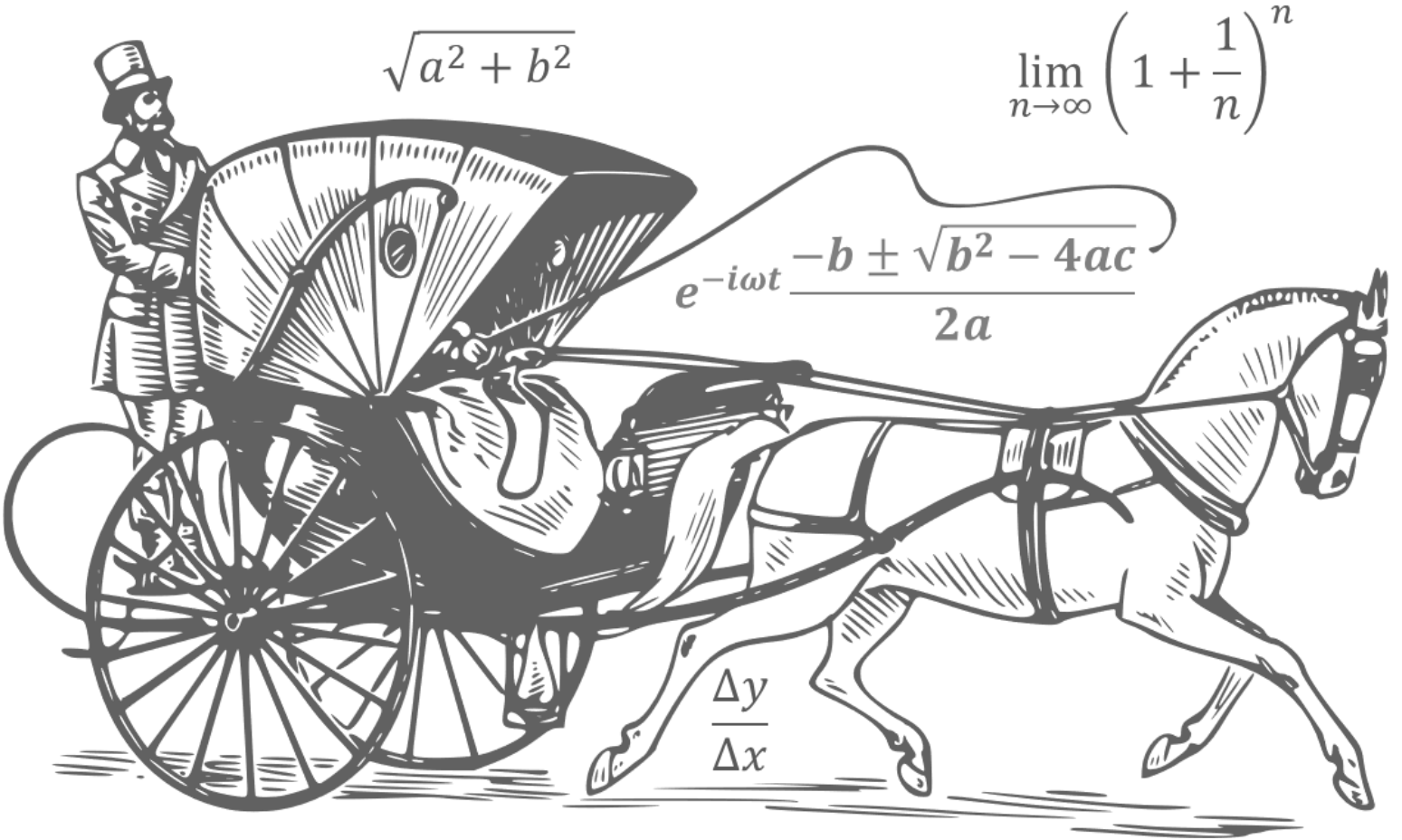
⁷ Integrated Assessment Model

⁸ International Energy Agency (<https://www.iea.org/>)

⁹ See also <http://www.oneplanetthinking.org/scientific-context.htm>

¹⁰ Thomä et al. (2019) JAAR

¹¹ <https://sciencebasedtargets.org/wp-content/uploads/2015/05/Sectoral-Decarbonization-Approach-Report.pdf>



WHAT IS THE SOLUTION?

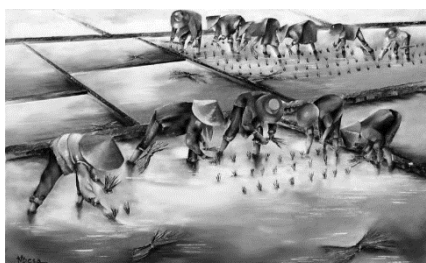
IF YOU ONLY HAVE 1 MINUTE...



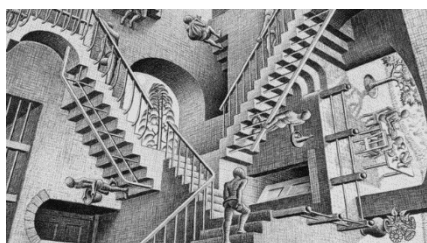
Defining the boundary in terms of the companies & assets targeted for GHG emissions reduction. In order to satisfy the consistency principle and avoid the transfer of emissions to another inventory, target-setting processes by financial institutions should define the universe of companies and physical assets being targeted. This definition should be associated with the specific underlying assets in order to ensure consistent boundary for the target-setting approach and avoid importing emissions transfer that may take place within a companies' emissions inventory. The universe of companies should satisfy the principle of being "comprehensive" in line with the GHG Protocol guidance.



Based on our current understanding, given the challenges described above, it does not make sense to set GHG emissions targets using the concept of 'portfolio alignment', including the PACTA approach developed by the 2° Investing Initiative. **The alignment of a portfolio can, at best, be a horizon, a collective "ambition" that may be designed to contribute to an ultimate investment objective but is not the objective itself.** Thus, even while operating under the SBT brand, the actual definition of the target in terms of PACTA, SDA, or alternative outcomes should be defined as an ambition associated with the target to implement a series of climate actions. This level of ambition should be consistent with well below 2°C pathways.



We concluded that target-setting frameworks should be associated with an actions framework to demonstrate the intentionality of contributing to emissions reduction. Thus, financial institutions should define – given that they don't control the outcome – at minimum a set of actions that they plan to execute to contribute to achieving the pathway goal and demonstrate the materiality and potential of this catalogue of actions for driving change.



Criteria 6 of the criteria and recommendations document of SBTi for companies provides that targets 'already achieved' are not eligible. The framework thus clearly expects that targets go "*beyond current ambition*". Coupled with the Scope 3 additionality principle, this implies that **existing commitments by companies – including production plans – do not satisfy the principle of going "*beyond current ambition*" and contributing to GHG emissions reduction unless the financial institution can document that its particular contribution is additional with regard to realizing that state commitment.**



Artwork: Map, Henricus Hondius II, C. 1639-44

SOLUTION #1: Defining the boundaries

In order to satisfy the consistency principle and avoid the transfer of emissions to another inventory, target-setting processes by financial institutions should define the universe of companies and physical assets being targeted. This definition should be associated with the specific underlying assets in order to ensure consistent boundary for the target-setting approach and avoid importing emissions transfer that may take place within a companies' emissions inventory. The universe of companies should satisfy the principle of being "comprehensive" in line with the GHG Protocol guidance.

This focus on "assets" also implies that alternative targets to emissions appear relevant. While not a core challenge posited above, data availability and uncertainty related to emissions, the constraint of emissions data in terms of understanding the 'glass floor' related to decarbonization plans (e.g. reducing emissions through efficiency gains without developing zero carbon technologies) and its lack of relevance in certain sectors (e.g. automotive) for guiding financial institution-company engagement suggests that companies may want to 'steer' on targets not explicitly measured and described in emissions. Among the most prominent types of targets in the market today for example are coal exclusion targets and 'green lending' targets. The concept of targets not expressed in emissions is already a part of the SBT framework (see technical deep-dive).

TECHNICAL DEEP-DIVE: WHY “THE PORTFOLIO” DOES NOT EQUATE TO THE “BOUNDARY” LOGIC DEFINED IN THE GHG PROTOCOL STANDARD

Some actors in the course of our interviews have suggested that an alternative concept of boundary should be the portfolio itself, rather than the assets in it. This approach would however face the following challenges:

- First, for some asset classes – notably equity – and some investors with flexible mandates it would create a bias in favour of divestment over engagement, since it is by design easier and less cost-intensive and more immediately reflective in a portfolio to trade out of a position rather than engage over a multi-year process.
- Second, it would be impossible to track whether any real emissions reduction took place, since the baseline would be associated with a universe of assets that would change over time. As can be seen in the area of climate pledges, ‘sustainable investing’ is growing according to many statistics, even as we see limited progress in improvements around economic sustainability indicators.

As a result, there is no way to track whether emissions in the real economy were reduced by simply measuring changes related to environmental indicators at portfolio level. This is particularly problematic given portfolio turnover in even less liquid asset classes. As outlined below, an approach to consider a portfolio of assets is also inconsistent with the GHG Protocol guidance.

TECHNICAL DEEP-DIVE: CURRENT GUIDANCE ON ALTERNATIVE TARGETS TO EMISSIONS

Alternatives to emissions targets are already part of the SBT framework. The SBT framework for Scope 2 states: *“As an alternative to setting percentage-reduction targets on scope 2 emissions, companies may instead set targets on the procurement of renewable energy.”*

Similarly, for Scope 3, the SBTi Manual recognizes that *“companies may wish to set targets that are not explicitly framed as targets to reduce emissions, but rather as targets to improve some specific aspect of business or product performance.”*¹² While the level of ambition should be in line with an emissions-based target framework, the actual definition of the target on the basis of emissions is not a requirement under the current SBTi manual. Making it a requirement for financial institutions would thus inhibit the scope of potential application. The PACTA technology mixes targets are one example for this. Given their prominence for financial institutions, the interface of Scope 3 targets by FIs and SBT for companies should be formalized, potentially requiring some adjustment of the existing target-setting framework for companies.

¹² <https://sciencebasedtargets.org/wp-content/uploads/2017/04/SBTi-manual.pdf>



Artwork: *The Moneychanger and his Wife* by Quentin Matsys, C. 1514

SOLUTION #2: Bottom-up definition of the 'level of ambition'

Based on our current understanding, given the challenges described above, it does not make sense to set GHG emissions targets using the concept of 'portfolio alignment', including the PACTA approach developed by the 2° Investing Initiative. The alignment of a portfolio can, at best, be seen as a horizon, a collective "ambition" that may be designed to contribute to an ultimate investment objective, but is not the objective itself. Thus, even while operating under the SBT brand, the actual definition of the target in terms of PACTA, SDA, or alternative outcomes should be defined as an ambition associated with the target to implement a series of climate actions. This level of ambition should be consistent with well below 2°C pathways.

Related, this ambition / target should as describe above be linked to a specific and prescribed universe of 'assets' defined up front and – when they are redefined – associated with a recalculation of the baseline.

TECHNICAL DEEP-DIVE: ADDITIONALITY AND GREENWASHING

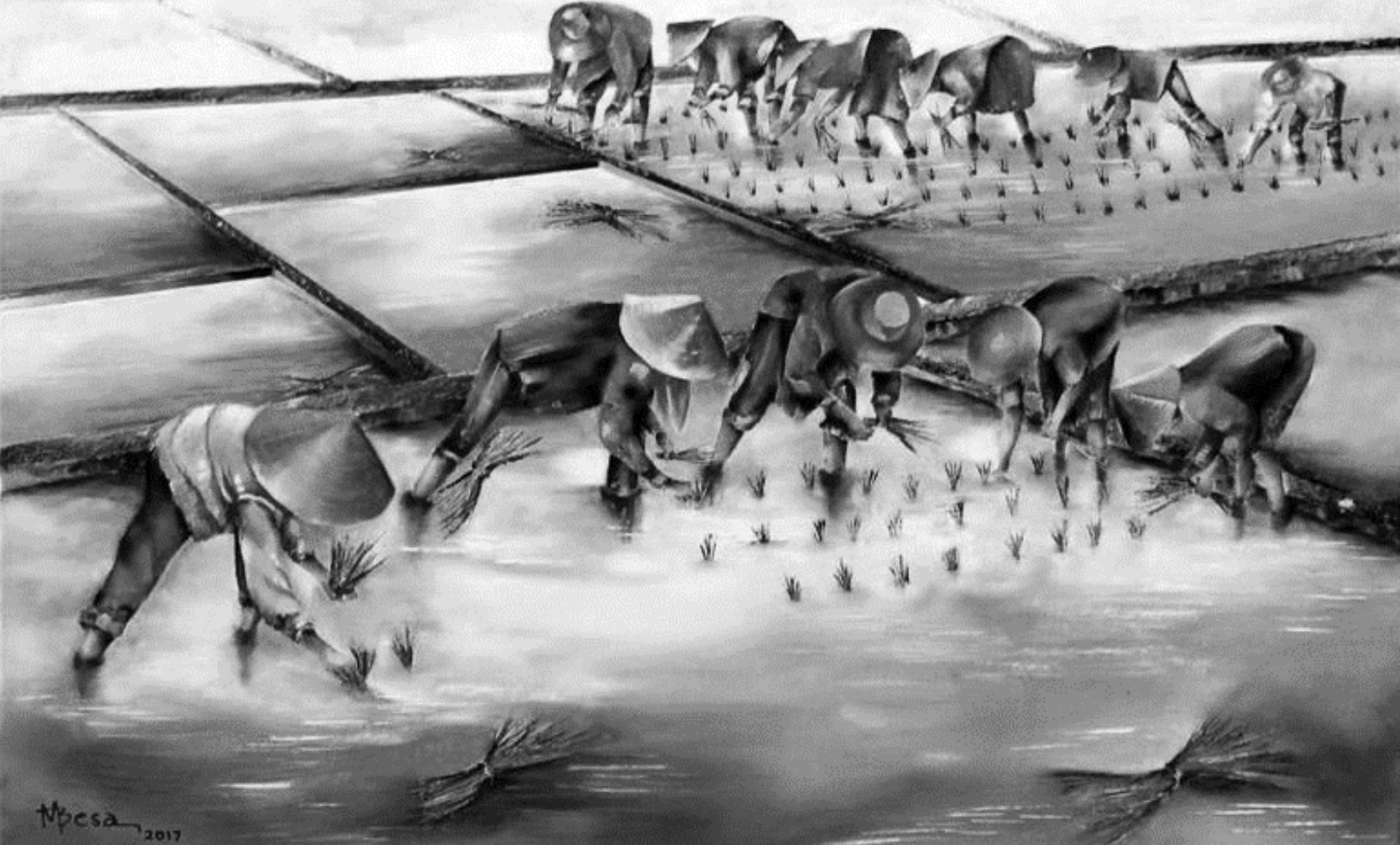
The current GHG Protocol framework with regard to Scope 3 is ambiguous as to the requirement for additionality, stating only that *“in cases where accuracy may be more important, it may be appropriate to undertake a more detailed assessment of the actual reduction using a project quantification methodology.”* Such a methodology – according to the framework – specifically requires the “demonstration of additionality” relative to a baseline. From the perspective of 2° Investing Initiative, while quantifying additionality is still an unresolved issue (see discussion above), a key predecessor for additionality to be possible is ‘intentionality’. This intentionality concept requires that specific set of actions with the explicit goal of achieving the target should be put in place and be associated with the target in order to prevent financial institutions importing GHG emissions reductions in their portfolio without actually taking any action or simply benefiting from actions from their peers.

While additionality is an ever-elusive challenge, the alternative – currently seen across the markets – are claims of GHG emissions reductions that are not evidenced. The following represents a sample of claims in marketing documents

“allows investors to have an (sic) real impact on global warming issues”

“A fund designed to have a real impact on the environment and help to find solution for global warming”

“For example, A 10-million-euro investment in (name of fund) for one year would reduce CO2 emissions by 8,500 tco2 which is equivalent to taking 3,800 cars off the road for a year.”



Artwork: Planting Rice by Miriam Besa, C. 2017

SOLUTION #3: Intentionality as a prerequisite to additionality

The target-setting process itself can be considered to represent ‘intentionality’. However, there are a couple of challenges to this assumption. First, target-setting frameworks, such as the SBTi, tend to emphasize reputational considerations over the objective of reducing GHG emissions. The objective of a target may thus be to improve the reputation, rather than achieve emissions reduction. In such a case, intentionality is not given. While this of course may also be the case for some companies, the ability to set a target without actual GHG emissions reduction is relatively constrained.

Second, even where motives are more genuine, they may not actually lead to a willingness for strategic reorientation. This is consistent with the evidence that what, on the surface, would appear to be strategic and fundamental adjustments to a banks’ business (e.g. ‘aligning with the Paris Agreement’) usually does not come with an associated strategic reorientation. Certain pledges sometimes are ‘signed’ without necessarily having board commitment for example. In practice, the responsibility of their implementation is often left largely to underfunded sustainability teams.

We concluded that target-setting frameworks should be associated with an actions framework to demonstrate the intentionality of contributing to emissions reduction. Thus, financial institutions should define – given that they don’t control the outcome – at minimum a set of actions that they plan to execute to contribute to achieving the pathway goal and demonstrate the materiality and potential of this catalogue of actions for driving change. They should then identify ex-post:

- a. Whether these actions were executed
- b. Whether there is evidence as to their effectiveness in terms of driving change;
- c. Whether the targeted emissions reduction / scenario alignment was achieved;

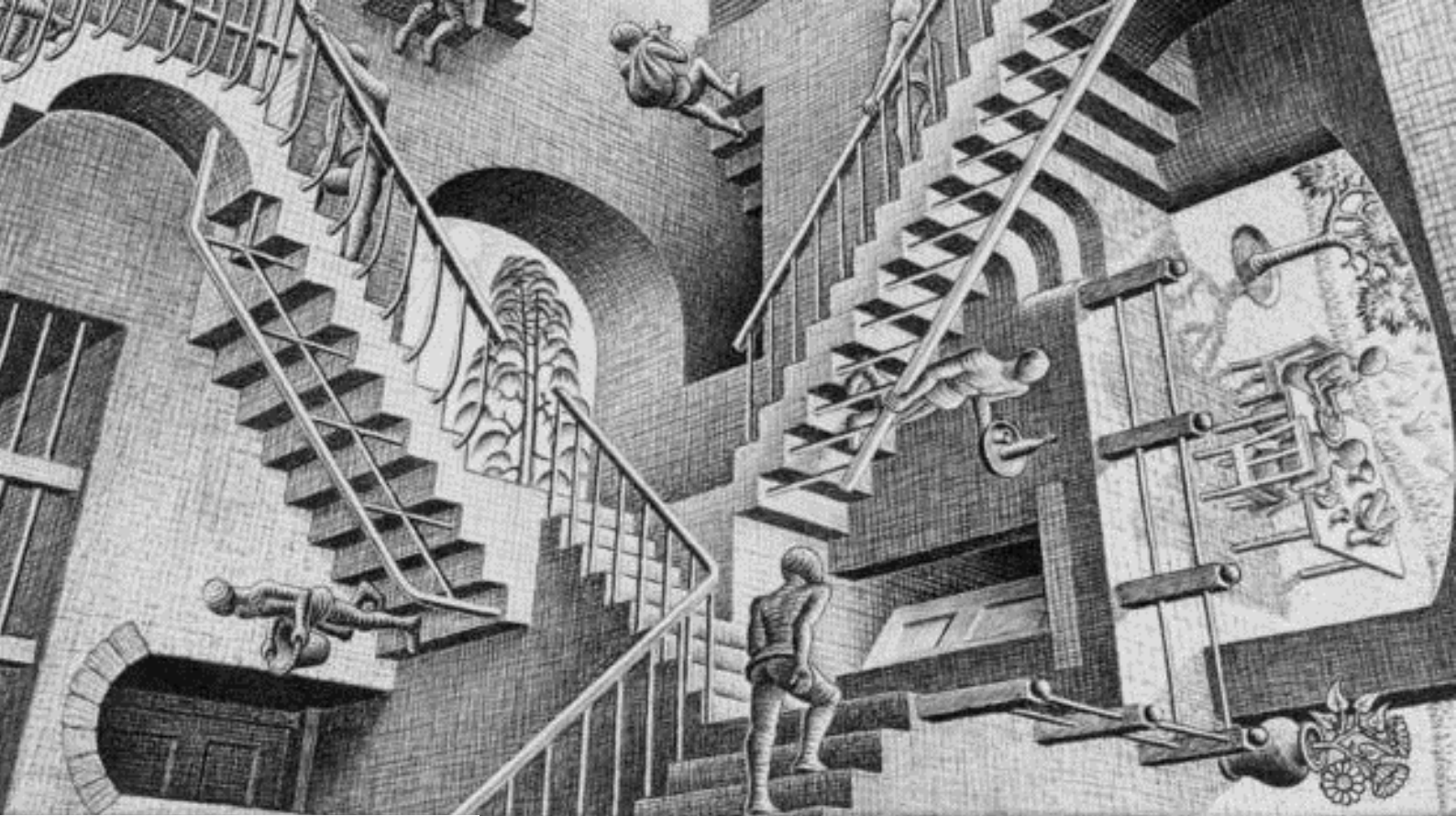
TECHNICAL DEEP-DIVE: ADDITIONALITY IN THE CURRENT GHG PROTOCOL FRAMEWORK

The current GHG Protocol framework with regard to Scope 3 is ambiguous as to the requirement for additionality, stating only that *“in cases where accuracy may be more important, it may be appropriate to undertake a more detailed assessment of the actual reduction using a project quantification methodology.”* Such a methodology – according to the framework – specifically requires the “demonstration of additionality” relative to a baseline. From the perspective of 2° Investing Initiative, while quantifying additionality is still an unresolved issue (see discussion above), a key predecessor for additionality to be possible is ‘intentionality’. This intentionality concept requires that specific set of actions with the explicit goal of achieving the target should be put in place and be associated with the target in order to prevent financial institutions importing GHG emissions reductions in their portfolio without actually taking any action or simply benefiting from actions from their peers.

TECHNICAL DEEP-DIVE: PORTFOLIO ALIGNMENT & INTENTIONALITY

A number of organizations have started to make commitments to ‘align their portfolio with climate goals’ (e.g. Katowice Commitment). Some stakeholders in the market see these types of commitments as evidence as to the contribution that these institutions want to make to limiting global warming to well-below 2°C. A survey of 15 banks partnering with the 2° Investing Initiative on developing portfolio alignment metrics suggests that only 7 of 15 respondents see “impact” as a driver for their work, while all 15 focused on compliance with standards and 13 of 15 considered portfolio alignment as a tool to manage transition risk.

This evidence is supported by interviews with a number of banks in the pilot who – while seeking to support the Paris Agreement in principle – did not consider emissions reduction as the primary intention, but rather reputational factors, policy constraints, risk management, and the indirect signalling role as decisive in their decision-making. Part of the question here is also the extent to which ‘accidental’ divestment (e.g. from equity portfolio managers in certain markets with no coal producers) should be considered as science-based contributions to emissions reductions.



Artwork: *Relativity* by M.C. Escher, C. 1953

SOLUTION #4 The concept of progress

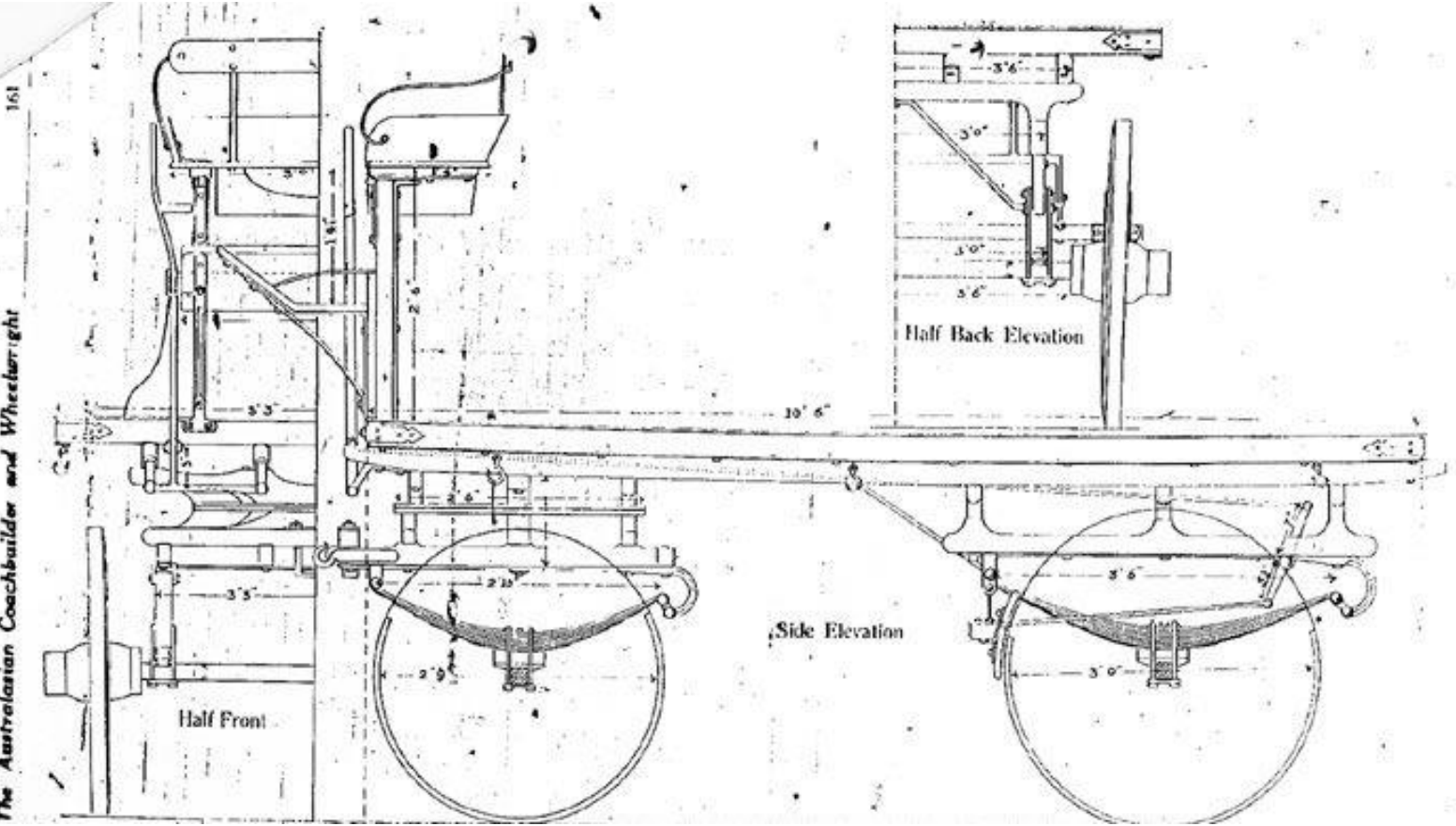
Criteria 6 of the criteria and recommendations document of SBTi for companies provides that targets 'already achieved' are not eligible. The framework thus clearly expects that targets go "*beyond current ambition*". Coupled with the Scope 3 additionality principle, this implies that existing commitments by companies – including production plans – do not satisfy the principle of going "*beyond current ambition*" and contributing to GHG emissions reduction *unless* the financial institution can document that its particular contribution is additional with regard to realizing that state commitment.

TECHNICAL DEEP-DIVE: IMPLICATIONS FOR EXCLUDING 'CURRENT AMBITION' FROM SCOPE

As outlined above, the Science-based Targets Initiative for companies currently excludes companies that have already achieved the target from setting a 'certified' target. As a result, a carbon-neutral company in 2019 cannot set a science-based target. Similarly, in case of supplier engagement targets, one would assume that a company that already has 100% of their suppliers with a science-based target could not set a supplier engagement target since that target too has already been achieved. It should be noted that the guidance is unclear on this point, however.

Independent of whether the concept of 'current ambition' extends to indicators already achieved, or indicators where the achievement is already planned, one question raised by investors is the extent to which this creates a 'penalty' for investing already today in zero-carbon companies.

The current framework suggests that these companies or assets – however defined – would be out of scope of the target-setting process unless additional progress is expected above and beyond what is already achieved (or planned, if considering targets). The framework would not however penalize investments in these companies in terms of raising the level of ambition. Rather, the baseline would be calculated exclusive of these companies.



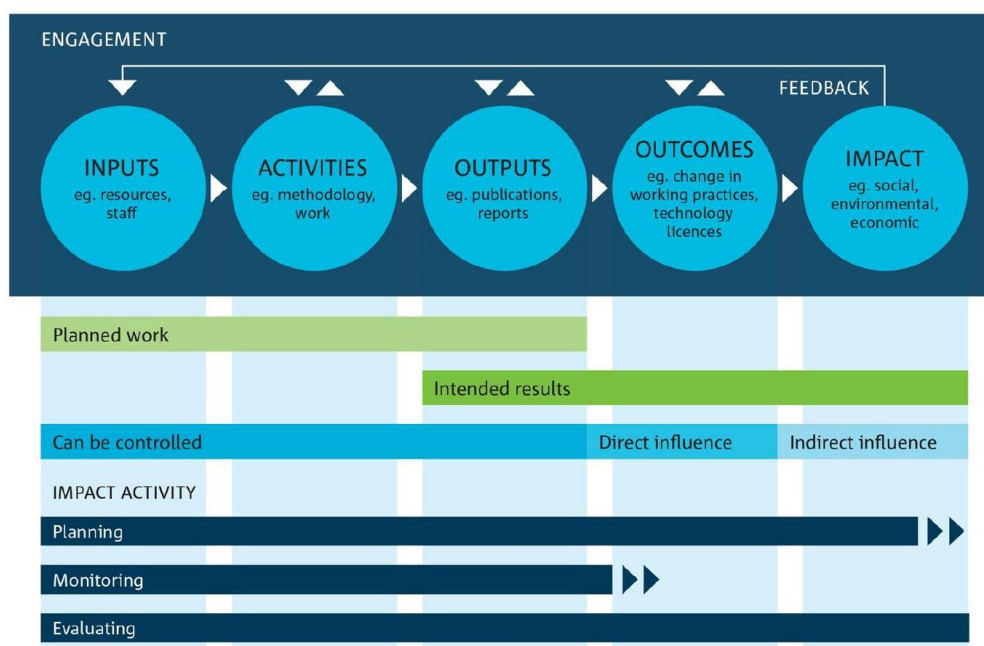
**WHAT IS THE BLUEPRINT FOR
IMPLEMENTATION?**

IF YOU ONLY HAVE 1 MINUTE...

The implementation of this solution can be built on traditional and existing 'impact' frameworks, such as those developed by the W.K. Kellogg Foundation and others (see image below).

The process we envision is the following:

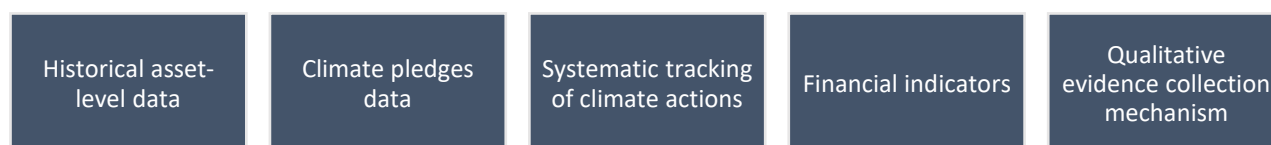
- 1) Decide whether you want to set a science-based target and the level of ambition specific to that target.
- 2) Decide on the scope of assets and the **activities** you plan to set that target on, and put the **inputs** in place to deliver on those activities
- 3) Implement the actions & measure **outputs** and **outcomes**.
- 4) Track evidence as to the **impact** of the actions.
- 5) Go back to Step 2 (or 1 if you're having second thoughts)



Impact Framework derived from the work of the W.K. Kellogg Foundation

Most of these steps largely mirror those being explored in the context of traditional portfolio alignment approaches. While monitoring a scope of assets potentially distinct of the portfolio is novel, it is technically not radically different to monitoring the portfolio itself

However, the big challenge relates to #4, notably the tracking of evidence as to the impact of actions. It is this issue that is further explored in this section. Building evidence involves a combination of rejecting the null hypothesis that no emissions were reduced as a step 1 and the finding a combination of quantitative and qualitative evidence as to the influences behind the emissions reduction. Implementing this framework then is predicated on five key inputs, visualized below.



BUILDING THE EVIDENCE

There is no reason to believe that in complex systems of which financial markets are one example, causal relationships can be identified. Nevertheless, principles are needed here in some form, even if the principle concludes not to attribute at all, but simply account the aggregated trends associated with the assets / emissions inventory being targeted. For sure, the current approaches make no comment as to the contribution of financial institutions to emissions reduction (or the lack thereof), nor of the ambition that financial institutions represent in supporting emissions reduction. They reflect – at a moment in time – the composition of a portfolio

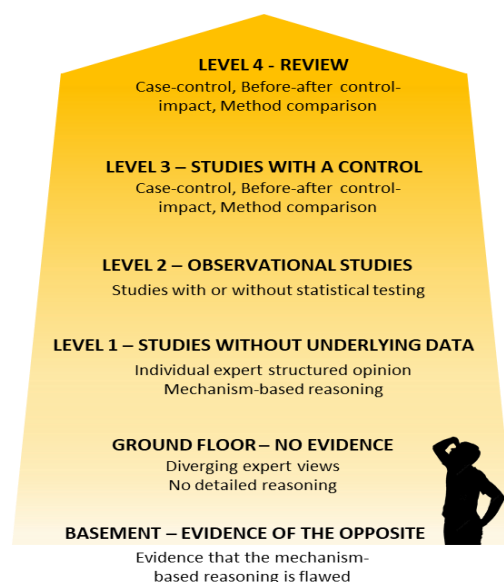
One important issue in the context of building an evidence tracking system is providing for a failure resolution mechanism, given that financial institutions, like companies for Scope 3, do not control the target outcome itself, the target-setting framework needs to provide for a failure resolution mechanism that governs what happens when the ambition is not achieved.

Example: Should a financial institution not reach their target outcome; this should be communicated. Financial institutions have the right to ‘reset’ the target when not achieving it where there is credible evidence that the commitments related to the actions that financial institutions took were kept.

Crucially, this is an issue raised by several financial institutions worried about the reputational risk of setting targets that they may not achieve despite their best efforts.

The following sets out the different techniques to collect evidence, that 2° Investing Initiative and its partners as to the relative efficacy and contribution of climate actions in financial markets to GHG emissions reductions in the real economy. The framework builds around traditional qualitative and quantitative research methods to build evidence. The figure on the right shows the different levels of ‘evidence’ in terms of robustness of approaches. While Level 4 is the ultimate goal, much of the techniques described below, essentially operate at Level 1 and Level 2, with potential for Level 3 analysis in specific cases.

It is worth reiterating and reminding that while Level 2 evidence may be unsatisfactory relative to the evidence we have in other areas of research, the current debate on the topic is not too dissimilar from religious debates in the Middle Ages in terms of scientific process and level of evidence vs. a discussion based on “beliefs”.



Case study Green Bonds Auto manufacturers

Analysis by the 2° Investing Initiative has shown that car manufacturers issuing green bonds subsequently lost market share in the hybrid and electric vehicle market, suggesting no additional emissions reduction beyond what was already planned.¹³ While the study was limited in scope and time horizon of analysis, further research of this kind can be imagined to identify the effects of various climate actions in financial markets on production and investment plans of companies and associated performance relative to the Paris Agreement.

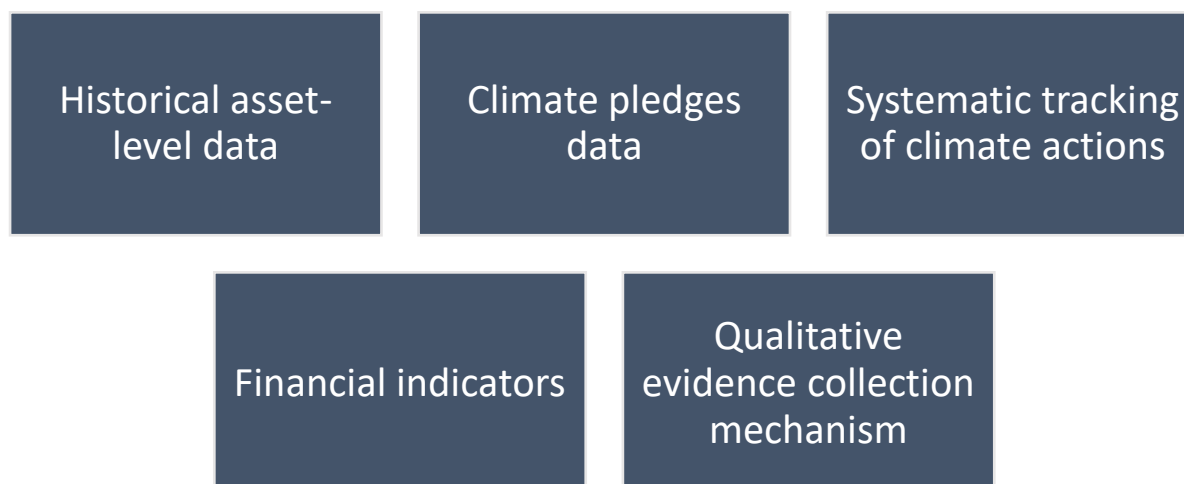
¹³ <https://2degrees-investing.org/shooting-for-the-moon-in-a-hot-air-balloon-measuring-how-green-bonds-contribute-to-scaling-up-investments-in-green-projects-a-discussion-paper/>

A framework to build evidence should rely on the following analytical tools:

- i) **Rejecting the null hypothesis that no emissions were reduced based on panel studies.** The first type of evidence collection mechanism involves identifying the extent to which emissions reduction took place to begin with within the emissions inventory / targeted financial & economic assets. The purpose of this exercise is simply to establish whether any emissions reduction took place, independent of whether the financial institution contributed to that reduction. It operates under the assumption that no emissions reduction relative to the baseline means no contribution. Obviously, hypothetically, climate actions in financial markets could have prevented emissions increase, but the target-setting framework highlighted above emphasizes and focuses on emissions reduction. One technical question here relates to the baseline against which emissions reduction are measured, which relates to the question of 'current ambition' described above and could mean today's emissions or emissions reduction in addition to what was already planned / announced.
- ii) **Identifying changes to financial parameters based on financial analysis.** The second component of building evidence is tracking evidence as to changes in financial parameters that may influence decision-making in the real economy, notably related to the cost and availability of capital. Much of this data can be easily tracked on Bloomberg or related financial data providers and essentially focuses on understanding whether there are movements in prices that can be attributed to climate actions or whether climate actions are being 'offset' by other market actors. Of course, many price movements, notably those related to German utilities or US coal companies, will have myriad drivers and some 'climate-related' price movements may be purely 'risk-driven' and not associated with any contribution concept or science-based target concept. While desirable arguably, such dynamics would not imply any additional contribution of initiatives like SBT to reducing GHG emissions.
- iii) **Qualitative evidence based on interviews and surveys.** Another element of impact tracking involves the use of qualitative data collection using interviews, surveys, workshops, etc. This provides a context-based, qualitative understanding of the mechanisms that led to impact and the extent to which they can be attributed to individual actions, as well as the conditions that allowed for impact to take place. The evidence collection should focus both on financial institutions but also companies and their relationship to financial institutions.
- iv) **Qualitative evidence based on desk research.** Finally, evidence-based analysis can also rely at least in part on desk research, sourcing myriad of sources including press material, corporate reports, investor calls, public announcements, regulatory filings, and a range of complementary dataset to inform on the question of impact, as well as to give insight into potential other drivers outside of financial markets that could be considered explanatory variables.

The issues described above represent core techniques but can of course be complemented by additional research methods.

The following summarizes the necessary infrastructure components in order to track evidence of the kind described above.



a. Historical asset level data and related climate pledges data

Identifying emissions reduction while controlling for emissions transfer requires either granular asset level data that allows for a tracing of economic assets through the system and / or company emissions inventory data that controls for emissions transfer. While the second may be a viable alternative to asset-level data, it will come with shortfalls notably the inability to isolate what happened to emissions once they were transferred. The data is required to identify changes in GHG emissions in the real economy. For certain sectors and types of activities (e.g. R&D), where asset-level datasets are either not available for now or not relevant as a data unit, alternative datasets may be required and should be explored. Part of the evidence tracking framework also requires information on corporate actions and pledges (e.g. SBT) in order to be able to trace these pledges through the system.

b. Systematic tracking of climate actions at granular level

In order to build evidence as to the effectiveness of climate action, systematic tracking of these actions across financial institutions is required. This involves a significant increase in the granularity with which these actions are tracked and the information provided as context. Simply defining that actions should be taken provides no commentary as to whether the actions taken are sufficient or not or meaningful. Financial institutions committing to engage could in theory deploy significantly different resources and strategies, as well as tools (e.g. shareholder resolutions, bilateral engagement). Strategies may be coordinated or not. Even in the case of divestment, where the action is in principle binary, divestment associated with communications strategies are different than 'quiet' divestments. A meaningful target setting framework – while obviously stating appropriate levels of ambition in terms of temperature outcomes, should also speak to appropriate levels of ambitions in terms of climate actions by financial institutions.

On its surface, this may appear as a significant additional reporting burden in an environment where even just reporting on climate indicators is still something not consistently and comprehensively done across the board.¹⁴ However, development of impact tracking software and infrastructure could dramatically reduce the reporting burden and costs, notably through the following specific measures:

- **Requirement to only track your own actions.** Unlike current environmental reporting frameworks, the requirements for financial institutions to track their action only relates to tracking their 'own' actions, thus obviating the need for purchasing and processing third-party data. In effect, the reporting suggested here is essentially little more than keeping track of what the financial institution is doing.¹⁵
- **Scope of actions.** While it is obviously desirable for actions tracking to be detailed, there are options to scale up / down the granularity of the tracking in order to facilitate its use for financial institutions with different resources. Moreover, the transaction costs of tracking actions are i) something a financial institution likely does anyway in-house as part of its internal reporting, and ii) in scope commensurate to the size of the institution i.e. a small institution will have less actions and by extension less elements to track;
- **Opportunities for economies of scale.** Many actions taken by financial institutions are coordinated with other financial institutions or form part of a broader initiative (e.g. Climate Action 100+, Divest pledges). As a result, impact tracking infrastructure can be designed to pre-populate certain actions and thus reduce transaction costs further. Again, it is expected that smaller financial institutions are likely to benefit from this as they are more likely to act in conjunction with others.

The questionnaire in the box on the next pages provides an example of what a reporting framework could look like for financial institutions. This information can also give insight into # of FTEs deployed and resources mobilized. Our estimates suggest that populating a questionnaire of this scope including data collection would take roughly 3-5 working days.

c. Financial indicators.

In order to track outcomes in financial markets, data on 'financial indicators' is required, including underlying financials, asset price data, transaction data, but also data related to outcomes of shareholder resolutions, IPO, bond issuance and pricing, and related information.

d. Qualitative evidence collection mechanism.

Finally, qualitative data collection mechanisms are required, including surveys, workshops, interviews, and desk research.

¹⁴ This is even the case in France, where at least in theory reporting is mandatory.

¹⁵ In case data exists, but in case the data is scarce, another approach would be required;

Questionnaire (Questions marked with an asterisk are voluntary):

The purpose of this questionnaire is to establish the actions and associated objectives accompanying portfolio management and / or asset allocation strategies.

1. Which of the following actions did you take (multiple answers possible):
 - Divestment (Please cite the scope of companies targeted by this action)
 - a. Coal companies (please put percentage of business used as threshold, eg 30%, 50% and indicator used)
 - b. Fossil fuels (Please describe methodology used to identify these companies)
 - c. Carbon Underground 100 / 200
 - d. Other (Please describe scope)
 - Increasing 'green' investment
 - Engagement (Lead of Multi-investor dialogue only; Collaborator of Multi-investor dialogue only: Bilateral/private engagement only; Voting; multi-investor or annual general meeting (AGM); Resolution)
 - Political Engagement
 - Legal action

For each of the selected actions, please fill out the following questions:

2. Was this action coordinated with other FIs?
 - Yes (please list organization or click other)
 - a. ClimateAction 100+
 - b. Asset Owner Pledge
 - No
 - If yes: did you lead this engagement: yes/no?
3. What was the time period over which the action took place (Start to finish date, if applicable?)
4. What were the resources in terms of FTE put in place to mobilize action (in # of FTEs?)
5. Where other resources mobilized (Y/N)?
6. Was this action communicated publicly (Y/N)?
7. What other resources were mobilized (e.g. data purchases, consultancy fees) and how much (please list – if allowed – choice of service provider, cost, and scope (max 500 characters)? *
 - Data fees
 - Consultancy fees
 - Proxy voting fees
 - Membership fees in organizations
 - Other:
8. Did you record any specific outcomes of the action in financial markets (e.g. changes in cost of capital, availability of capital) (Y/N)?
9. What changes did you record (Please list the company / set of companies for whom you identified the changes and provide evidence if possible)
 - Cost of capital changes
 - Availability of capital changes
 - Other
10. Did you record any climate-related commitments from your clients following your actions (Y/N)?
11. Did you record any changes in emissions / economic activity (Y/N)?
12. If yes, what commitments / Changes (please provide the company name for whom you have identified the commitments and evidence if possible)? *
 - SBT
 - Shutting down emission intensive assets
 - Refurbishments & energy efficiency
 - Increasing investment in zero carbon technologies



Artwork: *La charrette brisée*, Alphonso Legros, C. 1876

WHAT REMAINS UNRESOLVED?

There are of course dozens of open questions in the minutiae of developing criteria and recommendations and implementing the type of solutions suggested above. It is relevant however to briefly highlight a set of fundamental challenges / unresolved issues that require further exploration, some of which are briefly outlined below

Treatment of impact funds.

One challenge is that many of the most ambitious strategies of financial institutions involve investments in small-cap or private equity associated with developing breakthrough cleantech and zero-carbon technologies, where the current SDA or PACTA approaches do not provide a framework. Here, ambition is not in emissions reduction, but essentially the scaling of technologies that replaces emissions. Currently, the SBT framework does not allow for avoided emissions concepts given the complexity of measuring these emissions and the significant potential for greenwashing. While this makes sense, it does exclude a significant portion of investment strategies from the SBT framework and risks undermining these strategies where they don't fit into the neat approaches developed in this initiative. One potential solution here is to provide for carve outs for fund strategies that explicitly demonstrate intentionality in terms of emissions reductions through scaling of green technologies, perhaps making specific reference to the EU taxonomy or related standards. Further work is needed in this area.

Target-setting for asset managers.

In theory, the SBT framework is designed for 'private' financial institutions, not the public sector. This would imply that public pension funds are out of scope, even though many of them are leaders on this topic. On the other hand, asset managers are in scope, although they ultimately have very little control over their mandates. They can of course decide not to pitch on certain mandates inconsistent with the SBT framework, but it seems unlikely that many of them will do this. Moreover, it misunderstands the dynamic of power, with asset owners unlikely to change their mandate RFPs if a handful of asset managers don't respond.

Attribution system & Actions framework.

As outlined above, an attribution system is lacking to allocate 'responsibility' or 'credit' for GHG emissions reduction to individual financial institutions (or other stakeholders in the economy for that matter). What is more, there is obviously already an 'attribution system' to companies in the sense of them getting credit for setting SBTs. While it is unclear whether it is technically feasible to build such a system in a 'science-based way', potential approaches could be envisioned to overcome this challenge. A corollary of the question of attribution is the question of what 'ambitions' is expected with regard to the actions, how are they classified, what

The target-setting business model.

More broadly, the discussions raised in the previous sections raises a broader question as to the business model of the 'target-setting community', specifically:

- a. Who oversees collecting and analysing evidence?
- b. What is the governance of the evidence analysis and the standards?
- c. How is the evolution of evidence and insight managed in the context of target-setting standardization initiatives?
- d. How are conflicts of interest from parties, including NGOs and consultancies, addressed?

ref



Artwork: Jean-Marc Coté, *Aerial Firemen*, C. 1900

WHAT WILL THE FUTURE LOOK LIKE?

None of these mechanisms and infrastructure described above will lead to a perfect world where we will know exactly what works and what doesn't. "Science" did not deliver this world over the past few centuries neither and indeed, it is one reason why many scientists are still religious. However, hopefully, the measures proposed here will graduate the discussion from the Middle Ages and bring our understanding of climate actions in financial markets and their contribution to emissions reduction in the real economy into the 21st century.

Whatever the evidence, responsible marketing is a critical component of target-setting. Principles and key simple concepts are critical in this regard, notably related correctly distinguishing real vs. virtual emissions reduction, the claim of credit for these reductions, and transparency in the case of 'failure'.

While these principles may seem to be designed to confront current practices, they can also serve financial institutions' interest, who are faced with a growing expectation from civil society and policymakers to 'save the planet' despite having an important but ultimately limited role in determining emissions in the real economy.

Given the complexity of the exercise, the scope for 'cheating' and the multiple layers proposed, communication principles and guidance are needed in order to facilitate clear communications. It is worth reminding that the point of the discussion here is not to suggest that portfolio alignment is not a relevant concept. Rather that it should not be equated with impact and alternative frameworks are required to measure impact. It is these measures that this note sets out. So what will the future look like? We will end this report with two entirely hypothetical, biased narratives as to the future of sustainable finance

#1 Sustainable finance abandons attempts at building evidence as to its impact on the real world and attempts to steer this impact.

The next 2-3 years will continue to see major traction related to pledges, announcements, launch of products, initiatives, etc. As consumers get more involved, through regulation – notably in Europe – but also through other initiatives, new actors enter the market and seek to lift the veil. A lack of accountability coupled with a few scandals of greenwashing turn off consumers. Lawsuits as to green claims scares off some actors for fear of being sued in a 'fact-free' environment. Without evidence of impact, funders and governments eventually turn their back on the space. "True leaders" are unable to get strategic recognition as everyone 'can be a star'. While ad-hoc initiatives challenge consensus and seek to build evidence, they don't penetrate the discourse in the sector. As consumers realize greenwashing, further damage is done to the credibility of the financial sector. Leaders in the space eventually turn to other areas.

#2 Sustainable finance graduates from 'beliefs' to holding itself accountable and takes the next step as to building evidence.

Market perspectives turn and evidence-base becomes critical for recognition. Pledges without impact tracking strategies are rejected by the market. There is an internal conflict over this between 'marketing' and 'real targets', but ultimately the group of actors supporting evidence-based strategies wins. Mainstream is crowded as in we see things 'work' and marketing sees the opportunity to tell a meaningful story. Policy action is scaled as its potential impact becomes visible for specific set of actions. Some theories of change are abandoned, but new ideas and innovation materializes in the market. Science-based target-setting criteria become clearer, transaction costs drop, and a concert of actors is pivoting both finance and the real economy.

Time to choose our future...

Bibliography

Dimson, E., Karakas, O. and Li, X. (2015) 'Active Ownership', *Review of Financial Studies* 28(12)

Dimson, E., Karakas, O. and Li, X. (2018) 'Coordinated Engagements, *SSRN Electronic Journal*

Carbon Trust, World Resources Institute, World Business Council for Sustainable Development (2013) 'Greenhouse Gas Protocol: Technical Guidance for Calculating Scope 3 Emissions (version 1.0)' https://ghgprotocol.org/sites/default/files/standards/Scope3_Calculation_Guidance_0.pdf

Science Based Targets Initiative (2019) 'Science-Based Targets Setting Manual' <https://sciencebasedtargets.org/wp-content/uploads/2017/04/SBTi-manual.pdf>

World Resources Institute, World Business Council for Sustainable Development (2011) 'Corporate Value Chain (Scope 3) Accounting and Reporting Standard' https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporting-Standard_041613_2.pdf

Thomä, J., Dupré, S. and Hayne, M. (2018) 'A Taxonomy of Climate Accounting Principles for Financial Portfolios' *Sustainability*.

DeNederlandscheBank (2017) 'Waterproof? An exploration of the climate related risks for the Dutch financial sector study'

2° Investing Initiative (2017) 'Out of the fog: Quantifying the alignment of Swiss pension funds and insurance with the Paris Agreement' (PACTA study) https://www.transitionmonitor.com/wp-content/uploads/2017/10/2ii_Fog_v0.pdf

Thomä J., Murray, C., Jerosch-Herold, V. and Magdanz, J. (2019) 'Do you manage what you measure? Investor views on the question of climate actions with empirical results from the Swiss pension fund and insurance sector', *Journal of Sustainable Finance and Investment*

Science Based Targets Initiative (2019) 'Sectoral Decarbonization Approach: A method for setting corporate emission reduction targets in line with climate science' <https://sciencebasedtargets.org/wp-content/uploads/2015/05/Sectoral-Decarbonization-Approach-Report.pdf>

2° Investing Initiative (2018) 'Shooting for the moon in a hot air balloon? Measuring how green bonds contribute to scaling up investments in green projects' <https://2degrees-investing.org/shooting-for-the-moon-in-a-hot-air-balloon-measuring-how-green-bonds-contribute-to-scaling-up-investments-in-green-projects-a-discussion-paper/>

ABOUT 2° INVESTING INITIATIVE

The 2° Investing Initiative is a multi-stakeholder think tank working to align the financial sector with sustainability policy goals. The organization is not-for-profit and non-commercial. It helps develop the regulatory frameworks, performance metrics, data and tools to support this evolution.

Thanks to its EU-funded research programs, 2° Investing Initiative has introduced the climate scenario analysis of investment and lending portfolios into regulatory frameworks (France, EU, California), investors' and banks' practices (for more than 600 users and €20Tn of assets) and supervisory practice (UK, EU, California, Japan). 2° Investing Initiative research on the suitability assessment test in Europe triggered, via the HLEG, the reform of MIFID and IDD introduced by the EC regulatory package on sustainable finance.

Authors: Jakob Thomä, Emmeline Stein



This report has received funding from the European Union's Life program under grant agreement n° LIFE18 NGO/SGA/FR/200020.

Supported by:



Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety

based on a decision of the German Bundestag

This project is also part of the International Climate Initiative (IKI). The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) supports this initiative on the basis of a decision adopted by the German Bundestag.

Disclaimer: This report reflects only the authors' views. The funders are not responsible for any use that may be made of the information it contains.

Contact:

Email: contact@2degrees-investing.org

Website: www.2degrees-investing.org

Paris (France): 97 rue la Fayette, 75010 Paris, France (legal address)

New York (United States): 205 E 42nd Street, 10017 NY, USA

London (United Kingdom): 40 Bermondsey Street, SE1 3UD London, UK

Berlin (Germany): Schönhauser Allee 188, 10119 Berlin, Germany