



On the road to Paris?

A review of financial institutions' climate-related commitments

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ABOUT: The 2° Investing Initiative (2DII) is an international, non-profit think tank working to align financial markets and regulations with the Paris Agreement goals.

Working globally with offices in Paris, New York, Berlin, London, and Brussels, 2DII coordinates some of the world's largest research projects on climate metrics in financial markets. In order to ensure our independence and the intellectual integrity of our work, we have a multi-stakeholder governance and funding structure, with representatives from a diverse array of financial institutions, regulators, policymakers, universities, and NGOs.

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FUNDERS: This project has received funding from the European Union's LIFE program under grant agreement LIFE18IPC/FR/000010 A.F.F.A.P.

It 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.

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Supported by:



Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety

based on a decision of the German Bundestag

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Executive summary

Context

Sustainable finance initiatives and related commitments have flourished in the aftermath of the Paris Agreement¹, in response to increasing political and societal pressure on financial institutions to take action. However, there is still limited understanding of the extent to which these commitments are effective (i.e. drive emissions reductions in the real economy). There is a pressing need to address this particularly in France, where financial supervisors are tasked with monitoring these pledges and assessing their contribution to the Paris Agreement. This report aims to review the current nature of climate commitments by financial institutions and the existing scientific evidence as to the impact of these pledges in terms of GHG emissions in the real economy.

Classifying commitments from financial institutions

We built a database gathering 2,584 climate-related commitments taken by 1,487 financial institutions – on both the individual and collective levels. This database, although not representative of the market for data-availability reasons discussed in Annex 1, allows for the classification of commitments into 3 categories and 9 sub-categories, as shown in Figure 1.

Figure 1: Categorization of climate-related commitments taken by financial institutions

Categories	Portfolio construction commitments	Engagement commitments	Internal management process commitments
Sub-categories	Pledges to make low-carbon investments	Pledges to engage with investees on their impact	Pledges to better assess or manage climate risks
	Pledges to divest from or exclude from portfolio high-carbon assets or companies	Pledges to engage with investees on other objectives	Pledges to implement or strengthen disclosure of climate-related elements
	Pledges to reduce the portfolio carbon footprint	Pledges to engage with non-market actors on climate-related topics	Pledges to reduce operational emissions
	Pledges to set an internal carbon price		

One interesting takeaway is that financial institutions tend to mix, in their commitments, overarching objectives (e.g. reducing carbon footprint) with specific actions (e.g. low-carbon investment,

¹ See Table 2

engagement with investees). Clearer distinctions between ambition and means deployed to meet the ambition would facilitate the realization and analysis of pledges' impact potential.

Of course, it is important to highlight a number of caveats to this classification exercise. First, the focus here is on public pledges, with potentially significant actions “behind closed doors” that we don't track. This is by design. Second, in that same spirit, we are not tracking compliance with commitments. As shown by the analysis of the Swiss climate alignment (2DII, 2020), pledges and high-level commitments may not always translate into climate actions.

Shedding light on financial institutions' commitments impact potential: What does science say?

Although informative on current trends of climate pledging, the above classification is not sufficient to uncover the ability of financial institutions' commitments to contribute to climate change mitigation. Various pieces of the puzzle are missing. Section 3 seeks to identify the current state on the knowledge of the real-world impact of these climate commitments. It also highlights the dramatic gap in our current knowledge on this topic

Discussing the ability of a commitment to impact the real economy entails understanding that climate actions used to implement it, and the evidence that exists regarding the impact of these actions. Throughout this paper we will use both climate pledges and climate commitments interchangeably. Climate actions are defined as actions undertaken by financial institutions to influence the real economy towards meeting climate goals. In this paper, we thus breakdown each type of commitment into the various actions that can be used to fulfil it and discuss existing evidence regarding the impact of these actions.

Julian Kölbl and Florian Heeb's research² is the only existing meta-analysis of literature on this question and, as such, their conclusions are used as a scientific reference³. Furthermore, this paper relies on their research to define impact. The impact of a financial institution's commitment is defined as the **change caused** by the commitment in the real economy. **Impact**, in this report, thus designates a **causal, demonstrable** relationship between a financial institution's action and a change in the real-world. The existing level of evidence regarding the ability of financial institutions' commitments to cause a change in emission reductions is rated through the scale introduced by Kölbl and Heeb.

² Kölbl, J. F., Heeb, F., Paetzold, F., & Busch, T. (2020). Can Sustainable Investing Save the World? Reviewing the Mechanisms of Investor Impact. *Organization and Environment*. ; Kölbl, J., Heeb, F., Paetzold, F., & Busch, T. (2018). Beyond Returns: Investigating the Social and Environmental Impact of Sustainable Investing. *SSRN Electronic Journal*, 1-29. <https://doi.org/10.2139/ssrn.3289544>

³ The authors of this paper however recognize that the investor impact research field being still nascent and quickly evolving, frequent updates of Kölbl's meta-analysis will be required for it to remain up to date. 2DII, as part of its impact workstream, intends to conduct such an update in 2021.

Table 1: Level of evidence for the effectiveness of the mechanisms of investor impact.

Evidence level	Description
A Scientific consensus	Systematic reviews of the empirical evidence document a scientific consensus on effectiveness of the mechanism.
B Empirical evidence	Empirical studies show that the mechanism has been effective in specific settings. Yet, it remains unclear how far these findings can be generalized.
C Model-based prediction	Economic models predict that the mechanism should be effective under certain assumptions.
D Narrative	There are narratives that rationalize why the mechanism could be effective.

Heeb and Kölbl (2020)

Based on this scientific framework, two questions are answered:

- What information is needed to analyze the ability of pledges to yield a demonstrable impact?
- What evidence exists regarding the impact associated to the commitment categories highlighted on Figure 1?

Takeaway 1. Actions underlying the commitments are what matters.

As suggested by the ISO 14097⁴ and by Kölbl and Heeb's definitions of investor impact, the impact potential of a climate commitments primarily depends on the set of actions that is implemented to operationalize or realize the commitment, and on the conditions of implementation of the actions. We thus introduce an analysis grid that breaks down commitments into a set of actions, each with its own implementation modalities. Evidence levels taken from Kölbl and Heeb's research can then be matched with each action and its implementation modalities to shed light on the commitment's overall impact potential. Figure 2 illustrates the resulting analysis grid with an example of climate commitment.

⁴ <https://www.iso.org/standard/72433.html>

Figure 2: Analysis grid of commitments - Different implementing actions are associated to different levels of evidence of impact

Commitment	Actions	Output	Outcome	Impact
Climate-related commitment taken by the financial institution	The specific initiatives of the financier to achieve the commitment	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 the climate goals
Reaching carbon neutrality of portfolios in 2030	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
	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

The color code refers to the above table of levels of evidence

Takeaway 2. Although current scientific evidence does not allow for a comprehensive evaluation of the impact of individual climate actions, we know that it is more difficult to demonstrate the impact of some types of climate actions compared to other types

While the body of literature is meaningful and substantial in understanding the effect that shareholder engagement or concessional capital offering can have on corporate actions and even financial indicators like share prices, the literature remains light on demonstrating causal relationship and linking that causal relationship to the specific issue of GHG emissions reduction.

We use the above analysis grid to discuss the ability of each of the identified commitment category to contribute to real world decarbonization in a demonstrable way. The conclusions are three-fold:

- Research and evidence are lacking regarding the impact of the actions that can be used to operationalize portfolio construction commitments on liquid markets, be it through direct or indirect effects. A critical issue with the actions underlying this type of pledge, beyond the current lack of research, is that we may not be able to clearly demonstrate their impact, even if there is impact. This is due to the complicated causal chain that needs to hold for a real-world change to be triggered by those actions. Although this absence of scientific ground

does not disqualify these pledges per se, it sheds doubts on their appropriateness in leading the sectors' response to climate change.

- Portfolio construction pledges, when operationalized in the form of **concessional, flexible or conditional capital offerings to green or transitioning companies**, have a **demonstrated ability to drive changes** in the real economy.
- Although further research is still needed on the topic, preliminary evidence suggests that **engagement pledges can**, under certain conditions, **impact investees' environmental performance**.

These conclusions should not be understood as normative. The objective of the analysis is to **highlight the various elements** (action taken, market targeted, type of expected change in the investee's activities, etc.) **that condition the ability of a commitment to yield a demonstrable impact on the real economy**, not to recommend certain commitments over others. Formulating such recommendations would entail conducting a detailed analysis of the constraints specific to each institution, that conditions their ability to apply certain climate actions. Furthermore, this challenge of demonstrating proof and ultimately communicating this proof in a clear and accurate manner for a variety of stakeholder groups is a critical hurdle that we must overcome. The prevalence of greenwashing in the sector could partially be attributed to the fact that we have not yet solved this critical issue. 2DII intends to investigate these questions in upcoming reports.

1. Introduction

Financial institutions' commitments on climate goals have proliferated over the past 5 years since the Paris Agreement, creating the need to better understand their potential impact in contributing to real world decarbonization.

As part of the EU-funded Finance ClimAct project, which has also helped fund this report, the French financial center represented by Finance For Tomorrow (F4T) and industry groups launched a Sustainable Finance Observatory aimed at gathering information on climate-related commitments of the industry (<https://observatoiredelafinancedurable.com/en/>). Supervisors in France have been asked to monitor and evaluate these pledges, with a first report published in November 2020.

This report has been written to assist financial supervisors and other interested actors such as F4T, in assessing the ability of existing financial institutions' commitments to contribute to real world decarbonization. In other words, **the objective of this report is to investigate the types of commitments currently taken by financial institutions worldwide, and how these commitments relate to the scientific evidence base as to their real-world impact.**

Table 2: Collective climate action initiatives

Collective initiatives	Starting date
Climate Wise	2006
Caring for Climate	2007
Investor Decarbonization Initiative	2008
Climate Bond Initiative	2010
DivestInvest	2014
Montreal Carbon Pledge	2014
The Portfolio Decarbonization Coalition	2014
Carbon Pricing Champion	2015
Climate Action in Financial Institutions	2015
Initiative Climat Internationale	2015
Climate Action 100+	2018
Investor Agenda	2018
Collective Commitment to Climate Action	2019
Global Alliance for Banking on Values – Climate Change Commitments	2019
Net-Zero Asset Owner Alliance	2019
Principles for Responsible Banking	2019

In order to properly explore these questions, we (i) Identified existing categories of climate-related pledges and their current prominence in the market; (ii) mapped these climate-related pledges to the current scientific evidence as to their potential impact, and (iii) provided recommendations to fill informational gaps.

To accomplish this, we followed **three key methodological steps**. First, we pulled together a database of climate commitments by merging various data sources and analyzed this database to identify existing categories of climate-related pledges. Part 2 details the content of the database, while Annex 1 explains how it was built. Then, we drew on existing investor impact research (Heeb & Kölbl, 2020) to map these pledges to the current scientific evidence as to their potential impact (Part 3). Finally, we formulated recommendations for future market analysis based on the various lessons that we learned during this exercise (Conclusion). We offer theoretical, empirical and technical elements to assess the contribution of financial institutions to the Paris agreement through their climate-related commitments.⁵

⁵ Lütkehermöller & al. - New Climate Institute, [Unpacking the finance sector's climate-related investment commitments](#), 2020

2. What are financial institutions pledging? Classifying financial institutions climate commitments.

2.1. Description of the database

We created a database gathering existing commitments taken by financial institutions through collective initiatives and on individual bases. The process of building this database involved merging existing databases, including databases of collective initiatives aiming at mobilizing the financial sector to contribute to fight against climate change, harmonizing dimensions and wording, reviewing and when necessary amending information. The following databases were merged: InvECAT Climate Pledges database, Nazca Global Climate Action database, The Institute for Energy Economics & Financial Analysis' databases, and the World Resources Institute's Green Targets tool, along with lists of signatories to various collective initiatives. More information is given in Annex 1 on how this was done.

While there are clear limitations to the data collection exercise, in particular given the large number of "vague" pledges, issues further explored in Part 4, the database is comprehensive enough to identify key trends.

The merged database gathers the following information: entity names, home countries and sectors, commitments taken, categories of pledges, whether it is part of a collective initiative or not and, if so, the name of the collective initiative.

Overall, the database contains 1,487 financial institutions across 81 countries, which have taken 2,584 commitments (1.7 commitments per institution in average). However, 3 countries (the United States, the United Kingdom and Australia) represent more than 50% of commitments while more than 80% of the financial institutions are in 12 countries (see Table 3). 46% of financial institutions in the database are based in Europe.

Table 3: 12 Western countries represent 80% of financial institutions in the database

Countries	Number of financial institutions per country	Share of financial institutions per country	Cumulated share of financial institutions per country
United States of America	344	23%	23%
United Kingdom of Great Britain and Northern Ireland	236	16%	39%
Australia	183	12%	51%
Switzerland	95	6%	58%
France	84	6%	63%
Canada	49	3%	67%
Netherlands	47	3%	70%
Germany	44	3%	73%
Sweden	39	3%	75%
Japan	34	2%	78%
Denmark	21	1%	79%
Norway	21	1%	80%

Numbers relate to financial institutions included the database.

2.2. Types of commitments

Commitments in the database are broken down by the authors into the following categories and sub-categories, with some pledges (especially the ones that are part of collective initiatives) relating to several categories. The allocation was determined based on the intent of a commitment. Specifically, we differentiate between commitments whose intent is to engage with investees on their impact on climate change from portfolio construction commitments. This classification does not claim to be exhaustive and our categorization only aims at capturing the main trends that are observed in the market.

Table 4: Commitments categories

Categories	Sub-categories	Description
Portfolio construction	Low-carbon investment/positive screening	Commitment to finance low-carbon ⁶ assets or projects or to select companies which contribute to mitigate climate change
	High-carbon divestment/exclusion	Commitment to divest from high-carbon ⁷ assets (such as coal or oil) or exclude them from portfolio
	Portfolio carbon footprint reduction through unspecified means (abbreviated “Carbon footprint”)	General commitment to reduce the portfolio carbon footprint
	Internal Carbon Pricing (abb. “ICP”)	Commitment to implement an internal carbon price
Engagement	Engagement with investees on their impact	Commitment to engage with investees or clients on their impact on climate change
	Engagement (other objectives)	Commitment to engage with investees or clients on disclosure or climate-related risk management
	Policy advocacy	Commitment to engage with government or other non-market actors to foster stronger action against climate change
Internal management process	Operational emissions reduction (abb. “OER”)	Commitment to reduce emissions within the strict boundaries of the company (scope 1 and 2 in GHG protocol terms) and / or GHG emissions embedded in the upstream value chain (scope 3 upstream)
	Disclosure	Commitments to disclose climate-related metrics
	Risk assessment/management (abb. “RAM”)	Commitment to strengthen the assessment and management of climate-related risks whether through the implementation of appropriate tools (for assessment or integration of climate-related elements) or through engagement with investees

⁶ “Low-carbon” being discretionary defined by the committing financial institution.

⁷ “High-carbon” being discretionary defined by the committing financial institution.

Both commitments taken on individual and collective bases have been allocated to these categories. Below are examples of commitments per sub-categories.

Table 5: Examples of commitments

Categories – sub-categories	Examples ⁸
Portfolio construction – Low-carbon investment/Positive screening	"[Financial institution's name] committed to providing \$200 billion in financing to sustainable businesses and projects between 2018 and 2030, with more than 50 percent focused on clean technology and renewable energy transactions that directly support the transition to a low-carbon economy."
Portfolio construction – High-carbon divestment/Exclusion	"We will no longer finance coal extraction, whether via mining projects or via mining companies which do not have a diversification strategy. In a similar move, the bank has decided to no longer finance coal-fired power stations."
Portfolio construction – Portfolio carbon footprint reduction (unspecified means)	"By 2025, reduce the carbon footprint of its asset portfolio by 40% from 2015 levels."
Portfolio construction – Internal carbon price	"Set an internal carbon price high enough to materially affect investment decisions to drive down GHG emissions ..."
Engagement with investees on their impact	"[Financial institution's name institution] has committed to engage with 100% of portfolio businesses on their [...] carbon reduction and energy consumption performance targets."
Engagement with investees for other objectives	"Our goal is to have the 10 most carbon intensive holdings in [financial institution's name] developed and emerging market portfolios respond to the Carbon Disclosure Project climate questionnaire"
Engagement with policy makers or non-investee actors	COMMIT TO: ... 5. Engaging more actively with our own national governments, inter-governmental organizations and civil society to develop policies and measures to provide an enabling framework for business to contribute effectively to building a low-carbon and climate-resilient economy. ... 7. Becoming an active business champion for rapid and extensive climate action, working with our peers, employees, customers, investors and the broader public." Caring for Climate
Internal management process – Operational emissions reduction	"Reduce operational CO2e emissions by 35% from 2015 to 2030"
Internal management process – Disclosure	"We have committed to improving our disclosures on the climate change-related risks and opportunities in our portfolios, in line with the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) for asset owners and asset managers." Investor Agenda - Disclosure
Internal management process – Risk-assessment/management	"We commit to implement, as fully as practicable, the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) over the next three years (as outlined in the TCFD's implementation path). The TCFD recommendations are designed to solicit consistent, decision-useful, forward-looking information on the material financial impacts of climate-related risks and opportunities, including those related to the global transition to a lower-carbon economy" Commitments to implement the recommendations of the Task-force on Climate-related Financial Disclosures

⁸ We fully anonymized the names of financial institutions in this report.

3. Shedding light on financial institutions' commitments impact potential: Introducing an evidence-based framework

Glossary

Climate commitment: Climate commitments are defined as pledges taken by a financial institution that relate to the theme of climate change (for example to contribute to climate change mitigation, or to mitigate the climate risks associated with its portfolio).

Climate actions: Climate actions are defined as actions undertaken by financial institutions to influence the real economy towards meeting climate goals.

Impact of a climate action: The impact of a climate action is defined as the change that the climate action causes in the real economy.

Impact mechanism: An impact mechanism is defined as the mechanism through which a climate action can deliver impact.

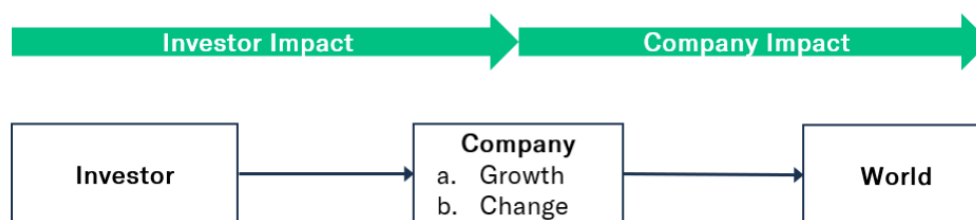
3.1 What does it mean to have an impact as a financial institution?

The impact of an action can be seen as the long-term effect of that action. If Person A impacts Person B to do something, by definition this means that Person A caused Person B to do something. We use these ideas to understand how to view and define the impact of a climate action. In order for someone, like a financial institution, to claim impact, they must be the one that caused the impact. If the financial institution (via a specific action) did not cause the impact or the impact would have happened without the specific action, then the financial institution cannot claim the impact. These nuances are further explained in the distinction between company and investor impact.

We rely on Kölbel et al.'s (2018)⁹ definition of financial institution's impact, which is aligned with the above-given definition. The impact of a company is defined as "the change in a specific parameter caused by company activities" (e.g. providing a low-carbon product to the market which competes with high-carbon ones). The **impact of an investor ("investor impact") is defined as "the change that the investor has caused in the activities of the company benefiting from his investment"**. If we apply this definition to the climate issue, this change can either take the form of **growth** in a "green" company' activities (e.g. a growth of its green power production) or of a change in the **quality** of a company's activities (e.g. an increase in the energy efficiency of a plant), as illustrated by Figure 3 (Kölbel et al., 2018).

⁹ Kölbel et al., Can sustainable investing save the world ? Reviewing the mechanisms of investor impact, 2018, available on https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3289544

Figure 3: A synthetic definition of investor impact (Kölbel et al., 2018)



“Impact”, in this report, thus designates a causal, demonstrable relationship between a financial institution’s action and a real-world change.

Impact can be delivered through various **mechanisms** – the classification reproduced here is consistent with that of the Impact Management Project (The Impact Management Project, 2020)

- **Active engagement:** Engagement can include a wide spectrum of approaches - dialogue with companies, creation of industry standards, taking board seats and management support (often seen in private equity), that all contribute to the same goal: improving the sustainability performances of the targeted companies.
- **Growing new or undersupplied capital markets:** Investors can provide capital to new or previously overlooked opportunities, thus enabling their growth.
- **Providing flexible capital:** Investors can accept below-market, risk-adjusted financial returns when investing in impactful companies, thus lowering their cost of capital and enabling their growth.
- **Signaling that impact matters:** Investors can choose not to invest in, or to favor, certain investments such that, if many investors did the same, it would ultimately either lead to a ‘pricing in’ of social and environmental effects by the capital markets (“critical mass effect”) or send a “signal” to society that impact matters – through nonmarket channels.

Climate actions differ from impact mechanisms in that a given climate action can mobilize several mechanisms to deliver impact. Based on a review of current market practices, Figure 4 below provides an overview of existing climate actions and maps them to corresponding impact mechanisms. Each of these **impact mechanisms** can be related to specific **climate actions**, i.e. actions that investors can take to influence the behavior of a targeted company.

Table 6 below provides definitions and examples for different types of actions that can be used to contribute to the impact channels described above. The types of climate actions mentioned below were defined and classified based on several surveys of banks, asset managers, asset owners and service providers conducted as part of 2DII’s “Evidence for Impact” working group¹⁰.

¹⁰ 2DII, Evidence for Impact project, available on <https://2degrees-investing.org/resource/impact-measurement-target-setting/>

Figure 4: Climate actions mapped to impact mechanisms (Source: author, with the kind support of the Impact Management Project (IMP))

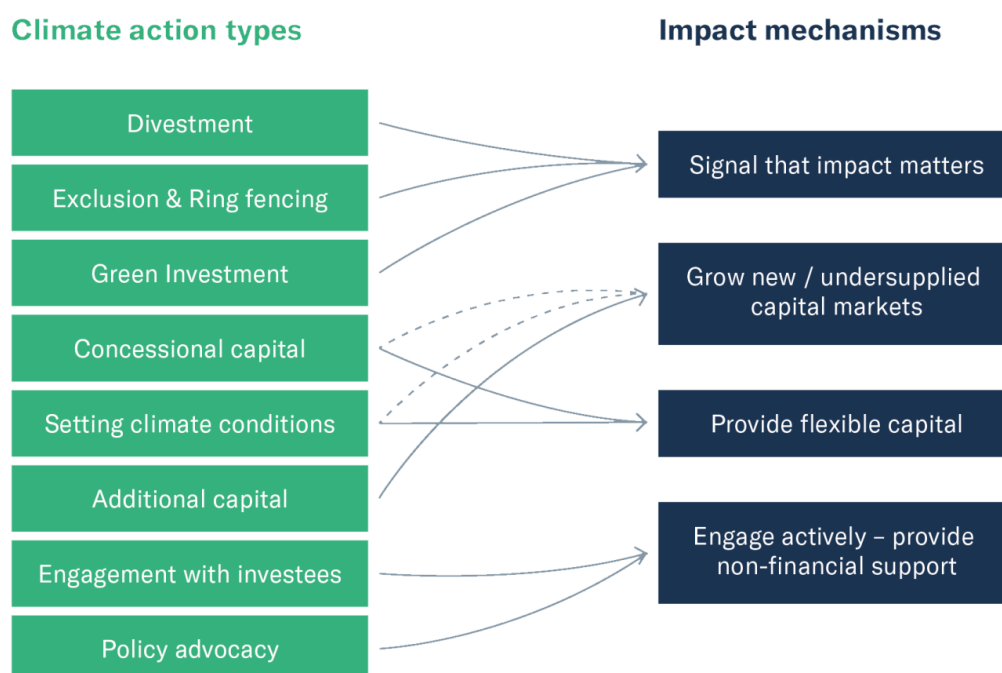


Table 6 below provides definitions and examples for different types of actions that can be used to contribute to the impact channels described above. The types of climate actions mentioned below were defined and classified based on several surveys of banks, asset managers, asset owners and service providers conducted as part of 2DII’s “Evidence for Impact” working group¹¹.

Table 6: The main types of climate actions that financial institutions can undertake (source: 2DII)

Type of climate action	Definition	Examples
Divestment	Within the context of climate action, divestment is the selling of assets for climate-related reasons.	An investor decides to divest from a range of to all the companies in its portfolio in a specific high-carbon sector or activity.
Exclusion	Exclusion at company level is the process of excluding the assets issued by specific companies from the universe of investable assets for climate-related reasons.	An investor sets investment policies that forbid the investment in certain harmful companies., e.g. by introducing a threshold such as “a maximum 25% of revenue coming from coal mining activities” when selecting investable companies.
Ring fencing	Exclusion within an exposure (ring fencing) is the process of excluding specific activities conducted by a company from the funding provided to this company. Screening within an exposure is the process of funding only specific activities of a company.	Project green bonds are an example, e.g. a green bond issued to finance a specific "renewable energy" project of a power producer which still produces some electricity with coal.

¹¹ 2DII, Evidence for Impact project, available on <https://2degrees-investing.org/resource/impact-measurement-target-setting/>

Traditional low-carbon capital	It is the process of investing in green assets at market conditions or to limit the investment universe to specific assets which feature quality climate-related characteristics, at market conditions	Best-in-class, best-in-universe, provision of a certain amount of money to “green” companies or the purchase of “green” assets...
Concessional capital	Concessional capital is the process of offering capital to a company at below market rate for climate-related reasons.	A bank decides to partner with a development finance institution (DFI) to offer concessional loans for companies engaged in renewable energy investment projects and the DFI agrees to subsidize the interest rate for borrowers.
Conditional investment / Setting climate-related condition	Conditional investments are investments made by financial institutions under specific conditions, relating to the sustainability performance of the investee/borrower.	Sustainable Improvement Loans. The interest rate is partially adjusted (a premium or discount is usually applied to the margin) depending on the evolution of the borrower’s sustainability performance. Lowering of returns decided by the majority of shareholder’s in exchange with low-carbon investments decreasing the sustainability risk of the investee.
Additional capital	Additional capital is the process of offering capital (at market rate) to a company that would otherwise not have accessed capital. It differs from “low-carbon investment/positive screening” because of this additionality dimension. Of course, low-carbon investment / positive screening can be additional capital under certain conditions.	A bank decides to offer a loan (at market rate) to a sustainable energy company that didn't yet manage to find a bank agreeing to lend it money.
Engagement with Investee	Engagement actions are all financial institutions' actions undertaken to influence the behavior of the company they own.	An investor does bilateral engagement with an investee company to persuade it to increase the scale of its investment plans in renewable technologies.
Policy advocacy	Engagement actions on non-investee actors are all investor actions undertaken to influence the behavior of actors that are not their investees.	A group of influential financial institutions decide to engage with policy makers in their home country to support the implementation of a carbon tax.

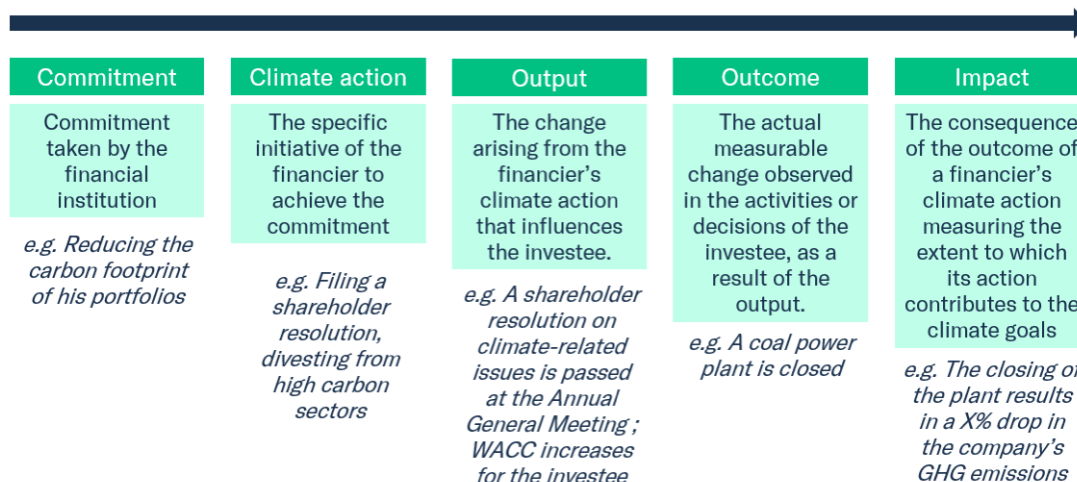
3.2. From climate commitments to impact: what matters is how pledges are implemented

In the above Section, we introduced the idea that a financial institution can impact real world GHG emissions through the climate actions that they implement to cause a change in their investees’ decisions – or, in some cases, in other actors’ decisions (e.g. policy makers). Consequently, **the impact potential of a climate commitment primarily depends on the set of actions used to operationalize the commitment, and on the modalities of implementation of these actions.** Each action, through the causal chain illustrated in Figure 5, then has the potential of triggering changes in the real economy – i.e. to be impactful.

The chain of consequences from an investor’s commitment to modified business activities and GHG emissions reduction consists of multiple steps: with the **objective** of contributing to climate mitigation, an investor decides to implement various **climate actions** to reach his commitment - for example, engaging with companies in high carbon sectors and investing in innovative green companies. These actions lead to **outputs**, namely the direct consequence of the actions – for example, a change in the WACC of targeted companies, which 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**).

The path from climate action to impact is not a clear path. All links of the chain are subject to **uncertainties**, a consequence of the indirect control that an investor has on the GHG emissions of its investees:

Figure 5: From climate pledge to investor impact: The impact value chain (Authors, based on ISO standard 14097)



- **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 gap 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 investor 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. Consequently, the probability that a given action will yield an impact varies across actions.

Understanding the ability of a pledge to contribute to real world improvements thus entails understanding the ability of underlying actions to deliver impact with a high degree of certainty.

3.3. The impact potential of climate commitments: what does science say?

Summary of existing evidence

The meta-analysis of existing evidence conducted by Kölbel & Heeb (2020) allows for the **classification of impact mechanisms and associated actions into four "evidence levels", that reflect the current state of the literature investigating their effectiveness** (Table 7). These evidence levels should not be conflated with "likelihood of impact" ratings. They simply reflect the current state of evidence. As such, if a mechanism has not been studied yet but is very effective in practice, the evidence level will still be D. This classification cannot thus be considered a perfect assessment of an action's ability to trigger a change in the real economy, but rather a summary of the evidence that exists regarding its effectiveness. This framework is thereafter linked to our commitments' categorization in order to assess impact evidence associated.

Table 7: How can an investor achieve impact?

Investor Impact Mechanism		Type of change	Evidence Level	Requirements	Limitations	Typical asset classes
Grow new/undersupplied capital markets		Enabling growth	B	<ul style="list-style-type: none"> Investment in companies with net positive impact Companies growth is limited by external financing conditions 	<ul style="list-style-type: none"> Not suited for investments in large, established companies, which have sufficient access to external financing 	Private markets
Provide flexible capital			B		<ul style="list-style-type: none"> Not suited for companies that have sufficient access to philanthropic or commercial capital 	
Engage actively	Provide non-financial support		B	<ul style="list-style-type: none"> Investment in companies with net positive impact Investors with know-how, reputation or network that helps companies grow faster 	<ul style="list-style-type: none"> Only suited for early-stage investments, where investors can directly influence the company 	
	Shareholder engagement	Encouraging improvements	B	<ul style="list-style-type: none"> Focus on meaningful improvements that companies can achieve at a reasonable cost Investor with strong influence on a company 	<ul style="list-style-type: none"> Limited to incremental improvements; unlikely to transform industries 	Public markets
Signal that impact matter	Market signals		C	<ul style="list-style-type: none"> Transparent ESG criteria that companies can meet at reasonable cost Substantial portion of the market screening out or underweighting firms that don't meet the criteria 	<ul style="list-style-type: none"> Only suited for early-stage investments, where investors can directly influence the company 	
	Non-market signals	Growth or improvement	D	<ul style="list-style-type: none"> High level of public visibility of the signal 	<ul style="list-style-type: none"> Impact is difficult to evaluate as it is indirect and depends on political action or cultural change 	

Table 8: Evidence levels

Evidence level	Description
A Scientific consensus	Systematic reviews of the empirical evidence document a scientific consensus on effectiveness of the mechanism.
B Empirical evidence	Empirical studies show that the mechanism has been effective in specific settings. Yet, it remains unclear how far these findings can be generalized.
C Model-based prediction	Economic models predict that the mechanism should be effective under certain assumptions.
D Narrative	There are narratives that rationalize why the mechanism could be effective.

Based on Heeb and Kölbel, "https://www.csp.uzh.ch/dam/jcr:ab4d648c-92cd-4b6d-8fc8-5bc527b0c4d9/CSP_Investors%20Guide%20to%20Impact_21_10_2020_spreads.pdf" *The Investor's guide to impact, 2020*

Caveats

The investigation of investor impact is a nascent research field and, as such, numerous gaps and uncertainties remain on the options for actions available to FIs, notably regarding:

- The **level of evidence** that actions can be impactful: Kölbel et al. classify impact mechanisms based on the type of proof of effectiveness available in the literature (See Table 7). However, they do not distinguish between an absence of research (the mechanism is classified in “narrative” because no research was ever undertaken to investigate its effectiveness) and existence of non-conclusive research. Additional research is thus needed to refine their classification and bridge the identified research gaps.
- The **likelihood of having an impact** with the action: Kölbel et al. (2020) list the requirements and limitations that apply to the impact mechanisms, i.e. the factors that influence the ability of the mechanisms to drive a change in the real economy. Further research is however needed to precisely quantify the likelihood that a given action has to deliver impact.
- The **scale of the impact that can be delivered** with the action: Information on the scale of the impact that can be delivered with a given impact mechanism or action is minimal in Kölbel et al.'s framework (most likely because it is rare in the literature). However, understanding whether a given action is best suited to foster a transformative change or rather a minor improvement is of crucial importance.

Kölbel's framework, as the only available meta-analysis on the topic, can be used as a starting point to identify options for action, but further research is needed to bridge the gaps listed above.

3.4. Synthesis of the analysis framework

Below is an exemplary analysis framework, that illustrates the variety of actions that can be used to implement a commitment and their associated level of evidence. **This framework allows for analysis of existing evidence regarding the impact potential of climate commitments based on the climate actions that are used to operationalize them.**

Figure 6: Illustrative impact value chain put in perspective with Heeb and Kölbl (2020) framework

Commitment	Actions	Output	Outcome	Impact
Climate-related commitment taken by the financial institution	The specific initiatives of the financier to achieve the commitment	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 the climate goals
Reaching carbon neutrality of portfolios in 2030	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
	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

The color code refers to the above table of levels of evidence

4. How can climate commitments contribute to the Paris Agreement?

In this section, we connect the dots between the different types of climate commitments and the current evidence as to their potential impact, based on the actions used to operationalize them.

4.1. Portfolio construction commitments

Achieving impact through portfolio construction pledges - Applying the theoretical framework

Portfolio construction commitments can mobilize a variety of impact mechanisms to contribute to climate change mitigation:

- **Growing new or undersupplied markets.** For instance, a venture capital investor invests in a start-up which faces strong difficulties to finance its activities and which designs tailored, off-grid renewable energy systems for houses and apartments
- **Providing flexible capital.** For instance, a bank adjusts its interest-rate to the sustainability profile of a client or a shareholder decides to give up part of its dividend against energy efficiency investments by the investee.

- **Signaling that impact matters**, either through market or non-market signals. Regarding the former, an investor coalition that divests from coal companies hopes to send a market signal in the form of lower share prices of the divested companies. As an example of the latter, a single investor may decide to divest, along with public communications on its decision to do so. This type of action does not affect shares prices due to the marginality of its own investments, but it signals to the market and society that coal companies should be phased out.

Using these mechanisms, the sub-categories of portfolio construction commitments can be mapped to Kölbel & Heeb's level of evidence framework to analyze their ability to yield a demonstrable impact.

The mapping is done in **Table 9**, that features the following information:

1. Column 2 lists the class of commitments featured in our database
2. Column 3 provides a further refining of the various type of commitments by breaking them down across several type of actions as provided by the Heeb & Kölbel's impact framework.
3. Column 4 provides the mechanism through which each action can have an impact, based on the Impact Management Project's¹² classification of investor impact mechanisms cited in Heeb & Kölbel (2020).
4. Column 5 provides information regarding the type of positive effect an action can have. It can either "enable growth" of low-carbon activities or it can "encourage improvements" of high-carbon companies.
5. Column 6 provides the requirements for an investor mechanism to ensure the maximum likelihood of achieving impact for each type of action as categorized in column 2, *i.e.* to mitigate the uncertainties already highlighted.
6. Column 7 provides the level of evidence of impact associated with each type of action and associated requirements.
7. Column 8 highlights the limits to each type of actions, which, if crossed, undermine the targeted impact.
8. Column 9 lists the typical asset classes for which an implemented action may have impact:
 - Listed equity: security that represents the ownership of a fraction of a publicly traded corporation
 - Private equity: security that represents the ownership of a fraction of a non-publicly traded corporation
 - Venture capital: private equity of early-stages companies
 - Listed debt: publicly-traded fixed income instrument representing a loan made by an investor to a borrower, whether for general purpose or to finance a specific project (earmarking)
 - Loans and credit lines: non-traded borrowing instrument between a debtor and an investor, including loans made for general purposes or to finance a specific project (earmarking), as well as credit lines (pre-set borrowing limit that can be used at any time) and revolving credit facilities (borrowing system in which credit replenishes up to the agreed upon threshold as the customer pays off debt).
 - Private debt: privately traded fixed income instrument representing a loan made by an investor to a borrower, whether for general purpose or to finance a specific project (earmarking)

¹² Impact Management Project, [A guide to classifying the impact of an investment](https://29kjb3armds2g3gi4lq2sx1-wpengine.netdna-ssl.com/wp-content/uploads/A-Guide-to-Classifying-the-Impact-of-an-Investment-3.pdf), 2018, available on <https://29kjb3armds2g3gi4lq2sx1-wpengine.netdna-ssl.com/wp-content/uploads/A-Guide-to-Classifying-the-Impact-of-an-Investment-3.pdf>

Table 9: Evidence of the impact of actions associated with portfolio construction commitments

N°	Commitment	Type of action	Mechanism of impact	Type of effect	Requirements for impact (uncertainties mitigation)	Level of evidence	Limitations	Typical asset classes	
1	Low-carbon investment	Additional capital	Grow new or undersupplied capital	Enabling growth	1. Investment in companies with positive impact 2. Companies growth depends on access to this additional capital	B	Not suited for companies that have sufficient access to philanthropic or commercial capital	Private Debt Private Equity Venture Capital Loans and Credit Lines	
2		Concessional capital			Provide flexible capital				1. Investment in companies with positive impact 2. Companies growth depends on access to this concessional capital
3		Conditional investment			Encouraging improvements	Investment in companies with positive impact	B		
4		Conditional investment	Investment in companies willing to achieve positive impact	C					
5		Conditional investment	Investment in companies willing to achieve positive impact		No research on this topic				
6	High-carbon divestment/ Exclusion	Traditional low-carbon capital	Signal that impact matters – market signals	Enabling growth or encouraging improvement		1.Transparent ESG criteria that companies can meet at reasonable costs 2. Substantial portion of the market screening out or underweighting firms that don't meet the ESG criteria		C	Disagreements on how to measure ESG criteria
7		Divestment / Exclusion (including ring-fencing)		Encouraging improvement	1. Transparent ESG criteria that companies can meet at reasonable costs 2. Substantial portion of the market screening out or underweighting firms that don't meet the ESG criteria		C		
8	Low-carbon investment/ positive screening High-carbon divestment/ exclusion	Traditional low-carbon capital Divestment / Exclusion (including ring-fencing)	Signal that impact matters – non-market signals	Enabling growth or encouraging improvements	High level of public visibility of signals	D		Impact is difficult to evaluate as it is indirect and depends on political action and cultural change	Listed equity, listed debt

* When flagged with a star, no research has been undertaken to assess the effectiveness of the action on the flagged asset class. The impact of the action on this asset class remains to be studied. *Based on Heeb & Kölbel (2020)*

The following conclusions can be drawn from the above Table:

Research and evidence are lacking regarding the impact of the actions that can be used to operationalize portfolio construction commitments on liquid markets, be it through direct or indirect effects. A critical issue with the actions underlying this type of pledge, beyond the current lack of research, is that we may never be able to prove their impact, even if there is impact. This is due to the complicated causal chain that needs to hold for a real-world change to be triggered by those actions. Although this absence of scientific ground does not disqualify these pledges per se, it sheds doubts on their appropriateness in leading the sectors' response to climate change.

Portfolio construction pledges, when operationalized in the form of **concessional, flexible or conditional capital offerings to green or transitioning companies**, have a **demonstrated ability to drive changes** in the real economy.

Achieving impact through portfolio construction commitments – A few examples

Below are a few examples, taken from the database, of how the theoretical framework can be applied to the analysis of portfolio construction commitments. The commitments are classified in the above framework based on the actions that are being applied by the committed institution.

Table 10: Example of portfolio construction commitments and their impact potential according to existing evidence

Type of commitment	Type of financial institution	Examples of commitments	Description	Levels of evidence		
				B	C	D
Commitment type 1 – Additional capital	Asset manager	“Invest 50% of the portfolio in carbon negative projects (energy & environment technologies)”	The investor associated to this commitment is involved in venture capital activities. The commitment can thus be mapped to “Growing new or undersupplied capital” impact mechanism as it will help nascent companies’ projects to grow.	X		
Commitment type 2 – Concessional capital	Public financial institution (development financial institution)	“Looking forward to 2020, [financial institution’s name] has pledged to catalyze \$13 billion in external private sector capital annually to climate sectors through mobilization, aggregation, and de-risking products. By 2020, [name] aims to have climate investments account for 28 percent of its total financing portfolio”	To achieve this objective, this development financial institution “will channel concessional finance” together with leveraging other methods. The commitment can thus be mapped to “Growing new or undersupplied capital” impact mechanism.	X		
Commitment type 5 – Conditional capital	Bank	“[Financial institution’s name] committed to providing C\$100 billion in sustainable finance by 2025.” This commitment includes, among other services “green and sustainability linked loans” ¹³	Sustainability linked loans are conditional capital tools, allowing to adjust interest rate to the sustainability risk of the investee. There is no sufficient research on the topic to date.	No research on this topic		

¹³ World Resources Institute, Green Targets: A tool to compare private sector banks’ sustainable finance commitments (as of July 2019), 2019, available on <https://www.wri.org/finance/banks-sustainable-finance-commitments/?indicator=2>

Commitment type 6 – Positive screening	Asset owner (pension fund)	“Invest 100% of global equities portfolio in low-carbon strategies by the end of 2020”	The global equities portfolio of this pension fund is only invested into listed equities. It does not provide clear ESG criteria nor involves a substantial share of the market, and therefore can not be considered as a “C” level of evidence commitment.	No rating associated due to lack of relevant criteria
Commitment type 7 – Exclusion	Asset manager	DivestInvest initiative	The DivestInvest initiative gathers a substantial share of the world’s assets under management and provides clear ESG criteria for divestment.	X
Commitment type 8	Asset owner (pension fund)	This financial institution has set the “objective of decreasing the portfolio’s carbon intensity: (risk-reducing, from the level at the start of 2018 until 2022)”	The portfolio of this asset manager was invested, as of end of 2018, at 84.1% in fixed income, listed equities and hedge funds. Decreasing the carbon intensity of the portfolio through its reallocation (both green investments and high-carbon divestment) is not associated to impact evidence (individual initiative, no clear ESG criteria).	X

Financiers have been anonymized.

4.2 Commitments to engage with investees on their impact

We focus in this section on engagement with investees on their impact (engagement to reduce the impact of high-carbon companies, or engagement to foster the growth of low-carbon investees). “Policy advocacy” and “engagement for other objectives” are not discussed in this section, given some of the additional complexities of tracking impact through this channel.

Achieving impact through engagement pledges - Applying the theoretical framework

Engagement offers a variety of tools to foster the decarbonization of the economy. It can provide more say to investors on corporate policies and actions than the mere provision of capital. Engagement with investees on their impact mainly takes the form of dialoguing with companies to influence corporate decisions or to provide support to management, including through taking board seats, drafting shareholder resolutions, voting or proxy voting them.

As for portfolio construction commitments, engagement pledges can be mapped to Kölbel & Heeb’s level of evidence framework to analyze their ability to yield a demonstrable impact. The below table (Table 11), similar to Table 9, synthesizes existing evidence.

Table 11: Evidence of the impact of engagement actions

N°	Commitment	Mechanism of impact	Type of effect	Requirements for impact (uncertainties mitigation)	Level of evidence (based on Heeb & Kölbel)	Limitations (according to Heeb & Kölbel)	Asset classes
9	Engagement with investees on their impact	Provide non-financial support	Enabling growth	1. Invest in companies with a positive impact 2. Investors with know-how, reputation or network that helps companies grow faster	B	Only suited for early stage investments, where investors have the possibility to directly influence the company	Private Equity Private Debt Venture Capital
10		Shareholder engagement	Encouraging improvements	1. Focusing on meaningful improvements that companies can meet at reasonable cost 2. Investor with strong influence on a company. Influence increases with: a) Number of shares held by the engager investor of group of investors b) Cultural proximity with the company c) Size and reputation of investor		Limited to incremental improvements, unlikely to transform industries	Listed Equity Listed Debt
11	Engagement with investees / clients on their impact	Provide non-financial support / Engagement	Enabling growth or encouraging improvement		No research on this topic		Loans and Credit Lines*

* When flagged with a star, no research has been undertaken to assess the effectiveness of the action on the flagged asset class. The impact of the action on this asset class remains to be studied.
Based on Heeb & Kölbel (2020)

The following conclusions can be drawn from the above Table (Kölbel et al., 2020):

There exists empirical evidence that **engagement commitments on private markets can be effective in supporting the growth of companies with a positive impact.**

On listed markets, there also exists evidence that **engagement commitments can be effective in triggering improvements in the investee's behavior.**

However, the evidence is inconclusive and perhaps not generalizable to all cases. For example, it seems intuitive that engagement is likely more effective when aligned with the financial interests of the company and where change is less fundamental to the business model

Achieving impact through engagement commitments – A few examples

Within our database, engagement commitments are all aiming for the reduction of emissions of companies and not (at least not explicitly) for the growth of low-carbon companies. Moreover, financial institutions in our database mostly commit to engage with companies through collective initiatives¹⁴. This allows investors to coalesce forces to enhance the strength of engagement activities to deliver real-world GHG emissions reduction, as described in the above framework.

The table below provides examples for each of the three types of engagement commitments outlined in the above framework.

Table 12: Examples of engagement commitments

Type of commitment	Type of financial institution	Examples of commitments	Description	Levels of evidence		
				B	C	D
Commitment type 9	None in our database					
Commitment type 10	Asset Managers Asset Owners Banks and Public Financial Institutions – Climate Action 100+	Contributors to the Climate Action 100+ initiative focus on “100 ‘systemically important emitters’” and engage them to, among other objectives, “curb emissions” ¹⁵ .	Engaging with publicly traded companies on their impact is associated with empirical evidence.	X		
Commitment type 11	Banks – Collective Commitment to Climate Action	Contributors to the Collective Climate Action are committing to, among other objectives, “engaging and working with [...] clients on their transition” ¹⁶ .	Engaging with loans’ recipients is associated with no scientific evidence in the literature ¹⁷ .	No research on this topic		

Section 4 illustrates how the analysis framework introduced in Section 3 can be used to understand existing evidence regarding the impact potential of climate commitments based on the climate actions that are used to operationalize them. It provides a basis for future research and for the development of target setting frameworks that factor existing evidence. The following section discusses recommendations drawn from this analysis.

¹⁴ Out of 447 commitments to engage with investees on their impact in our database, only 2 have been taken on an individual basis. This might be due to the fact that, even if they act in practice, FIs rarely pledge their individual actions.

¹⁵ Climate action 100+ webpage, available on <http://www.climateaction100.org/>

¹⁶ *The sentence is thereafter followed by « As banks, this is how we can contribute most effectively to realizing the changes required in the real economy to achieve a low-carbon, climate-resilient economy ».*

UNEP-FI-PRI, *Collective Commitment to Climate Action*, available on <https://www.unepfi.org/wordpress/wp-content/uploads/2019/12/PRB-Collective-Commitment-to-Climate-Action.pdf>

¹⁷ However, this does not mean that this type of commitment has no impact. It has been classified as a level D of evidence considering the lack of literature addressing the topic.

5. Next steps and recommendations

Increasing the quality and quantity of data on the climate-related actions underlying commitments

This study highlights the need for granular data regarding the actions underlying the pledges that will enable a thorough assessment of climate commitments' ability to deliver demonstrable impact. Financial institutions should provide more information on:

- (i) the way in which the commitments will be implemented, for example by listing the **specific actions** that will be taken to operationalize the commitments and the **modalities of implementation of the actions**;
- (ii) the **assets classes** targeted by their commitments, as a pledge can have very different real-world consequences when implemented on public or private markets;
- (iii) The ex-post **tracking of the actions implemented**, in a granular way and on an ongoing basis.

Improving the scope and the type of information gathered by F4T and the French financial marketplace as part of their Sustainable Finance Observatory would help fill this information gap.

Deepening research on the ability of financiers to achieve real-world impacts

Evidence regarding the impact of financial institutions' actions is currently extremely limited (see page 19 for more details). Hypothesis can be drawn from existing literature, but more research is needed to conclude on the ability of a given action to be impactful. Quantitative and qualitative methods could be used to further assess the likelihood of achieving impact or the scale of GHG emissions reductions allowed by different actions. This research would provide a basis for developing impact-seeking frameworks for financial institutions to contribute to real-world decarbonization.

Building evidence-based frameworks for financial institutions to implement climate-related pledges

Financial institutions mix, when they take climate-related commitments, overarching objectives (e.g. portfolio carbon footprint reduction), implementation means (e.g. engagement, portfolio reallocation) and monitoring tools (e.g. internal carbon price, disclosure, risk-assessment tools). Financial institutions could benefit from guidance to navigate these categories, to develop evidence-based decarbonization plans and to take evidence-based commitments. Such frameworks should allow financial actors to understand ex-ante evidence associated to potential actions, so that they can maximize the likelihood of achieving impact through the implementation of their commitments. 2DII will leverage its resources and current work undertaken as part of the Evidence for Impact working group to provide a pilot-test framework addressing this need.

Suggestions for the development of the French Observatory of Sustainable Finance

In October 2020, the French financial center launched a Sustainable Finance Observatory (*Observatoire de la Finance Durable*), which monitors the climate-related commitments of French financial institutions. The Observatory ultimately aims to assess the contribution of the French financial sector to the Paris Agreement.

The initial version of the Observatory gathers and categorizes the climate-related pledges taken by the Place. It however does not yet feature the information that would be needed for assessing the

real-world impact of these pledges. The framework developed in this report can be used to bridge such a gap. Specifically, the Observatory could strive to gather the following information:

- A description of the actions underlying the commitments and their conditions of implementation;
- A description of the assets class targeted by the commitments and of targeted companies, as commitments can have very different real-world consequences when implemented on public or private markets;
- An explanation of how the financial institution taking the commitment expects it to contribute to the Paris agreement.
- A description of the follow-up measures implemented by the financial institutions to assess the impact of its commitment, in a granular way and on an ongoing basis.

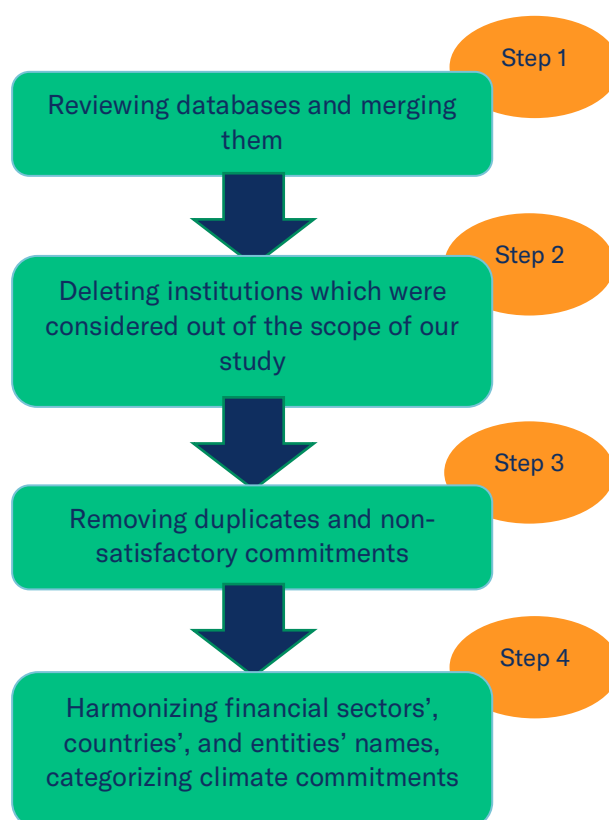
Annex 1 - Building a database of climate commitments: Methodological process & challenges

2° Investing Initiative built a merged database of individual and collective climate-related commitments (thereafter “commitments”) of financial institutions from existing databases.

A commitment is defined, for this report, as a **public statement by a financial institution in which it affirms its decision to implement climate-related actions or to reach a climate-related objective**. This includes financial institutions that joined collective initiatives aiming at mobilizing the financial sector and leveraging financial tools to fight climate change.

Financial institutions are defined as **private or public institutions which primary business is to invest or manage capital** (including receiving and reinvesting deposits) **for their own sake, the sake of their clients or their authorized representative** (cf step 2 of the methodology).

The process of building this database involved merging existing databases, including databases of collective initiatives aiming at mobilizing the financial sector to contribute to fight against climate change, harmonizing dimensions and wording, reviewing and when necessary amending information. The figure below outlines our process:



The final database includes 1,487 financial institutions and 2,584 commitments. Some financial institutions have taken several pledges (explaining the higher number of commitments than financial institutions) while most commitments were taken in recent years (~past decade). When spanning a limited time period, some of these commitments have already finished, while others extend further into the future.

Step 1

The dataset was built by merging the following databases:

Databases	Comments	# of commitments in the original database in the final database	
InvECAT Climate Pledges database (United Nations Framework Convention on Climate Change – UNFCCC) ¹⁸	Designed in three steps: (i) selection, via initial desktop research, of the key criteria of commitments, (ii) the structuring of the database framework and (iii) its filling using an machine learning web crawling tool which searched for commitments, both individuals and from collective initiatives, in web pages and sustainability reports of financial institutions. However, due to some flaws of the tool in the collection of commitments, the final database was post-treated to take into account relevant and comparable results (further details below).	2635	1740
Nazca Global Climate Action investor database of individual climate actions ¹⁹	Built based on voluntary displaying of financial institutions' actions. 1,202 climate actions were retrieved through web scraping. Among these actions, only 349 corresponded to our definition of commitments	349	339
The Institute for Energy Economics and Financial Analysis' (IEEFA) databases ²⁰ of global financial institutions commitments to restrict thermal coal financing	There are two databases, one gathering 130 commitments of banks and insurers, the other one gathering 21 commitments of asset managers and asset owners.	151	80
The World Resources Institute's (WRI) Green Targets tool ²¹	The tool lists and analyzes the sustainable finance commitments taken by the world's 50 biggest private banks. Only 23 of these banks had sustainable finance commitments when the database was set up.	23	22
Collective initiatives			
The Principles for Responsible Banking (171 institutions)		171	164
The Collective Commitment to Climate Action (38 institutions)		38	38
The Initiative Climat International (44 institutions)		44	35
The Investor Decarbonization Initiative (114 institutions)		114	98
The Net-Zero Asset Owner Alliance (27 institutions)		27	24

¹⁸ Not publicly available.

¹⁹ UNFCCC, [Global climate action – Nazca](https://climateaction.unfccc.int/views/stakeholders.html?type=investors), Available on <https://climateaction.unfccc.int/views/stakeholders.html?type=investors>

²⁰ IEEFA, [Financial institutions are restricting thermal coal funding](https://ieefa.org/finance-exiting-coal/), available on <https://ieefa.org/finance-exiting-coal/>

²¹ World Resources Institute, [Green Targets: A tool to compare private sector banks' sustainable finance commitments \(as of July 2019\)](https://www.wri.org/finance/banks-sustainable-finance-commitments/?indicator=2), 2019, available on <https://www.wri.org/finance/banks-sustainable-finance-commitments/?indicator=2>

The Powering Past Coal Alliance (20 institutions)	20	16
The Global Alliance for Banking on Values Climate Change Commitment (28 financial institutions)	28	28

Treatments in steps 2 and 3 explain why not all signatories to the collective initiatives or financial institutions included in the original databases were not included into our final database. For instance, many contributors to the DivestInvest initiative do not correspond to our definition of financial institutions and have thus been excluded.

These collective initiatives add to the following already included in the InveCAT database²²:

- The Carbon Pricing Champion (12 institutions in the original and final database)
- Caring for Climate (44 institutions in the original database, 38 in the final one)
- Climate Action 100+ (105 institutions in the original database, 97 in the final one)
- Climate Action in Financial Institutions (40 institutions in both databases)
- The Climate Bond Initiative (27 institutions in both database)
- The ClimateWise Principles (27 institutions in the original database, 22 in the final one)
- The commitments to implement the recommendations of the Task-force on Climate-related Financial Disclosures (30 in the original database, 24 in the final one)
- DivestInvest (1007 institutions, 584 in the final one)
- The Investor Agenda - disclosure and policy advocacy commitments (475 in the original database, 408 in the final one)
- The Montreal Carbon Pledge (138 in the original database, 128 in the final one)
- RE100 (76 in the original database, 72 in the final one)
- The Responsible Corporate Engagement on Climate Policy (11 institutions in the original database, 10 in the final database)
- The Science Based Emission Reduction Targets (42 in the original database, 39 in the final one)
- The Portfolio Decarbonisation Coalition (32 in the original database, 25 in the final one)
- The Sustainable Stock Exchange initiative (80 in the original database, none in the final one)

Step 2

We defined financial institutions as being private or public institutions whose primary business is to invest or manage capital (including receiving and reinvesting deposits) for their own sake, the sake of their clients or their authorized representative. This led us to delete companies providing financial services but not corresponding to this definition, such as brokers and dealers, market makers, companies providing finance advisory services.

The InveCAT database, most principally the DivestInvest list of signatories included in the database, included the following categories which were deleted: “faith-based”, “stock exchange”, “government”, “healthcare” and “NGO” (which does not include foundations). We considered these categories to not meet our definition of financial institutions:

- The “faith-based” category was comprised of religious charities and organizations.
- The “stock exchange” category included securities exchange companies.
- The “government” category included local authorities as well as administrations in relation with the financial sector but with no capital investment or management mandates.

²² The number of financial institutions committing to these initiatives may have evolved since the InveCAT database has been built (Q1 2019)

- The “NGO” category gathered not-for-profit organizations (apart from foundations) in favor of the protection of the environment but with no capital investment or management mandates.
- The “healthcare” category included not-for-profit organizations, non-profit health systems, non-financial companies, and professional associations in the medical sector.

Step 3

We deleted the duplicates between the various databases. Most of the time, they were due to some thematic databases featuring individual commitments that were already part of collective initiatives. Also, companies that were considered to be financial institutions in the InveCAT database were deleted after being reviewed through desktop research²³.

Because the InveCAT database was built through an automated tool, we encountered many “false positives” when reviewing the data. Some commitments were deleted because of the following reasons:

- incomplete or incoherent sentences;
- information regarding past / completed actions.

Moreover, we further deleted some commitments which were part of the “financial services” category of the InveCAT database and that were non-financial institutions in the sense of our definition, such as consulting corporations or non-financial service providers. This reviewing and correcting process allowed us to optimize the relevance and comparability of the data.

Step 4

Finally, the database was reviewed to harmonize financial institutions' countries and sectors names. This allowed for quantitative analysis of the database.

- We harmonized financial institutions' names and countries of origin that were spelled differently across various databases.
- Financial institutions were classified into the following industry categories, based on available online information²⁴.
 - **Asset managers** (including real-estate investment companies)
 - **Banking institutions** including both retail and investment banks
 - **National financial institutions** (comprised of Development Financial Institutions, National Investment Institutions and Export Credit Agencies)
 - **Asset owners** (comprised of universities' endowments, foundations, pension funds and other types of funds such as funds superannuation funds, trust funds, public retirement funds..., insurer and reinsurers and other asset owners)
 - **Other depository and investment services institutions** (comprised of credit unions, financial cooperatives, microfinance institutions and other non-banking financial institutions providing customer financial services)

²³ This mostly includes churches, that have been deleted, but also some companies that are not involved in the financial sector

²⁴ Allocation to types of financial institutions is based on their principal activity. We acknowledge that some institutions are involved in secondary activities as well.

Finally, we determined 3 categories and 10 sub-categories to which commitments can be allocated. This classification was done based on the available information contained in the commitments. Some are part of several categories. These are:

- **Portfolio construction:** commitments relating to a certain composition of portfolio, as assessed through climate-related indicators (e.g. carbon footprint, share of “green” investments, reduction of “brown” share or divestment from “brown” investments...)
 - **Green investment:** commitments to invest in low-carbon activities, companies or assets
 - **Divestment/exclusion:** commitment to divest from or exclude from portfolio high-carbon activities, companies or assets
 - **Portfolio carbon footprint** (no means specified)²⁵ (*abbreviated in “Carbon footprint”*): commitments to reduce the carbon footprint of the portfolio
 - **Internal Carbon Price**²⁶ (*“ICP”*): commitments to set an internal carbon price
- **Engagement:** commitments to engage with investees on their emissions or on other objectives, with policy makers to support climate policies
 - **Engagement with investees on their impact:** commitments to engage with investees to foster the reduction of their emissions or their growth in the case of low-carbon companies
 - **Engagement with investees on other objectives** (*“Engagement - other objectives”*)
 - **Engagement with policy makers or non-investee actors** (*“Policy advocacy”*)
- **Internal management process:** commitments relating to internal procedures.
 - **Risk-assessment/management** (*“RAM”*): commitments to implement climate-related risk assessment and management tools
 - **Disclosure:** commitments to implement climate-related disclosures
 - **Operational emissions reduction** (*“OER”*): commitments to reduce non-financed emissions

Some commitments are of several types (especially the ones pertaining to collective initiatives). This classification does not claim to be exhaustive; each commitment is unique and our categorization only aims at capturing the main trends that one can observe in the market.

²⁵ Portfolio carbon footprint reduction can be achieved through either low-carbon investment and/or high-carbon divestment and/or engagement. When financial institutions commit to reducing their portfolio carbon footprint, they refer to a portfolio construction target.

²⁶ We acknowledge that internal carbon prices are also risk management tools.

Alberola and Afriat (I4CE), Internal carbon pricing – A growing corporate practice, 2016, available on <https://www.i4ce.org/download/internal-carbon-pricing-an-increasingly-widespread-corporate-practice/>

References

- 2DII, A large majority of clients want to invest sustainably – Survey of French and German retail investors' sustainability objectives, 2020, available on <https://2degrees-investing.org/wp-content/uploads/2020/03/A-Large-Majority-of-Retail-Clients-Want-to-Invest-Sustainably.pdf>
- 2DII, EU Retail Funds' Environmental Impact Claims Do Not Comply with Regulatory Guidance, 2020, available on <https://2degrees-investing.org/wp-content/uploads/2020/03/EU-Retail-Funds-Environmental-Impact-Claims-Do-Not-Comply-with-Regulatory-Guidance.pdf>
- 2DII, Evidence for Impact project, available on <https://2degrees-investing.org/resource/impact-measurement-target-setting/>
- 2DII, Shooting for the moon in a hot air balloon – Measuring how green bonds contribute to scaling up investments in green projects, 2018, available on <https://2degrees-investing.org/wp-content/uploads/2018/10/Green-bonds-updated-paper-Oct-2018.pdf>
- 2DII-Climate KIC, Climate impact – What it is and how to achieve it, 2018, available on https://2degrees-investing.org/wp-content/uploads/2018/12/Final-draft_Climate-actions-impact.pdf
- Ameli et al. *Climate finance and disclosure for institutional investors : why transparency is not enough*, *Climatic Change*, 2019 available on <https://link.springer.com/article/10.1007/s10584-019-02542-2>
- ACPR-AMF-Banque de France, Un nouveau mécanisme de suivi et d'évaluation indépendante des engagements climatiques pris par les entités de la Place financière, juillet 2019, available on https://acpr.banque-france.fr/sites/default/files/medias/documents/20190702_cp_autorite_finance_durable_fr.pdf
- Alberola and Afriat (I4CE), Internal carbon pricing – A growing corporate practice, 2016, available on <https://www.i4ce.org/download/internal-carbon-pricing-an-increasingly-widespread-corporate-practice/>
- Buchner et al. – Climate Policy Initiative, Global landscape of climate finance 2019, 2019, available on <https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2019/>
- Caldecott, *With the TCFD in its fifth year, it's time to make 'net zero' mandatory for financial institutions*, *Responsible Investor*, 2020, available on <https://www.responsible-investor.com/articles/with-the-tcfd-in-its-fifth-year-it-s-time-to-make-net-zero-mandatory-for-financial-institutions>
- Climate action 100+ webpage, available on <http://www.climateaction100.org/>
- Climate Bonds Initiative et al., *Green bond pricing in the primary market January-June 2019*, 2018, available on https://www.climatebonds.net/files/files/CBI_GB_Pricing_H1_2019_final.pdf
- Cochran (I4CE), *Beyond transparency: unlocking the full potential of green bonds*, 2016, available on <https://www.i4ce.org/download/unlocking-the-potential-of-green-bonds/>
- Doherty, *Why long-term investors are killing fossil fuels*, 2017, available on <https://www.greenbiz.com/article/why-long-term-investors-are-killing-fossil->

[fuels#:~:text=A%20new%20investment%20hypothesis&text=The%20Divest%2DInvest%20movement%20has,total%20reinvested%20was%20%241.2%20trillion.](#)

Dordi and Weber, [The impact of divestment announcements on the share price of fossil fuel stocks](#), Sustainability 2019

EIB Group, [Climate Bank roadmap 2021-2025](#), 2020

Ekeland and Lefournier, [L'obligation verte: homéopathie ou incantation](#), Working Paper, 2019, available on http://www.chair-energy-prosperity.org/wp-content/uploads/2019/06/publication2019_obligation-verte_ekeland-fourrier.pdf

France Invest, Initiative Climat International, available on <https://www.franceinvest.eu/initiative-climat-international-ici>

Giraud, Dufrêne & Gilbert, [Comment financer une politique ambitieuse de reconstruction écologique ?](#) 2020, available on https://www.institut-rousseau.fr/comment-financer-une-politique-ambitieuse-de-reconstruction-ecologique/#_ftnref10

Heeb and Kölbel, [The Investor's guide to impact](#), 2020, available on https://www.csp.uzh.ch/dam/jcr:ab4d648c-92cd-4b6d-8fc8-5bc527b0c4d9/2020_CSP_Investors%20Guide%20to%20Impact_21_10_2020_spreads.pdf

Heinkel et al., [The effect of green investment on corporate behavior](#), Journal of Financial and Quantitative Analysis, 2001.

Helios, [Les Français et l'usage de leur épargne par les banques](#), Juin 2020

IEEFA, [Financial institutions are restricting thermal coal funding](#), available on <https://ieefa.org/finance-exiting-coal/>

Impact Management Project, [A guide to classifying the impact of an investment](#), 2018, available on <https://29kjbw3armds2g3gi4lq2sx1-wpengine.netdna-ssl.com/wp-content/uploads/A-Guide-to-Classifying-the-Impact-of-an-Investment-3.pdf>

IPCC, Summary for Policymakers, in Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty, 2018, available on https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_SPM_version_report_LR.pdf

Kölbel et al., [Can sustainable investing save the world ? Reviewing the mechanisms of investor impact](#), 2018, available on https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3289544

Le monde de l'énergie, [De plus en plus d'investisseurs se détournent des énergies fossiles](#), 2019, available on <https://www.lemondedelenergie.com/investisseurs-energies-fossiles/2019/09/09/>

Lütkehermöller & al. - New Climate Institute, [Unpacking the finance sector's climate-related investment commitments](#), 2020, available on https://newclimate.org/wp-content/uploads/2020/09/NewClimate_Unpacking_Finance_Sector_Sept20.pdf

UNEP-FI-PRI, [Collective Commitment to Climate Action](#), available on <https://www.unepfi.org/wordpress/wp-content/uploads/2019/12/PRB-Collective-Commitment-to-Climate-Action.pdf>

UNFCCC, Global climate action – Nazca, Available on

<https://climateaction.unfccc.int/views/stakeholders.html?type=investors>

UNFCCC Standing Committee on Finance, 2018 Biennial Assessment and Overview of Climate Finance Flows Technical Report, 2018

U.N.-Convened Net-Zero Asset Owner Allience, Draft 2025 Target Setting Protocol, 2020

United Nations Environment Programme, Emissions Gap Report, 2019, available on

<https://wedocs.unep.org/bitstream/handle/20.500.11822/30797/EGR2019.pdf?sequence=1&isAllowed=y>

World Resources Institute, Green Targets: A tool to compare private sector banks' sustainable finance commitments (as of July 2019), 2019, available on <https://www.wri.org/finance/banks-sustainable-finance-commitments/?indicator=2>