



INVEST BELOW

1.5°_C

OWNING THE FUTURE

A REVIEW OF EUROPEAN ASSET OWNERS' NET ZERO TARGETS

ANALYSIS BASED ON THE WWF CLIMATE ACTION
SURVEY 2021

WWF

WWF is one of the world's largest and most experienced independent conservation organisations, with over 5 million supporters and a global network active in more than 100 countries. WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable, and promoting the reduction of pollution and wasteful consumption.

AUTHOR

Jan Vandermosten, WWF European Policy Office
Sébastien Godinot, WWF European Policy Office

REVIEWERS AND OTHER CONTRIBUTORS

The authors would like to thank all of the responding companies, internal and external reviewers and contributors for their time and immensely valuable contributions to the subsequent draft versions of this report.

Internal reviewers and contributors from WWF include (in alphabetical order):

Inès Abbas	Donald Linderyd
Jon Dennis	Raija Ojanen
Magnus Emfel	Nicolas Poolen
Stefano Esposito	Fee Reinhart
Tor Hjorth-Falsted	Lennys Rivera
Mario Iannotti	Parisa Shahyari
Matthias Kopp	

Externals reviewers and contributors from 1Planet Advisory:

Simon Messenger	Designer
Pippa Lynam	www.dougdawson.co.uk

DISCLAIMER

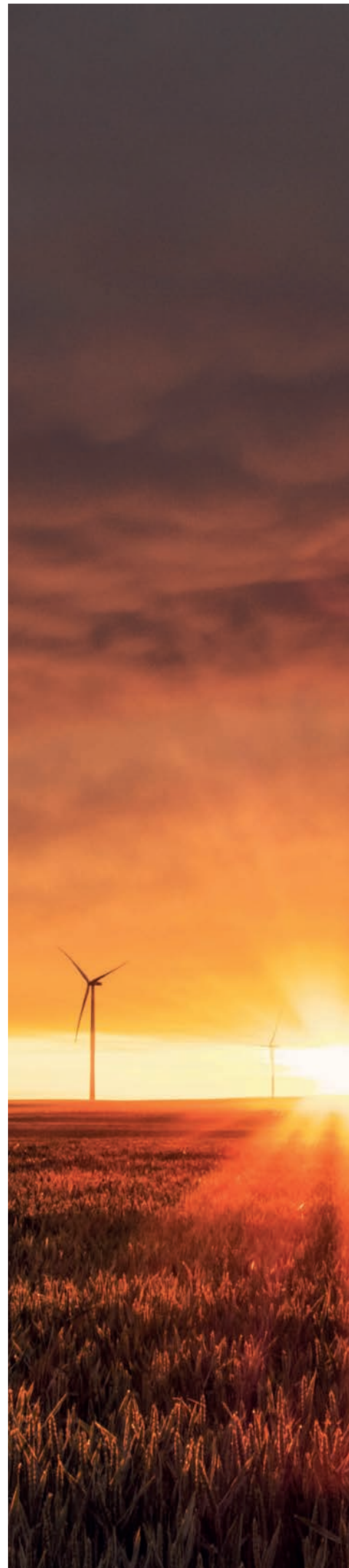
It should be noted that the views expressed in this report are the sole responsibility of the authors and do not necessarily represent the views of the external reviewers.

This publication and related materials are not intended to provide and do not constitute financial or investment advice. WWF makes no representation regarding the advisability or suitability of investing in any particular company, investment fund or other vehicle or of using the services of any particular entity, pension provider or other service provider for the provision of investment services. A decision to use the services of any financial institution, or other entity should not be made in reliance on any of the statements set forth in this publication. Whilst every effort has been made to ensure the information in this publication is correct, WWF and its agents cannot guarantee its accuracy and shall not be liable for any claims or losses of any nature in connection with information contained in this document, including (but not limited to) lost profits or punitive or consequential damages or claims in negligence.

WWF gratefully acknowledges the financial support of the KR Foundation for this publication.



Cover image: © Jack B




CONTENTS

INTRODUCTION	4
1. ASSET OWNER RESPONSES TO THE WWF CLIMATE ACTION SURVEY	8
2. LONG-TERM CLIMATE COMMITMENTS: NET-ZERO COMMITMENTS ARE TAKING CENTER STAGE	12
3. IMPLEMENTING LONG-TERM CLIMATE COMMITMENTS: KEY AREAS OF ACTION	20
3.1 DISCLOSURE OF CLIMATE PERFORMANCE	21
3.2 SHORT AND MID-TERM CLIMATE TARGETS	24
3.3 SECTOR POLICIES AND APPROACHES	28
3.4 ENGAGING STAKEHOLDERS	33
4. OVERCOMING CHALLENGES FOR IMPLEMENTATION	38
CONCLUSION	42
ANNEX 1: WWF CLIMATE ACTION SURVEY FOR ASSET OWNERS	44
ANNEX 2: LIST OF CONTACTED ASSET OWNERS AND RESPONSE STATUS	48
ANNEX 3. LIST OF HIGH-CARBON SECTORS USING NACE CODES	52

A photograph of a modern building with large glass windows reflecting a sunset sky, with solar panels in the foreground. The building is situated on a hillside with sparse vegetation. The sky is filled with soft, pinkish-orange clouds. In the foreground, there are rows of solar panels mounted on a metal frame.

INTRODUCTION



The Paris Agreement and the scientific findings of the Intergovernmental Panel on Climate Change (IPCC 2018, IPCC 2021) have established a consensus on the need to urgently reduce greenhouse gas emissions in order to avoid the worst impacts of climate change.

Asset owners must address climate change because of their long-term duty to safeguard the pensions of, or provide insurance to the assets of, current and future generations. However, investment flows remain misaligned with the ambitions of the Paris Agreement. WWF research (WWF 2018) has previously indicated that asset owners' public equity and corporate bond portfolios are not yet aligned with the goals of the Paris Agreement.

Climate misalignment exposes asset owners to material climate-related financial risks. The financial industry (e.g. Mercer 2019) and academic research (e.g. Cambridge University 2015, London School of Economics 2016) find that aligning investments with the Paris Agreement's goal to keep global warming well below 2°C will ultimately lead to both higher investment returns and lower financial risks than no action would. The Network on Greening the Financial System (NGFS 2019) states that 'climate science leaves little doubt: action to mitigate and adapt to *climate change is needed now*' and that *'there is a strong risk that climate-related financial risks are not fully reflected in asset valuations'*.

Climate misalignment furthermore risks perpetuating an environment that puts asset owners' core business at risk.

This research report takes stock of the climate actions that European asset owners are undertaking in light of the above. WWF contacted 100 asset owners across 12 countries in Europe to better understand the actions they are taking on climate change: 33 asset owners responded. Annex 1 of this report contains the full list of questions that were sent to the asset owners, covering how they assess and disclose the climate performance of their portfolios; the climate commitment they have taken; how these assessments and commitments have informed their investment strategy; and the challenges/barriers in taking climate action.

We find that:

- A growing number of leading asset owners are **convinced of the need to align their investments with the goals of the Paris Agreement and contribute to a just transition** (UN PRI). There is notably a growing number of net-zero commitments: climate science stipulates that net-zero emissions need to be reached by 2050 at the latest¹ in order to respect the 1.5°C warming threshold.
- There remain a lot of questions on how asset owners' long-term climate commitments are translated into a robust and credible strategy, including mid- and short-term targets. Asset owners are developing innovative climate actions but, overall, still **lack a comprehensive approach** that maximises all the levers they have at their disposal to tackle the complex issue of climate change.
- Recurring challenges for a full integration of climate considerations into investment decision making include: **access to appropriate, reliable and robust client-level data; standardized approaches to measuring and managing climate-related considerations; and methodologies to assess the impact of investment decisions on the real economy.**

WWF believes that asset owners need to develop net-zero transition plans that contribute to an immediate decrease in greenhouse gas emissions in the real economy, keeping in mind the said greenhouse gas emissions need to at least be halved by 2030 in order to keep global warming within safe boundaries. This report focuses on key areas of work that asset owners will need to develop as part of such transition plans:

- The assessment and disclosure of the climate performance of their portfolios,
- Setting of science-based net-zero targets,
- Adopting robust approaches for the most material sectors, and
- Developing a comprehensive engagement strategy.

For each of the areas above we highlight best-practice examples, but also point out where further progress is still needed.

1. Reaching Net Zero by 2050 corresponds to a 50% probability of keeping warming to under 1.5°C by the end of the century.

A background image showing a row of wind turbines silhouetted against a vibrant sunset sky with orange and yellow hues. The turbines are spaced out across the horizon.

COP26 – THE GOOD, THE BAD, AND THE HOPE

“*Alive, but just*”, is a common assessment of the world’s chances of limiting warming to 1.5°C by achieving the goals of the Paris Agreement following the COP26 conference in Glasgow.

On the one hand, there were several positive developments which will affect all financial institutions including, in the context of this report, asset owners:

- **Fossil fuels are explicitly mentioned** for the first time in the Glasgow Climate Pact, which underlines the clear signal that the age of fossil fuels is coming to an end
- **Rules on international carbon markets** were agreed, which will give certainty and predictability to both market and non-market approaches in support of mitigation as well as adaptation
- 39 countries signed a commitment explicitly **ending international public support for unabated fossil fuels** by the end of 2022
- **\$100bn per year of finance from higher income to lower-income countries** was agreed, even though fair criticisms remain about past adherence to previous commitments
- The Glasgow Leaders’ Declaration on Forest and Land Use signed by 127 countries pledges to **“halt and reverse forest loss and land degradation” by 2030**
- **The EU- and US-led Global Methane Pledge** launched at the COP26 with over 100 countries commits to cut at least 30% methane emissions from 2020 levels by 2030
- International convergence for sustainability reporting standards is within sight after **the formal launch of the International Sustainability Standard Board**, under the auspice of the IFRS Foundation

On the other hand, potentially ground-breaking opportunities were missed: the commitment to “phase out” coal was re-worded as “phase down”; in addition, only one major emitter – India – produced a new Nationally Determined Contribution at the talks; and no funding mechanism was agreed for loss and damage.

THE GLASGOW FINANCIAL ALLIANCE FOR NET ZERO (GFANZ)

One positive – though anticipated – development was the prominence given to the role of private financial institutions in achieving the goals of the Paris Agreement.

On 3 November, GFANZ, which is the umbrella which brings together all the major net-zero alliances for financial institutions, published its progress report, which highlighted the rapid growth in signatories (450+ institutions with £130+ trillion in assets under management as of November 2021) and the work programme it has set itself for 2022 covering commitments, engagement, investment and net-zero alignment.

Under GFANZ, 61 asset owners, through the Net Zero Asset Owner Alliance (NZAOA – see page 10 for an overview) and 51 asset owners, through the Paris Aligned Investment Initiative (PAII), have pledged to meet net-zero targets by 2050 or sooner. 16 asset owners covered in this report are in one or both of the initiatives.

As a whole, WWF is pleased to see the level of ambition and the number of actors, though it is critical that this be translated into immediate actions which have a significant impact in the real economy as soon as possible and before 2025. Until then, commitments risk being empty promises.

Collectively, there are some strong elements to all of the Alliance’s requirements:

- They require **net zero targets for 2050 or earlier**,
- they require **interim targets by or before 2030** and
- they are exhaustive in **scope, sector coverage and boundaries**, though gaps do remain.



TECHNICAL CHALLENGES WITH GFANZ COMMITMENTS

From a general perspective, there are major gaps in the Alliance's commitments in the treatment of fossil fuels and offsets and. As highlighted in the SBTi-FI (Science-Based Targets initiative for Financial Institutions)'s Net Zero standard, WWF's position is that:

- offsets should not be used in any target setting, unless as a last resort once all other technical and financially feasible solutions have been explored
- all funding to any new fossil fuel exploration and production should end in 2022, consistently with the IEA 1.5°C scenario.

From a technical perspective, there are additional challenges which WWF would like to see addressed. First of all, financial institutions can set targets choosing intensity targets rather than absolute emission reduction targets. WWF is concerned that a reduction of emission intensity does not necessarily result in absolute or real-world emission reductions in line with the science and agreed carbon budgets.

Reliance on an economic intensity approach can lead to an underestimation of warming potential and can create the wrong incentives. WWF strongly recommends the use of absolute emission reduction measures that makes sure that emissions are lowered overall and in line with the 1.5°C goal of the Paris Agreement.

Too much flexibility remains in the choice which financial institutions can make with regards to the climate scenario benchmark. The allowance throughout the alliances to **use of a single scenario benchmark** rather than benchmarks based on multiple climate scenarios to develop targets could mean analyses are overly sensitive to bias.

Additionally, the **lack of mandating of a specific scenario** (for instance, the IEA 1.5°C Net Zero "NZE2050" scenario) risks leading to lower comparability. WWF believes that **alignment assessment must be based on multiple scenarios** (i.e. warming function). Indeed, a multiple scenario approach draws from a much broader set of data from the modelled scenario landscape, ultimately improving the accuracy in determining the overall temperature rating of a company.

In addition, allowances to build benchmarks and targets based on a single climate scenario and on emissions intensity will **weaken what could be robust guidance for coherent and science-based disclosures that facilitate real economy change**. While the underlying metrics and methodologies for portfolio alignment are maturing, for them to gain the trust required for widespread uptake, they need to be anchored in science and transparent and consistent in their assumptions.

As a general point, WWF **is pleased that the debate for financial institutions has now moved beyond disclosing risks and opportunities alone, towards the concept of portfolio alignment and setting net-zero targets**. This is a crucial step as financial institutions seek to align activities with the 1.5°C warming limit of the Paris Agreement.

A low-angle, upward-looking photograph of several modern skyscrapers with glass facades, reaching towards a clear blue sky. The perspective creates a sense of height and scale.

1. ASSET OWNER RESPONSES TO THE WWF CLIMATE ACTION SURVEY

WWF contacted 100 of the largest asset owners in 12 European countries. Annex 2 contains a full list of the contacted asset owners, and the Table 1 provides an overview of the response rate, which stood at 33% – both overall and broken down by country. There are important differences between countries:

- 55% of asset owner responses (18 out of 33) are head-quartered in the Nordic region (Denmark, Finland, Norway and Sweden), where the combined response rate is 72%.
- The combined response rate for the remaining eight countries is only 20%: the UK (5%), France (8%), Germany (10%), Italy (0%) and Belgium (0%) had a particularly low response rate.

Table 1 Response rates per country

Country	Number of asset owners contacted	Completed the survey	Declined WWF request	No response
Belgium	1	0	0	1 (100%)
Denmark	6	4 (67%)	0	2 (33%)
Finland	5	5 (100%)	0	0
France	12	1 (8%)	0	11 (92%)
Germany	11	1 (9%)	0	10 (91%)
Italy	2	0	0	2 (100%)
Netherlands	17	5 (29%)	0	12 (71%)
Norway	5	2 (40%)	2 (40%)	1 (20%)
Spain	4	2 (50%)	0	2 (50%)
Sweden	9	7 (78%)	0	2 (22%)
Switzerland	8	5 (62.5%)	1 (12.5%)	2 (25%)
UK	20	1 (5%)	2 (10%)	18 (85%)
Total	100	33 (33%)	4 (4%)	63 (63%)

While the overall sample of climate actions collected across the 12 European countries are from some of the largest and most advanced asset owners in the field, WWF considers that, because of low responses in some markets, the findings presented in this research are not necessarily a full reflection of where the broader asset owners

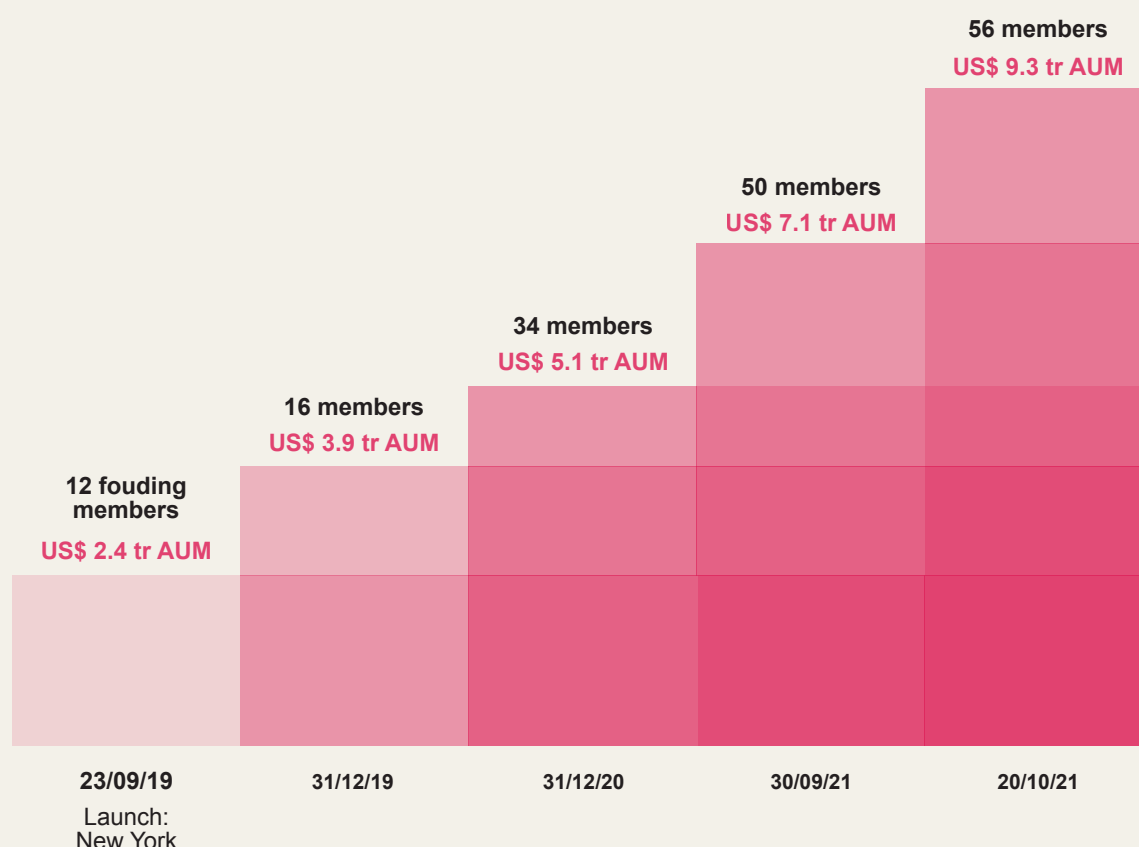
market stands in terms of addressing the climate challenge. Box 1 presents an overview of the UN-convened Net Zero Asset Owner Alliance (NZAOA), the largest global alliance of asset owners, and its progress in 2021 to offer a wider reflection on market progress.

33
OF EUROPE'S
100
BIGGEST ASSET
OWNERS RESPONDED
TO WWF'S SURVEY

BOX 1 UN-CONVENED NET ZERO ASSET OWNER ALLIANCE (NZAOA)

The Net Zero Asset Owner Alliance is an international group of 60+ institutional investors looking to deliver on their commitment to transition their investment portfolios to net zero emissions by 2050. It is considered by many to be a leading demonstration of possible asset owner targets and actions”.

The UN-convened Alliance was launched in 2019 and, as of November 2021, represented over 10tn USD in Assets under Management.



Alliance members commit to:

- transition their investment portfolios to net-zero GHG emissions by 2050 consistent with a maximum temperature rise of 1.5°C above pre-industrial temperatures,
- take into account the best available scientific knowledge including the findings of the IPCC, and
- regularly report on progress, including establishing intermediate targets every five years in line with Paris Agreement Article 4.9.

In January 2021, it launched its Target Setting Protocol which explicitly sets out how individual Alliance members will set short-term 2025 targets.

In October 2021, it launched its first progress report which highlighted both the growth of the Alliance but also reported on the first set of targets disclosed by members.

- Some asset owners are already **setting targets which are more ambitious than the minimum requirements of the Alliance’s Protocol**, in particular regarding engagement and portfolio-wide targets, which is to be welcomed.
- However, while 29 asset owners have already published their short-term targets for 2025 (which must be aligned with ‘no overshoot’ or ‘low overshoot’ scenarios), **only 4 have set sector-specific targets: setting sector-specific targets is a critical step in developing a robust action plan**. It is hoped that many more will develop sector-specific targets in the next months as data, methodologies and best practices continue to evolve.

Going forward, the Alliance aims to:

- **Extend the scope of the 2025 Target Setting Protocol** to further advance targets and related actions to enable members to meet the Alliance's commitment to net zero by 2050;
- **Engage with other financial actors** (asset owners, managers, banks, insurers and stock exchanges) worldwide to transition their activities to align with net-zero pathways including through the GFANZ initiative;
- Continue the **dialogue with scientists** on the latest advances in climate science, especially in the context of the IPCC AR6, to ensure a rigorous, robust, transparent and science-based decarbonisation approach to net-zero transition across all sectors;
- **Engage further with relevant investee companies** to strengthen their ambition and capacities to adopt strategies aligned with a 1.5°C pathway; and
- Continue to **call on governments to implement public policies** that promote the transition to a globally decarbonised economy by 2050.

More information can be found on <https://www.unepfi.org/net-zero-alliance/>



THE NET ZERO ASSET
OWNER ALLIANCE IS AN
INTERNATIONAL GROUP OF

60+

INSTITUTIONAL INVESTORS
LOOKING TO DELIVER ON THEIR
COMMITMENT TO TRANSITION
THEIR INVESTMENT
PORTFOLIOS TO NET ZERO
EMISSIONS BY 2050.



2. LONG-TERM CLIMATE COMMITMENTS: NET-ZERO COMMITMENTS ARE TAKING CENTRE STAGE

The growing understanding by asset owners of their exposure and contribution to climate change has driven many to define a climate ambition. Such ambitions are broad and long-term in nature, and distinct from short-term and quantified climate targets (see chapter 3.2) (TCFD, 2021). In this publication, WWF refers to climate ambitions as climate commitments.

30 of the 33 asset owners that responded to the WWF climate action survey have made a climate commitment (see Table 2). The most commonly formulated commitment is to reach net-zero portfolios, followed by commitments to align or contribute to the Paris climate agreement. **While Paris alignment and net-zero commitments may seem identical at first, there are some important nuances between the two** (see Box 2).

Table 2 Ambition of net-zero commitments (based on data received in July and August 2021. Where public announcements have subsequently been identified by WWF, the table has been adjusted to reflect them.)

Net-zero commitment	Paris alignment commitment	Other type of climate commitment	No public climate commitment
AMF AP1 AP2 AP3 AP4 Alecta Nordea Varma Ilmarinen KLP DNB Swiss RE NN ABP Zurich PFA PKA Lloyds Banking Group Banco Santander BBVA BVV	Migros Pensionskasse (MPK) BpfBouw Industriens	PME PMT KEVA	Publica ATP VER
21	3	3	3

WWF believes net-zero commitments are most closely aligned with the requirement to limit global warming to 1.5°C. We therefore support asset owners setting net-zero commitments. However, there are still a lot of questions on how

these long-term commitments will be translated to robust mid- and short-term actions, which are essential. WWF has therefore formulated criteria for credible net-zero commitments (see Box 3).

30
OF THE 33 ASSET OWNERS
THAT RESPONDED TO WWF'S
CLIMATE ACTION SURVEY
HAVE TAKEN A CLIMATE
COMMITMENT

BOX 2 PARIS ALIGNMENT VERSUS NET-ZERO COMMITMENTS

For more information, see from WWF's [introductory guide to net-zero](#), July 2021.

In practical terms, a financial institution's net-zero commitment is often shorthand for 'net-zero by 2050 (1.5°C warming by end of century)'. Indeed, all credible climate commitments made by financial institutions require reaching net-zero at some point before the end of the century and must be supported by verifiable, transparent actions.

The level of ambition pushed at COP26 was for this milestone to be reached by 2050 at the latest. Such a commitment might for some institutions have already been implied as part of their broader Paris Agreement Alignment commitment ('well below 2°C and striving for 1.5°C warming by end of century') as the former does not preclude the latter.

However, the broader range of outcomes possible under 'well below 2°C' means that, for many actors, their Paris Agreement alignment commitment might imply carbon neutrality around 2065, (see diagram below), whereas a 'net-zero' commitment would imply carbon neutrality by 2050 at the latest: the primary difference is therefore the ambition and speed of implementation (and consequently the amount of carbon released in the atmosphere). The tools, datasets, methodologies are the same in both instances, but one looks to limit global warming to 1.5°C above pre-industrial temperatures by the end of the century ('net-zero'), while the other will limit warming to 'well below 2°C, striving for 1.5°C' by the end of the century.

Consequently, for a similarly shaped reduction path, a net-zero commitment will mean reducing greenhouse gas emissions in one's portfolio by half approximately 5 years sooner (around 2030) than for a 'Paris Alignment' commitment. The difference between the two, while potentially appearing marginal, is significant in terms of long-term impact for the planet and human civilisation ([WWF-France and 1Planet Advisory, 2021](#)).

It should be noted that the term net-zero was originally introduced by climate scientists to describe scenarios when the entire atmosphere was, on balance, no longer building up greenhouse gases. This implies reaching net-zero for the whole planet, not only on the level of individual companies or financial institutions. By consequence, each individual actor needs to reduce the emissions related to their own activities as much and as quickly as possible, and not overly rely on the use of offsets or negative emission technologies to reach their net-zero commitments ([J. Foley, 2021](#)).

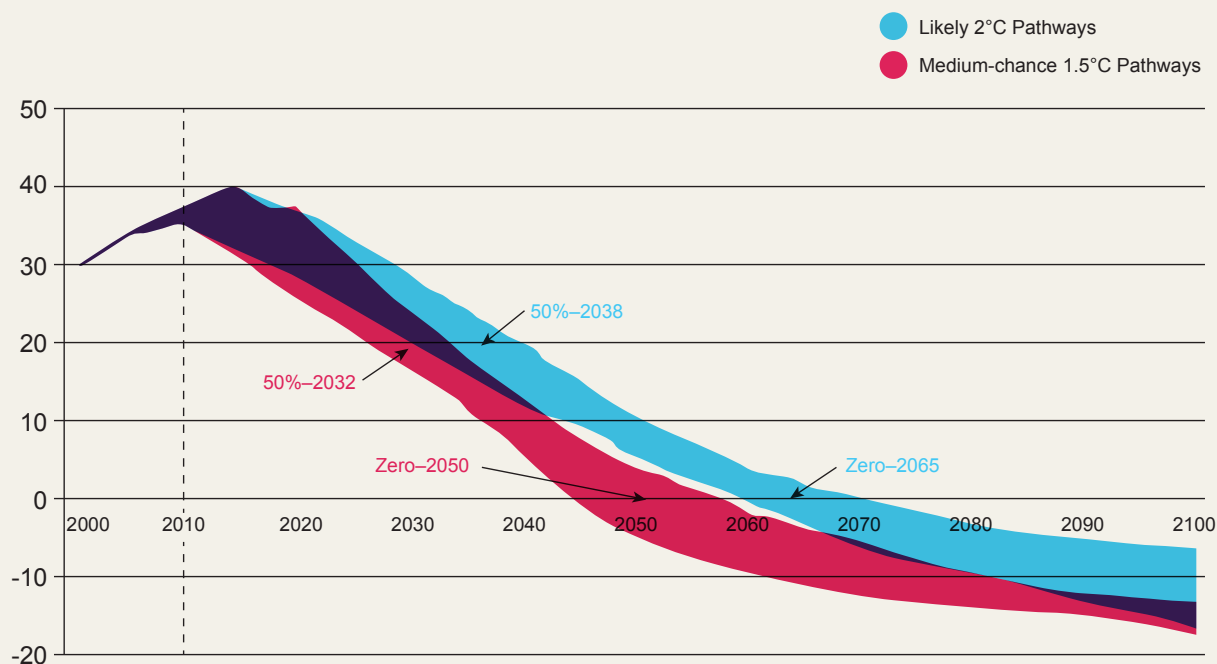


Figure 1: Range of Global Emissions Potlays in Scenarios Consistent with Likely Chance of 2°C or Medium Chance of 1.5°C.
Source: Joeri Rogelj et al, Energy system transformations for limiting end-of-century warming to below 1.5°C. *Nature Climate Change*, Vol.5, June 2015, P.520 cited in OC *The Sku's the Limit*

BOX 3 WWF CRITERIA FOR CREDIBLE NET-ZERO COMMITMENTS BY FINANCIAL INSTITUTIONS

For net-zero commitments to be credible, WWF believes financial institutions should:

1/ Pledge at the head-of-organization level to reach net-zero by 2050 or sooner, in line with global efforts to limit warming to 1.5°C.

2/ Plan Explain what steps will be taken toward achieving net-zero, and commit to calibrate all activities (see point 3 below) on science-based no/low overshoot 1.5°C scenarios (e.g. P1 or P2 pathways of the IPCC special report on 1.5°C warming) that do not rely on excessive carbon dioxide removal technologies, and hence require a global reduction in CO₂ of approximately 50%² by 2030.

3/ Proceed Take immediate action toward achieving net-zero by COP26 – aligned with the scientific requirements set out in point 2 above – including:

- Setting a combination of short-term targets that cover all (i.e. no cherry-picking) of the following levels and activities: (sub-)portfolio level targets, targets for sectors, targets for company engagement and green investments targets.³
- Adopt investment policies for the most material sectors that involve fossil fuels,⁴ deforestation- and conversion-related sectors (agriculture and forestry), high-carbon transport and high-carbon industry (e.g. cement, steel, chemicals, etc.).
- Commit to strive towards achieving impact in the real economy by developing a robust and publicly disclosed engagement strategy⁵ towards investee companies, policy makers and service providers as the primary tactic to achieve (sub-)portfolio targets. Such a strategy must include time-bound objectives and escalation steps⁶ in case engagement is not bearing fruit.

4/ Publish Commit to measure and report progress towards 1.5°C alignment at least annually, including via, to the extent possible, platforms that feed into the UNFCCC Global Climate Action Portal.

5/ Contribute to the development and application of credible portfolio alignment methodologies that drive and measure the financial institution's contribution to real-world reductions in line with a 1.5°C pathway. This notably implies going beyond measuring 'financed emissions', including the need for financial institutions to immediately avoid investments in new high emitting infrastructure⁷.

2. The IPCC P1 pathway forecasts a 54% reduction by 2030, and the P2 pathway a 47% reduction.

3. There is a growing number of target setting frameworks that allow financial institutions to set short-term targets such as the Science-Based Targets for Financial Institutions initiative, the UN-convened Net Zero Asset Owner Alliance target setting protocol and the IIGCC Paris Aligned Investment Initiative net-zero investment framework.

4. Based on an available carbon budget calculation for an IPCC scenario of 50-66% chance of staying below 1.5°C of global warming, with low or now overshoot and limited carbon dioxide removals, thermal coal should be phased out from the energy system by 2030 in OECD/Europe/Russia and by 2040 globally; oil and gas should be phased out by 2040 in OECD/Europe/Russia and by 2050 globally (IEA Beyond Two Degrees, 2017). Financial institutions should ensure that their own portfolio is free from fossil fuels by the same timelines, by assessing and taking action to guarantee (e.g. engaging and/or reducing exposure and/or divesting) that the companies they invest in and/or provide financial services to have corresponding transition plans in place.

5. An engagement strategy should include: engagement targets; a description of how sectors/companies for engagement were identified; the climate requests towards sectors/companies; the number and sectoral breakdown of engagement conducted with regard to climate change over the last 12 months; and a description of the engagement escalation strategy (disclosure and rationale of voting on climate shareholder resolutions, votes against management for climate reason, divestment decisions in case of unsuccessful engagement, etc.).

6. For companies, this can entail public messaging, filing/supporting shareholder resolutions, and participating in capital raising efforts through bond issuances/loans, vote against management, and ultimately divestment if the company remains unresponsive to demands.

7. This includes direct investments in infrastructure projects and/or providing financing or services (e.g. project loans, financing through corporate instruments (corporate loans, equity, bonds), insurance underwriting, loan underwriting, etc.) to companies that are investing/planning to invest in high-emitting infrastructure.

Table 3 Percentage of responding asset owners which meet the WWF Criteria

WWF criteria	Percentage of respondents meeting the requirements
Pledge	81%
Plan	74%
Proceed – Short Term Targets	71%
Proceed – Sectoral Policies	65%
Proceed – Engagement Strategy	65%
Publish	81%
Contribute	84%

Of those asset owners who responded to the survey, 17 (51%) disclose in their responses that they fully meet all 5 of WWF's requirements, as shown in Table 3.

Table 4 provides a high-level assessment of the 28 net-zero asset owner commitments that WWF received information about through the responses to the climate action survey. It provides an overview of the timing by which asset owners aim to reach net-zero, and maps whether the commitments align with the robustness indicators that WWF was able to quantify from the asset owner responses, such as short-term targets and approaches for the most material sector.

- While the table indicates that asset owners have started to match their climate commitments with concrete actions, it does not express the degree to which both the short-term (2030

and sooner) and longer-term climate targets and sector approaches are aligned with what is scientifically required to drive a net-zero economy by 2050.

- Asset owners will also need to take additional measures, such as assessing and disclosing the climate performance of their investments and developing a robust engagement strategy across all relevant actors.

The following chapters will look more closely at each of the above areas: we will highlight key findings from the asset owner responses to the climate action survey, share best practice examples, and provide guidance on how asset owners can take robust action. Our analysis will be based on the full sample of 33 asset owner responses – not only on the 28 asset owners that have net-zero commitments.

Table 4 Overview of respondent asset owners' net zero and other commitments

Net zero commitments		
Timeline		
2035	2	Varma, Ilmarinen
2040	1	AP4
2045	1	AP2
2050	18	AMF, AP1, AP3, Alecta, Nordea, KLP, DNB, BBVA, Swiss RE, NN, ABP, Zurich, PFA, PKA, Lloyds Banking Group, Banco Santander, BVK, Elo

Short-term targets		
Yes	14	AMF, AP3, AP4, KLP (pending), Alecta, Nordea, Varma, Ilmarinen, DNB, Swiss RE, Zurich, ABP, PKA, Lloyds Banking Group
No	6	AP1, AP2, BBVA, NN, PFA (pending under NZAOA), Banco Santander

Sectoral approach		
Investment policy	17	AMF, AP1, AP2, AP4, Alecta, Nordea, Varma, Ilmarinen, KLP, DNB, BBVA, ABP, NN, PFA, PKA, Lloyds Banking Group, Banco Santander
None	1	AP3

Other commitments		
Short-term targets		
Yes	10	VER, Publica, BNP Paribas Cardif, Elo, Migros, BVK, BpfBouw, KEVA, PME, PMT
No	3	ATP, BVV, Industriens
Sectoral approach		
Investment policy	9	VER, Publica, BNP Paribas Cardif, Elo, Migros, BVK, BpfBouw, PME, PMT
Targets	2	KEVA, PMT
None	3	ATP, BVV, Industriens



LEADING PRACTICE

AVIVA – NET ZERO TARGET SETTING AND ACTIONS

Aviva strives to be a net-zero company by 2040. In order to do so, it is setting out a list of targets, initiatives and active engagement to achieve its objectives:

Targets

- Aviva is setting out a pathway to achieve its goal with immediate actions and targets for 2025, 2030 and 2040. (interim targets starting in 2025)
- Aviva is taking additional action on coal immediately. By the end of 2022, it will divest from all companies which make more than 5% of their revenue from coal unless they have signed up to the Science Based Targets initiative.

Increasing green investments:

- Over the past five years, Aviva Investors has invested £500 million every year in low-carbon and renewable energy infrastructure including solar, wind and energy centres. This takes total energy generation capacity to 730 megawatts in the UK and Europe, enough to power one million homes.
- By the end of 2022, Aviva expects to invest a further £10bn of assets from its auto enrolment default funds and other policyholder funds into low carbon strategies (of which £5bn has already been announced);
- By 2025, it will invest £6bn in green assets, including £1.5bn of policyholder monies into climate transition funds;
- By 2025, Aviva Investors will invest £2.5bn in low carbon and renewable energy infrastructure and deliver £1bn of carbon transition loans
- However, the majority of our investments will be focused on driving the transition of assets from higher carbon to low or zero carbon impact.

Engagement

- Aviva Investors is making specific requests to these companies, including signing up to Science Based Targets aligned to the Paris Agreement and setting fixed deadlines of between 12 and 36 months. If Aviva Investors does not see evidence of serious engagement from the companies to meet the climate challenge, it will put them on its stop-list and divest itself of any assets it holds.



Varma Mutual Pension Insurance Company (“Varma”) provides statutory pension cover for work carried out in Finland, with total assets at the end of 2020 of approximately 50bn euro.

In November 2019, Varma announced its commitment to reach carbon-neutral investment portfolio by 2035, which corresponds to the carbon-neutrality target of the Finnish government.

Carbon-neutrality for Varma means reducing CO₂-emissions as much as possible by investing in companies whose solutions enable emission reductions and who take the progression of climate change into account in their operations. Carbon offsetting is used only as an option of last resort.

The main tool for Varma in reaching the target is setting measurable interim targets for all asset classes. For instance, the target for emissions from equities, in relation to revenue, is a reduction to 50% relative to 2016 by 2027 (with intermediate goals of -30% by 2023 and -40% by 2025).

Varma’s toolbox includes:

- sectoral policy targeting industries with greatest opportunities for emission reductions and significant exposure to risks caused by climate change mitigation. The industries identified by Varma are oil & gas, utilities, automobiles, metals & mining, construction materials, transportation, chemicals. In their investments in the above-mentioned industries, Varma commits to using the emission reduction analysis in compliance with the Science Based Targets initiative
- Climate allocation target of 20% for 2025. Climate allocation includes companies that mitigate the effects of climate change through their own operations, or that have set ambitious carbon reduction targets, e.g SBT.
- Exclusion of coal at least from listed corporate bonds and equities by 2025 and oil exploration by 2030.

Varma’s carbon-neutrality target is in their climate policy stated to be conditioned on “the investment environment allowing it”.



**VARMA HAS COMMITTED TO THE
EXCLUSION OF COAL FROM LISTED
CORPORATE BONDS AND EQUITIES
BY 2025 AND OIL EXPLORATION
BY 2030.**



Ilmarinen Mutual Pension Insurance Company (“Ilmarinen”) provides employment pension in Finland. Total assets were at the end of 2020 approximately 53bn euro. Ilmarinen committed in February 2020 to reach carbon-neutral investment portfolio by 2035. The government of Finland has the same carbon-neutrality target year. Ilmarinen’s statutory mandate is to manage pension assets profitably and securely. Ilmarinen considers robust climate strategy and action by their investee companies to be aligned with protecting and generating long-term shareholder value.

Ilmarinen aims to reach the net-zero target by 2035 with the help of asset class specific roadmaps. First roadmap was published October 28, 2021. Additional roadmaps should follow in the coming years. Ilmarinen intends to both decarbonize the portfolio and to invest in low carbon opportunities. Key interim targets in the first roadmap are:

- No investments in companies that are planning new thermal coal investments (2021)
- Carbon footprint of direct listed equities -30% in 2020–2025 and -50% in 2020–2030
- Direct listed equity investments aligned with the Paris Agreement’s 2-degree scenario in 2025 and with the 1.5-degree scenario in 2030
- Only CO₂-free electricity in Finnish real estate as of 2021
- Finnish real estate’s in-use carbon footprint -50% in 2025 and -80% in 2030 (from the average of 2018–2020)
- Finnish real estate’s total energy CO₂-free in 2030
- Ilmarinen is investigating the option of joining Science Based Targets for financial institutions.

Ilmarinen’s toolbox also includes:

- expanding carbon assessment from thermal coal to also other fossils
- doing further due diligence on investees in high carbon intense businesses i.e. fossil fuel production and use, includes sectors such as energy, utilities, transportation and materials, and
- only investing companies with more than 30 % in high carbon intense businesses if they have climate targets in place and can already show good performance in intensity trend. The aim is to lower the threshold and tighten the criteria for companies to get on transition list.

**FINNISH REAL ESTATE’S
IN-USE CARBON FOOTPRINT**

-50%

IN 2025 AND

-80%

**IN 2030 (FROM THE
AVERAGE OF 2018-2020)**

A photograph of a field of tall, golden-brown grain in the foreground. In the background, several wind turbines are silhouetted against a dramatic sky at sunset or sunrise. The sky is filled with clouds, glowing with orange, red, and purple hues. The overall scene conveys a message of sustainable energy and agriculture.

3. IMPLEMENTING LONG-TERM CLIMATE COMMITMENTS: KEY AREAS OF ACTION

3.1 DISCLOSURE OF CLIMATE PERFORMANCE

The majority of responding asset owners disclosed some, or all, of their climate-related considerations using well established public frameworks such as the Taskforce on Climate-related Financial Disclosures (TCFD) in some instances such as Santander Asset Management as part of their commitment through the Net Zero Asset Managers initiative. National

disclosure requirements, such as Article 173 in France for BNP Paribas, have driven disclosure requirements too. More broadly, jurisdictional requirements such as the upcoming Sustainable Finance Disclosure Regulation (SFDR) and the EU Taxonomy disclosure requirements are highlighted by asset owners such as Nordea and PFA.

Table 5 indicates that almost all asset owners that responded to the climate action survey have assessed the climate performance of their investment portfolios. It is notable that the use of forward-looking climate scenario analysis is now well established, and asset owners have a growing variety of tools at their disposal. The findings of these forward-looking assessments are mainly used for internal use, however, and disclosure of climate performance is still firmly rooted in carbon footprinting. In addition, where asset owners disclose findings of forward-looking assessments, it is often partial.

Table 5 Assessment of carbon footprint and scenario alignment by asset owners

	Carbon footprint		Forward-looking climate scenario analysis	
Internal assessment (not disclosed publicly)	26	AP1, AP2, AP3, AP4, Alecta, Nordea, VER, KEVA, Elo, Ilmarinen, KLP, DNB, BVK, BNP Paribas Cardif, ABP, Bpfbouw, PME, PMT, ATP, PFA, PKA, PUBLICA, MPK, Swiss Re, Zurich	29	AMF, AP1, AP2, AP3, AP4, Alecta, Nordea, VER, KEVA, Elo, Ilmarinen, KLP, DNB, BVK, BNP Paribas Cardif, BVV, BBVA, ABP, Bpfbouw, NN, PME, PMT, PUBLICA, ATP, PFA, PKA, Lloyds Banking Group, Banco Santander, Swiss Re
Publicly disclosed	23	AP1, AP2, AP3, AP4, Alecta, Nordea, VER, KEVA, Elo, Ilmarinen, KLP, DNB, BNP Paribas Cardif, ABP, PME, PMT, ATP, PFA, PKA, PUBLICA, MPK, Swiss Re, Zurich	8	AMF, Ilmarinen, BNP Paribas Cardif, NN, Lloyds Banking Group, Banco Santander, PUBLICA, Swiss Re

WWF believes that disclosure of carbon footprinting alone is not going to provide the market with relevant information on the extent to which asset owners are truly contributing to the transition towards the net-zero economy (See Box 4). As per the results of the survey, only 18% of asset owners disclose the results of their scenario alignment assessment: the disclosure of the alignment level of portfolios with science-based net-zero targets, as well as actions planned to reduce any misalignment, will be a critical step for all asset owners in meeting market demands for sufficient, decision-useful, information. In addition, asset owners must understand that requirements to disclose findings from forward-looking climate assessment are going to increase, whether it is through industry-led initiatives or through regulation:

- In Europe, the EU disclosure regulation lays down transparency rules on the integration of sustainability risks and the consideration of adverse sustainability impacts in investors and financial advisors' processes, and on the provision of sustainability-related information

on financial products. The regulation includes a requirement for investors *to publish and maintain on their websites (...) where relevant, the degree of their alignment with the objectives of the Paris Agreement.*"

- Recent TCFD guidance on climate metrics, targets and transition plans includes a recommendation that *financial institutions should measure and disclose the alignment of their portfolios consistent with a 2°C or lower temperature pathway (e.g. Paris-aligned), and incorporate forward-looking alignment metrics into their target setting frameworks and management processes' (TCFD, 2021)*

The exact metrics and modalities for climate alignment disclosure are still under discussion, but asset owners that actively contribute to these reflections and share their own findings will be better positioned to take the market lead when reporting requirements become more stringent. WWF has formulated recommendations about what is a comprehensive disclosure of an investment portfolio's climate alignment (see Box 5).

BOX 4 LIMITATIONS OF CARBON FOOTPRINTING

Mark Carney stated in the foreword of a research on climate metrics, which is supported by the COP26 presidency, that: 'as countries turn the Paris Agreement goals into nationally legislated objectives to achieve net-zero, the financial sector will need to adapt and allocate capital according to their understanding of the opportunities and risks in the transition. Financial institutions will also increasingly be expected to disclose the alignment of their investments to net-zero and show how clients' money is invested. Existing climate-related measures all serve an important purpose for this community, but aren't yet as forward-looking, robust, decision useful and comparable as they need to be to measure portfolio alignment'.

WWF supports the claim that carbon footprint and intensity metrics have severe limitations, and should therefore not be used as a sole indicator for climate alignment disclosure:

- **They do not provide the information as to whether the company is gradually aligning or not its business model with 1.5°C climate scenarios.** As such, using carbon footprint metrics does not mean that the approach is science-based: assessing the alignment with the objectives of the Paris Agreement would systematically require an additional methodological step;
- **They treat low-carbon (e.g. renewables) and neutral activities (e.g. services and media) equally.** As a result, some low-carbon technologies that are critical in all 1.5°C scenarios (such as the production at scale of electric vehicles or electricity storage) are ignored when focusing on the carbon footprint of portfolios. This is not consistent and potentially counterproductive with the objective of alignment in the Paris Agreement;
- **Past GHG emissions are not a good indicator of future emission trends.** GHG emission data are backward-looking, and will not necessarily lead to select the companies that are transitioning to a low-carbon business model as this depends largely on their forthcoming investment plans (capex plans) which are not captured with backward-looking data;
- **'Scope 3' emissions are usually ignored.** Most carbon footprint assessments rely on corporate reporting, which usually only covers Scope 1 (direct emissions) and Scope 2 (purchased electricity). These two scopes are relevant for a few sectors such as power production. However, in many other sectors, it misses the bulk of emissions that are related to the use of products and supply chains (Scope 3): scope 1 and 2 roughly capture around 10% of emissions of major sectors like automobiles, energy, industrials, etc.;
- **Service providers have developed approaches to estimate companies' Scope 3 emissions but results between approaches vary widely.** In addition, another methodological step is required to aggregate company emissions to the level of a financial portfolio: this attribution can also be done in a variety of ways, with no standardized approach agreed by all, although industry-led initiatives such as the Partnership for Carbon Accounting Financials (PCAF) are currently developing open-source approaches to support the assessment and disclosure of emissions by financial institutions.
- **It can therefore be safely concluded that applying carbon footprinting as a climate metric for financial institutions is no more mature than other forward-looking – and hence more relevant – climate metrics.**



**CARBON FOOTPRINT AND
INTENSITY METRICS HAVE SEVERE
LIMITATIONS, AND SHOULD
THEREFORE NOT BE USED AS THE
SOLE INDICATOR FOR CLIMATE
ALIGNMENT DISCLOSURE**

WWF has developed a position paper on minimum requirements for climate alignment disclosure (WWF, 2020). The paper is primarily aimed at policy makers but can also be applied at the level of individual asset owners.

The paper recommends climate alignment disclosure across three levels: (1) portfolio metrics and targets, (2) dynamic sector metrics and targets, and (3) strategy and activity-based metrics and targets. Financial institutions should disclose against all three levels but be given some degree of flexibility to decide for each level which exact metric best fits their activities. WWF argues that all the included metrics and targets must be forward-looking and be reviewed on a regular basis (maximum five year) to take in account evolving climate science and methodology development.

The paper provides more detailed recommendations for each of the three levels:

- On a portfolio level, we suggest that **investors disclose at least one of the following three metrics: temperature alignment scoring, an absolute CO₂e-emission reduction targets, and/or EU taxonomy-based targets.**
- On a sector level, we suggest **investors identify a list of material sectors and disclose at least one of the following two metrics: product/production targets and/or economic activity-based metrics.**
- On an activity and strategy-based level, we suggest **investors disclose their transition plan, engagement strategy/ targets and investment policies.**

The paper recommends that investors disclose information about the methodologies they use for their climate alignment assessments, including:

- How the methodology forecasts the future climate performance of companies;
- Precise information on the temperature scenario that was used (scenario name, timestamp of the scenario, scenario provider);
- How the methodology derives temperature benchmarks.

Finally, with regards to the disclosure of targets, the paper recommends that asset owners explain how these targets align with what is required under no/low overshoot 1.5°C scenarios – i.e. an absolute reduction by 25% by 2025 compared to 2020.



LEADING PRACTICE

BNP PARIBAS CARDIF – DISCLOSURE APPROACH

Every year for the last five years, BNP Paribas Cardif has published a report presenting the Responsible Investment Strategy. This strategy is structured around three main commitments:

1. including non-financial criteria in investment processes and shareholder engagement.
2. taking action to combat climate change.
3. developing positive-impact investments.

The drafting of this report complies with Article 173 of the French Energy Transition Act (LTE), which sets for the institutional investors' reporting requirements regarding their accounting for environmental and social issues.

BNP Paribas Cardif refers to the TCFD's framework in this report and engages with other climate change related initiatives such as the PRI and the Montreal Carbon Pledge.

3.2 SHORT AND MID-TERM CLIMATE TARGETS

Recent TCFD guidance makes a distinction between long term ambitions (see chapter 2) and targets, which it states should be:

- Based on recognised metrics;
- Be quantified and granular;
- Designed in consideration of an organization's strategy and forecasting, and informed notably by scenario analysis and climate science;
- Clearly specified over time.

WWF has adopted the TCFD definition of targets to assess to what extent asset owners have matched their long-term ambitions with targets. We believe that short and mid-term targets should not be longer than 5 to 10 years: this ensures that the timeframe for the target is actionable and underlines the accountability and responsibility for delivery on the current management and leadership teams of the financial institutions.

There are currently four broad approaches that investors use for target setting:

- **Carbon accounting-based methodologies**, which look at current and future forecasted absolute and sector-intensity emissions to build required trajectories for decarbonising the portfolio. These approaches require to measure and track financed emissions, using for instance the Partnership for Carbon Accounting Financials (PCAF) methodology.

- **Capacity-based methodologies**, such as the Paris Agreement Capital Transition Assessment (PACTA) tool, which looks at forward-looking production plans of clients' assets by technology and by sector and maps alignment with climate scenarios.
- **Temperature-based methodologies**, which give an implied degree of warming for portfolios, such as the Science-Based Targets initiative – Financial Institutions (SBTi-FI) temperature tool.
- **Percentage of companies** meeting a science-based requirement or technical criteria: for instance, percentage of companies in a portfolio aligned with the EU Taxonomy, share of companies with Science-Based Targets, share of companies with Paris Agreement-aligned transition plans.

The above target setting approaches can be applied to one or several asset classes and/or sectors; or complemented by further actions such as setting specific financing targets for certain sectors or technologies.

Table 4 indicates that all asset owners that responded to the climate action survey have adopted targets with a small majority having already set net-zero targets. These targets are almost uniquely using the carbon accounting-based methodology and applied to a selected number of asset classes – most commonly corporate instruments (public equity and bonds) and real estate. For the latter asset class, asset owners also occasionally adopt energy efficiency targets.

While it is encouraging that asset owners set targets, WWF believes comprehensive target setting aligned with net-zero or other climate commitments will require a combination of targets which, while observed in some asset owners who responded such as Aviva or BNP Paribas Cardif, is not currently a widespread approach. In addition, the nature of the targets may need to further evolve beyond the four currently existing approaches outlined above. There is a growing body of guidance and frameworks that can assist asset owners in these efforts (see Box 6).

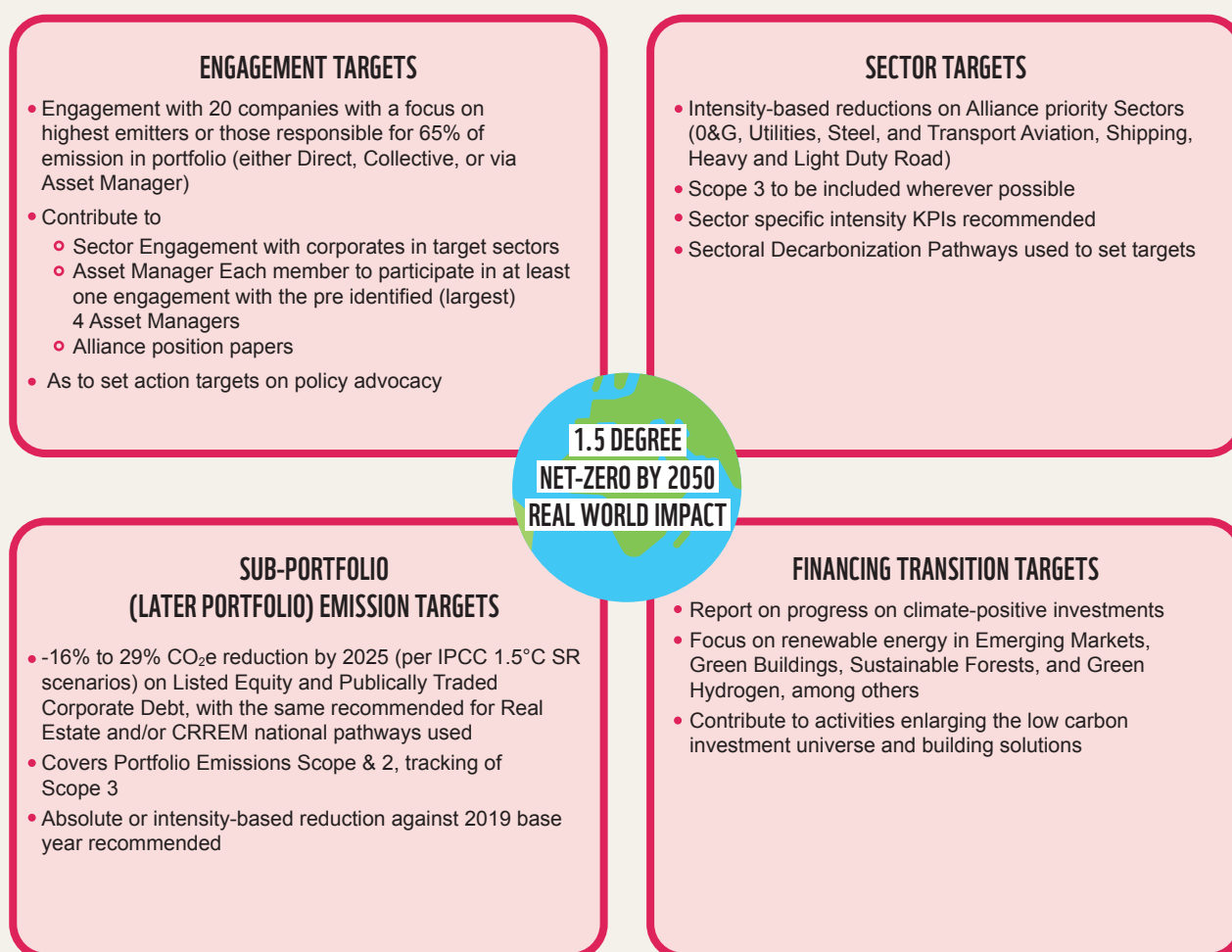
BOX 6 GUIDANCE AND FRAMEWORKS FOR NET-ZERO TARGET SETTING

The Science Based Targets initiative (SBTi) mobilizes companies to set science-based targets and boosts their competitive advantage in the transition to a low-carbon economy. It is a collaboration between CDP, the United Nations Global Compact, World Resources Institute (WRI), and WWF.

SBTi launched a framework for financial institutions (SBTi-Finance) in October 2020 which includes target setting methods, target validation criteria and recommendations, a target setting tool, and a guidance for financial institutions to align their lending and investment portfolios with the ambitions of the Paris Agreement. Targets need to be set for a 5-to-15-year time horizon, and the current framework covers the following asset classes: real estate, mortgages, electricity generation project finance and corporate instruments (equity, bonds, loans).

In addition to the existing framework, they launched a pilot guide Net-Zero Target Setting in April 2021 and followed this with a consultation in November 2021. This paper focus on criteria and methods for setting near-term and long-term SBTs that are an essential part of any corporate net-zero commitment. The SBTi aims to develop the Net-Zero Standard to encourage companies to follow the principles of the mitigation hierarchy. Effectively that means that companies should set science-based targets to reduce their value chain emissions and implement strategies to achieve these targets before engaging in neutralisation and compensation activities.

The UN-Convened Net-Zero Asset Owner Alliance (NZAOA) has also published a target setting protocol which includes four levels of target setting (see figure below): sub-portfolio emission target, sector targets, engagement targets and financing transition targets. Signatories to the NZAOA are expected to set targets within one year of joining the initiative, and 26 asset owners have already published their targets. WWF has contributed to the development of the target setting protocol and supports its multi-faceted approach to target setting.





Nordea Life & Pension's (Nordea L&P) 2025 emission reduction target on portfolio level is set in accordance with the Target Setting Protocol developed by the UN convened Net-Zero Asset Owner Alliance which is based on P1-P2(P3) pathways and requires that the overall portfolio decarbonises at rate between -16% and -29% between 2019-2024. Nordea L&P's target is -25% and covers listed equities, corporate bonds and directly held real estate. More asset classes will be included when robust methodologies and data become available. The proportion of AUM covered by the net-zero commitment of Nordea L&P is slightly below 20%, while best practice AUM coverage should be aligned with the boundary requirements from the Science-Based Target initiative for instance, as defined in the Financial Sector Science-Based Targets Guidance.

While Nordea L&P recognizes the primary importance of absolute intensity reductions, due to issues such as data coverage, the initial target is set using a normalised CO₂e/mUSD invested intensity metric. They expect that their 2030 targets will be set on absolute CO₂e emissions.

During 2021, Nordea L&P have started to enhance their alignment activities by integrating top-down guidance on sector level (selected sectors) and combine that with bottom-up asset level analysis. The normative scenario used for sectoral alignment assessment comes from the OECM model which they have been part of developing for the financial industry together with colleagues in the Net Zero Asset Owner Alliance (NZAOA). The OECM model is a net-zero and 100% renewable energy by 2050 scenario fully aligned with our low/no OS objective. It is based on a carbon budget to maintain temperatures below 1.5°C with 66% probability, with a global energy-related CO₂ emission budget of around 400 [budget updated in the new version] Gt, accumulated between 2020 [new version] and 2050.

In their climate risk scenario analysis and stress-testing, Nordea L&P uses a Climate Value at Risk (CVaR) model for corporate exposures. The model assesses transition risk (policy), opportunities (technology) and physical risk. A wide range of different scenarios are used but the standard set includes a 1.5C scenario, a 2C disorderly scenario and a 3C scenario. In 2021, Nordea L&P will integrate the NGFS scenarios to its standard set of scenarios. For their real estate portfolios, they assess transition risks using the CRREM model which is based on Friends of the Earth 1.5C scenario.

Finally, Nordea L&P has over the past year explored the usability of different Implied Temperature Rise (ITR) metrics which aims to provide an indication of how the projected business activities undertaken by investee companies in their investment portfolios align to pathways corresponding to global temperature targets. Although ITR metrics could play an important role and that the underlying models and data have improved recently, Nordea L&P's view is that they are currently not mature enough to be used in any comprehensive way. Better data quality and granularity in issuer-level assessments, scenario and model choices, and aggregation issues are some of the principal challenges. They use it as a complementary metric and also analyses correlation with CVaR results.

In addition, Nordea L&P uses a number of forward-looking metrics such as emission projections on issuer level data. These forward-looking analyses are complemented by a broad variety of backward-looking carbon metrics.



LEADING PRACTICE

PKA – NET ZERO TARGET SETTING

PKA has committed to achieve net-zero CO₂e emissions by 2050 via the NZAOA and IIGCC's Paris Aligned Investment Initiative. In this context, PKA has committed to setting CO₂e-emissions reduction targets and reporting in line with the abovementioned initiatives.

Concretely, PKA has set a 10% CO₂e-reduction target on portfolio level for 2022 and is currently working towards setting ambitious CO₂e-emissions targets for 2025. In addition, the CO₂e-emissions of the PKA's real estate portfolio are to be reduced by 50% and an average energy level between B and A by 2025.

Since 2017, PKA had a target of investing 10% of its AuM in green/climate-related investments by the end of 2020. The target was achieved by the middle of 2020 through green investments across different asset classes, including infrastructure (such as solar and wind energy), shares in green companies, sustainable properties, green bonds etc. As of late 2021, PKA has a goal of reaching DKK 50 billion in green investments and DKK 10 billion in social investments by 2025.

PKA works to build competencies within green investments, where PKA has gained specific expertise within green infrastructure through PKA's subsidiary AIP Management. PKA is also a co-lead of a working group from IIGCC's Paris Aligned Investment Initiative (PAII) focusing on investments in climate solutions. Going forward, PKA's green investments will be aligned with the EU taxonomy.

PKA has committed to setting CO₂-emissions reduction targets and reporting in line with the abovementioned initiatives.

- PKA has set a 10% CO₂-reduction target on portfolio level for 2022 and is currently working towards setting a target for 2025.
- The CO₂ emissions of the PKA's real estate portfolio are to be reduced by 50% and an average energy level between A and B by 2025.
- PKA has a zero limit for companies with turnover from oil sands or coal mines, as well as a coal limit of 20% for utilities



LEADING PRACTICE

KLP – NET ZERO ALIGNMENT FRAMEWORK

While an increasing number of financial institutions have committed to net-zero, few have published a comprehensive strategy for how to get there. KLP, Norway's largest pension fund, has launched a "Roadmap to Paris", a framework which describes how KLP will work towards net-zero emissions by 2050 and how it measures its contribution to the goals in the Paris Agreement.

KLP's strategy and approach is based on full openness around methodology and weaknesses. The Roadmap has been out for consultation and received several inputs from civil society, including WWF, which have been integrated in the final strategy.

KLP developed a "Paris Alignment Percentage" which measures the overall alignment: it set targets of 50% alignment by 2025, and 100% by 2050. The Percentage is calculated using different methods for different types of investments, based on four categories:

- Green investments, low-emissions companies which are considered already aligned with the Paris Agreement.
- High-emission sectors for which it is possible to compare emissions of individual companies against reference pathways in line with the Paris Agreement.
- Other investments, for which no reference pathways currently exist. For this category, KLP uses carbon intensity and temperature score.
- No data: companies in this group will score zero in the Paris Alignment Percentage.

Based on this framework, KLP's strategy is based on different goals:

- to increase green investments by a fixed amount every year
- to progressively align high-emission sector with the Paris Agreement
- to reduce emissions by 7% per year from 2019 to 2030 and reach a net-zero emissions by 2050.

KLP publicly acknowledge that the roadmap will need to be further improved, and that for this reason it is fully open about the method, and open to feedbacks. The strategy is still as of today largely based on trying to influence high-emission sectors such as oil and gas, and not divest from it.

3.3 SECTOR POLICIES AND APPROACHES

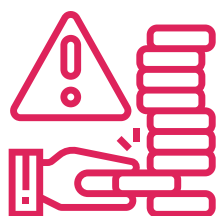
There is an abundance of evidence that material (i.e. high carbon) sectors are exposed to significant financial risk (e.g. for instance, recent publications by Banque de France, DNB, NGFS, ECB, European Supervisory Authorities, Mercer, S&P, Moody's). Not tackling these sectors as an absolute priority will jeopardize the ability to reach global climate targets (e.g. IPCC, IEA). Hence, there is a need for asset owners to explicitly focus their action on the most material sectors in their portfolio.

Table 6 indicates that the most common approach remains the adoption of sector policies. These policies are mostly focused on coal investments, and in some cases unconventional oil & gas sources – for instance for BNP Paribas Cardif, and have in large part been assessed by a civil society organisation (see Box 7). WWF believes there is a need to further improve the quality and coverage of fossil fuel policies (see Box 8) as well as expand these approaches to further sectors (see Box 5).

More recently, the momentum for the adoption of sector targets – for instance as part of the NZAOA target setting protocol (see Box 6), continues to grow. Table 6 indicates, however, that only one asset owner that responded to the climate action survey has publicly disclosed sector targets. WWF supports the adoption and disclosure of sector targets as part of a broader target setting approach (see Box 5, Box 6 and Box 8).

Table 6 Breakdown of short-term and sector-based approaches to target setting

All commitments			
Short term targets		Sectoral approaches	
Yes	23	Investment policy	25
No	10	Targets	1
		No	5
Total	33		31



THERE IS AN ABUNDANCE OF EVIDENCE THAT MATERIAL (I.E. HIGH CARBON) SECTORS ARE EXPOSED TO SIGNIFICANT FINANCIAL RISK

BOX 7 RECLAIMFINANCE'S ASSESSMENT OF FINANCIAL INSTITUTIONS' COAL POLICIES

ReclaimFinance has built a Coal Policy Tool that aims to enable a broader understanding of coal policies adopted by financial institutions for their banking, investment and (re)insurance activities. The database assesses and scores the coal policies of over 200 asset owners, based on five criteria:

- The exclusion of coal mines, coal plants, and coal infrastructure from project finance (i.e. not applicable to asset owners);
- The exclusion of all financial services to companies planning new coal mines, coal plants or coal infrastructure projects;
- The exclusion of companies which are most exposed to the coal sector, based on their share of revenues or electricity production from coal;
- The exclusion of the largest coal producers and largest coal plant operators;
- The quality of the coal phase-out strategy.

ReclaimFinance finds that not all coal policies are created equal and the details of adopted policies vary dramatically. Many policies still have limited impact on the thermal coal industry, because they rarely:

- Cover the entire value chain, from mining to power through infrastructure.
- Stop all financial services, including corporate and project financing, underwriting, and passive fund management.
- Combine exclusion and shareholder engagement to not only prevent the expansion of the coal sector, but to also support its phase-out with Paris-aligned deadlines (see footnote 3).

BOX 8 WWF ASSET OWNER GUIDES ON SECTOR POLICIES

WWF has published a range of asset owner guides that explore how investors can devise investment policies that bring their investments in material sectors (coal mining, power utilities, oil & gas producers) in line with the Paris climate goals.

The guides argue for investors to develop an assertive engagement strategy to ensure that high-carbon portfolio companies, in the very near term, publish time-bound 1.5°C transition plans (i.e. achieving net-zero by 2050) and climate science-based targets, and deliver TCFD-aligned reporting. For most investors this will mean acting in collaboration with like-minded peers. To that end, we have developed:

- Objective criteria that allow investors to assess whether companies are willing and able to timely shift their business model in line with the requirements of meeting net-zero by 2050, and on that basis decide which companies to engage with or divest from;
- Questions that investors should ask portfolio companies they engage with, and recommendations for how they can set in place an escalation strategy.



In order to assess their Property & Casualty (P&C) businesses accurately and to structure sound risk transfer solutions, Swiss Re have developed approaches to understand the economic impact of natural catastrophes and the potential effect of climate change on their frequency and severity.

As such, they have an internal property risk modelling team that builds, maintains and updates sophisticated models for all relevant natural catastrophe risks (flood, tropical cyclones, windstorms, earthquakes). The models are based on current scientific knowledge and are regularly updated to include new scientific findings and to make use of advances in computing and modelling capabilities. Swiss Re's proprietary and fully integrated risk models are important tools for managing the business, which are used to determine the economic capital required to support the risks on our books as well as to allocate risk-taking capacity to different lines of business.

In 2020, in order to advance their carbon steering mechanism, Swiss Re developed an exit strategy for thermal coal in their treaty business. This complements their previous coal policy with a focus on their direct and facultative business. In addition, they started implementing an updated oil and gas policy to shift away from highly carbon-intensive oil and gas production.

Their climate-related policies are initial steps towards the development of a comprehensive carbon-risk steering mechanism to assess, manage and reduce the carbon intensity and associated risks embedded in their re/insurance business. In 2020, they applied a carbon footprinting methodology they had previously helped develop in a project with peers via the CRO Forum in their direct and insurance portfolios. Such methodologies will be further developed through the Net Zero Insurance Alliance (NZIA) for which Swiss Re became a founding member in 2021. The set of measures described above will support carbon risk steering towards reaching net-zero emissions on the liability side of Swiss Re's business by 2050.

**IN 2020, IN ORDER TO ADVANCE THEIR
CARBON STEERING MECHANISM,
SWISS RE DEVELOPED AN EXIT
STRATEGY FOR THERMAL COAL IN
THEIR TREATY BUSINESS.**



BNP Paribas Cardif deploys its ESG policy (including climate) across all assets to identify sustainability risks and opportunities.

On upstream processes, BNP Paribas Cardif applies the sector & exclusions policies from BNP Paribas group (specifically on fossil fuels: thermal coal, unconventional oil and gas), combined with BNP Paribas Cardif specific commitment on thermal coal industry.

In addition to an ESG filter (Best in class sectoral approach), a carbon filter is applied for Private companies: a “Best in Universe & Best Effort” approach. BNP Paribas Cardif uses the carbon emissions to select the best-rated companies and/or those with an energy transition strategy policy.

BNP Paribas Cardif requires the application of the exclusion lists (including thermal coal and unconventional oil and gas) in the management processes for Asset Management mandates and dedicated fund.

For open funds, BNP Paribas Cardif uses a due diligence questionnaire to encourage asset management companies to improve their practices as responsible investors on climate.

BNP Paribas Cardif's policies for thermal coal and unconventional oil & gas:

Thermal coal

BNP Paribas Cardif has established a schedule to exit the thermal coal industry by 2030 for Europe and OECD countries and 2040 for the rest of the world. This applies to BNP Paribas Cardif's new investments as well as historical inventory. This schedule is gradually implemented with increasingly stringent thresholds over time.

Unconventional oil and gas

BNP Paribas Cardif applies the investment policy on unconventional oil and gas of BNP Paribas. Therefore, BNP Paribas Cardif will not invest in a company that falls under one of the following activities:

- Exploration and production companies for which unconventional oil and gas represent a significant part of their total reserves;
- Diversified companies for which unconventional oil and gas exploration and production represent a significant share of their total revenues;
- Trading companies for which unconventional oil and gas resources represent a significant part of their business;



BpfBouw has two asset managers: Bouwinvest for real estate investments and APG Asset Management (APG) for investments in other asset classes.

APG has developed a comprehensive climate dashboard using 20 indicators (such as fossil fuel demand, investments in renewable energy) which assesses the alignment with the Paris Agreement targets. It uses multiple climate scenarios when mapping climate risks and opportunities and helps APG better understand what the road towards achieving the Paris Agreement goals will look like.

APG compliments this with a top-down climate analysis for economic sectors with milestones for 2022, 2030 and 2040 looking at risks and opportunities for 26 separate economic sectors.

This analysis showed that sectors that are particularly vulnerable to the physical consequences of climate change, but for which the physical effects of climate change also offer opportunities, include: oil and gas, road and rail transport, the construction sector and agriculture.

To meet its long terms goals, it has set short term targets, including: reducing equity portfolio carbon footprint by 40% in 2025 (relative to 2015), phasing out investments in coal and tar sands by 2025 and reducing the energy consumption of Dutch Real Estate portfolio by 30% by 2025 relative to 2015.

**TO MEET ITS LONG TERMS
GOALS, APG HAS SET SHORT
TERM TARGETS, INCLUDING:
REDUCING EQUITY PORTFOLIO
CARBON FOOTPRINT BY**

40%
IN 2025

3.4 ENGAGING STAKEHOLDERS

Asset owners are particularly well-placed to generate change through engagement due to their unique position in the financial system: they can create a demand for climate-related products and services from their service providers and drive meaningful engagement with their portfolio companies and with policy makers.

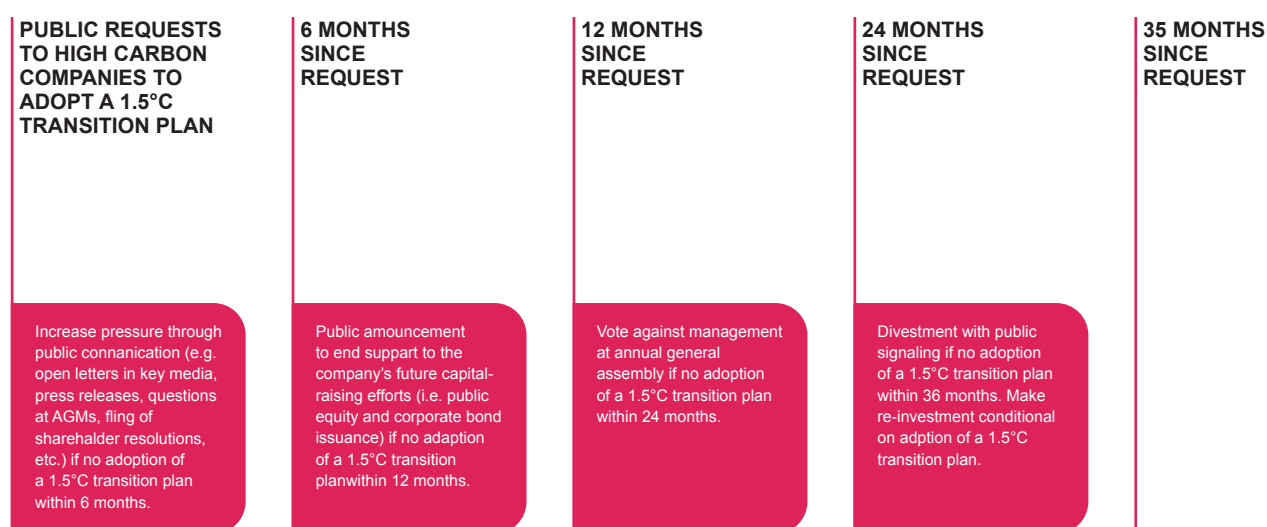
The responses from asset owners to the climate action survey indicate that they are undertaking a variety of engagements with various stakeholders. While these approaches are at times well developed, which is illustrated by the best practice examples below, it is rare for asset owners to have a comprehensive strategy in place that systematically pulls all the levers they have at their

disposal. WWF therefore encourages financial institutions to develop a robust and publicly disclosed engagement strategy towards investee companies, policy makers and service providers. To be impactful, such a strategy must be public, include time-bound objectives and escalation steps in case engagement is not bearing fruit.

WWF has developed dedicated resources for asset owner engagement with portfolio companies and investment managers:

Engaging portfolio companies. We encourage financial institutions to include engagement targets (see Box 9); a description of how sectors/ companies for engagement were identified; the climate requests towards sectors/companies; the number and sectoral breakdown of engagement conducted with regard to climate change over the last 12 months; and a description of the engagement escalation strategy (disclosure and rationale of voting on climate shareholder resolutions, votes against management for climate reasons, divestment decisions in case of unsuccessful engagement, etc.) as outlined in the figure below.

Figure 3 Illustrative engagement escalation strategy



BOX 9 ENGAGEMENT TARGETS

The SBTi-FI framework has developed two target setting methodologies that facilitate investor engagement with portfolio companies on setting science-based emission reduction targets:

- Under the portfolio coverage method, an investor commits to having a portion of their investees set their own SBTi-approved science-based targets such that the financial institution is on a linear path to 100% portfolio coverage by 2040 (in consistent emissions or monetary terms). An example of a target set on the basis of this methodology is: 'Investment Firm A commits that 30% of its equity portfolio within the asset class/sector by total assets will have science-based targets by 2025';
- The temperature rating approach enables financial institutions to determine the current temperature rating of their portfolio and take actions to align their portfolios to ambitious long-term temperature goals by engaging with portfolio companies to set ambitious targets. An example of a target set on the basis of this methodology is: 'Investment Firm A commits to align its scope 1 + 2 portfolio temperature score within the asset class or sector from 2.6°C in 2018 to 1.75°C by 2025. Investment Firm A also commits to align their scope 1 + 2 + 3 portfolio temperature score within the asset class or sector from 3.1°C in 2018 to 2°C by 2025'.

Investment managers. Investment managers are critical service providers for asset owners, as they manage – whether internally or externally – their assets on the basis of the mandates awarded to them. The selection of experienced investment managers is therefore crucial if asset owners want all their assets to be managed in line with their own climate-related beliefs, policies and targets.

WWF has published a resource guide that provides an overview of existing resources that can support asset owners' assessment of investment managers' climate performance, and that formulates recommendations on how asset owners can use these resources for investment manager selection, appointment and monitoring. Asset owner can notably – in collaboration with their investment advisors, if relevant – use the resources mentioned in the publication, or other relevant resources, for the following actions:

Mandate requirements and request for proposals (RFPs):

- Include the information and insights obtained from climate guidance documents, investor initiatives and frameworks and climate performance assessments in mandate requirements and RFPs;
- Encourage investment managers to include their climate commitments and actions as an integral part of their response to the RFPs, and notably how they intend to improve their performance against the climate performance assessments that are included in the RFPs.

Investment manager selection and appointment:

- Favour investment managers that score well on the selected climate performance assessments;
- Favour investment managers that are a member of the net-zero asset manager initiative (NZAMI) or that have committed to setting targets under the SBTi;
- Favour investment managers that are taking immediate action towards achieving net-zero in line with WWF's criteria for credible net-zero commitments by financial institutions.

Investment manager monitoring:

- Track the climate performance of selected investment managers to assess progress, and integrate the findings into conversations with the investment managers;
- Encourage relevant actors (e.g. data and index providers) to develop resources that allow for a comprehensive and robust climate alignment assessment of the whole investment management industry.



LEADING PRACTICE

BVK – ENGAGEMENT APPROACH

Active ownership is the core pillar of BVK's responsible investment approach. In a periodic screening process, BVK identifies candidates for an engagement where substantial gaps in relation to climate transition or other ESG topics are identified.

With each company dialogue started, BVK aims to achieve a significant improvement with regards to the identified gaps over a period of up to three years through clearly formulated engagement targets. At the same time, they actively exercise their voting rights. If this process remains unsuccessful, they may exclude the company from their portfolios. Examples of the latter are coal producers that have been excluded from BVK's investment universe due to their lacking in ability to transform.

In order to give its voice as much weight as possible, BVK joins collective engagements together with other investors wherever possible. It uses national and international initiatives, such as the Swiss Association for Responsible Investments (SVVK-ASIR), Climate Action 100+ or the collaboration platform of the UN PRI. Together with its network of partners, BVK engaged with more than 190 companies on climate transition.

Progress of the active ownership approach is measured on a periodic, at least annual, basis. Since 2018, BVK publishes an engagement report.

On the example of climate engagement, BVK uses a broad number of backward as well as forward looking climate risk KPIs to measure the progress of each engagement.



LEADING PRACTICE

SWISS RE –ASSET MANAGER SELECTION, APPOINTMENT AND MONITORING

For Swiss Re's externally managed assets, such as listed equities and corporate bonds, Swiss Re works closely with their external investment managers to ensure they consider ESG and climate-related aspects consistently in their investment processes.

Before external investment managers are appointed, Swiss Re performs thorough due diligence on them to confirm their compliance with Swiss Re's own responsible investing approach. This includes a review of the managers' governance approach of dedicated resources and policies, the ESG considerations in their investment decisions and monitoring, as well as of their commitment to responsible investing. The external investment managers are also requested to provide insights on their approach to engagement and voting, as well as monitoring and reporting.

The contractual framework for appointing external investment managers highlights Swiss Re's commitment to responsible investing, and the external investment managers' responsibility to take ESG considerations into account in their investment process. Swiss Re defines their investment guidelines integrating ESG considerations through pre-defined ESG criteria. Another component that external managers must take into account are exclusions based on Swiss Re's Sustainable Business Risk Framework.

Once mandated, the individual performance of the external investment managers is monitored in line with the Swiss Re Responsible Investing Policy and measured against ESG-related benchmarks in the case of listed equities and corporate bonds. The monitoring of ESG risks is an integral part of the regular performance reviews in this regard.

Managers are required to report regularly on their responsible investment activities and are encouraged to continually enhance their commitment to responsible investing and to report to Swiss Re on the implementation and impact on the investment portfolio managed on behalf of Swiss Re. Swiss Re requires regular reporting on the external managers' efforts made and monitors their progress.



LEADING PRACTICE

NN IP – ENGAGEMENT WITH SOVEREIGN ISSUERS

NN Group (and NN Investment Partners) has made the pledge to achieve net-zero by 2050 or sooner and both support the Net Zero Framework of the IIGCC. NN IP is also a member of the NZAMI.

As part of their actions to achieve their ambition, they have developed an approach to assess the climate alignment and impact of sovereign bonds. In doing so, countries are scored on their climate performance using current and forward-looking indicators. Using a best-in-class approach, they aim to increase allocation towards higher-climate-performing issuance and/or green bonds. In parallel, they are also exploring ways to engage more with sovereign issuers on climate change, notably by leverage their investments in those countries (in particular in Indonesia and Brazil) as a reason for engagement.

This sovereign engagement is conducted as part of the Policy Dialogue on Deforestation Initiative (IPDD), an investor-led initiative of 50 asset managers (with 7tn USD in AuM) investing in Indonesia and Brazil and whose goal is to half deforestation in those countries.



LEADING PRACTICE

DNB LIV – SURVEY FOR ASSET MANAGERS

One of WWF's key recommendations to Asset Owners is to use screening criteria when selecting Asset Managers.

DNB is Norway's largest financial institutions and DNB Liv has included different ESG aspects in its internal evaluation process. Specifically, asset managers are evaluated according to several topics, which include:

- how ESG factors are integrated in the investment strategy,
- which ESG factors are included,
- which ESG risks are identified and what is done to reduce them,
- how financial valuations are adjusted based on ESG factors,
- what kind of data has the asset manager access to,
- what kind of internal competences and governance is built to deliver on the ESG strategy,
- how this is integrated into the active ownership, and
- how the results of this work are measured and reported.

DNB Liv has developed a specific questionnaire for asset managers which is used as basis for the overall evaluation of asset managers.

DNB Liv is aiming to further expand the use of questionnaire in the follow up of asset managers.

Topic	Questions	
1) ESG policy on organisation level	1	Is ESG part of the overall investment philosophy? - If yes: Describe how this is integrated in the philosophy. - If no: Explain why not.
2) How ESG factors are incorporated on a fund level in the strategy, investment decisions and risk analysis.	2.a	Describe how ESG factors are integrated in the investment process of the fund, especially with regards to asset selection and risk management.
	2.b	By using one or more specific examples related to an ESG risk or opportunity, describe how the process has affected decision making.
	2.c	If possible, please provide specific examples on: – Which ESG factors are considered? – Material ESG risks that have been identified in the portfolio and what has been done to mitigate them. - How valuations have been adjusted based on an ESG factor.
3) Access to information	3.a	Which resources are available to asset managers and analysts to assess ESG factors?
	3.b	Are ESG considerations based on external or in-house ESG ratings?
	3.c	Are the current resources considered to be sufficient?
4) Knowledge, expertise, and training.	4.a	What is the level of ESG expertise within the fund's asset management team?
	4.b	Is ESG a focus area for all members of the fund team?
	4.c	Does the organisation have dedicated ESG specialists?
	4.d	If the organisation has a dedicated ESG team: - How does the fund team cooperate with the ESG team? - What is the ESG teams' responsibilities and how is their work utilised by the fund team? - Where is the ESG team located physically relative to the fund team (same floor etc)?
	4.e	Is there any ESG specific training for asset managers and analysts? - If yes: Please provide details, including type of training and regularity - If no: Explain why
5) Active ownership	5.a	Do you discuss ESG topics when meeting with companies? - If yes: Describe the process and provide examples. - If no: Explain why not.
	5.b	Do you have specific ESG focus areas which form the basis of discussions with companies?
	5.c	In what way does the result of active ownership affect investment decisions?
6) Measurement	6.a	Do you measure ESG risk in the fund portfolio? - If yes: Describe how this is done, and what is reported to the investor. - If no: Explain why not.
	6.b	Do you measure the successfulness of the active ownership approach? - If yes: Describe how this is done, and what is reported to the investor. - If no: Explain why not.
	6.c	Do you assess and measure compliance of the ESG integration processes? - If yes: Describe how this is done, and what is reported to the investor. - If no: Explain why not.



4. OVERCOMING CHALLENGES FOR IMPLEMENTATION

WWF asked asset owners about the challenges they encounter in devising and implementing their climate actions.

Asset owners are unanimous about the difficulties to access relevant data and the lack of harmonised metrics and methods that provide robust and comparable forward-looking analysis. WWF agrees that further work and harmonisation is needed, but we also believe that it should not be an excuse for inaction for the following reasons:

- Forward-looking financial indicators are by definition highly uncertain, and this is generally accepted by the financial industry. Examples includes financial results (e.g. revenues, earnings/EPS, cashflow), risk metrics (e.g. Value-at-Risk and volatility), ratings (e.g. buy and sell recommendations of equities, ratings of corporate and government bonds and related products creditworthiness – expressed by S&P and Moody's as AAA, AA, A, BBB, etc.);

- There is little doubt about which sectors are most material in terms of climate impacts (see Box 10), and asset owners can tackle these sectors as a priority by adopting sector policies – even in the absence of perfect data and tools.
- Finally, asset owners have themselves a role to play in improving data quality and availability as they are in a good position to ask their portfolio companies to disclose information and set science-based climate targets. They should, in addition, actively contribute to developing methodologies and tools for forward-looking climate scenario analysis.

In light of the above, **WWF believes that asset owners should use climate performance assessment, metrics and targets to identify hot spots and areas of action, or to set a level of ambition.** They should not expect tools and metrics alone to give a definite answer to all their questions.

BOX 10 IDENTIFYING MATERIAL SECTORS

Building on the work of the EC Technical Expert Group on sustainable finance and many other sources, WWF has developed two tentative complementary lists of high-carbon sectors that asset owner can tackle as a priority.

The first list, using NACE codes provided by Eurostat, defines high-carbon sectors in a relatively extensive way (see Annex 3). This list includes the sectors that Banque de France-ACPR selected to assess the share of large French bank's loans exposed to climate transition and physical risks. This list is also consistent with the sector identification of major climate transition risks in volume by the EC Technical Expert Group, in its final report on climate benchmarks.

The second list is more targeted and focuses only on the riskiest high-carbon sectors, using additional sources on climate-related financially material risks (e.g. Moody's environmental risks heatmap, Mercer, etc.). It identifies 15 specific sub-sectors or economic activities that are deemed to be more risky than high-carbon sectors in general:

- Coal mining;
- Coal terminals;
- Power companies and utilities;
- Power generation projects (including nuclear energy);
- Oil and gas exploration and production;
- Oil and gas refining and marketing;
- Metal and mineral mining (excluding coal);
- Commodity chemicals;
- Building materials (incl. cement);
- Steel;
- Aluminum;
- Automotive manufacturers;
- Aviation;
- Shipping;
- Real estate.

A complementary way to set up the list of high-risk sectors is to use the EU taxonomy, using the list of sectors and specific economic activities for which technical screening criteria have been developed (energy; high carbon industries; high-carbon transport; etc).

A second area that was identified by asset owners is the difficulty to measure the impact of climate actions.

- WWF recognises that impact measurement is an area that needs further development, and therefore suggests asset owners to contribute to the development and application of credible portfolio alignment methodologies that drive and measure the financial institution's contribution to real-world reductions in line with a 1.5°C pathway.
- The asset owner responses also indicate differences between asset classes. It is, for instance, easier to take action with an immediate and measurable impact in real estate portfolios – and many asset owners in this field (see example for Keva in Finland below).
- There are a few think tanks that are doing promising work on measuring impact, such as the Impact Management Project (see Box 11)



LEADING PRACTICE

KEVA – REAL ESTATE TARGET SETTING

Keva provides statutory pension cover for municipal and state employees in Finland. Its total assets at the end of 2020 were approximatively 58 bn euros. While Keva does not currently have an overall net-zero target for its portfolio, it plans to publish its approach to climate change risk this year.

In 2020, Keva announced its target to become carbon neutral by the end of 2030 in terms of CO₂ emissions from the energy used in Keva's direct real estate investments, which is where Keva is the sole or majority owner.

They have set interim target to halve carbon emissions from energy used in real estate by the end of 2025 relative to 2018.

In order to make a positive impact on the energy transition, Keva is supporting the development of windpower through the signature of a long-term (10 year) power purchase agreement (PPA) from a new windfarm now under construction in Kokkoneva, Finland, which will eventually cover about 70% of the electricity needs of Keva's real estate investments.

Keva's approach for reaching its net-zero target is: increasing energy efficiency, producing energy at site and engaging with suppliers e.g municipal energy companies for emissions free power and heating.

In order to support this, Keva is also engaging property users on their environmental objectives, further improvements in the water-use efficiency and recycling of waste, transparent responsibility reporting and environmental certification of the key properties.

BOX 11 STARTING TO MEASURE IMPACT

A number of initiatives are currently underway to develop methods and tools to assess the impact of financial institutions.

The Impact Management Project (IMP) provides a forum for building global consensus on measuring, assessing and reporting impacts on people and the natural environment. It is relevant for enterprises and investors who want to manage environmental, social and governance (ESG) risks, as well as those who also want to contribute positively to global goals.

The IMP facilitates standard-setting organisations that, through their specific and complementary expertise, are coordinating efforts to provide comprehensive standards and guidance related to impact measurement, assessment and reporting. 15 organisations have formed a structured network to work together with IMP's support.

The IMP also convenes a community of over 2,000 practitioners to share best practices, delve into technical issues and identify areas where further consensus is required in impact measurement and management.

In November 2021, it launched the [Impact Management Platform](#) to:

- clarify the meaning and practice of impact management;
- work towards interoperability and fill gaps as needed; and
- have coordinated dialogue, as appropriate, with policymakers.

In addition, WWF launched in June 2021 a report "[Assessing portfolio impacts: tools to measure biodiversity and SDG footprints of financial portfolios](#)" which analyses and provides recommendations on tools that quantify portfolio ESG impacts and generate decision-useful information for investors."



THE IMP ALSO CONVENES A
COMMUNITY OF

OVER 2000

PRACTITIONERS TO SHARE BEST
PRACTICES, DELVE INTO TECHNICAL
ISSUES AND IDENTIFY AREAS WHERE
FURTHER CONSENSUS IS REQUIRED
IN IMPACT MEASUREMENT AND
MANAGEMENT.



CONCLUSION



WWF's Climate Action Survey 2021 which focuses on 33 of the largest asset owners across 12 European countries indicates both that the **most advanced amongst them have changed gear in tackling the momentous challenge of climate change**, but also that there remain a number of steps to be taken to fully confront the challenge at stake. While there is a growing number of asset owners that are adopting net-zero commitments, setting targets and engaging with various stakeholders, the self-selecting nature of our survey means that many asset owners who did not respond are yet to take such actions.

While the positive signs are encouraging, **it is nonetheless time for all asset owners – whether they have already made a net-zero commitment or not – to move from**

such commitments and high-level actions to concrete and decisive implementation plans and short and mid-term targets.

Asset owners must develop and publish net-zero transition plans in which they systematically pull all the levers at their disposal to contribute to rapid and drastic greenhouse gas emission reductions in the real economy.

This includes – amongst others – setting a combination of science-based climate targets, developing approaches to tackle all the most material climate sectors and rolling-out a robust and interconnected engagement strategy towards companies, policymakers and financial service providers.



ANNEX 1: WWF CLIMATE ACTION SURVEY FOR ASSET OWNERS

Questions on climate alignment assessment and disclosure

1. Please describe any climate alignment analysis you have undertaken, and why you consider it relevant.
 - a. Examples of metrics (and related tools/frameworks) for climate alignment analysis are included in the WWF briefing on minimum requirements for climate alignment disclosure in regulation. These include temperature scoring, sub-portfolio absolute emission reduction targets, product/production targets for (highly) material sectors, economic activity based metrics, engagement targets, etc.
 - b. Please provide precise information on the temperature scenario that was used (scenario name, timestamp of the scenario, scenario provider) for the climate alignment analysis.
2. Have you disclosed, or do you have plans to disclose any findings – for instance as part of reporting against International (e.g. TCFD), European (e.g. the EU Disclosure Regulation) or domestic regulations and reporting standards?

3. Would you be interested to collaborate with WWF on testing particular tools, notably the temperature rating tool developed within the Science Based Targets initiative for Financial Institutions and the Paris Agreement Capital Transition Assessment (PACTA) developed by 2° Investing Initiative?

Questions on climate alignment commitments

4. Please describe the commitments your group has made to alignment with the Paris Agreement, net-zero emissions, or similar, and to which part of your business they apply.
5. Have you joined, or are you considering joining, collaborative initiatives such as the:
 - a. UN-convened net-zero asset owner alliance;
 - b. Science-based targets for financial institutions initiative;
 - c. Paris aligned investment initiative net-zero asset owner commitment;
 - d. Others: please explain
6. How much are your climate alignment commitments consistent with the WWF criteria for credible net-zero commitments? Please fill in the table below.

WWF criterion	Does your commitment align with the criterion (yes/no)	Justification for response
Pledge at the head-of-organization level to reach net-zero by 2050 or sooner, in line with global efforts to limit warming to 1.5°C.		
Plan. Explain what steps will be taken toward achieving net-zero, and commit to calibrate all activities (see point 3 below) on science-based no/low overshoot 1.5°C scenarios (e.g. P1 or P2 pathways of the IPCC special report on 1.5°C warming) that do not rely on excessive carbon dioxide removal technologies, and hence require a global reduction in CO2 of approximately 50% by 2030		
Proceed. Take immediate action toward achieving net-zero by COP26 – aligned with the scientific requirements set out in point 2 above	Short term targets Sectoral policies Engagement strategy	Short term targets Sectoral policies Engagement strategy
Publish. Commit to measure and report progress towards 1.5°C alignment at least annually, including via, to the extent possible, platforms that feed into the UNFCCC Global Climate Action Portal.		
Contribute to the development and application of credible portfolio alignment methodologies that drive and measure the financial institution's contribution to real-world reductions in line with a 1.5°C pathway. This notably implies going beyond measuring 'financed emissions', including the need for financial institutions to immediately avoid investments in new high-emitting infrastructure.		

Concluding questions

7. How has your overall company strategy and investment process evolved as a result of your climate alignment assessment/disclosure/

commitments, and what goals do you have for the next 12 months to build on this? This can include one or more of the actions in the table below – please select and explain:

Action	Activities undertaken to date	Planned activities going forward
The adoption of climate-related investment beliefs and criteria		
The integration of climate change in the investment strategy		
The establishment of a climate governance structure, including who is responsible for achievement of climate objectives and management incentives related to these objectives		
An adjustment in strategic asset allocation		
The adoption of sectoral policies		
Setting of climate science-based targets		
Joining collaborative climate investor initiatives		
The integration of climate change in investment manager selection, appointment and monitoring		
The inclusion of climate change in engagement with financial service providers other than investment managers such as index providers, investment consultants, proxy voting advisors, data&systems providers, etc.		
Engagement with portfolio companies		
Engagement with policy makers		
Engagement with members and beneficiaries		
Others, please specify		

8. Have you tried to assess the impact of your climate actions on greenhouse gas emission reductions in the real economy, whether at a small (e.g. one given investee company) or large (e.g. on a given market) scale, and can you share which of your actions have had the greatest impact?
9. What have been the key challenges or barriers in undertaking above actions, and how have you sought to overcome these?
10. If you wish, please provide any further information that you find relevant for the above.



ANNEX 2: LIST OF CONTACTED ASSET OWNERS AND RESPONSE STATUS

Asset owner	Country	Response status
ABN AMRO Pensioenfond	Netherlands	
ABP	Netherlands	Responded
Achmea	Netherlands	
Aegon Group	Netherlands	
Ageas	Belgium	
Alecta	Sweden	Responded
Allianz Group	Germany	
AMF Pension	Sweden	Responded
AP Fonden 1	Sweden	Responded
AP Fonden 2	Sweden	Responded
AP Fonden 3	Sweden	Responded
AP Fonden 4	Sweden	Responded
AP Fonden 7	Sweden	
ASR	Netherlands	
ATP	Denmark	Responded
Aviva	U.K.	Responded ⁸
AXA Group	France	
BAE Systems	U.K.	
Baloise Asset Mgmt.	Switzerland	
Banco Santander	Spain	Responded
Barclays Bank U.K.	U.K.	
Bayerische Versorgungskammer	Germany	
BBVA	Spain	Responded
BNP PARIBAS	France	Responded
Bouwnijverheid	Netherlands	Responded
BP	U.K.	
British Airways	U.K.	
British Coal Pension Schemes	U.K.	
BT Group	U.K.	
Bundes Pensionskasse	Switzerland	Responded
BVK des Kantons Zurich	Switzerland	Responded
BVV	Germany	Responded
Caisse des Dépôts	France	
Caixabank	Spain	
CNP Assurances	France	
Covéa Group	France	
Crédit Agricole Assurances	France	
Daimler	Germany	
Detailhandel	Netherlands	
DNB	Norway	Responded
Electricity Supply Pension	U.K.	
Elo Mutual Pension Insurance	Finland	Responded
ENPAM	Italy	
ERAFP	France	
Folksam	Sweden	
FRR	France	
Generali Group	Italy	
Government Pension Fund Global	Norway	
Government Pension Fund Norway	Norway	
Grafische Bedrijven	Netherlands	
Greater Manchester	U.K.	
Groupama Asset Mgmt.	France	
Helvetia	Switzerland	

8. Although Aviva did not respond to all of the survey's questions, it provided broader answers to WWF.

IDUNA Gruppe	Germany	
Ilmarinen	Finland	Responded
Industriens Pension	Denmark	Responded
ING Pensioenfonds	Netherlands	
Keva	Finland	Responded
KLP	Norway	Responded
Legal & General Group	U.K.	
Lloyds Banking Group	U.K.	Responded
M&G Prudential	U.K.	
Mapfre	Spain	
Metaal/tech. Bedrijven	Netherlands	Responded
Migros-Genossenschafts-Bund	Switzerland	Responded
Munich RE	Germany	
Natixis Global Asset Mgmt.	France	
Nestle	Switzerland	
NN Investment Partners	Netherlands	Responded
Nordea	Sweden	Responded
Nürnbergger	Germany	
PensionDanmark	Denmark	
PFA Pension	Denmark	Responded
PFZW	Netherlands	
PKA	Denmark	Responded
PME	Netherlands	Responded
Rabobank	Netherlands	
Railways Pensions	U.K.	
Royal Bank of Scotland Group	U.K.	
Royal Dutch Shell	Netherlands	
Royal London Group	U.K.	
Sampension	Denmark	
SCOR	France	
Société Générale	France	
SRLEV	Netherlands	
State Pension	Finland	Responded
Storebrand Group	Norway	
Strathclyde Pension Fund	U.K.	
Swiss Life Asset Managers	Switzerland	
Swiss RE	Switzerland	Responded
Talanx Group	Germany	
UBS	Switzerland	
Universities Superannuation	U.K.	
Varma	Finland	Responded
VBL	Germany	
Versicherungskammer Bayern	Germany	
Vervoer	Netherlands	
Zurich Financial Services	Switzerland	Responded



ANNEX 3. LIST OF HIGH-CARBON SECTORS USING NACE CODES

A – Agriculture, forestry and fishing

- A.01 – Crop and animal production, hunting and related service activities
- A.02 – Forestry and logging
- A.03 – Fishing and aquaculture

B – Mining and quarrying

- B.05 – Mining of coal and lignite
- B.06 – Extraction of crude petroleum and natural gas
- B.07 – Mining of metal ores
- B.08 – Other mining and quarrying
- B.09 – Mining support service activities

C – Manufacturing

- C.10 – Manufacture of food products
- C.11 – Manufacture of beverages
- C.12 – Manufacture of tobacco products
- C.13 – Manufacture of textiles
- C.14 – Manufacture of wearing apparel
- C.15 – Manufacture of leather and related products
- C.16 – Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
- C.17 – Manufacture of paper and paper products
- C.19 – Manufacture of coke and refined petroleum products
- C.20 – Manufacture of chemicals and chemical products
- C.21 – Manufacture of basic pharmaceutical products and pharmaceutical preparations
- C.22 – Manufacture of rubber and plastic products
- C.23 – Manufacture of other non-metallic mineral products
- C.24 – Manufacture of basic metals
- C.25 – Manufacture of fabricated metal products, except machinery and equipment
- C.26 – Manufacture of computer, electronic and optical products
- C.27 – Manufacture of electrical equipment
- C.28 – Manufacture of machinery and equipment n.e.c.
- C.29 – Manufacture of motor vehicles, trailers and semi-trailers
- C.30 – Manufacture of other transport equipment

D – Electricity, gas, steam and air conditioning supply

- D.35 – Electricity, gas, steam and air conditioning supply

E – Water supply; sewerage; waste management and remediation activities

- E.36 – Water collection, treatment and supply
- E.37 – Sewerage
- E.38 – Waste collection, treatment and disposal activities; materials recovery
- E.39 – Remediation activities and other waste management services

F – Construction

- F.41 – Construction of buildings
- F.42 – Civil engineering
- F.43 – Specialised construction activities

G – Wholesale and retail trade; repair of motor vehicles and motorcycles

- G.45 – Wholesale and retail trade and repair of motor vehicles and motorcycles
- G.46 – Wholesale trade, except of motor vehicles and motorcycles

H – Transporting and storage

- H.49 – Land transport and transport via pipelines
- H.50 – Water transport
- H.51 – Air transport
- H.52 – Warehousing and support activities for transportation

J. Information and Communication

- J.58 – Publishing activities
- J.59 – Motion picture, video and television programme production, sound recording and music publishing activities
- J.60 – Programming and broadcasting activities
- J.61 – Telecommunications
- J.62 – Computer programming, consultancy and related activities
- J.63 – Information service activities

K. Financial and insurance activities

- K.64 – Financial service activities, except insurance and pension funding
- K.65 – Insurance, reinsurance and pension funding, except compulsory social security
- K.66 – Activities auxiliary to financial services and insurance activities

L – Real estate activities

- L.68 – Real estate activities





**ASSET OWNERS ARE
RESPONSIBLE FOR TRILLIONS
OF EUROS OF PEOPLE'S
MONEY. ENSURING THOSE
INVESTMENTS BECOME ZERO-
CARBON CONSISTENTLY WITH
A 1.5°C PATHWAY IS KEY TO A
SUSTAINABLE EU ECONOMY.**



Working to sustain the natural
world for the benefit of people
and wildlife.

together possible™ www.wwf.eu

© 2021

© 1986 Panda symbol WWF – World Wide Fund for Nature (Formerly World Wildlife Fund)

® "WWF" is a WWF Registered Trademark.

WWF European Policy Office, 123 rue du Commerce, 1000 Brussels.

For contact details and further information, please visit our website at www.wwf.eu