



“Net-zero”: how to achieve it?



Executive summary

Financial institutions can play a **crucial role in the race towards net-zero** by financing low-carbon solutions and supporting the transition in high-emitting sectors. Integrating net-zero considerations into investment policies is also beneficial to mitigate climate-related physical and transition risks as well as to identify new investment opportunities in companies that have the potential to prosper in a new low-carbon economy.

Despite the increasing number of public pledges and the launch of international alliances of investors, **net-zero remains a challenging mission** for financial institutions at various levels. Many strategies are currently in use to integrate net-zero considerations into investment policies, each one with strengths and shortcomings. Investors should navigate this landscape bearing in mind that the **ultimate objective of a genuine net-zero commitment must be reducing emissions in the real economy**. Therefore, a sound portfolio decarbonization can only be achieved through increasing investments in companies that have committed to net-zero and that are able to provide clear evidence of the robustness of their decarbonization plans.

Adopting a net-zero strategy is a long journey demanding frequent reviews and decisive action. The paper explores some of the most frequent **challenges** that investors deal with: **choosing the climate scenario, facing data gaps** – especially regarding the emissions in companies' value chain (Scope 3) – and **managing portfolio constraints**, such as making adequate financial returns and ensuring diversification.

Public policy measures are important to **incentivize net-zero investment policies**. Those policies should be consistent with global and EU carbon budgets. Governments are pivotal in determining **market signals that influence the allocation of private capital**, e.g. by target & standard setting, carbon pricing, and public investments.

An effective net-zero action will require **complementary efforts** on the part of various actors moving in the same direction. In particular:

- **policymakers** are crucial to create a regulatory and policy environment that supports net-zero;
- **companies** are crucial to set-forth measurable and ambitious decarbonization pathways and to provide accurate and meaningful data;
- **financial market participants** are crucial to embark on result-oriented engagement actions with companies and policymakers. Furthermore, asset owners should push asset managers in the direction of aligning their portfolios to net-zero trajectories, while asset managers should do their best to integrate net-zero into their strategies even if the current environment is not yet perfect to enable this.

Introduction: what is net-zero and why it is important

The term “**net-zero**” refers to an **overall balance between greenhouse gas (GHG) emissions generated by human activity and GHG emissions removed from the atmosphere over a specified period**. In practice, it requires the reduction of Earth-warming emissions as much as possible and absorbing or compensating for the unavoidable emissions.

According to the Intergovernmental Panel on Climate Change (IPCC) *Special Report: Global warming of 1.5°C* (IPCC 2018), achieving net-zero by 2050 is necessary to limit global warming to well below 2°C, possibly to 1.5°C, compared to pre-industrial levels by the end of the century. This is crucial to avoid catastrophic consequences produced by climate change on human activities¹.

As carbon emissions are an inevitable byproduct of the economic system and of many aspects of human activity in general, **huge efforts are required from a wide range of stakeholders**, from countries to undertakings as well as from local communities to individuals. In view of the **COP26** in Glasgow next November, public awareness and the concern of public authorities, companies and investors are increasing. A significant and ever-increasing number of **countries, local entities (e.g. regions and municipalities), companies, and investors are making public pledges** to reach the goal of net-zero by mid-century, often rallying around joint initiatives such as the **UN Race to Zero campaign**. A recent report by the research initiatives Energy & Climate Intelligence Unit (ECIU) and Oxford Net Zero found that countries with net-zero targets together represent 61% of global emissions, 68% of global GDP (at Purchasing Power Parity) and 56% of the global population. Among the 2,000 largest public companies, at least one-fifth (21%) have set net-zero commitments, representing annual sales of nearly \$14 trillion (ECIU 2021).

1. The IPCC Special Report refers specifically to CO₂ emissions. Besides this, a rapid decline in other non-CO₂ GHG emissions (like methane) is also necessary. In model pathways with no or limited overshoot of 1.5°C, global net anthropogenic CO₂ emissions decline by about 45% from 2010 levels by 2030, reaching net zero around 2050. Non-CO₂ emissions are projected to reach net-zero around 2070.

Investors can play a crucial role in **financing low-carbon solutions and supporting the transition plans of companies in high-emitting sectors**. Integrating net-zero considerations into investment policies is also beneficial to **mitigate climate-related physical and transition risks** as well as to **identify new investment opportunities** in companies that have the potential to prosper in a new low-carbon economy.

The importance of triggering a debate about the challenges of net-zero

The question now is: “How do we get there?”. If we scratch the surface and try to systematically analyze the implementation of investment strategies intended to produce significant impacts on the real economy, we realize that net-zero is a very challenging goal at various levels. **Many questions are still open**: identifying the sources of GHG emissions across portfolios, setting credible targets, embarking on coherent decarbonization pathways, and reporting progress against them. Further reflections are also needed on how investors can engage successfully with carbon intensive companies to encourage them to decarbonize, as well as on how to advocate with policymakers on public policy.

While public pledges and the launch of international initiatives are crucially important to maintain momentum, a realistic sense of the practical challenges that financial market participants face when trying to contribute to the attainment of net-zero goals is also needed. **Pooling and sharing questions, difficulties and best practices is the most effective way to overcome the practical obstacles that financial institutions often encounter.**

As such, this paper is aimed at:

1. defining positive impacts and shortcomings of the strategies that are currently implemented within the context of net-zero actions;
2. dissecting the challenges that institutional investors currently face when dealing with target-setting;
3. highlighting the role of policymakers, companies, and financial market participants vis-à-vis these challenges.

A round-up of net-zero strategies: strengths and shortcomings

Global warming is 1.1°C above pre-industrial levels. By 2100 the global average temperature will rise by at least 2.8°C based on current policies, reaching +5.7°C in the most pessimistic scenarios (IPCC 2021). The question is how financial market participants can contribute to bridge the gap between the current trajectory and a 1.5°C objective scenario.

Robust net-zero investment strategies should pursue some key objectives. At a portfolio level, these include: reducing carbon footprint and carbon/emissions intensity (i.e. emissions relating to revenues), mitigating climate-related risks, and ensuring diversification. To be credible, net-zero investment strategies must also provide evidence of their **impacts on the real economy**, of how they accelerate climate transition in the wider economy, and finance climate solutions. In other words, **a net-zero portfolio should lead to a net-zero world.**

Many strategies are currently in use to reach this goal and each one possesses its own strengths and weaknesses.

Intensifying investments in low-emitting companies (e.g. media companies) **and in climate solutions** (e.g. renewable energies) is very important. Nevertheless, this approach might **miss opportunities** in companies that are successful in decarbonization in those **hard-to-abate sectors** (e.g. steel, cement and chemicals) that are crucial in view of decarbonizing the economy. In addition, companies in low-emitting sectors must be assessed in terms of **prospective emissions across the entire value chain** in which they are embedded, in order to take into account transition risks.

Offsetting means compensating for exposure to GHG emissions by investing in green solutions (e.g. planting trees) that are calculated to absorb an equal amount of emissions. This strategy, however, **falls short of addressing the climate risks of high-emitting assets**. Moreover, offsetting **cannot be interpreted as a substitute for efforts towards lowering the amount of the financed emissions** within the portfolio.

Engagement is one of the most effective levers that enable investors to ask for more efficient data or to encourage investee companies to adopt emission reduction pathways that pursue science-based targets. Engagement

actions should take into account the **sector where companies operate**, as well as include **targets** against which investors can check the effectiveness of their action (e.g. deadlines and criteria). Engagement normally demonstrates **its full potential and impact in the long-term** and it is a time and resource-demanding activity.

On the other hand, **total and partial divestment** ensures a rapid reduction of GHG emissions at portfolio level and it can be a solution when engagement is not successful. **A phase-out of investments in some critical activities**, as new fossil fuel supply projects and unabated coal plants, **must be a milestone towards net-zero**, as recommended by the International Energy Agency (IEA) in a recent report (IEA 2021). Divesting can also be effective as **market signal**, especially if included in broader initiatives such as investors' networks/alliances, although total divestment implies giving away the lever of engagement itself and not always leads to a reduction of real-world emissions, as it does not guarantee that the target companies decarbonize.

This rapid round-up of net-zero strategies clearly demonstrates that a meaningful portfolio decarbonization can only be achieved through **increasing investments in companies that have committed to net-zero** and that are able to provide clear evidence of the robustness of their decarbonization plans through measurable objectives/outcomes.

A clear definition of net-zero and a description of the paths that lead to it would be beneficial to **increase the transparency of the market** and to reduce the risks of so-called "net-zero washing". It would also help companies and investors navigate this complex universe of strategies.

Emissions avoidance ≠ emissions reduction

It is a common practice to measure the carbon footprint of a portfolio by subtracting from its GHG-toll the so-called "avoided" emissions, made possible by investing in green activities. Now, **including carbon avoidance in emissions reduction targets is an accounting error**: in reality, what has been *avoided* cannot be counted as a *reduction*.

Aligning portfolios to net-zero: challenges and possible solutions

Setting and implementing a net-zero investment strategy is a complex and long journey, which requires a thorough analysis and frequent reviews. Asset owners and asset managers usually face the following challenges.

Choosing the climate scenario

Several scenarios are available on the market. Each one is based on specific assumptions (e.g. with or without overshooting 1.5°C, considering or not considering carbon absorption, etc.), resulting in **different outcomes** in the target setting exercise.

Facing data gaps

Data about the GHG emissions of the investee companies are essential to measure the exposure of the portfolio to climate-related risks and impacts, and thus to accurately estimate a realistic decarbonization trajectory. However, still today **an insufficient number of companies properly disclose the amount of GHG emissions they release in the atmosphere**. Furthermore, data usually come from large companies because they are better equipped to carry out detailed calculations and reporting, and they are normally required to do so by law. This is the case in the EU, where the Non-financial Reporting Directive (NFRD) currently includes 6,000 large companies in its scope. Still, Small and Medium Enterprises (SMEs) represent 99% of all businesses in the EU and account for more than half of Europe's GDP. The new Corporate Sustainability Reporting Directive (CSRD), whose proposal was published by the EU Commission on April 21, 2021 might expand the scope of ESG data reporting to include more large companies as well as listed SMEs, totaling 49,000 companies.

As a consequence of this data gap, asset owners and asset managers largely rely on forecasts and data providers. Several datasets are available on the market: each one is based on different assumptions and might lead to very different outcomes. Data issues are particularly challenging in sectors that are crucial in view of transitioning the economy, but are not based on **public markets** (e.g. real estate). Finally, there is still lot of room for improvement with regard to the quantity and the reliability of **forward-looking data** (see also paragraph below).

Managing Scope 3 emissions

According to the Greenhouse Gas Protocol, Scope 3 emissions are all indirect emissions that occur in the value chain of the reporting company, including both upstream and downstream emissions. In some sectors, such as oil companies and car manufacturers, Scope 3 is the main source of GHG emissions. Therefore, for financial market participants **Scope 3 emissions are crucial** in view of measuring the financed emissions and setting robust net-zero targets. According to a recent report by the CDP, total financed emissions from financial institutions are, on average, more than 700 times greater than their direct emissions, based on data from 84 organizations that collectively managed \$27 trillion in assets (CDP 2021).

Unfortunately, data on Scope 3 emissions is inadequate and not fully reliable. However, **the fact that financial market participants miss Scope 3 data is not a sufficient reason to rely just on Scope 1 and 2**, because in some sectors this approach might result in a distorted picture of the position of the company in the decarbonization trajectory of the reference industry.

One of the possible solutions consists in **engaging with companies** to try to increase the quantity, quality and comparability of reliable data. Meanwhile, investors should also use the available tools and methodologies to **make assumptions and estimates for filling data gaps**. In fact, it is better to be “approximately right” than to be “precisely wrong”.

Managing portfolio constraints

One of the major challenges for investors is **balancing the needs of net-zero strategies with portfolio constraints**. According to McKinsey (2020), within the next 30 years the EU will need €28 trillion investments in a number of key sectors (e.g. power, transportation, buildings, industry, agriculture and infrastructure). However, at present nearly half of these investments would not have positive investment cases.

Furthermore, at a company level, in many sectors the measures that are currently available to reduce GHG emissions are not considered worthwhile, at least in the short term: in many organizations, the implications of the carbon-abatement curve are so intimidating that projects to cut emissions are frozen or delayed. Still, studies about the potential costs of advancing policy responses to limit global warming in different time horizons show that **the later a policy is implemented the higher the cost**. As such, a **shift in the way risks are assessed and integrated into business models and investment policies** would be beneficial in view of building the case for net-zero for companies and financial market participants.

In addition to this, **public policy actions such as carbon pricing** are crucially important to allow institutional investors accept lower returns while financing the transition plans of the companies.

Maintaining **an appropriate risk-return profile and diversification at a portfolio level** represents a major concern for asset owners, as fiduciary duty requires them to act in the best interests of their clients. **Asset managers need to bring returns** because otherwise institutional and retail investors are not going to buy their funds: if the preferences shift towards products offered by asset managers that have less ambitious climate investment concerns, companies will have reduced access to transition finance. Thus, **asset owners can play a crucial role** in terms of speeding up the shift of financial markets toward net-zero by **demanding that their asset managers adhere to specific carbon reduction trajectories**.

Adequate public policy measures

To overcome the issues related to portfolio constraints, **strategic public investments and supportive economic policies** are needed in order to unlock new business models, send market signals and shift incentives towards new net-zero investment opportunities.

Direct policy interventions will be key to force companies to align with a decarbonization trajectory that is consistent with carbon neutrality. Other useful policy actions are: **direct public financings** (which leads to commercial de-risking and brings in long-term investors, e.g. through blended finance) and **pricing measures**, such as carbon prices or cap-and-trade systems.

As suggested in the aforementioned IEA report, one of the priorities is the **massive deployment of clean energy**, which can be enhanced through policy actions such as: mandates and standards to drive consumer spending and industry investments; fossil fuels phase-outs; limitations or disincentives for the use of certain fuels and technologies (e.g. unabated coal-fired power stations or sales of internal combustion engines car); targets and competitive auctions to scale-up wind and solar installations. Furthermore, governments should plan and incentivize **investments in infrastructure**, and accelerate **innovation** through R&D, and the speed-up of demonstration and deployment. That is key to bring new technologies on the market and scale them up, so as

to leverage private investment and reduce costs². Finally, the disclosure by governments of **credible net-zero plans** with details about interim steps will be key to build confidence among investors and industry and catalyze private investments (IEA 2021).

On 14 July 2021 the European Commission sent out its **Fit for 55 package**. The initiative consists of a batch of regulatory measures aimed at ensuring that the EU real economy delivers on the 55% GHG emissions reduction target by 2030 as compared to 1990. Among the proposals, the EU Commission included **carbon pricing measures**, such as the revision of the EU Emission Trading Scheme, with a higher emission reduction target and new sectors included; the **Carbon Border Adjustment Mechanism**, a levy on imports based on their carbon content; and a **revised taxation directive** envisaging a new structure of rates based on the energy content and environmental performance of the fuels and electricity. The Fit for 55 package also includes **new targets in key economic sectors**, such as energy efficiency, renewable energy production, and stricter CO₂ emission standards for cars.

A round-up of net-zero tools: choosing the right mix

Net-zero strategies should be based on a clear action plan, including:

1. **calculating financed emissions** across the portfolio, which means measuring the impact on climate change of the activities enabled by investments, lending and underwriting activities, with details about absolute emissions and emission intensity;
2. **setting targets at portfolio level**, with specific characteristics **for each sector and asset class**;
3. **establishing realistic long-term and intermediate targets** that are consistent with net-zero;
4. **reporting** on progress on a regular basis (e.g. year on year).

These actions require a complex set of analysis and choices. Financial market participants might find it beneficial to follow some methodological approaches in selecting sustainable and responsible investment (SRI) strategies, metrics and target-setting tools.

Nowadays **the net-zero toolset is well equipped and diversified**; the market is evolving dynamically. Financial market participants can choose among different methodologies and metrics to get a reasonable picture of their portfolio exposure to GHG emissions, as well as to work out solutions to neutralize them by 2050. There is no silver bullet: **each company should choose and mix existing methodologies that fit its own specific needs, while also contributing to developing new tools and metrics**.

There are two considerations investors might bear in mind when assessing metrics and target-setting approaches: first, **science-based methodologies are essential**; second, **data and metrics should be forward-looking**. For example, they could take into consideration whether corporate investments (Capex) are aligned to the decarbonization targets. **Carbon footprint relies on past emissions** (i.e. the emissions that have been disclosed by investee companies in the latest report, with a specific reference period in the past), thus it does not give any insight about the transition efforts of the company: neither about its position in the trajectory of the reference industry, nor about its impact on the overall economy. As recommended by WWF, **carbon footprint and absolute emissions shouldn't be the sole metrics to measure and disclose climate alignment**.

A sound net-zero investment strategy should require the following metrics:

Absolute CO₂-equivalent emission reduction targets

Temperature alignment scoring

This implies a **comparison between the climate trajectory of a portfolio and the temperature benchmark** (e.g. 1.5°C). As these data are forward-looking and therefore highly uncertain, financial institutions should be transparent about the assumptions they used when assessing a temperature alignment score, while bearing in mind the current limitations of those instruments due to data gaps. Furthermore, the analysis should always retain a focus on the sectoral exposure of the products.

Activity-based targets

The **EU taxonomy** could be taken as a **reference**: this means providing details about the incremental proportion

2. See also: EU Commission 2021.

of the portfolio that must align with the technical screening criteria for Substantial Contribution (SC) and Do-No-Significant-Harm (DNSH) within given time frames³.

Some methodologies, most notably the **Paris Agreement Capital Transition Assessment (PACTA)**, assess a financial institution's exposure to high-carbon sectors and compare this to the required economic outputs under a Paris-aligned scenario.

Conclusions: who can do what

The magnitude and importance of the challenge require huge efforts from a wide range of stakeholders: **collaboration and coordination between different actors** moving in the same direction is necessary to achieve net-zero by 2050. In particular:

Policymakers are crucial to create a regulatory and policy environment that supports net-zero, consistent with global and EU carbon budgets (also by **enshrining clear definitions of net-zero and price signals into law**, as suggested recently by Eurosif 2021) as well as to **implement strategic investments** aiming at attracting private investors and mitigating risks in high-emitting sectors.

Companies are crucial to **set-forth measurable and ambitious decarbonization pathways** and to appropriately **report about their GHG emissions** and the progress achieved, especially to bridge the gap with regard to forward-looking and Scope 3 information.

Financial market participants are crucial to embark on ambitious, transparent and result oriented engagement actions with companies and policymakers. **Asset owners should push asset managers** in the direction of aligning their portfolios to net-zero trajectories. **Asset managers should** do their best to **integrate net-zero into their strategies** even if the current environment is not perfectly fit for the purpose yet.

On top of that, it is important that companies and investors make the best of all data, metrics, target-setting tools and scenarios that are currently on the table. Even if the perfect tools or the best policies are yet to come, the best moment to start acting is now.

3. The delegated acts for climate mitigation and adaptation currently cover the activities of 40% of EU-based companies in sectors that are responsible for 80% of EU direct GHG emissions: retaining portfolio exposure to these sectors, in companies that comply with SC and DNSH criteria, would ensure a meaningful contribution to the transition.

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The Italian Sustainable Investment Forum (ItaSIF) is a not for profit association founded in 2001.

Its membership base is multi-stakeholder: its members are financial actors and other organizations interested in the environmental and social impacts of financial activities. ItaSIF mission is to promote the awareness and the strategies linked to sustainable investments, with the aim to encourage the integration of environmental, social and governance criteria into financial products and processes.

ItaSIF activities are divided into three main areas: research, projects and advocacy.

Within these sectors ItaSIF:

- runs research and education activities and facilitates working groups to promote best practice and contribute to the analysis and growth of sustainable investments;
- informs and advises the financial community, the media and society as a whole, on sustainable finance through the organisation of communication campaigns, conferences, seminars and cultural events;
- engages with Italian and European institutions to encourage the implementation of a regulatory framework promoting sustainable investments.

Since 2012, ItaSIF has organized the Italian SRI Week, one of the leading initiatives in Italy on sustainable and responsible investment.

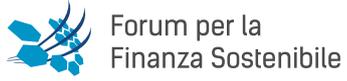
ItaSIF is a member of Eurosif, the association for the promotion of sustainable investment in the European market.



Eurosif is the leading pan-European Sustainable and Responsible Investment (SRI) membership organisation whose mission is to promote sustainability through European financial markets. Eurosif works as a partnership of Europe-based national Sustainable Investment Fora (SIFs) whose members include institutional investors, asset managers, index providers and ESG research and analysis firms totalling over €20 trillion of assets under management, as well as other stakeholders such as NGOs, trade unions, think-tanks and philanthropic foundations. Eurosif is also a founding member of the Global Sustainable Investment Alliance, the alliance of the largest SIFs around the world.

The main activities of Eurosif are public policy, research and creating platforms for nurturing sustainable investing best practices.

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