Net-Zero Portfolios:
10 Frequently-Asked Questions

In Brief

Over the past year, we have had many in-depth discussions with a wide range of institutional investors and other stakeholders about transitioning to more sustainable investment portfolios. As the interest and adoption of sustainable investing continues to grow, so too has the focus on climate change and the quest for achieving global net-zero emissions.

Some investors have already begun to take action, while others are seeking to understand what it means to transition to a net-zero portfolio. Our view is that investors should organize their journeys to net zero around five broad steps:

1. Get educated on the concept of net zero.
2. Measure and understand the carbon exposure of existing portfolios.
3. Clarify objectives and set goals.
4. Evaluate and select strategies to transition portfolios.
5. Monitor progress and share results with stakeholders.

This document provides FFI's answers to 10 frequently asked questions about net zero and is intended to help prepare investors for the transition process.

FFI Solutions has been working with institutional investors to reduce exposure to carbon and emissions since 2014, and we are always pleased to discuss issues related to net zero. Please feel free to reach out to Chris Ito (cito@ffisolutions.com) or Michael Palmieri (mpalmieri@ffisolutions.com) if you would like to discuss a potential roadmap to net zero.

Net-Zero FAQ

1. What is net zero?

Net zero is a science-based concept that originated to support the goals of the Paris Climate Accord. In simple terms, net zero represents the state where **carbon emissions put into the atmosphere equal the emissions removed**. The latest science states that in order to limit the global temperature rise to 1.5°C, the world has to achieve net-zero emissions by 2050 and halve emissions by 2030 (compared to 2010). Today, net zero has become a collective societal movement to mitigate a climate crisis that is at a critical stage.

2. Why are investors acting?

For financial and non-financial reasons, institutional investors will increasingly feel compelled to act on climate. From a financial standpoint, many long-term investors recognize the global, societal push to decarbonize will significantly impact companies across multiple sectors of the economy. Those companies that position themselves best for a net-zero economy should, all other things being equal, outperform those that do not. Investors are also recognizing the role they can play in organizing, educating, and implementing change. Many investors, especially those embracing ESG, are motivated to signal to the broader community that climate action is essential. Motivation can result from stakeholder pressure or simply aligning an investor's investments with their organizational values.

3. What does it mean to have a net-zero portfolio?

What net zero means for investors is still evolving, and while there are no generally accepted standards, frameworks are emerging to help guide investors. The Net Zero Asset Owner's Alliance, The Institutional Investors Group on Climate Change (IIGCC) and The Investor Agenda provide frameworks for investors to achieve net-zero portfolios. While those frameworks lack detailed guidance on achieving such objectives, two main elements of a net-zero investment strategy are clear:

- decarbonize portfolios[1]
- invest in climate solutions.

4. What are the criticisms of net zero?

Net zero is imperfect in part because the "net" aspect could lead to **greenwashing**, specifically an over-reliance by high-emitting companies on carbon offsets and carbon removal technologies to reduce their carbon footprints. Our position is that companies can properly take credit for carbon offsets and removal when they have exhausted all reasonably available options to reduce emissions. Offsets in and of themselves are generally productive. They provide companies and investors with the tools to fund

[1] The frameworks reference the Greenhouse Gas (GHG) Protocol Scope 1, 2, and 3 emissions as the standard by which company and portfolio emissions are measured.

projects that reduce greenhouse gas (GHG) emissions. Admittedly, carbon offset markets are unregulated and raise reasonable questions regarding their effectiveness, verifiability, permanency, and additionality. Despite this, many legitimate GHG-reduction activities would not be funded if not for offsets (and cap and trade allowances). As these markets mature, their monitoring, verification, and certification protocols will improve and provide investors with the ability to identify the difference between legitimate, effective offsets, and greenwashing.

5. Where should investors start?

The first step is to set objectives. Without specific standards, investors should define what it means to decarbonize, and then set measurable goals and targets for monitoring. This includes providing clear guidance to external managers on how they will be measured concerning net-zero targets. Today, decarbonization is challenging because only a handful of companies report (or realistically have) net-zero emissions as defined by GHG Protocol Scopes 1 and 2. As such, it is virtually impossible, without shorting or using offsets, to achieve a diversified net-zero portfolio (using the portfolio company's current carbon footprint as the measure). That said, the frameworks suggest that net-zero portfolios can also be achieved by constructing a portfolio that is comprised of companies that **are on a path to decarbonization** consistent with net-zero emissions by 2050.

6. How does an investor measure net zero?

Know what you own. Net zero broadly includes three types of portfolio measurements:

- carbon footprint as measured by GHG Protocol Scope emissions
- exposure to high emitting sectors such as fossil fuel reserve owners
- investment in clean energy solutions.

Data and service providers (including FFI Solutions) have created tools to allow investors to measure and monitor the portfolio versus their net-zero goals.

7. What actions can investors take to achieve net-zero portfolios?

While there are many options for taking action, developing a roadmap that aligns with an investor's goals is a critical next step. Our view is that implementation is broadly categorized into four main approaches. Importantly, these approaches are not mutually exclusive and can be used in concert with one another depending on the desired objectives.

- **Investment in climate solutions**: Includes both investment in early-stage innovation that can accelerate the energy transition, and mature public companies whose products are scaling today.
- **Shareholder Engagement**: Engaging as stakeholders to demand change at companies that demonstrate the willingness and/or business models to align with the goals of the Paris Agreement.
- **Divestment (or shorting):** Divesting from industries or shorting companies that are unable or unwilling to align with a net zero trajectory.
- **Utilization of offsets**: Buy and retire carbon offsets at the portfolio level to achieve what companies themselves are unable or unwilling to do.

8. Aren't ESG funds net-zero?

Generally, the answer is no. ESG funds evaluate companies by focusing on their operating characteristics and not the underlying products the companies produce. Companies with strong ESG scores (and even strong E scores) do not necessarily align with net zero, nor have they made net-zero commitments. As such, ESG funds may provide some small, incremental progress toward net zero, but they are not specifically designed to achieve such net-zero goals.

9. What about data quality and regulation?

We believe that carbon accounting will improve as artificial intelligence and machine learning applications provide more reliable emissions data, including Scope 3 emissions related to a company's supply chain and end-use of their products. Regulatory action in Europe (e.g., the EU Sustainable Finance and Disclosure Regulation) will ultimately spread to the United States and investors and managers will face even greater pressure to disclose climate-related risks.

10. What is the urgency?

If you are wondering whether net zero is just the next investment fad, think again. The policy, regulatory and technology trends, and the increasing public concerns about climate change from younger demographics point toward an increasing long-term focus on carbon neutrality. While specific standards for determining net-zero for investors do not yet exist, the lack of standards should not prevent or dissuade investors from taking action. There are many different roads to net zero by 2050. Arriving there is important, but choosing the right path is critical as every investor will have unique objectives and reasons for pursuing net-zero portfolios. The longer society takes to reduce emissions materially, the more we put our financial markets, our environment, and our society in peril. This makes the journey to net zero a race, and one in which investors will increasingly feel pressured or compelled to participate.