July 2023

Learning About ESG

Investing in the transition to net zero

Learning About ESG is an educational series that connects **environmental, social and governance** topics with investing.

Join us each issue to see how global developments can have implications for investors. The better we understand ESG, the bigger the role it can play in our everyday lives – and investment portfolios – contributing to a better world.

Key takeaways

- Since the beginning of 2021, the proportion of countries whose net zero targets are set in legislation or policy documents has grown from single digits to 75%.
- Companies face new opportunities and risks related to their impact on greenhouse gas emissions.
- Technological innovations will be vital to achieve net zero goals, creating compelling opportunities for long-term investors.

What does the net zero transition mean?

'Net zero' is achieved when greenhouse gases are no longer added to the atmosphere. This doesn't require us to completely eliminate activities that generate greenhouse gases, but means solutions to offset unavoidable emissions, by reducing the amount left in the atmosphere, result in a net amount of zero added.

Last month was the hottest June ever recorded on the planet, according to the World Meteorological Organisation. Sadly, heat records nowadays tend to be short-lived. Over four consecutive days in the first week of July, the planet experienced its hottest days in modern history.

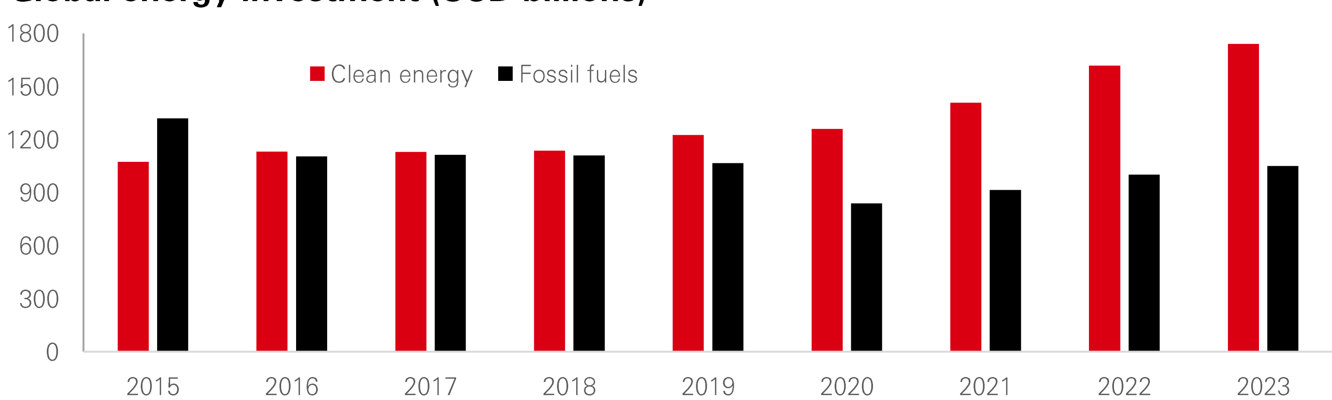
After over a century of filling the atmosphere with greenhouse gases, mankind has already caused over 1°C of global warming. The impact goes beyond higher temperatures, also causing more extreme weather events such as heatwaves, storms and droughts. This affects everyone as it impacts our basic survival needs.

Unchecked climate change will damage our ability to grow crops, further strain water supplies and necessitate mass migration as areas become uninhabitable due to lack of water, arid land and other factors. More frequent extreme weather events add to the issue - in 2021, weather-related disasters displaced 45 million people[1]. Financial implications are long-term. One already felt by all is food inflation impacted by crop failures.

The UN estimates that 3.5 billion people, nearly half of the world's population, live in areas highly vulnerable to climate change impacts. This is clearly a global issue of urgency. Positively, governments are rapidly enacting new laws and regulations to drive the transition to net zero, which includes incentivising clean energy investments.

Since the beginning of 2021, the proportion of countries whose net zero targets are set in legislation or policy documents has grown from single digits to 75%. Likewise, of the world's largest 2,000 companies, those with net zero targets now represent two-thirds of total annual revenue[2].

Global energy investment (USD billions)



Source: International Energy Agency, May 2023. Figure for 2023 is projected.

1. The Internal Displacement Monitoring Centre (IDMC)) 2021 Global Report on Internal Displacement.
2. Net Zero Stocktake, June 2023: New Climate Institute, Oxford Net Zero, Energy & Climate Intelligence Unit and Data-Driven EnviroLab.

Why does it matter for investors?

Effective management of climate change hinges on swift and large-scale global action. The realisation of risks to populations and economies has resulted in governments now taking steps to oblige. This means companies face new opportunities and risks related to their impact on greenhouse gas emissions.

According to UN projections, limiting global warming to 1.5°C requires greenhouse gas emissions to peak no later than 2025. Countries that have announced, pledged, or adopted climate plans to reduce emissions account for over 90% of global output and around 88% of global carbon emissions[3]. Yet, these plans and commitments must go further to reverse the current emissions trajectory at a fast enough pace.

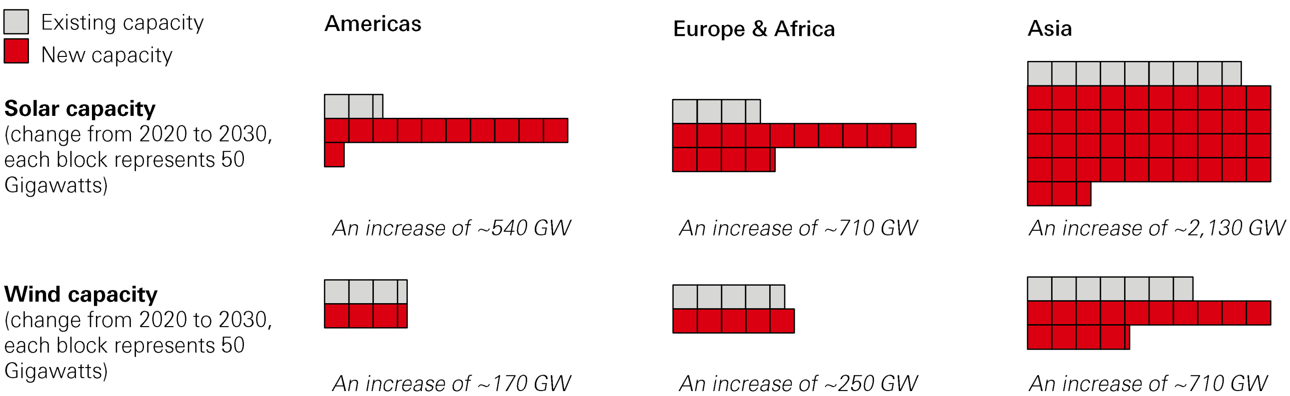
Momentum is gathering, as evidenced by last year's US legislation to accelerate its transition to net zero, with subsidies to boost investment in clean technology across industries. Funding is estimated to amount to USD500 billion over the next decade.

Not to be outdone, Europe has built on its own net zero transition plans, enacting new policies to decarbonise economies across the region. State aid will amount to up to USD110 billion per year to 2027 in support of the development of clean technologies.

Separately, various carbon pricing schemes have been implemented across most of the largest economies, essentially adding a cost to the operations of heavy greenhouse gas emitters. Both sides of these policy actions clearly incentivise companies to pursue decarbonisation solutions.

The chart below provides scale for the change underway to transition economies towards net zero, with no opportunity bigger than in Asia where there're more individual policies in force to incentivise the use of renewables than in any other region. Clean energy investment in China has grown by a third in the last three years alone, reaching more than USD500 billion last year[4].

Projected renewable infrastructure development



Source: Bloomberg NEF, HSBC Asset Management, February 2023.

3. UN Climate Action Tracker; McKinsey Energy Insights Global Energy Perspective 2022.
4. International Energy Agency, Energy investment in China, 2019 and 2022.

How to invest in the transition?

Economies must be redesigned if we're to avoid the most dire consequences of climate change. Innovation is the answer and presents opportunities for long-term investors.

The technological innovation of the industrial revolution set us on the path towards a climate crisis, and technological innovation is now needed to avert it. Solutions extend beyond implementing renewable energy.

For instance, more energy generated by renewables requires storage. This creates opportunities for battery storage solutions, and hydrogen as an alternative energy store which releases only steam as a by-product when producing power. Hydrogen-powered trains have already been rolled out in Germany and China, and should arrive in India by the end of the year.

Transportation contributes roughly a quarter of greenhouse gas emissions globally, making it a vital industry for decarbonisation. The transition to electric vehicles is key to this, making recent developments in technologies such as sodium-based batteries important. Reliance on today's lithium-based batteries may not be feasible given that demand for lithium is projected to increase 26-fold in the 2030s, potentially outpacing supply.

Examples extend across industries, from capabilities to capture carbon released in industrial processes, to incorporating new approaches and technologies in farming that reduce emissions, and changes in how we build and use products to reduce material waste and the energy-intensive process of extracting more from the ground.

For investors there're multiple ways to pursue the opportunity. Prioritising exposure to companies with a smaller carbon footprint is a logical approach. Another is specifically targeting exposure to leaders of the change being undertaken to transition to net zero.

Asset managers can go beyond designing portfolios focused on the net zero transition. Managing large pools of capital creates leverage for engaging with companies to accelerate their transition. HSBC is part of the Net Zero Asset Managers initiative tackling this, with roughly USD60 trillion in assets cumulatively. We're also one of the first signatories to the Principles for Responsible Investment, back in 2006.

Glossary

ESG: a set of Environmental, Social and Governance criteria that investors can apply to analyse and identify material risks and growth opportunities in investments.

Carbon emissions: are emissions stemming from the burning of fossil fuels during any kind of manufacturing process.

Climate change: the change in the planet's climate and weather due to the release of greenhouse gases into the atmosphere.

Greenhouse gases: gases that create a greenhouse effect and warming of the planet, with carbon dioxide being the most common.

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