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Ninety One

Investing in companies shaping the future

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The fast view

- Both traditional global equity investors and those committed to sustainable investment agendas could benefit from an actively managed allocation to the decarbonisation theme. Benefits include:
  - A differentiated source of potential returns through exposure to long-term structural growth which we believe will drive higher revenues, and profitability, for companies with strong competitive advantages — and hence superior share-price appreciation.
  - A diversified alpha stream with low correlation to typical core and growth equity exposures.
  - Access to companies that are innovating, disrupting and reinventing themselves in the environmental-solutions universe that are poised to grow and outperform.
  - A hedge against systemic exposure to carbon, which is likely underestimated.
- We believe we are in the early stages of a decades-long trend towards a decarbonised economy, creating compelling investment opportunities.

Introduction

In this paper, we explore an investment theme that we believe is too big to ignore: the transition to a lower-carbon economy. This energy transition presents a significant, long-term structural growth opportunity that is compelling for both investors who have made a pledge to net-zero emissions and investors in search of new return drivers. We believe that this theme will drive new business opportunities for the foreseeable future.

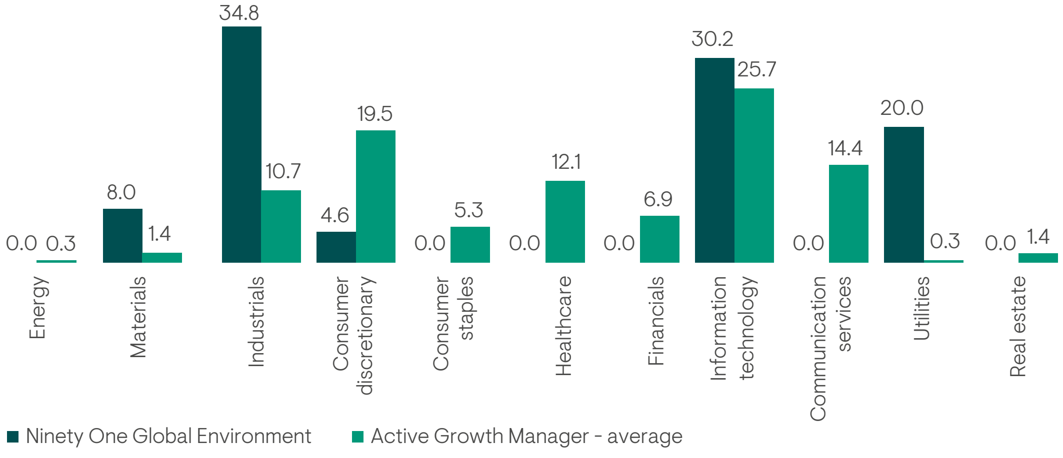
A different kind of growth

Decarbonisation is a powerful and potentially valuable structural growth trend. The speed at which climate-related developments are occurring — across policy, technology and consumer trends — is accelerating. There aren't many growth stories that include 'human survival' among their drivers.

Many of the companies behind decarbonisation solutions are in renewables and transportation, where rapidly improving technology and lower costs are contributing to long-term structural growth opportunities. But the range of companies exposed to the energy transition extends far wider, sitting across multiple sectors and regions, and with a spread of market capitalisations, but generally with higher-than-average growth rates.

We believe the Global Environment portfolio offers exposure to the next wave of long-term, innovation-driven structural growth. An analysis of Global Environment's holdings suggests that this type of structural growth exposure is not replicated in typical 'growth'-oriented strategies — which we believe tend to focus on businesses that are already maturing. In fact, Global Environment has no significant style bias to either growth or value, and zero exposure to sectors that account, on average, for about 40% by weight of the portfolios of a selected peer-group of active growth managers. In other sectors crucial to decarbonisation, such as industrials and utilities, Global Environment's exposures contrast sharply with those of selected growth managers.

Figure 1: Current managers are underweight the next wave of long-term structural growth



Source: eVestment. Chart shows average of Global Large Cap Growth Equity manager in eVestment database, as at end Q4 2020.

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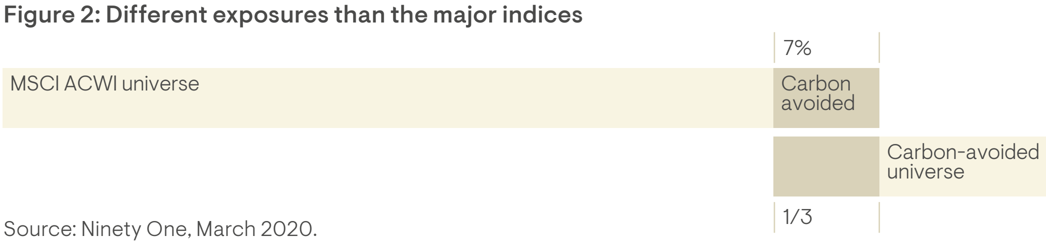
Decarbonisation's diversification potential

Indeed, one of the compelling characteristics of decarbonisation as an investment theme is that it comprises a hugely diverse group of businesses: from wind-power developers, to logistics firms, to software companies, to biotech businesses, and more. We saw the benefits of this diversity during the global equity sell-off in Q1 2020. The defensive utilities in the Global Environment portfolio — we are overweight utilities relative to broad equity indices because we hold a number of leading providers of renewable energy — did their risk-mitigating job, offsetting in benchmark-relative terms the heavy falls in cyclically exposed companies, such as auto-sector businesses (we also hold various technology companies that are enabling the shift to electrified and ultimately autonomous transport).

While being diversified itself, the Global Environment universe is also a potential diversifier, since it has little overlap with traditional equity allocations and broad benchmarks such as the MSCI All Country World Index (ACWI) or the FTSE 100.

Figure 2: Different exposures than the major indices



Source: Ninety One, March 2020.

We therefore consider this to be a universe of largely undiscovered companies, and hence complementary to core equity allocations. Only about one-third of Global Environment's proprietary decarbonisation universe is included in the MSCI ACWI, and the universe only accounts for 7% of the ACWI by weight. Simply put, these new-economy businesses are little represented in standard indices, thereby offering opportunities for diversification.

Hedge systemic carbon risk in portfolios

Investors are rightly paying attention to how climate change and the transition to a low-carbon economy may impact the risk/return profile of their portfolios. The average investor is highly exposed to fossil fuels, given the amount of carbon-intensive exposure in their underlying investments.

Transition risks linked to climate change — as opposed to physical risks, such as higher incidence of extreme weather events — include policy changes, reputational impacts and shifts in market preferences, supply and demand and technology[1]. As climate action accelerates, these headwinds for traditional, carbon-heavy businesses will grow stronger. We believe one approach to manage this risk is through an investment process that seeks companies for which these same factors are tailwinds, and hence we would expect an opposite effect on investment performance.

1. ClimateWise Transition Risk Framework, University of Cambridge Institute for Sustainability Leadership, 2019.

Innovation and adaptation

Environmental solutions by their nature require innovation. To solve the climate challenge, we need to reinvent many aspects of the way the world produces and consumes — from transforming energy generation and transmission, to changing industrial processes, to transitioning to new ways of transporting people and goods. Electric vehicles, for instance, look similar to traditional cars on the outside, but contain very different components and technologies, and require different infrastructure. Innovation is therefore a key driver of the competitive advantages, growth potential and profitability of the companies Global Environment invests in.

Adaptation is also key, since climate change is already occurring and likely to continue even if emissions-reduction targets are met. Alongside the decarbonisation innovators, we believe that companies that help the world adapt to an unstable climate will also be presented with significant growth opportunities. For examples of businesses that are leading the way in innovation and adaptation, please see the case studies later in this report.

The path to a low-carbon future

The economic transformation required to limit the worst effects of climate change has only just begun. The world is currently spending only US$500 billion of the US$1.6-US$3.8 trillion of public and private investment required annually to keep temperature rises below 2^{o}C (35^{o}F). As a result, the massive growth opportunity lies ahead. Moreover, we believe the market is yet to price the potential of companies likely to benefit from decarbonisation, providing opportunities for active investors.

We invest in select companies across the main pathways to decarbonisation, which include:

- **Renewable energy:** The world needs a complete change in how we generate electricity, moving away from fossil fuels towards renewable energy, mainly wind and solar.
- **Electrification:** Increased electrification is essential, including an overhaul of ground transportation, making the fleet more autonomous and efficient, and ultimately moving away from internal combustion engines to self-driving electric vehicles powered by renewable energy.
- **Resource efficiency:** More efficient use of resources is key to decarbonisation, including achieving higher standards of efficiency in many domestic and industrial processes, and in buildings and appliances.

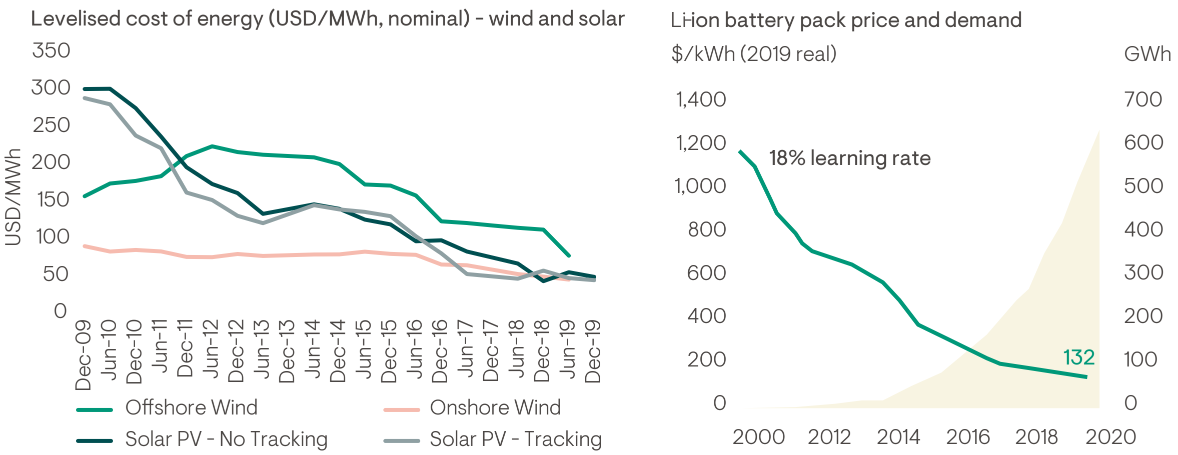
Tap into a long-term structural growth trend

Despite the pandemic, the past year suggests governments the world over are committed to decarbonisation, further fuelling the structural growth trend. Most recently, the Biden administration has set an ambitious agenda to mitigate climate change, including new commitments to infrastructure, wind energy and energy-efficient homes as part of his affordable housing proposal.

However, government policy isn't the only driver of decarbonisation. The costs of low-carbon technologies are declining, and green solutions' performance continues to catch up to, and increasingly exceed, that of traditional, high-carbon products and services. For example, it's now cheaper to generate electricity from wind power than any other source in many parts of the world, while the first electric-vehicle (EV) with a 1,000km range is due to go into production next year. Add to this growing consumer preferences for low-carbon solutions, and decarbonisation looks hard to stop.

Figure 3: Drivers of decarbonisation — technology

Costs have fallen considerably as technologies have improved



Source: Bloomberg BNEF, 31 December 2019.

In our view, the growth potential of some of these businesses is significant. To get to net-zero, or close to it, the green energy and transport sectors will have to be multiple times their current sizes. Wind and solar must dominate electricity generation, and 100 million EVs must be sold every year by 2050, up from about 2 million in 2019. This implies substantial growth not only for renewable-energy utilities and EV manufacturers, but for companies in their supply chains. The same applies to businesses whose products and services drive energy efficiency. Growth potential, sustainable returns and competitive advantage are key attributes of these businesses and we think make for a compelling investment opportunity.

It's important to note that the Global Environment investment strategy is not predicated on the world achieving net zero. Rather, the strategy is simply positively leveraged to decarbonisation, meaning we would expect it to benefit from efforts to make progress towards net zero, and to outperform in an environment of faster decarbonisation.

Case studies: leading decarbonisation companies at the forefront of innovation and adaptation

Waste Management Inc

Waste Management is the largest waste collection and processing company in the US and a leader in technologies such as methane capture.

NextEra

NextEra Energy is the world's largest producer of wind and solar energy, with historical roots in oil, coal and nuclear energy production.

Wuxi Lead Intelligent Equipment

Wuxi Lead predominantly designs, manufactures and sells battery production equipment and services to leading electric vehicle (EV) battery manufacturers in China.

Croda

Croda produces biochemicals and ingredients-based solutions including crop and seed technologies that help to improve agricultural yields, thereby saving carbon in the production process.

Iberdrola

Electric utility company Iberdrola, the number one wind producer in Europe, pivoted towards renewable energy 20 years ago from fossil-fuel based production.

Voltronic

Voltronic supplies uninterruptible power systems (UPS) and photovoltaic (PV) inverters, which support sustainable decarbonisation, by enabling the move towards electrification.

Aptiv

Aptiv provides solutions for electric and autonomous vehicles including smart vehicle architecture, electrical distribution systems, software solutions, e-mobility and connected services.

Trane Technologies

Trane sells products and services for HVAC and refrigeration systems. With an estimated 15% of global emissions caused by heating and cooling of buildings, innovation in this sector is key to decarbonisation.

Infineon

Infineon is a market-leading power semiconductor company utilising new materials and production innovation. It is the first power semiconductor company to manufacture on 300m wafers.

Novozymes

Novozymes has developed enzyme technologies that include those allowing consumers to wash clothes at lower temperatures and hence saving energy/carbon.

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No representation is being made that any investment will or is likely to achieve profits or losses similar to those achieved in the past, or that significant losses will be avoided.

Source: Ninety One, 31 May 2021. Companies shown are the top 10 by weight in the Global Environment portfolio as at 31 May 2021.
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Additional impact considerations

From an investment and climate-risk perspective, the potential benefits of allocating capital to decarbonisation are easy to understand. Less talked about is the potential positive social impact of a decarbonisation-focused portfolio.

The economic transformation required to achieve net-zero presents an opportunity for unprecedented wealth creation. The global energy sector, for example, could employ 100 million people by 2050 under the most ambitious climate scenario put forward by the International Renewable Energy Agency, 72% more than today. According to the Agency, "new jobs in transition-related technologies and sectors are expected to outweigh job losses in fossil fuels and nuclear energy".[2]

To enhance impact, the Global Environment team believes strongly in engaging actively as shareholders to advocate for positive change. It is also committed to transparent reporting, providing detailed sustainability analysis for every company in the Global Environment portfolio in its annual Impact Report.

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2. https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2020/Apr/IRENA_Global_Renewables_Outlook_2020.pdf

Aligning portfolios for the future

We believe the shift towards a decarbonised future is accelerating and will create compelling investment opportunities for decades to come. Decarbonisation is still at an early stage, which should give investors the potential to capture meaningful alpha and diversification. Investors who align portfolios with the clean-energy transition may be able to tap into new and diverse sources of growth, and address the climate risk in their portfolios.

As investors consider how best to position themselves for the future, we believe robust partnerships are needed with experienced managers who have the necessary tools — data, research capabilities, a forward-thinking mindset and a genuine commitment to sustainability — in order to marry risk, return objectives and impact over the long-term.

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