

Stimulating recovery through green investments

By Chris Greenland

While Covid-19 has inflicted untold damage on economies and businesses around the world, it is important to take heed of some of the positives. The pandemic has been a powerful force for the environment. Chris Greenland, fund manager at Sanlam Investments, discusses why lockdown has brought about a welcome respite for the natural environment and why investors could hold the key to a green economic recovery.

Since the world has been in lockdown, we have seen dramatic falls in fossil-fuel emissions, electricity consumption and pollution levels. These shifts have opened the eyes of policy makers who have been advocating even more ambitious climate targets – especially in Europe. This bodes well for the planet, but it's also great news for companies that continue to put the environment at the forefront of research and development. With renewed impetus from governments around the world, investors will take an increased interest in supporting clean-energy initiatives, and the sector has a brighter future as a result.

We're already seeing this in action. The operational resilience and strength of renewable-energy companies has become evident throughout this period of uncertainty. With economic stimulus and recovery measures prioritising green initiatives, pioneering companies in this sector will undoubtedly benefit in ways not seen before.

Improving the efficiency of energy supply, and demand

Improving energy efficiency is an important tool in combating climate change and offers investors some exciting opportunities on both the supply and demand side.

Take, for example, the technology required to harness and distribute energy at the place it is used, rather than having to get it from the grid where transmission and distribution results in a lot of wastage. Combined heat and power (CHP) plants on buildings can convert otherwise wasted thermal energy into heating while rooftop solar photovoltaic (PV) panels can provide a reliable source of power. Imagine if these technologies were standard for every office block, warehouse and supermarket in the country. Both can deliver lower-cost heat and power over the medium to long term, and, with less reliance on the grid, they offer an independent and secure supply of energy.

It is now widely recognised that the route to becoming 'carbon neutral' can only be achieved by decarbonising the demand side (i.e. through all of us becoming more energy-efficient consumers). Take, for example, the benefits of making buildings more energy efficient. Operational emissions from buildings are responsible for 28% of all carbon emissions in the world, and, according to the European Commission, "roughly 75% of building stock is energy inefficient, yet almost 80% of today's buildings will still be in use in 2050".

These are shocking statistics that are driving an initiative by the European Commission called the "Renovation Wave". There will be a push to refurbish and improve buildings to make them more energy-efficient and help decarbonise communities as part of the post-Covid-19 economic recovery. Investing in the companies involved in this initiative should offer a source of sustainable and stable long-term returns.

Improving heating, ventilation and air conditioning units can also play an important role in advancing the energy efficiency of buildings. Replacing or upgrading heating and cooling systems can reduce energy consumption by up to 60%, which provides big savings for consumers too.

Decarbonising energy – the next frontier

Another area of development is generating clean energy. Hydrogen has the potential to reduce emissions across areas of the economy that were previously deemed too hard to de-carbonise. It can act as a fuel for ships, aircraft and heavy-goods vehicles, and it can provide the heat required for steel, cement manufacturing and feedstock for chemicals manufacturing. According to Bloomberg NEF, “Hydrogen could meet up to 24% of the world's energy needs by 2050”.

The process of creating ‘green’ hydrogen is relatively simple in that electrolysis splits water molecules into oxygen and hydrogen. The trouble is, the energy expenditure required to do this on a large scale has, until now, prevented it from becoming commercially viable. One solution is to produce it using the excess power generated by wind farms. During periods of high wind, the onshore grid is not capable of coping with the volume of energy created, and it goes to waste. New technology is enabling offshore hydrogen electrolyzers to sit alongside wind farms and utilise the excess energy to create green hydrogen. It’s a win-win for all concerned.

Germany is at the forefront of decarbonising energy and has announced a game-changing initiative, worth 9 billion euros, to build a green hydrogen economy. Smaller projects are also underway in Denmark where a consortium of companies has formed a partnership to develop an industrial-scale transport-fuel production facility in Copenhagen. It is to be powered by offshore wind in the Baltic Sea. The consortium comprises Copenhagen Airports, A.P Moller- Maersk, DSV Panalpina, DFDS and SAS. Together, these companies form both the demand and supply side of what will become one of the world’s largest electrolyser and sustainable fuel-production plants. The facility is intended to produce renewable hydrogen for buses for Movia, heavy-goods vehicles for DSV Panalpina, renewable methanol for Maersk and renewable jet fuel for SAS airplanes and air transport out of Copenhagen Airport. The facility could be developed as soon as 2023 and may have an electrolyser capacity of 1.3GW – the world’s largest such facility

Opportunities of the future

When it comes to clean and green energy, we’re still a long way from where the world needs to be. But initiatives like this encourage more investment in new technologies and takes us a step closer to net zero. A greener, more climate-conscious future awaits us in a post-Covid-19 world. Investors need to sit up and take note. A post-pandemic recovery is looking increasingly green.