



2021 Year-end CIO Letter

Dear investors and friends,

We are pleased to report a strong finish to our third year running Climate Action outperforming in the fourth quarter, and posting another solid year of absolute performance as we approach our fourth year. After beating the MSCI by over 20% percentage points per year for the last three years, we gave back some of the excess returns from 2020's exuberance as the broader markets rallied strongly in the first half of the year. Climate Action posted a 14.59% return net of fees compared to 21.81% for the MSCI World Index. Strong performance continued as we saw better-than-expected results reported by most of the companies we hold. Earnings season was particularly impressive despite several of our companies reporting supply constraints, logistical issues, and raw material price increases. At year-end many of our companies' order books are at record levels and demand for goods and services offered by our companies is higher than ever.

Our top contributors came from a variety of sectors, including semiconductors, lithium mining, electric vehicles (BYD), and water technology. Detractors were concentrated in the renewable equipment sector, specifically solar panel makers and wind turbine blade manufacturers. 2021 saw significant profit-taking in the entire clean energy sector after an exceptionally strong 2020, and we took advantage of over-corrections to add to existing positions and to build new ones.

Our recent performance was achieved against the background of a disappointing COP-26 in Glasgow. Reading the final communiqué, one might feel justified in qualifying the summit a failure. However, there were many achievements to highlight, including:

1. A commitment to reduce methane emissions by 30%, equivalent to 145 megatons per year;
2. An agreement in principle by many countries to phase out (or, for India, phase down) coal and inefficient fossil fuels over time;
3. A promise to fulfill a prior pledge of \$100 bn a year to fund developing nations' efforts to transition to clean energy; and,
4. A broad framework for governments to adopt carbon pricing and trading.

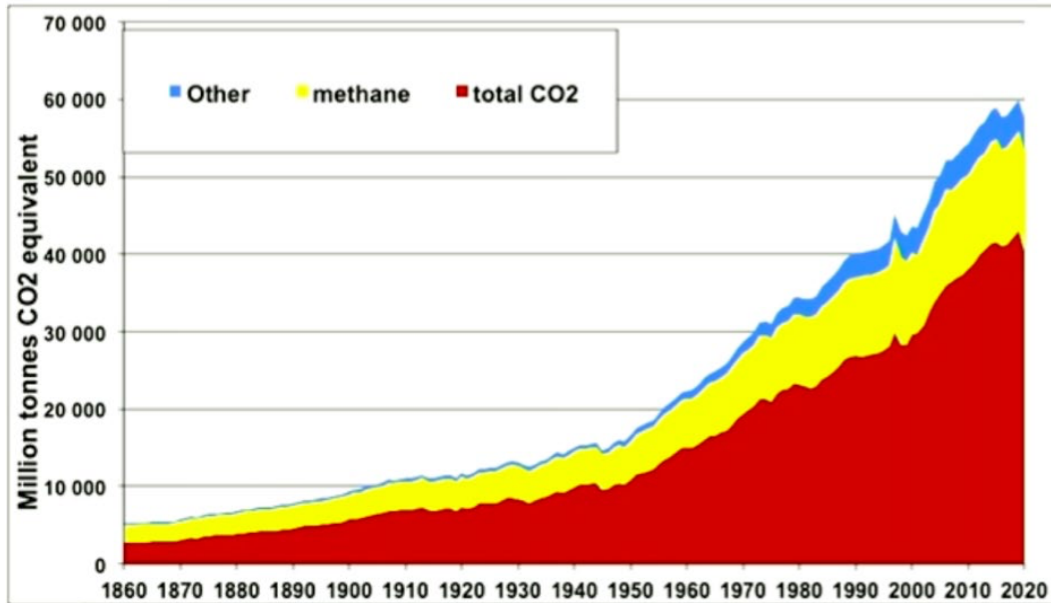
Source: https://unfccc.int/sites/default/files/resource/Overarching_decision_1-CP-26_1.pdf

While much of the above sounds non-binding and ultimately non-enforceable, perhaps the most important objective was simply to raise awareness of the threat to our collective future caused by greenhouse gases. Echoing the alarming "code red for humanity" report title issued by the IPCC last August, and its even more worrisome October 26 report showing a trajectory to 2.7 degrees, the final communiqué makes ample reference to fossil fuels as the root problem of the emergency situation we face today.

<https://www.ipcc.ch/assessment-report/ar6/> <https://www.unep.org/resources/emissions-gap-report-2021>



As the chart below suggests, GHG emissions have continued unabated despite increasingly dire warnings issued at every COP and even with the economic downturn caused by the COVID-19 pandemic. It would be easy to conclude that the next few years will be no different.

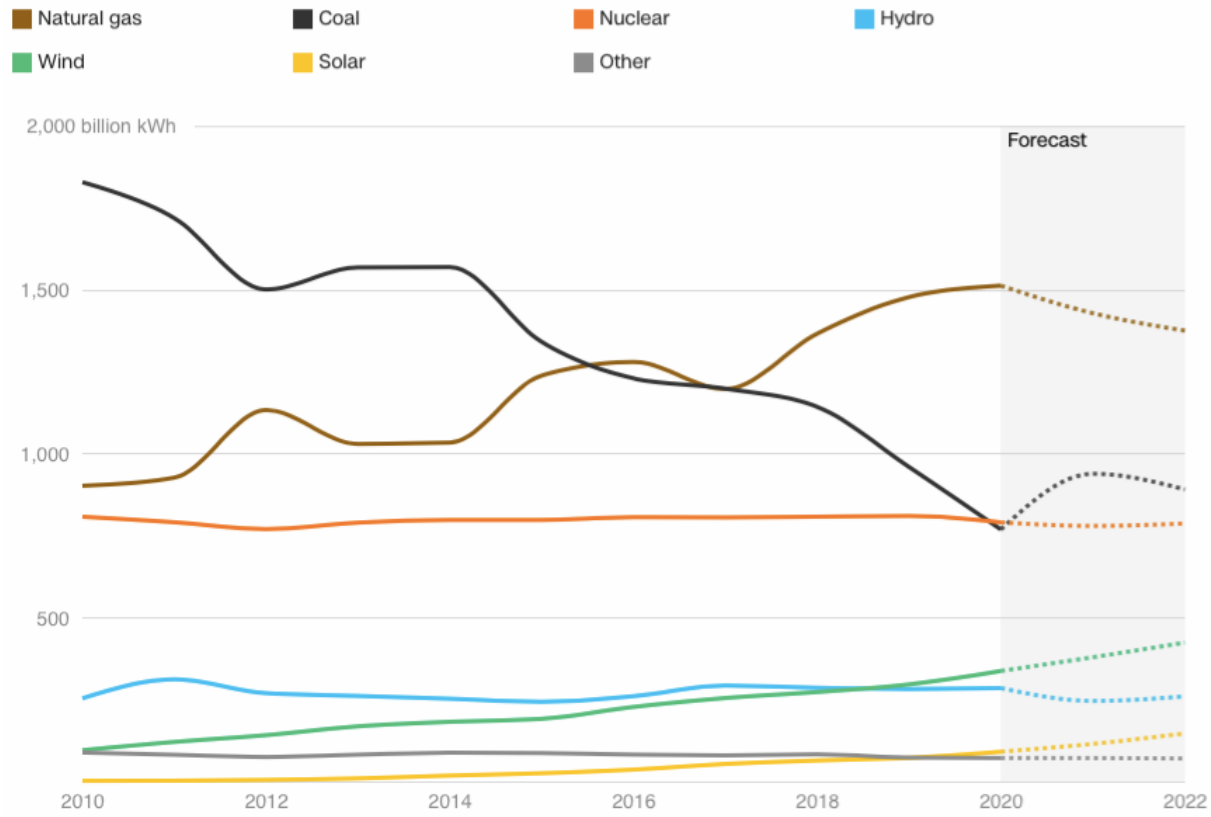


Why is it so difficult to cut back on emissions? The US example provides a few clues. Looking at the chart below, it is clear that natural gas has taken over coal, and renewables are nowhere near replacing either form of power. Worse, with gas prices escalating in recent months, coal is now expected to make a comeback. Meanwhile, the US has exhausted all potential new large sources of hydro development and can at best hope for a slow decline in this clean source of energy, as is the case in the rest of the world.

The above analysis can easily be extended to other regions of the world. Most countries are not able to grow renewables fast enough, still rely disproportionately on fossil fuels and no longer have any potential new hydropower left to develop. It is therefore no surprise to witness the rehabilitation of nuclear energy. Our portfolio holds several companies involved in nuclear power, which have been out of favor for most of the last few years and are now making a comeback. Companies that were hostage to politicians' electoral ambitions, and faced threats of plant closures for several years, are now viewed as holding the key to energy independence and clean power. We welcome this change of perspective and urge our readers to look at the scientific reports on the real risks versus perceived risks of nuclear energy.



Power generation by method, in billion kilowatt-hours (kWh)

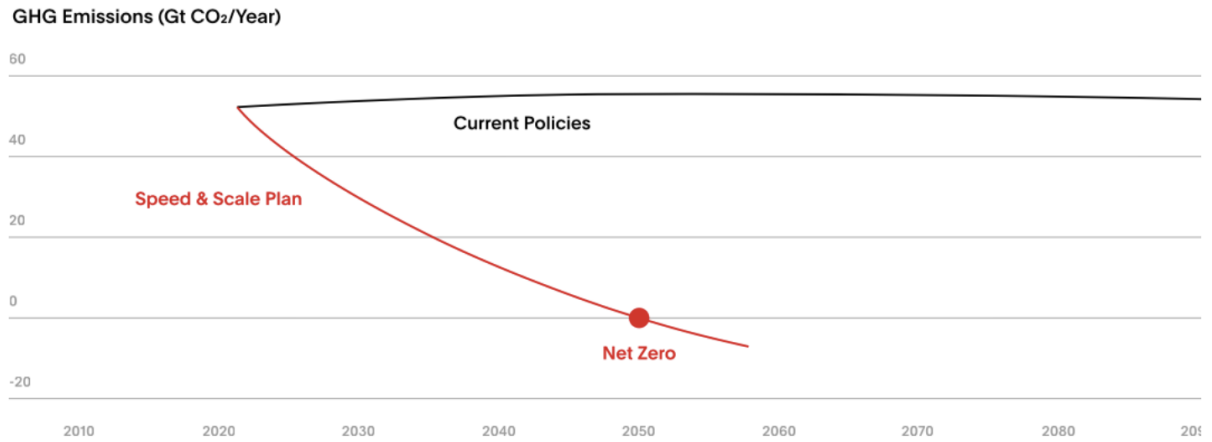


Source: US Energy Information Administration

" Large quantities of carbon-free electricity will be necessary if we are to have a low carbon future, and nuclear power plants reliably do this."

Source: *Become a Nuclear Safety Expert* by Herschel Specter (see attached pdf below)

To end on a positive note, many initiatives are coming to light just as COP-26 is ending. While governments seem to have failed to reach an agreement on pressing issues, other entities including corporations, NGOs, universities, cities, and individuals are showing a new impetus to achieve a net-zero economy in the shortest time frame possible. Looking back, the US under the Trump administration still took many pro-environment decisions at the state and private sector level despite a non-supportive, and at times hostile federal government. Regardless of the outcome of COP-26, there is evidence of action being taken. Over the last few weeks, dozens of corporate leaders and heads of research organizations have come together with their plan to move to a net-zero economy, as illustrated below:



Source: <https://speedandscale.com>

While the above objective seems ambitious, we have no choice other than putting together all our resources to achieve it. As inspiration we would like to quote the following words by Salvador Dalí: "Intelligence without ambition is like a bird without wings"

- Ariane