Climate Pulse

Climate change risks and opportunities

By Mamadou Abou-Sarr

The heat After COP26, where next?

Given the increasing severity of the climate crisis, I was hoping for a 'kumbaya moment' at the COP26 climate summit in Glasgow last month. But the 'pact' that emerged was timid.

The COP proved to be a battle about semantics – we saw arguments about whether coal was to be phased out or phased down. We are left with a note "welcoming", "urging", and "inviting" action, when what is needed is firm commitments.

However, there were some welcome announcements and breakthroughs, and my conviction in climate change as a fundamental driver of valuations for companies is stronger than ever.

More than 100 countries signed up to the Global Methane Pledge, which aims to limit methane emissions by 30% by 2030 compared with 2020 levels. Methane is a far more potent greenhouse gas than carbon dioxide. For more information see Climate Science Made Simple, overleaf.

Another breakthrough concerned carbon markets. While carbon markets have been steadily expanding in various parts of the world in recent years, COP26 saw an agreement that should help to make it easier to begin to link these markets, potentially paving the way for a global carbon market.

Carbon markets – which involve putting a price on carbon to encourage companies to decarbonise – are a key tool in the battle against climate change.

It's not possible to address a global issue with a patchwork of fragmented markets, as is currently the case.

The price of carbon in the world's biggest carbon market, the EU's emissions trading scheme, has risen to more than €80 (\$90) per tonne, up from about €30 a year previously.

The rise in price illustrates the increasing importance of climate change as a business and policy imperative. But many experts say prices will need to rise significantly higher in order to meet the goals of the Paris Climate Agreement, to limit temperature rises to 1.5C above preindustrial levels. A global carbon market will help by driving efficiencies in the market and sending a uniform price signal. A recent report by PwC and the World Economic Forum found that a global carbon price could reduce greenhouse gas emissions by 12%. The cost of implementation would be less than 1% of GDP and could be offset by avoided economic losses associated with global warming and potential productive uses of carbon revenues.

Looking ahead, companies and investors will need to pay increasing attention to emissions and the cost that will be associated with them. However, there are currently limited ways for investors to play this theme. We have seen a number of exchangetraded products launched in recent years, and I am expecting more innovation.

While I am a supporter of carbon markets, I also believe that, alone, they will be insufficient to solve climate change. While I am a supporter of carbon markets, I also believe that, alone, they will be insufficient to solve climate change.

We are dealing with a global problem that requires a concerted response from policymakers, communities, businesses and investors. A combination of diplomacy, science, multilateralism, urgency and finance will be needed.

It would be transformational if we were to step back from the political wrangling that has hindered COPs in the past and applied some of the lessons learned from the response to the Covid-19 pandemic, when scientists and business leaders worked in tandem, with a sense of urgency, backed by a policy framework to develop vaccines.

It was great to see so many businesses and investors driving the agenda at COP26. Their input will be vital.

At V-Square Quantitative Management, we focus on creating innovative products to help tackle climate change related risks in portfolios and create sustainable returns for investors.



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Methane

Methane (CH₄) is more than 25 times as potent as carbon dioxide (CO₂) at trapping heat in the atmosphere. Luckily, CH₄ dissipates faster than CO₂, which persists in the atmosphere and affects the climate for thousands of years.

Methane is emitted during the production and transport of coal, natural gas, and oil, as well as livestock and other agricultural practices, land use and the decay of organic waste in municipal solid waste landfill sites. More than half of methane emissions come from human activities. The Environmental Defense Fund found that at least 25% of today's warming is caused by methane from human actions.

Methane is a more powerful and short-lived greenhouse gas compared with carbon dioxide. Achieving significant reductions would have an immediate and significant effect on atmospheric warming potential, according to the US Environmental Protection Agency.

Upgrading the infrastructure associated with oil and natural gas can reduce many of the leaks that contribute to methane emissions.

The pulse

| As of 10/29/21 | | Performance (Net total return) | | | | | |
|--|--------------|--------------------------------|--------|---------|--------------------------------------|--|--|
| | Year to date | 3 Year | 5 Year | 10 Year | Since Nov 29 2013 (Annualized) | | |
| MSCI WORLD | 19.44% | 18.20% | 15.45% | 12.19% | 10.82% | | |
| MSCI WORLD CLIMATE CHANGE | 20.97% | 20.76% | 17.17% | | 12.16% | | |
| MSCI WORLD LOW CARBON LEADERS | 19.57% | 18.47% | 15.66% | 12.52% | 10.98% | | |
| MSCI WORLD CLIMATE PARIS ALIGNED | 19.67% | 20.01% | 16.79% | | 12.32% | | |
| MSCI EM (EMERGING MARKETS) | -0.27% | 12.30% | 9.39% | 4.88% | 5.20% | | |
| MSCI EM (EMERGING MARKETS) CLIMATE CHANGE | -0.83% | 13.51% | 9.91% | | 5.99% | | |
| MSCI EM LOW CARBON LEADERS | -0.65% | 11.66% | 8.93% | 4.72% | 4.82% | | |
| MSCI EM CLIMATE PARIS ALIGNED | 0.13% | 14.63% | 10.01% | | 5.72% | | |
| SOLACTIVE GBS DEVELOPED MARKETS LARGE & MID CAP INDEX | 19.53% | 18.24% | 15.45% | 12.21% | 10.84% | | |
| SOLACTIVE ISS ESG DEVELOPED MARKETS PARIS-ALIGNED BENCHMARK INDEX | 5 17.67% | 18.41% | 15.65% | | | | |
| SOLACTIVE ISS ESG DEVELOPED MARKETS | | 17.98% | 15.26% | | | | |
| SOLACTIVE GBS EMERGING MARKETS LARGE & MID CAP INDEX | -0.55% | 11.91% | 9.30% | 5.22% | 5.57% | | |
| SOLACTIVE ISS ESG EMERGING MARKETS PARIS-ALIGNED BENCHMARK INDEX | 1.23% | 13.34% | | | | | |
| SOLACTIVE ISS ESG EMERGING MARKETS CLIMATE TRANSITION BENCHMARK INDEX | 1.60% | 12.80% | | | | | |

Equity Indexes

| As of 10/29/21 | Risk (Annualized Standard Deviation) | | | | | |
|---|--------------------------------------|--------|---------|--------------------------------------|--|--|
| | 3 Year | 5 Year | 10 Year | Since Nov 29 2013 (Annualized) | | |
| MSCI WORLD | 17.93% | 14.88% | 13.18% | 13.68% | | |
| MSCI WORLD CLIMATE CHANGE | 17.91% | 14.92% | | 13.70% | | |
| MSCI WORLD LOW CARBON LEADERS | 18.01% | 14.95% | 13.28% | 13.75% | | |
| MSCI WORLD CLIMATE PARIS ALIGNED | 17.75% | 14.74% | | 13.56% | | |
| MSCI EM (EMERGING MARKETS) | 18.56% | 16.65% | 16.47% | 16.52% | | |
| MSCI EM (EMERGING MARKETS) CLIMATE CHANGE | 18.49% | 16.73% | | 16.46% | | |
| MSCI EM LOW CARBON LEADERS | 18.17% | 16.37% | 16.29% | 16.30% | | |
| MSCI EM CLIMATE PARIS ALIGNED | 18.81% | 16.93% | | 16.59% | | |
| SOLACTIVE GBS DEVELOPED MARKETS LARGE & MID CAP INDEX | 18.74% | 15.50% | 13.92% | 14.23% | | |
| SOLACTIVE ISS ESG DEVELOPED MARKE PARIS-ALIGNED BENCHMARK INDEX | TS 17.68% | 14.69% | | | | |
| SOLACTIVE ISS ESG DEVELOPED MARKE | | 14.90% | | | | |
| SOLACTIVE GBS EMERGING MARKETS LARGE & MID CAP INDEX | 17.26% | 15.46% | 15.06% | 15.11% | | |
| SOLACTIVE ISS ESG EMERGING MARKET PARIS-ALIGNED BENCHMARK INDEX | S 17.00% | | | | | |
| SOLACTIVE ISS ESG EMERGING MARKET CLIMATE TRANSITION BENCHMARK IND | | | | | | |

Fixed-Income Indexes

| As of 10/29/21 Performance (Net total return) | | | As of 10/29/21 | Risk (Annua | k (Annualized Standard Deviation) | | | | | |
|---|--------------|--------|----------------|-------------|--------------------------------------|--|--------|--------|---------|--------------------------------------|
| | Year to date | 3 Year | 5 Year | 10 Year | Since Nov 29 2013 (Annualized) | | 3 Year | 5 Year | 10 Year | Since Nov 29 2013 (Annualized) |
| MSCI USD HY CORPORATE BOND | 3.86% | 7.13% | 5.65% | 6.25% | 5.21% | MSCI USD HY CORPORATE BOND | 10.01% | 7.93% | 6.86% | 8.61% |
| MSCI USD HY CLIMATE CHANGE CORPORATE BOND | 2.91% | 7.38% | | | 5.28% | MSCI USD HY CLIMATE CHANGE CORPORATE BOND | 7.74% | | | 6.72% |
| MSCI USD IG CORPORATE BOND | -1.27% | 7.96% | 4.70% | 4.57% | 4.97% | MSCI USD IG CORPORATE BOND | 6.40% | 5.45% | 4.83% | 5.76% |
| MSCI USD IG CLIMATE CHANGE | -1.68% | 7.92% | 4.67% | | 4.95% | MSCI USD IG CLIMATE CHANGE | 5.90% | 5.09% | | 5.35% |

Source: MSCI Inc - https://www.msci.com/

ISS ESG - <u>https://www.issgovernance.com/esg/ratings/</u> Solactive AG - <u>https://www.solactive.com/indices/</u>



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