

Climate change and the role of index investing

As our attention turns to COP 26, the urgency of the issue of climate change has never been more palpable. Between 2011 and 2020, we experienced the warmest decade since records began¹. Years of unsustainable practices pursuing economic growth at any cost have brought our planet to breaking point.

Today, few would disagree that the need to take action on climate change is pressing and we have only ten years, at most, before reaching the point of no return. This has triggered a rapid acceleration in the adoption of climate-focused investment solutions throughout the world, and particularly so in Europe. However, as we all seek to take necessary steps to curb climate change, what role does financial services play? And how can investors take steps in the right direction?



Context of climate investing

Signatories of the Paris Agreement at COP 21 in 2015 committed to a common goal of limiting global warming to within 2°C of pre-industrial levels while striving to keep it to 1.5°C. The 2015 conference² highlighted the urgent need for joint and international climate action to achieve a rapid reduction in emissions in order to reach emission neutrality by 2050. It also raised public awareness of the need for rapid and long-term climate and environmental action to meet the EU's international commitments to tackling climate change and to reach a more sustainable economy. A massive mobilisation of all sectors and economic actors is now required, with incentives to redirect investments and capital flows, whether public or private, to less carbon-intensive business activities.

Regulation, a driving force in climate indexing

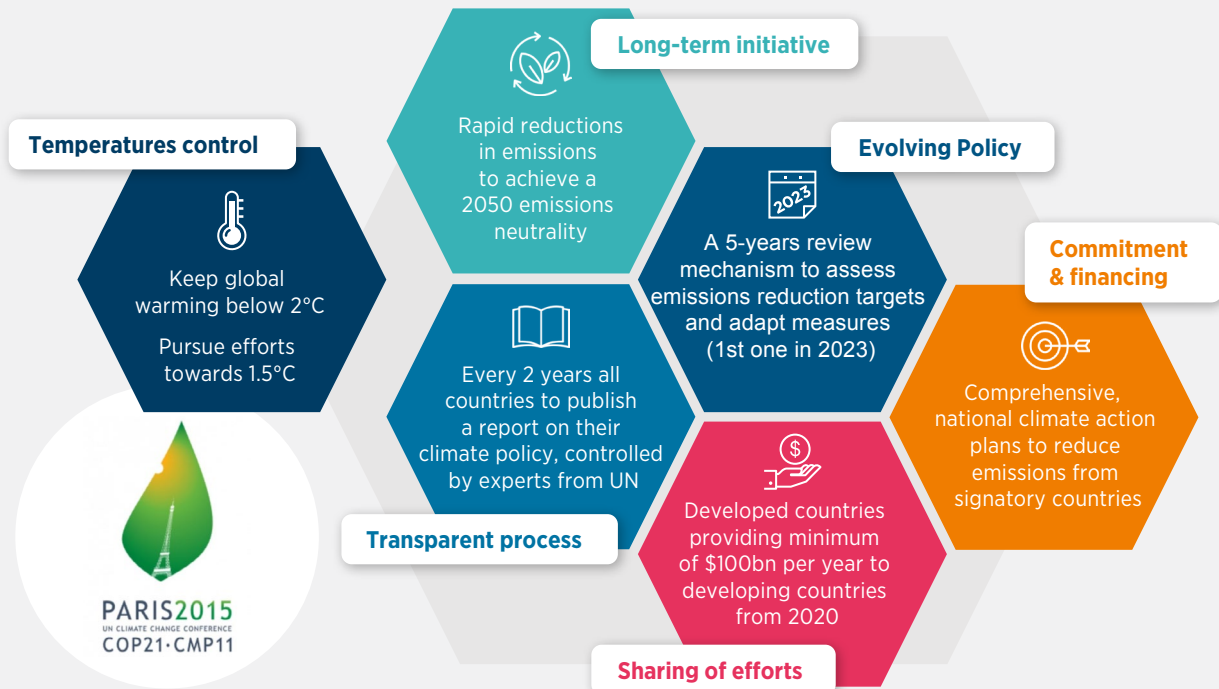
In keeping with the objectives of the Paris Agreement, the European Union made sustainable development a top priority in its economic and financial policy. To this end, in 2018 the European Commission set up a group of technical experts (TEG)³ to work on the development of a framework of measures to steer capital markets and investments more generally towards an ecological transition.

In March 2018, in collaboration with the TEG, the European Commission adopted and published its "Action Plan on Sustainable Finance" (the "EU 2018 Action Plan")⁴, an ambitious and innovative plan bringing together ten key actions to promote sustainable finance. As part of this programme, the Benchmark regulation (BMR) was updated with two key initiatives:

- The creation of two new categories of benchmark under the BMR - Climate Transition Benchmarks (CTBs) and Paris-aligned Benchmarks (PABs)
- Sustainability disclosure requirements for benchmark administrators regarding the methodologies and ESG characteristics of ESG indices

Ultimately, the European Commission's objective when updating the BMR was four-fold: to make the benchmarks more comparable, to provide a useful investment tool for investors, to increase the transparency of investment impact and to discourage green washing.⁵ ■

Chart one: The Paris Agreement: first universal climate agreement



Source: Amundi ETF, Indexing & Smart Beta as of January 2021.

Looking at the EU climate indices

The European Commission introduced two climate benchmarks with different climate intensities to allow investors to incorporate climate in a way that suits their objectives.⁶ The Climate Transition Benchmarks (CTB) and the Paris Aligned Benchmarks (PAB) must comply with strict minimum requirements to achieve their climate objectives.

Both types of index require the exclusion of companies that have a negative impact on key environmental aspects such as climate change, pollution, marine protection and biodiversity⁷ as well as companies that are involved in controversial weapons.

Beyond this, the primary differentiation between the two indices relates to their respective levels of climate intensity. The PAB integrates a more stringent carbon

footprint reduction and a more restricted investment universe than the CTB - we can see this difference visually in chart two.



The importance of climate indices

The establishment in 2020 of the new climate indices within the EU regulation acknowledged of the importance of redirecting passively invested assets in addressing the climate emergency. They also afforded index investors a comprehensive and transparent index approach to addressing climate change.

We believe that the democratisation of climate investing is essential both for investors and for addressing climate change. We believe that the impact of low-carbon investing will increase as it become more widely implemented. As indexing offers the benefits of simplicity and cost efficiency, the new EU indices will allow extensive adoption by index investors.

The PAB limits specific activities considered high carbon emitters such as coal exploration and processing or electricity generation.

As with all other benchmarks, and in line with BMR requirements, the benchmark administrators of CTB and PAB indices must comply with a high level of transparency on their methodologies, through the formalised reporting accessible to investors. This reporting is, however, much more detailed than that required for other indices;

It includes:

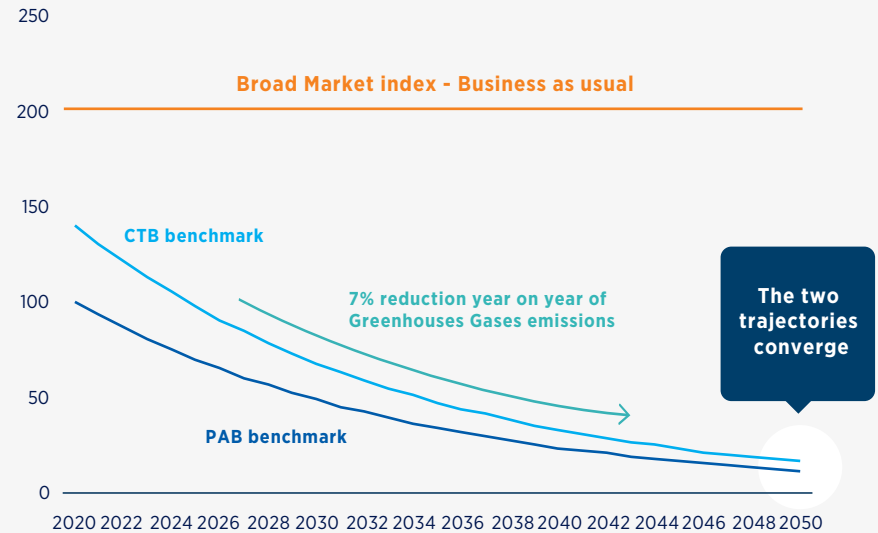
- Information on the methodology and data used
- Reporting on the decarbonisation strategy of the index as well as declaring if these objectives are not achieved, the reasons for this failure, as well as the means implemented in the following period to remedy the problem

Significantly, the two climate benchmarks incorporate new attributes to allocate capital towards the most climate-virtuous companies:

- They integrate a backward-looking approach, using reported historical data, and focus on Scopes 1, 2 and 3 upstream (supply chain for operations) and downstream (products) greenhouse

Chart two: CTB and PAB indices have the same long-term objectives but different carbon footprint trajectories

Carbon emissions intensity, tCO₂/mlnUSD sales



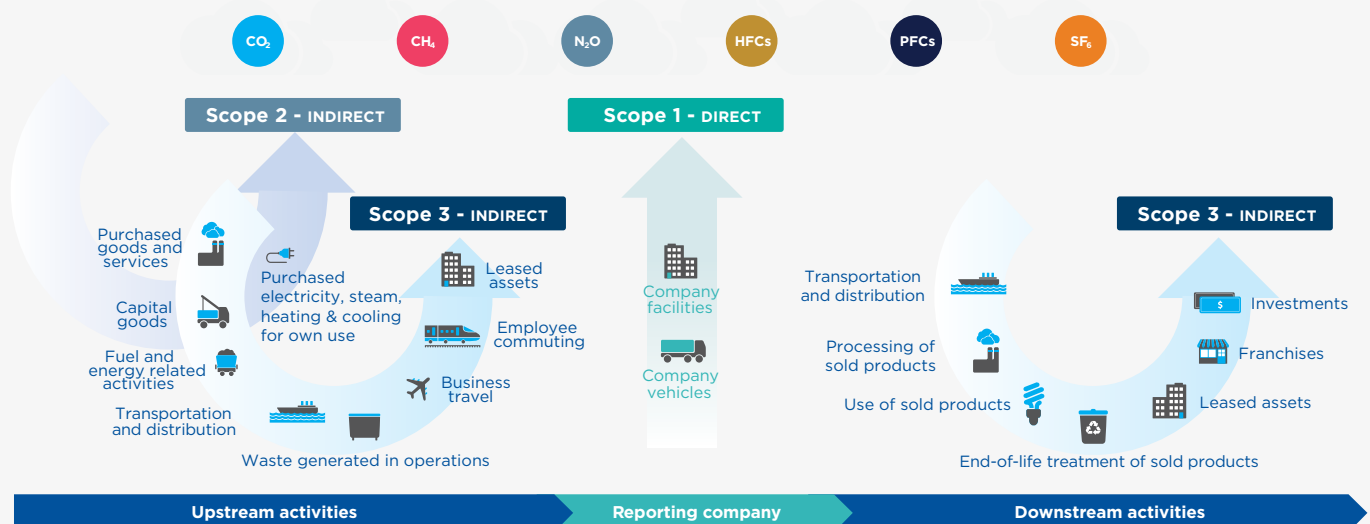
Source: Amundi as of end of March 2021, for illustrative purpose only.

gas (GHG) emissions with an explicit allocation towards the most climate virtuous companies – see chart three for an explanation of Scopes 1, 2 and 3.

Together, the benchmarks offer a structure for index providers and asset managers to facilitate widespread, cost-effective climate investing. ■

- They take into account companies' climate strategies over the long run and their forward-looking commitment towards carbon emission reductions

Chart three: GHG Protocol scopes and emissions across the value chain



An evolving sector

Low-carbon investing is not entirely new, and we see these new indices as the “second generation” and part of an evolution in climate investing.

For example, Amundi co-developed the MSCI Low Carbon Leaders index series with FRR and AP4 in 2014 at this time, the data available allowed us to consider

historical direct greenhouse gas emissions. This second generation of climate change indices, reinforced by the regulatory framework of the CTB and PAB requirements, provides a more comprehensive approach to investing for positive impact by considering all GHG emissions including scope 3, and being in a position to consider these from an historical and future perspective.

Using one of the new CTB or PAB climate change indices gives investors comfort in knowing that the measurement of the carbon intensity is interpreted through the full value chain and that the management of the index takes a more proactive and future focused approach. ■

Delivering on expectations

It is now a little over a year since the introduction of the CTB and PAB and the launch of the first funds and ETFs managed to indices meeting their requirements. So for many the question will be, how are they working and do they really offer a reduction in carbon versus the universe.

Amundi launched its first PAB ETF, tracking the EURO iSTOXX Ambition Climat PAB Index, in June 2020, quickly followed by a range of equity CTB and PAB ETFs.

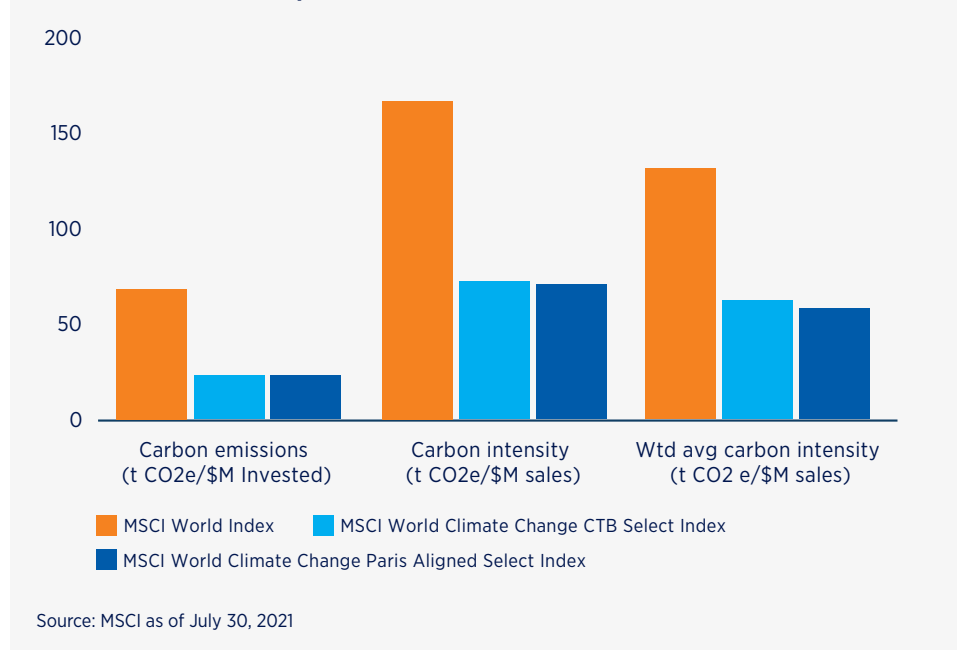
In assessing the impact of these strategies we take a look at the two Amundi Climate ETFs that have attracted the most investor interest – these ETFs both offer World equity exposure, tracking the MSCI World Climate Change Paris Aligned Select Index (PAB index) and the MSCI World Climate Change CTB Select index (CTB index).

The primary area we look at based on the requirements of the benchmarks is the index carbon emissions and the index carbon intensity as shown in chart four which shows a marked reduction versus the parent index.

Aligning with objectives

Investors have many reasons to choose climate ETFs – it is for this reason that we believe it is important to offer a range of solutions to meet different needs. For example, for some investors the priority in selecting a climate ETF could be managing climate-related risks such as stranded assets.

Chart Four: Climate Footprint Metrics



From that perspective, the data shown in chart four demonstrates a clear reduction in exposure to companies that:

- own coal, oil or natural gas reserves used for energy purposes (fossil fuel reserves)
- derive some of their revenue from thermal coal mining or power generation
- derive revenues from activities such as shale gas, oil sands or coal bed methane.

These are key industries that may suffer premature write-downs or devaluations as we move from fossil-fuel lead power to climate-friendly solutions.

In charts five and six we see the impact of this on the potential carbon emissions and the stranded assets exposure of the three indices. With the CTB and PAB significantly lower than the universe.

Chart Five: Potential CO2 emissions

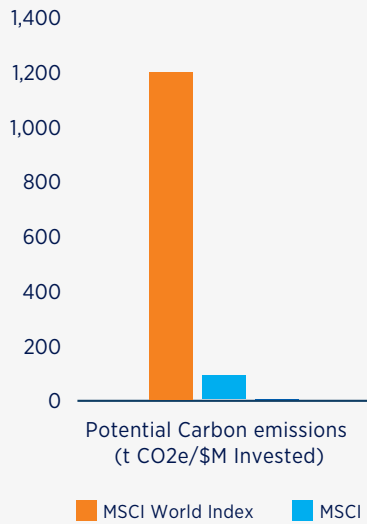
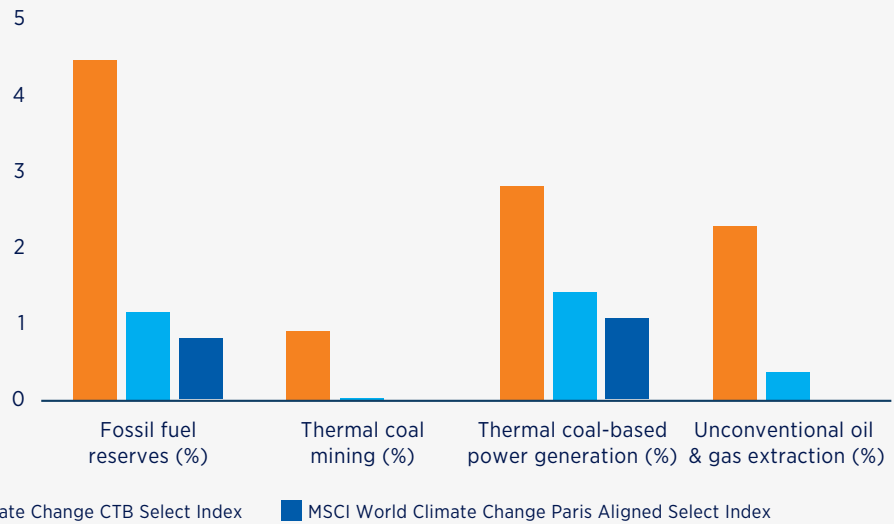


Chart Six: Stranded Asset Exposure



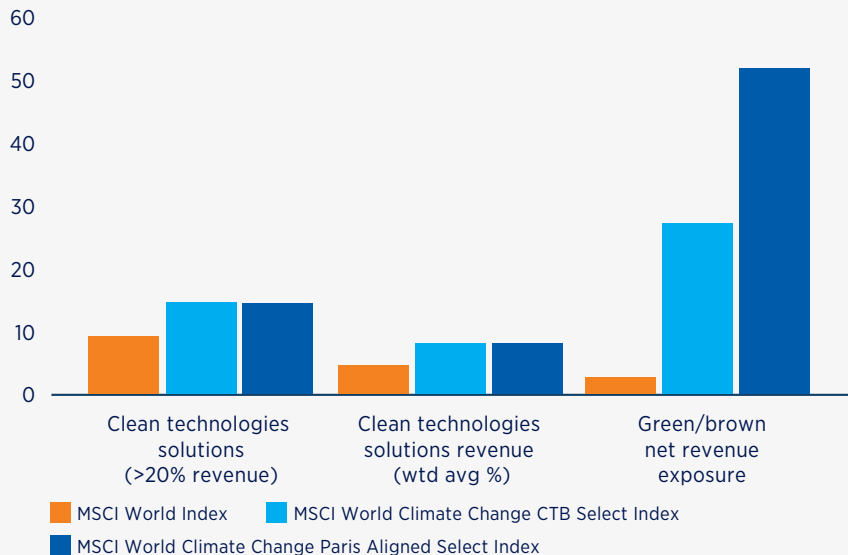
Source: MSCI as at July 30, 2021

Another reason for investing in climate may be an investor’s belief that over the long-term the sector offers return opportunities related to innovation and development. As we see in Chart Seven, the CTB and PAB indices have an increased exposure to clean technology solutions where companies are deriving their revenues from any of the five clean tech themes: alternative energy, energy efficiency, green building, pollution prevention, or sustainable water.

It is also clear that the ratio of the weighted average clean technologies solutions revenue (%) or “Green Revenue” to the weighted average fossil fuel revenue (%) or “Brown Revenue” differs between the indices, with the PAB index having a significantly higher weighting towards green revenues than the universe. This exposure could offer potential to future innovation in climate-friendly sectors.

Ultimately, these new climate indices provide a more comprehensive approach for index investors to introduce climate investing into their portfolios. We have

Chart Seven: Exposure to clean technology solutions



Source: MSCI as at July 30, 2021

seen strong demand within the ETF sector and enthusiasm from investors who now have the choice of almost 50 different low carbon, fossil fuel free or

climate change ETFs. These ETFs represent over \$11.5bn in assets – 57% of which are flows we have seen in 2021.⁸ ■

Amundi has a comprehensive range of PAB and CTB ETFs covering both equity and fixed income and a range of geographical exposures. For more information visit amundiETF.com/climate.

ESG +	ESG ++	ESG ++	Climate ++	Climate +++
<p>Broad market exposure with enhanced ESG score</p> <p>World – Europe – EMU – Germany – US – EM – Japan</p>	<p>Best-in-class approach with a controlled tracking error</p> <p>World – Europe – EMU – US – EM</p>	<p>Best-in-class approach combined with strict negative screening</p> <p>World – Europe – EMU – UK – US – Pacific Region – Japan – EM</p>	<p>Transition towards a low carbon economy with broad market</p> <p>World – Europe</p>	<p>Accelerated transition towards a low carbon economy. GHG intensive activity screen</p> <p>World – Europe – EMU</p>

About Amundi ETF, Indexing & Smart Beta

Amundi is a recognised European leader in the ETF market and offers over 150 ETFs⁹ across all main asset classes, geographic regions and a large number of sectors and themes. Amundi is leading the ESG transformation and its ETF, Indexing and Smart Beta platform is known for its wide range of high-quality, cost-effective ESG solutions spanning equity and fixed income and a range of levels of ESG intensity.

1 World Meteorological Organization, 14 January, 2021

2 See <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>

3 For more information: https://ec.europa.eu/info/publications/sustainable-finance-technical-expert-group_en

4 Source: European Commission https://ec.europa.eu/info/publications/sustainable-finance-renewed-strategy_en, March 2018

5 Source: EU Technical Expert Group on Sustainable Finance – “Final report on climate and benchmarks’ ESG disclosures” dated September 2019

6 Source: European Commission https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-climate-benchmarks-and-benchmarks-esg-disclosures_en

7 Article 9 of regulation 2020/852/EU: climate change mitigation, climate change adaptation, sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control, protection and restoration of biodiversity and ecosystems

8 Source: ETFGI Global ESG ETF and ETP industry insights July 2021

9 Source: Amundi ETF as of end of March 2021

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