Climate risk has become a concrete issue for a wide range of financial players, and there is a sharp increase in the run-up to the COP21. The G20 Financial Stability Board is working on modelling the systemic risk posed by climate change. California prohibited its pension funds from investing in coal shortly after Norway did the same with its sovereign wealth fund. Environmental NGOs are mounting more and more campaigns, and announcements of green investments, portfolio decarbonisation, and shareholder engagement to compel companies to adopt business models compatible with the targeted global warming limit of 2\(^\circ\) Celsius are increasing.

**Investor action**

There are four main forms of investor action: divestment, shareholder engagement, green investments (see page 4) and portfolio decarbonisation (see page 3). These actions follow the joint pressure of high level studies showing increasing risks associated with climate change as well as highly vocal fossil fuel divestment campaigns targeting pension funds and more broadly the financial community.

For the past 14 months, the Novethic research centre has analysed the extraordinary mobilisation of investors on climate change. It has assembled a sample group of international investors whose engagements and initiatives have been closely examined in a study already updated three times. In the last three months alone, 154 new investors have been added to the list, and their total number has increased by 75% since February. The first step for them is to assess the impact of their investments on climate change. This is reflected by the carbon footprint of their portfolios. Today, 132 investors, with assets worth €9.445 trillion (up 10% in three months) have committed to determining this footprint.

<table>
<thead>
<tr>
<th>Actions</th>
<th>July 2015</th>
<th>October 2015</th>
<th>% of the sample group</th>
<th>Assets €trn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divestment</td>
<td>364</td>
<td>486</td>
<td>51%</td>
<td>3.711</td>
</tr>
<tr>
<td>Shareholder engagement</td>
<td>291</td>
<td>303</td>
<td>32%</td>
<td>11.087</td>
</tr>
<tr>
<td>Decarbonisation</td>
<td>16</td>
<td>34</td>
<td>4%</td>
<td>3.324</td>
</tr>
<tr>
<td>Green investments</td>
<td>336</td>
<td>364</td>
<td>38%</td>
<td>20.431</td>
</tr>
</tbody>
</table>

Three-quarters of the sample group are asset owners (pension funds (17%), foundations (17%), religious organisations (23%), local authorities (7%), universities (5%), insurance companies (2%)). While the pioneers tended to be small-scale ethical investors, the number of pension funds has now grown by a substantial 55% in 3 months. More of the 166 pension funds surveyed are divesting from fossil fuels (up 33% in 3 months), and they each have, on average, €38 billion in assets. This is giving greater visibility to the movement. A majority of the most active investors are American or British, but Australians are not far behind, with small pension funds making engagements recently. In the United States, the newcomers are big players, as the volume of assets involved reach €11 trillion. A final point: investors are diversifying their strategies, with one-third using a combination such as divestment with shareholder engagement or green investments.
More assessment services, varied methodologies, and a need for better CO₂ emissions data

The ranks of service providers offering to assess the carbon footprint of investment portfolios have grown a great deal in recent months. Although the earliest on the scene, like Trucost and South Pole Carbon, have performed more than 80% of the assessments reported by investors who choose to communicate on this subject so far, there are now ten or so others proposing similar services. The majority are non-financial rating agencies (MSCI ESG Research, Sustainalytics, INRATE, oekom research and EIRIS), though Bloomberg and some index providers are now engaged in this activity too. Thus, the carbon footprint is progressively becoming standard information provided to investors and made more easily available via classic financial databases. The methodologies, however, are not standardised yet, nor are the emissions data supplied by companies.

Worth noting is the work backed by Carbone4, which wants to go beyond the carbon footprint and integrate in a single ratio the projected emissions, including indirect impacts as well as emissions avoided owing to energy efficiency processes or the use of renewable energies.

The Montreal Pledge was initiated by the PRI in September 2014 to obtain a commitment from responsible investors to measure and disclose their portfolio carbon footprints in time for the COP21.

As of summer 2015, about sixty investors had signed the Pledge, but the movement has picked up steam recently, with the number of signatories rising to over 100 during October. Two-thirds of them are waiting until the last moment to report their carbon footprint data.

Two-thirds of the new signatories are asset managers, including heavyweights like Aviva Investors, HSBC Global AM, ZKB and Union Investments, though there are also institutional investors like Railpen, USS or APG, most of whom are European.

Investors disclose their portfolio carbon footprints

Altogether, 132 investors have committed to assessing the carbon footprint of their portfolios, which contain a total of €9.5 trillion in assets. Forty-five per cent have already disclosed the footprint of all or part of their assets (worth more than €4 trillion). Fifty per cent are asset managers, who are taking the lead in this trend, followed by pension funds (about 30%). The remaining 20% fall into diverse categories.

The main dark spot in this encouraging picture is that only about ten investors give a clear explanation of their methodology. Since there is sharp disagreement over assessment methodologies, this is an obstacle to comparing the data reported by investors. Given the data available, we can say that a majority of investors choose to measure GHG emissions by millions of euros (or another currency) invested, thus limiting their footprint to scopes 1 and 2. Their indirect emissions (scope 3) are not counted, which reduces the assessment’s main impact for certain sectors. They generally present their results by comparing their emissions to those of their benchmark. A presentation of historical trends is less frequent. The figures reported indicate emissions 10% to 60% below the benchmarks. The sharp disparities between results suggest they are partly correlated with the methodologies used.

As for the best approaches, the AFD (Agence Française de Développement) can be cited for the level of detail in its methodology and ASN Bank for setting an objective of carbon neutrality for its portfolios by 2030.
Low carbon investments

Portfolio decarbonisation engagements

Decarbonisation is one of the strategies available to investors who want to finance a low-carbon economy. It can be applied to traditional portfolios or to index-based mandates. Proof of its growing popularity, this strategy has been adopted today by 34 investors with a combined €3.324 trillion in assets, compared with just 16 investors three months ago. These are major players. Most of them are institutional investors, two-thirds of which are pension funds, with an average of €60 billion in assets. Half of these investors have opted for a specific engagement, while the other half have chosen to join the Portfolio Decarbonization Coalition supported by the UNEP FI. Two-thirds of these investors combine decarbonisation with shareholder engagement and/or green investments, with divestment used by a minority.

The sample group can be divided into three categories:

• **Asset managers**, which propose low-carbon strategies of the «best-in-class» variety designed to optimise the performance of funds without fundamentally changing their sector-based allocation. To accomplish this aim, they generally offer index funds that replicate low-carbon indices. The choice has grown considerably in recent months, with indices marketed by leading providers of traditional indices like MSCI, S&P, DJI, and FTSE as well as specialised companies like Solactive and ET Index, and innovators in the field like Edhec Risk, which is bringing out the first smart green indices. Altogether, a dozen families of specialised indices now allow investors to make passive management allocations based on low-carbon strategies no matter what their area of investment.

• **Large pension funds** – for example, Sweden’s AP4, Britain’s BT PS and EAPF, and France’s ERAFP, FRR and IRCANTEC – are choosing to allocate a growing share of their assets to funds based on low-carbon strategies. Even if these allocations do not yet represent a majority of their portfolios, they still add up to several hundred million or even, in some cases (ERAFP and FRR), more than a billion euros.

• **Last, financial institutions** like ABP and the Caisse des Dépôts in France. They have decided to shift the portion invested in equities in their portfolio, by setting quantitative targets. Their aim is to reduce their indirect emissions by between 20% and 50% by 2020. The EAPF and ASN Bank, two more modest-size players, are pursuing more ambitious goals: the former has aligned its strategy with the 2°C global warming limit and the latter is aiming to achieve carbon neutrality for its investments by 2030.

The UK Environment Agency Pension Fund (EAPF) is the first to announce a low-carbon asset management strategy aligned with the objective of keeping global warming below 2° Celsius. Dawn Turner, Head of Pension Fund Management at EAPF, talks to us about this pioneering engagement.

**What led you to choose this strategy?**

Our role as the pension fund of a UK environmental agency is twofold. First, we are well placed to benefit from all the research demonstrating the need to rapidly move toward a low-carbon economy. Second, we are expected to set the example. That’s why we have been pursuing a responsible investment policy for the past ten years. It has served as a basis for defining our road map. Right from the start, we wanted it to be ambitious regarding the climate as well as financially realistic, since we manage €4.1 billion for our 40,000 members. We are convinced that climate change is a real, long-term financial risk and that we have a legal responsibility to address it.

**What are the key features of the ‘2 degrees’ investment strategy?**

There are three: green financing, to which we will allocate 15% of our assets by investing in low-carbon and energy efficiency or adaptation projects. Ultimately we want to allocate a quarter of our assets to the financing of a clean and sustainable economy through all asset classes. The second aspect is the future decarbonisation of our portfolios. That means we will decrease by 90% emissions related to coal and by 50% those related to gas by 2020, based on our current exposure measured in relation to our benchmark at 31 March 2015. We think selective divestment from certain companies is a good way to do that, but we believe that effective engagement with the majority of them is indispensable to move toward a low-carbon economy. The last dimension of the strategy consists in working energetically with all parties – asset owners, asset managers, researchers, regulators and others – to increase the volume of assets that are managed taking into account the impacts of climate change.
Several shades of **green investments**

**364 investors** with more than **€20.4 trillion** in assets say they want to invest in the financing of the green economy. It is hard to get a clear picture of the concrete actions these announcements might translate into, as very often only general engagements or examples of projects are mentioned. However, some of these investors provide enough details to know what the main investment themes are. The primary one is the area of green infrastructures, including renewable energies (28%), green bonds (17%) and energy efficiency (14%).

**Green bonds:** promising engagements

The green bonds market has developed rapidly over the last two years and is now an integral part of many low-carbon investment strategies. Green bonds are indeed a good way to make bond portfolios more environmentally friendly. An analysis of the sample group surveyed by the Novethic research centre reveals that **117 investors**, with **€17.5 trillion** in assets, are openly in favour of them. Some have made specific engagements in this market, 26 have joined the Green Bond Principles, 17 support the Green Bonds & Climate Bonds Statement carried by the Climate Bonds Initiative (CBI), and 27 are signatories to the Statement of Investor Expectations proposed by US-based CERES. Most of these investors give little precise information about their policies, with the exception of a handful that are the most engaged. These include the California State Treasurer’s Office (manager of the CalPERS and CalSTRS pension funds), which says it has already invested €1 billion in green bonds, and the Swedish pension fund AP3, which has allocated 5% of its bond portfolio (about €140 million) to them for several years. A few commitments are also noteworthy:

- Deutsche Bank, which invested €200 million in early 2015, has committed to allocating €1 billion to green bonds
- KFW announced in April 2015 that it was creating a green bonds portfolio with a target amount of over €1 billion
- Zurich Insurance Group has set an objective of investing €2 billion in green bonds.

**Climate: Investors take action**

**A Novethic research centre study.**

This paper is the short update of a more in depth study published in September 2015 by Novethic. You can find it on [novethic.com/reports](http://novethic.com/reports). Please also visit [Carbon-Risk.com](http://Carbon-Risk.com), first pedagogical web app that shows the carbon intensity of each country, the amount of unburnable fossil fuels and how states, investors and companies commit for preserving the climate. The detailed information about this study’s investor sample is fully integrated and regularly updated on Carbon Risk.

Novethic is a source of expertise on the development of a responsible economy. A Caisse des Dépôts subsidiary created in 2001, its role is to contribute to the debate and analyse the economic and financial impacts of today’s major environmental and social issues. Its website, Novethic.fr, offers a wide range of content, making it an unequalled information tool and documentary resource. In particular, the website proposes the Novethic research centre’s work on responsible investment. These studies, published in French and English, analyse how environmental, social and governance (ESG) criteria are being integrated into asset management and how they are serving as benchmarks for investors. Novethic has also created labels for financial products (SRI and green funds) since 2009.

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