Investing for our Future: Mobilizing Investors and Innovating against Climate Change

In light of the increasingly visible impacts, climate change-related risks can no longer be overlooked as an issue to be dealt with by non-governmental actors. Growing evidence of climate change's impacts on both the environment and humanity have held media attention, and the 21rst Conference of Parties (COP21)[1] has put the global energy transition at center stage. Building off the findings of our research, we believe that faced with capital preservation objectives, both investors and us, asset managers, cannot ignore the risks posed by climate change. Not only is managing and mitigating climate change-related risks aligned with long-term objectives, investors and, subsequently, asset managers, also have a key role to play in financing the energy transition.

Our responsibility as an asset manager is to ensure that investors take into account long-term risks, while we ourselves foster positive impacts and encourage sustainable behaviors in companies in which we invest.

But one of the key challenge of fighting against climate change-related risks, and more generally, of financing the energy transition has been a lack of scalable solutions, with most of the offer being, up to now, concentrated mostly in private equity which lacks extensible opportunities for large institutional investors.

Seeking to make the fight against climate change accessible to all investors, Amundi believes in bringing investors together to share best practices and has designed innovative financial products across main asset classes in order to promote the financing of the energy transition.

Our solution? Innovation

KEY POINTS

- The impacts of climate change on our environment are growing and are increasingly visible.
- Investors and asset managers should not overlook climate change-related risks in their risk management framework.
- Financing the global energy transition requires tremendous financial needs and presents a unique investment opportunity.
- Mobilization seems to be under way.
- Amundi seeks to accompany investors to fight against climate change by **(i)** bringing stakeholders together for knowledge sharing and best practice spreading and **(ii)** designing innovative financial solutions that attempt to tackle climate change across asset classes.

1. The COP21 was held in Paris from November 30 to Dec. 12th, 2015 and resulted in the signing of the Paris Agreement.

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Understanding the risks

The impacts of climate change constitute a risk for asset owners and asset managers, and the financial community at large. Mark Carney, Governor of the Central Bank of England, has been one of the first prominent financial actor to highlight the risks posed by climate change, and to expose what he calls the "tragedy of the horizon"[2] - namely, the fact that climate risks are long-term risks which short-sighted markets fail to price because there are no incentives to fix it from current financial actors driven by short-term indicators.

This externality, in turn, exposes financial actors to three risks to financial stability:

- First, there are liability risks[3], namely, the risk that climate change's direct victims seek compensation from those polluting.
- Second, physical risks[4] arising from damages to physical assets resulting from both climate change and extreme weather events such as floods and storms.
- And last but not least, transition risks[5], the risk that highly valued commodities (such as fossil fuels) might undergo rapid devaluation resulting from for example, technological or regulatory changes. The risk of stranded asset is an example of transition risk.

STRANDED ASSETS

The international commitment taken at the COP21 has had the direct consequence of leading to an international effort to limit greenhouse gas emissions. This implies that it is likely that the highly carbonated activities or that the exploitation of highly carbonated assets such as fossil fuels could become limited. With the carbon reserves of the planet being greater than the carbon budget of the planet to follow the 2°C scenario, some assets could become stranded.

Take fossil fuel companies, for example. Today valued partly considering their "reserves", they are likely to see these reserves un-exploitable as a result of efforts to limit global greenhouse gas emissions: these assets become "stranded". In turn, stranded assets are likely to have direct consequences on the company's value.

Therefore, divestment strategies from fossil fuel or other highly carbonated activities are not only aligned with a 2°C global objective, they also favor sound financial investments.

2. 3. 4. 5. Mark Carney, "Breaking the tragedy of the horizon – climate change and financial stability", speech at Lloyd's of London on September 29, 2015, accessible at: http://www.bankofengland.co.uk/publications/Pages/speeches/2015/844.aspx

A unique investment opportunity

With the impacts of climate change on our environment being increasingly visible and affecting communities around the world, thereby drawing growing media attention, the fight against climate change has come into the spotlight as an issue to be dealt with at international summits.

The December 2015 COP21 Paris Agreement has been a game-changer: not only was it the most ambitious climate change agreement to have been reached so far – with the commitment of 195 countries[6] to maintain global warming to "well below 2°C" above pre-industrial levels – the collaborative Agreement has also become a significant driver of success.

Governments across the globe have translated their commitments into national intended contributions to reduce global greenhouse gas emissions aiming to ensure a global energy transition, with real consequences for institutional investors. Policymakers have taken a unique leadership in institutionalizing the fight against climate change by setting frameworks that encourage capital market mobilization.

BEST PRACTICE CASE STUDY

Article 173 of the August 17, 2015 Law on the Energy Transition for Green Growth in France[7]

Globally, the Energy Transition for Green Growth Law of August 17, 2015 is the first to set a unique disclosure framework that makes it mandatory for institutional investors to include a detailed assessment of climate considerations, and more generally to publish how they take environmental, social and governance (ESG) criteria into account in their investment strategies. It's Article 173 takes it further and constitutes a key innovation for the integration of climate considerations into the decision making process of financial institutions by rendering it mandatory for French institutional investors to disclose how they integrate climate risks considerations into their investment decisions and more generally, how they contribute to the energy transition.

It is nevertheless the prescribed approach that constitutes the most innovative feature and enables this initiative to distinguish itself from others. Not only does the "comply or explain" approach provide some leeway to investors, thereby favoring a pertinent integration of these criteria through an adaptable framework, it also enables investors to progressively build up their internal climate-related assessment capabilities.

In parallel, a number of new entities have been created and are working to standardize reporting frameworks. The Task Force on Climate-related Disclosures (TCFD), established by the Financial Stability Board in December 2015, for instance, provides a number of key recommendations on climate-related financial disclosures applicable to organizations and industries. With tremendous financing needs, the energy transition will require a global mobilization of the financial community in order to effectively meet the Sustainable Development Goals, and the 2°C Paris objective. Meeting the Sustainable Development Goals should require US$90trillion[8] of investments in the next fifteen years, among which $53trillion[9] would be required in energy supply and energy efficiency alone by 2035 to keep the global temperature rise below 2°C as set out in the Paris Agreement.

Despite substantial needs, investing for climate has not been as straightforward as it could have seemed. So far, existing solutions had born a number of issues that had made it difficult to mainstream climate products. In equities, solutions had lacked scalability and transparency, rule-based methodologies. In fixed income, the fear was that "green" would mean lower return for investors. In infrastructure, the inherently different characteristics and local market specificities made it a difficult market to penetrate, with a long learning curve. We tackle these challenges through simple and scalable solutions that do not hinder performance expectations across main asset classes.

6. According to the United Nations Framework Convention on Climate Chang, with 169 parties that have ratified the Paris Agreement, as of 30 October 2017. Status of Ratification accessible at: http://unfccc.int/paris_agreement/items/9444.php

7. Loi n°2015-992 du 17 août 2015 relative à la transition énergétique pour la croissance verte, accessible at: https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000031044385

8. Source: The New Climate Economy, "The Sustainable Infrastructure Imperative", The New Climate Economy website as of Nov. 21, 2017, accessible at: http://newclimateeconomy.report/2016/

9. Source: International Energy Agency (IEA), "World Energy Investment Outlook – Special Report" (2014).

Our answer?

Mobilizing stakeholders to innovate against climate change

We seek to accompany investors to fight against climate change by **(i)** bringing stakeholders together in key coalitions that aim to participate to knowledge sharing in order to spread best practices, and **(ii)** by fostering financial innovations across main asset classes.

i. **Bringing stakeholders together in the Portfolio Decarbonization Coalition:** In 2014, Amundi co-founded the Portfolio Decarbonization Coalition, a coalition of now 27 investors representing over $3.2trillion in assets that have committed to align over $600bn of their portfolios with a low carbon economy[10], and that was a key representative of the business and finance community at the COP21.

ii. **Fostering financial innovation across asset classes: We see two key motivations for climate investments: (i)** to manage and mitigate climate change-related risk exposure and/or to **(ii)** finance the energy transition with real impact on the economy. Amundi has innovated across the three main asset classes in order to answer these needs and support investors in their fight against climate change. Our challenge? Providing scalable solutions across main asset classes in order to help mainstream green finance.

a. Equity:

i. **Low carbon Strategy** – Amundi, alongside Swedish National Pension Fund AP4, Fonds de Réserve pour les Retraites (FRR) and MSCI co-developed low-carbon indices, with subsequent launch of indexed and ETF investment solutions. The development of a transparent methodology was born from the will to manage and mitigate investors' carbon risk exposure. Today, we offer comprehensive investment solutions, from the decarbonization of existing portfolios to the replication of standard or fully customized low-carbon indices.

ii. **Green Technology Equity Socially Responsible (SRI) Strategy** – Besides these innovative solutions, Amundi offers its clients with an Equity SRI strategy focused on key environmental aspects. This strategy is invested in shares of European companies that derive a minimum of 20% of their revenue from the development of green technologies. It also excludes companies that produce fossil fuels and nuclear energy and benefits from our in-house Environmental, Social and Governance (ESG) analysis.

Expert Talk – Laurent Trottier, Global Head of ETF, Indexing & Smart Beta Management, Amundi

"Our low-carbon strategies aim to answer the need for investors to manage and mitigate their long-term carbon risk exposure in their portfolios without impacting returns in the short-term by generating a (somewhat) free option on a mispriced asset. The transparent and rule-based methodology that we developed has been picked up around the globe, and has become a reference for low-carbon investment."

b. Fixed income:

The rise of green bonds has been substantial in the past few years[11], and we believe in their ability to channel private capital flows into energy transition projects beneficial for the real economy. As such, we have designed three green bond strategies to finance the energy transition.

i. The first with the specific purpose of financing the energy transition through green bonds, key energy transition players and key sector leaders.

ii. The second one in order to enable investors to measure the positive impact of their investments on the environment in tons of CO_2 avoided per million invested.

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10. Source: Portfolio Decarbonization Website, as of Nov. 22, 2017; accessible at: http://unepfi.org/pdc/

11. Market for labelled green bonds has grown from a few billing in 2013 to over $200bn in 2017, Climate bonds Initiative, "Bonds and Climate Change – The State of the Market 2017", as of September 2017.

iii. Amundi has been selected by the International Finance Corporation (IFC) to launch a green bond strategy solely focused on emerging markets.

AN INNOVATIVE PUBLIC PRIVATE PARTNERSHIP TO SUPPORT THE DEVELOPMENT OF GREEN BONDS IN EMERGING MARKETS

In 2017, Amundi was selected by a key actor for private sector development in emerging markets, namely, International Finance Corporation (IFC), as its unique strategic partner in an innovative initiative that will seek to facilitate the financing of the green transition through the development of the green bond market in developing countries.

This project has been designed to simultaneously stimulate demand (through the strategy managed by Amundi) and supply (through an international investment support program led by IFC) of green bonds by implementing a dual, one of a kind, approach that aims to "complete the circuit" and foster the development of climate finance in developing countries.

Based on the belief that institutional investors –searching for yields– have both the capacity and appetite to deploy significant amounts of capital in emerging countries, the Amundi-IFC partnership offers investors an opportunity to invest at scale, with exposure to emerging markets yields, and a positive impact on the energy transition in emerging countries.

This programme builds an innovative platform that combines deep expertise in asset management (Amundi) and private sector development in emerging markets (IFC) to help emerging countries achieve long-term sustainable growth.

This game-changing project sits at the crossroads between financial expertise and innovation, and has been designed in order to transform aspiration to implementation.

Expert Talk – Marie-Anne Allier, Head of Euro Fixed Income, Amundi

"Green bonds have been a key area of development for Amundi in the past few years, with the underlying belief that this market will be key to the effective transition to a low-carbon economy. In the future, as we expect the green bond market to grow and gain momentum, we will leverage our recent election as representative of the Investor community at the Executive Committee of the Green Bond Principles & our ecosystem of green partners in order to promote and spread best practices in the green bond market."

c. Real and Alternative Assets:

Amundi has partnered with Electricité de France (EDF) in order to launch a joint-venture, Amundi Transition Energetique, that seeks to finance green physical assets. This innovative partnership combines EDF's expertise as a global electricity provider[12] and largest European renewable electricity producer[13] and Amundi's expertise as largest European asset manager[14] in order to source for our clients the best private deals offering tangible benefits for our society.

Expert Talk – Pedro Arias, Global Head of Real and Alternative Assets, Amundi

"Amundi Transition Energetique is a one-of-its-kind deal that combines the capabilities of two large European firms in order to foster investments into green physical assets. We hope that this unique venture will contribute to Europe's energy transition and will prove the first step to a global transition to a low-carbon economy powered by renewable energies and energy efficient infrastructures."

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12. 13. Source: Électricité de France website as of November 20, 2017.

14. Amundi figures as of September 30, 2017. Source IPE "Top 400 asset managers" published in June 2017 and based on AUM as of December 2016.

Amundi – Value creation goes beyond performance

Since its creation, Amundi has been a convinced actor committed to responsible investment.

As a long-term partner seeking to enhance value creation in the real economy, Amundi believes that climate change is not an issue to be overlooked. In general, not only do we attempt to provide specific solutions to meet the investment gaps to finance the energy transition, we also thrive to participate to and encourage the debate to ensure that market developments are aligned with our beliefs.

- Most recently, we were elected as there representative for the Investor Community in the Executive Committee of the Green Bonds Principles at International Capital Market Association (ICMA) in June 2017[15], exemplifying our active engagement as an investor and our commitment to support spreading best practice in the green bond market.
- Meanwhile, we have co-published academic papers on climate change-related risks and the financing of the energy transition.
- Amundi has also organized a series of high-level meetings with key actors in the financial community, on long-term investing and climate change.

Our climate offer is embedded in our belief that value creation goes beyond performance, and in our endeavour to be a driver of environmental progress and change in the long run. We believe that the inclusion of environmental, social and governance (ESG) criteria can contribute to value creation.

As such, Amundi has developed a rigorous Socially Responsible Investment (SRI) methodology that applies to €168bn in SRI management[16]. Recognized and certified by Association Française de Normalisation (AFNOR), our ESG approach seeks to embed the conviction that a strong sustainable development policy enables issuers to better manage regulatory and reputational risks and also contributes to improving their operational efficiency. Our analysis leads to negative screening of worst rated issuers (G) on 95% of our assets, with the exclusion – among others- of companies whose coal extraction activity exceeds 30% of their turnover or, after a qualitative and prospective analysis, companies producing 100 million tons and more of coal per year.

A WELL-STRUCTURED, RIGOROUS ESG ANALYSIS

Amundi's ESG analysis process examines the corporate behavior of issuers in the three fields of Environmental, Social and Governance. Our ESG Rating process includes a quantitative and qualitative analysis and is enriched by a formalized engagement policy. With regard to the environmental dimension, ESG analysts consider companies' ability to control their direct and indirect environmental impact, by limiting their energy consumption, reducing their greenhouse gas emissions, fighting resource depletion and protecting biodiversity. Criteria are weighted according to business sector and regional context. The greater the risk associated with a criterion for a given company or sector, the greater the weight attributed to this criterion. Our ESG Rating process also aims to assess an issuer's contribution to building a positive ecology in the territories in which it operates.

15. Amundi Asset Management has been a member of the Executive Committee as of June 14, 2017 according to the Green Bond Principles, ICMA website; accessible at: https://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/green-social-and-sustainability-bonds/executive-committee-and-working-groups/

16. Amundi figures as of end December 2017.

Engagement & voting policy, an effective lever of ESG strategies

With ownership comes responsibility. Because responsible investing does not stop at asset management, Amundi believes in the continuum of sustainable investing all along the investment process, by encouraging an engagement policy and voting policy that are aligned with a sustainable view on investing.

- For Amundi, engagement provides an additional angle to building ESG criteria into our fund management, because we consider that dialogue with companies is fully relevant when it is used to optimize portfolio management and construction, notably when seeking to frame risk.

Amundi's engagement policy focuses on three main aspects: engagement for influence, collecting information for rating purposes, voting at general meetings and pre-meeting dialogue. These aspects are central to Amundi's fiduciary responsibility and role as a responsible investor.

Since 2013, our engagement for influence has been particularly active on 6 themes among which: respect for Human Rights in the mining and petroleum industries; combatting food waste in the agrifood and retail sectors; the environmental impact associated with coal in the Utilities sector.

In addition to these sector reviews, our analysts produce extensive studies on themes linked to major sustainable development issues, for instance: water, unconventional hydrocarbons, endocrine disruptors, palm oil, etc. These studies enable us to adopt positions on controversial activities.

Furthermore, in order to fine-tune companies assessment, the ESG analysts stage meetings with more than 200 companies per year[17]. During 2016, Environmental issues made up almost half of the subjects addressed, focusing on Environmental strategy, Energy consumption, Greenhouse gas emissions, Biodiversity, and Water.

- With regards to voting, we believe that the financial performance of the companies in which we invest can only be sustainable in a long-term vision associating exemplary corporate governance and strong social and environmental responsibility. It is through this framework of analysis that we fully play our role of shareholder and particularly in the exercise of our voting rights.

Amundi systematically votes at the general shareholders' meetings of French companies or of companies in which we holds more than 0.05% of the capital, i.e. more than 2,600 general meetings per year[18].

Amundi has implemented a formalized dialogue system to inform the companies in which it holds its largest positions of its voting intentions, to initiate a dialogue and contribute to the improvement of their practices. As well as this proactive approach, Amundi is open to all meetings requested by issuers to discuss general meetings or, more generally, governance topics. This second element tends to increase in importance as it enables upstream and more constructive dialogue. In 2016, the Corporate Governance team interacted with 240 issuers, resulting in substantial improvements (justifying a change in our voting intentions) in nearly 50 companies[19].

Publicly traded since November 2015, Amundi is the largest European Asset Manager[20] in terms of AUM, with €1.426 trillion worldwide[21] including **€168bn** in SRI management[22]. Amundi offers an extensive range of investment services for a diverse international client base including both institutional and private investors, in France and internationally.

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17. 18. Amundi figures, Engagement Report 2016.

19. Amundi figures, Engagement Report 2016.

20. Source: IPE "Top 400 asset managers" published in June 2016 and based on AUM as at December 2016.

21. Amundi figures as of September 30, 2017.

22. Amundi figures as of end December 2017.

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