

Responsible Investment

19 November 2018

Executive Summary

MULTIPLE FORCES ON CLIMATE CHANGE

- **Unprecedented challenge**
- **Multiple forces to tackle the problem:**
 - COP21 as a game changer
 - Multiple forms of regulation
- **Investors are getting mobilized:**
 - Risk Management approach
 - Increasing number of simple and transparent investment solutions

AMUNDI PLAYS A PIVOTAL ROLE IN THIS FIELD

- **Part of its DNA as a Responsible Investor since its creation**
- **Innovative off-the-shelf solutions:**
 - ...on all asset classes: debt, equity, real-assets
 - ...through innovative approaches¹ : Joint Ventures, Public & Private partnerships, thematic strategies ...
- **Multiple initiatives for public good: Portfolio Decarbonization Coalition, papers, etc.**
- **\$15bn AUM in energy transition and green growth out \$320bn AUM of responsible investment**

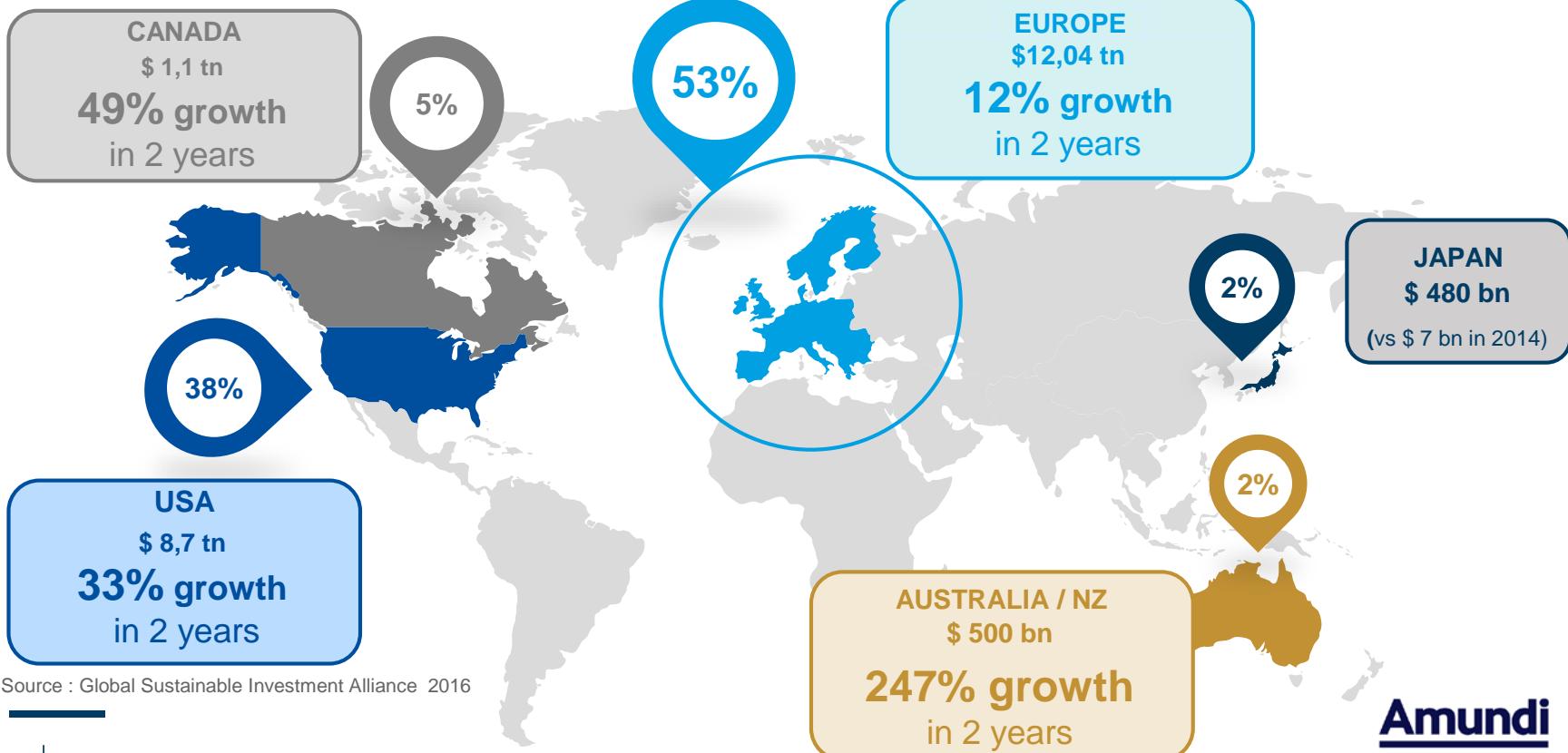
(1) Co-founder of the Portfolio Decarbonization Coalition, one of the first signatories of the UNPRI, Member of the *Institutional Investors' Group on Climate Change* (IIGCC) since 2003, signatory of the *Carbon Disclosure Project* and *Water Disclosure Project*. Co-Developer of the first Low carbon indices (see MSCI disclaimer at end of document), joint-venture with EDF and thematic funds.

ESG becoming a mainstream trend for institutional and retail investors

\$ 23 tn
Global Responsible Investment market in 2016

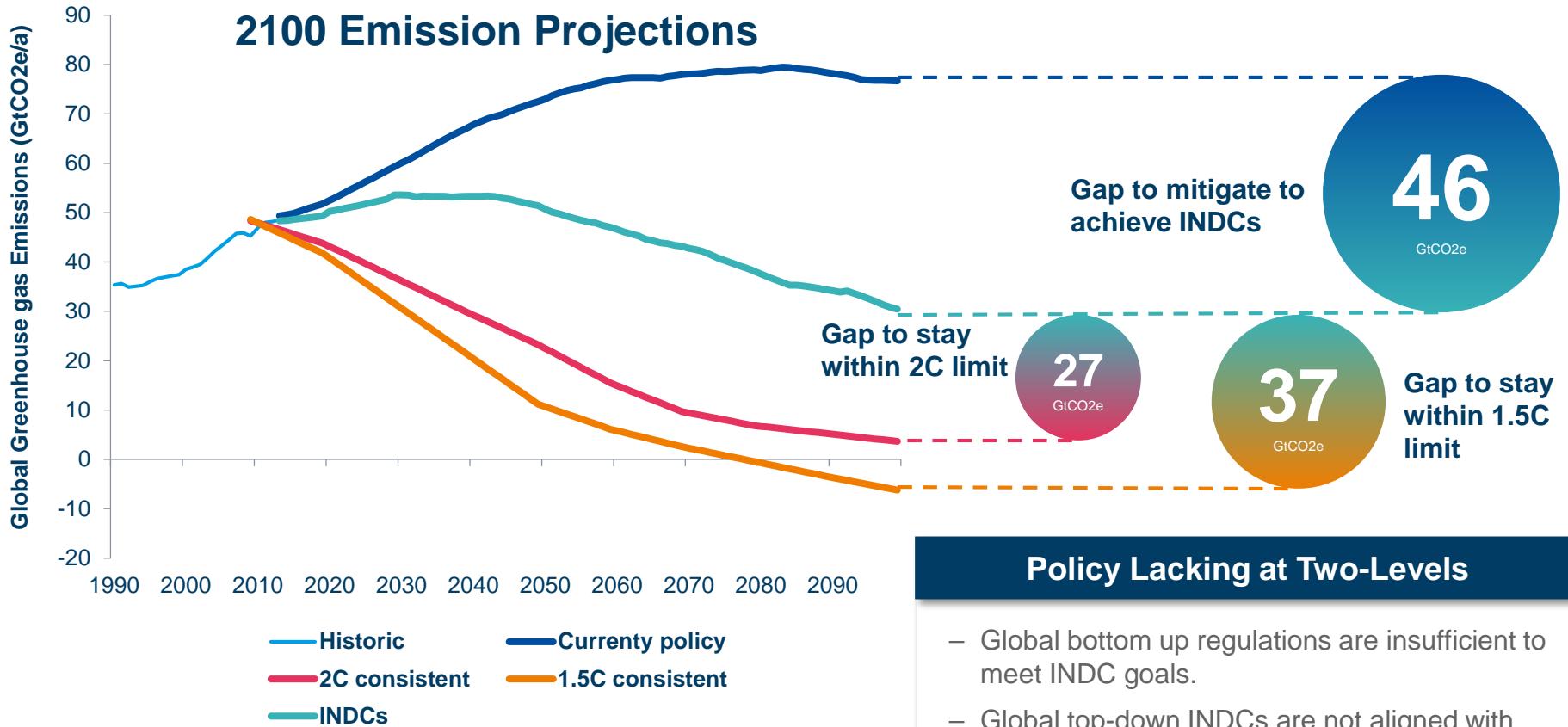
~ 1/4
of global assets under management

+25%
growth in 2 years



Climate Change: an Unprecedented Challenge

Global emission gaps

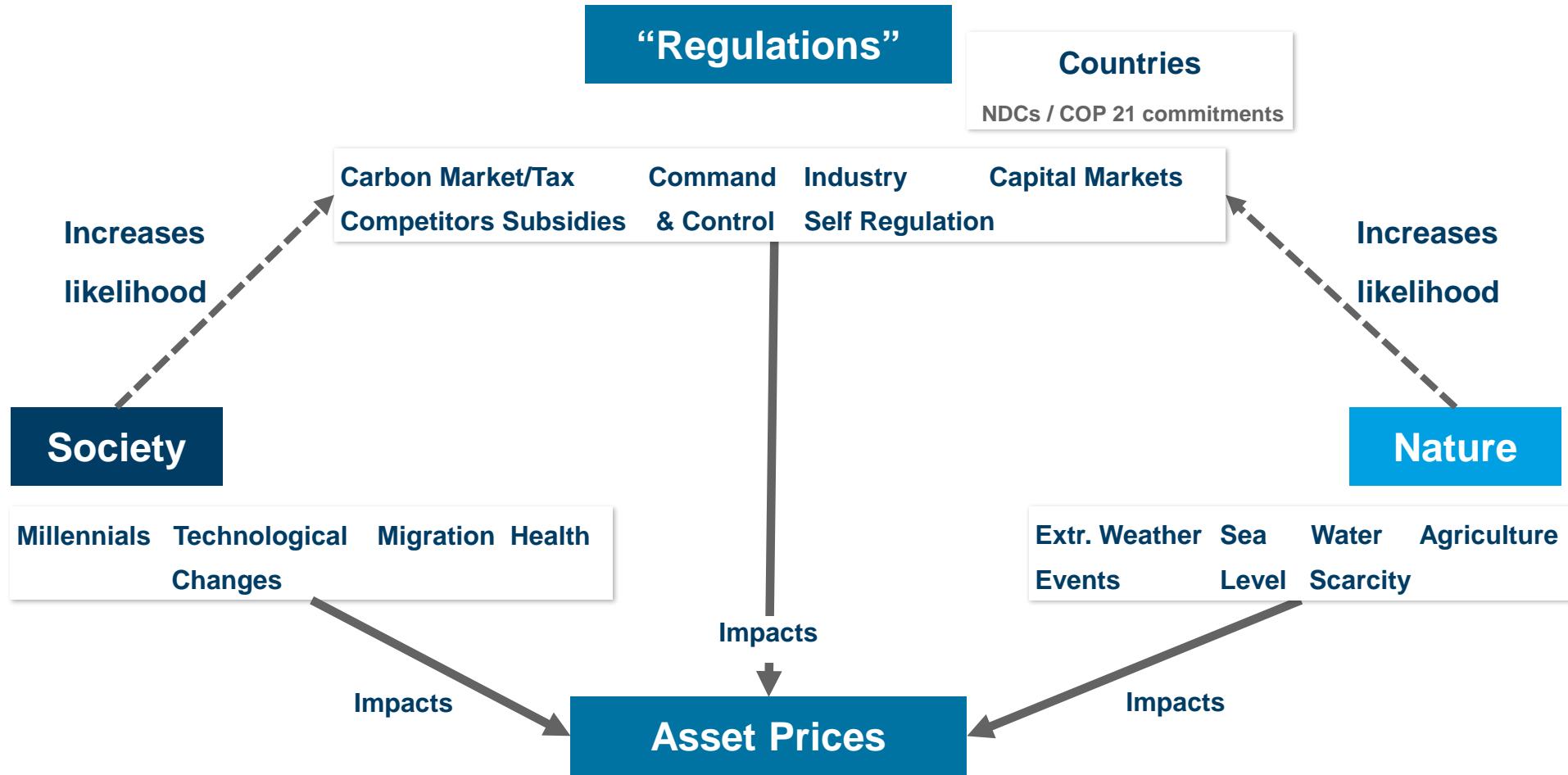


Source: Climate Action Tracker Database, Global emissions time series, updated November 2017. Time series data for INDCs, 2C consistent, 1.5C consistent time series are computed as medians of highest and lowest potential global emission level results.

Good News: A Tipping Point in Mobilization

| BEFORE 3 to 5 years ago | | → | TODAY | |
|----------------------------|-------------------------------------|---|-------|----------------------------------|
| 1 | Deniers | | 1 | Acceptance of climate change |
| 2 | One of many risks | | 2 | Biggest risk |
| 3 | Limited regulations | | 3 | Multiple regulations |
| 4 | No global agreement | | 4 | COP 21 |
| 5 | China blocking | | 5 | China leading |
| 6 | Limited interest within populations | | 6 | Millennials |
| 7 | Economics only | | 7 | Impacts on health |
| 8 | « Abstract » topic | | 8 | Observations in day to day lives |
| 9 | Cost of renewables | | 9 | Competitive pricing |
| 10 | Few European investors | | 10 | Major world investors |

A Risk Already Impacting Asset Prices



Growing Public Initiatives to Mobilize Asset Owners

STOCK EXCHANGES MOBILIZATION

UK Climate Change Act requires all quoted UK companies to report their GHG²

LUXEMBOURG Green Exchange, leading platform dedicated exclusively to securities that are 100% green, social or sustainable

SINGAPORE

Comply or explain mandatory sustainability reporting for issuers³

CENTRAL BANKS INITIATIVES

BRAZIL encourages banks to assess their individual exposure to carbon risks¹

CENTRAL BANKS & SUPERVISORS NETWORK for greening the Financial system

CHINA first to provide national guidelines for Green Bonds and Green Credit Guidelines

REGULATORY INITIATIVES

CALIFORNIA STATE SB 185 requires CalPERS and CalSTRS to divest from coal companies

FRANCE Article 173 mandates contribution to low carbon economy, “comply or explain” approach

ERISA ESG factors are a proper component of fiduciary duty⁴

TCFD Key sector-specific integration of climate-related criteria

(1) In the Internal Capital Adequacy and Assessment Process (ICAAP), (2) Environmental reporting Guidelines: British Government. (3) Source: Climate Disclosure Standards Board, 6 Sept 2016. (4) Interpretative bulletin 2015-01, when ESG factors might directly affect economic and financial value of the plan's investment.

Central Banks' Mobilization on Climate Change

ONE PLANET SUMMIT

- Reiterate France's commitment
 - Organized by President Macron on Dec. 12, 2017
 - Gather international leaders and committed citizens
 - Creation of One Planet Coalition, 12 commitments
 - Article 173 cited as an example
- Call for action
 - Scale up finance for climate action
 - Green finance for sustainable business
 - Accelerate local and regional climate action
 - Strengthen policies for ecological and inclusive transition



CENTRAL BANK NETWORK TO GREEN THE FINANCIAL SYSTEM¹

- 19 Central Banks and 5 supervisors
- 3 missions:

Share experience and best practices

Contribute to environmental and climate risk management development

Mobilize mainstream finance to support the energy transition

« NGFS Members acknowledge that climate-related risks are a source of financial risk.

It is therefore within the mandates of Central Banks and Supervisors to ensure the financial system is resilient to these risks”

1. "Joint-statement by the Founding Members of the Central Banks and Supervisors Network for Greening the Financial System," Dec. 12, 2017, accessible at: https://www.banque-france.fr/sites/default/files/medias/documents/joint_statement_-_greening_the_financial_system_-_final.pdf

2. Website of Climate Action 100, as of Dec. 20, 2017, accessible at: 20 <http://www.climateaction100.org/>

3. "French Business Climate Pledge – les entreprises françaises s'engagent pour le climat", accessible at: <http://www.medef.com/uploads/media/node/0001/13/4a63d832010c7ec5ac57b6c345f72f1b44a84ae0.pdf>

SWFs' Mobilization on Climate Change

- Announced in Paris in 2017
- Communication on ESG policy: all about climate change
- Goals: i) foster a shared understanding of principles and methodologies related to climate change; ii) identify climate-related risks and opportunities; iii) enhance investment decision-making frameworks
- 6 founding members: ADIA, Kuwait Investment Authority, NZ Superannuation Fund, Norges Bank, Public Investment Fund, Qatar Investment Authority
- USD 3tn of AUM



| PRINCIPLES | |
|-------------|---|
| ALIGNMENT | Principle 1. Build climate change considerations, which are aligned with the SWFs' investment horizons, into decision-making. |
| OWNERSHIP | Principle 2. Encourage companies to address material climate change issues in their governance, business strategy and planning, risk management and public reporting to promote value creation. |
| INTEGRATION | Principle 3. Integrate the consideration of climate change-related risks and opportunities into investment management to improve the resilience of long-term investment portfolios. 3.1 SWFs should identify, assess and manage portfolio risks generated by the expected transition to a low-emissions economy and from the potential physical impacts of climate change. 3.4 SWFs should consider approaches to reducing portfolio exposure to climate-related risks. |

A Mobilization Spreading Among all Investors



- Commitment to analyse climate change related risks
- 120 signatories
- \$10 trillion
- Members: AP4, CalPERS, ERAFP, FRR, Local Government Super, PGGM,...

- Commitment to engage with the 100 most polluting companies on climate change related risks
- **310 investors, \$32 trillion**
- Members: ABP, Alecta, AP4, Allianz, CalPERS, CalSTRS, ERAFP, FRR, GPIF, NZ Superannuation Fund, PKA, USS,...

Sources: Montreal Pledge website as of March 27, 2018. Climate Action+ website as of March, 27, 2018.

Case Study: \$2bn to Deploy Amundi/IFC Green Bond Fund

A Challenge

Lack of solutions in emerging markets

- Potential US\$23tn climate-smart investment opportunity in emerging markets between now and 2030⁽³⁾.
- Green bonds have become an effective way to channel capital toward the energy transition.
- Emerging market green bond issuance is growing but still represents a small proportion (22%) of all outstanding green bonds⁽⁴⁾.

Combined Expertise

Catalyst for sustainable finance

- IFC: Fostering sustainable finance and creating new market. Mobilizing financial institutions.
- Amundi: Emerging market debt capabilities with an expertise in green finance innovation.



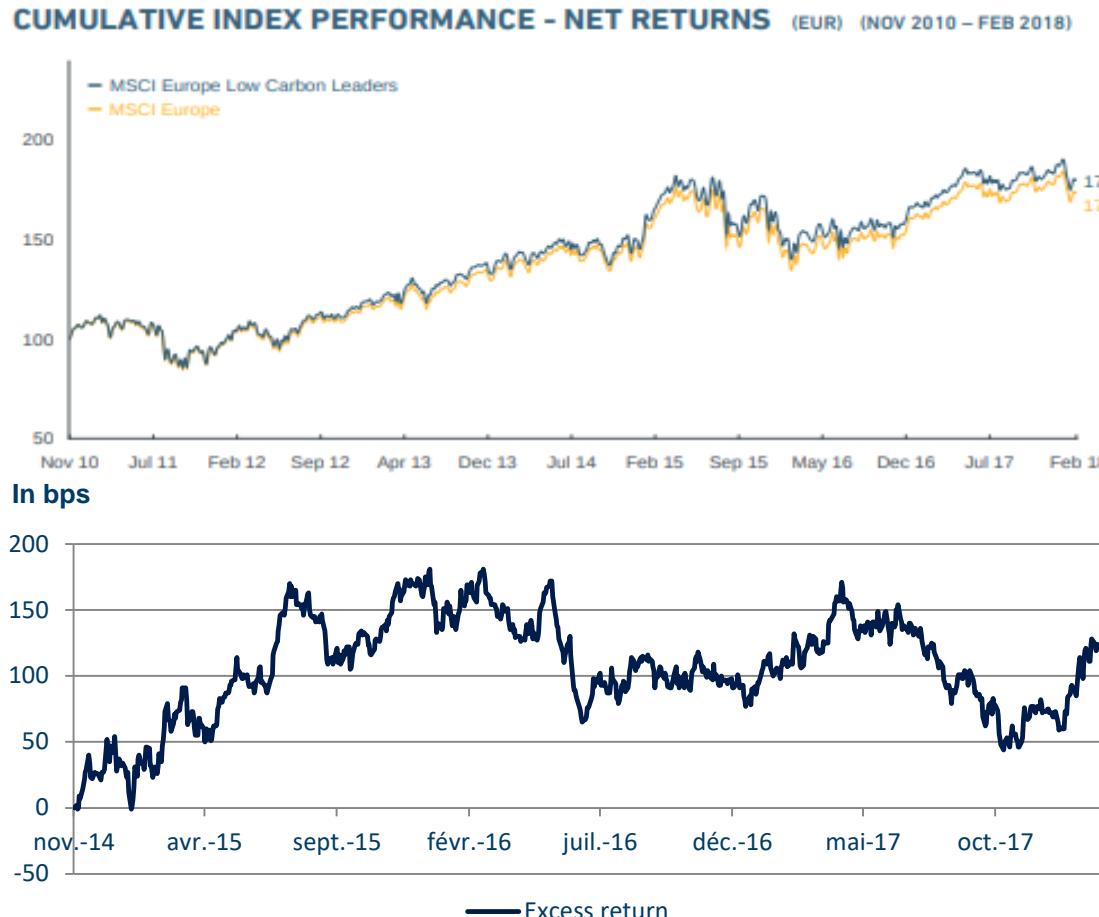
Meeting Investors Demand

Yields with impact

- Yields associated with emerging markets debt.
- Credit enhancement through first-loss absorption mechanism by IFC.
- Diversified exposure at institutional scale.
- Impact through green bonds.

(3) Source: IFC, « Climate Investment Opportunities in Emerging Markets – An IFC Analysis », 2016. (4) Source: Climate Bonds Initiative database as of 14/03/2018

Case Study: Low Carbon Indexes, Outperformance



- Reduces climate-related Risks without changing Market Exposure
- Annualized outperformance (2010-2018):
 - World: +41 bp ⁽¹⁾
 - North America: +47 bp
 - Europe: +53 bp
- Performance of concrete investments :
 - Nov 2014 – Feb 2018
 - Outperformance: +50 ⁽²⁾ bp
 - Information ratio⁽³⁾: 0.57

Past market trends are not a reliable indicator of future ones. Past performance does not prejudge future results, nor is it a guarantee of future returns. Source: MSCI (1) Net monthly returns annualized in EUR for the 11/30/2010 to 02/28/2018 period. Data prior to the launch date (Sep 16, 2014) is back-tested data (2) Net daily returns annualized in EUR for the 11/07/2014 to 02/28/2018 period. Outperformance in basis points. The cumulative index performance is from MSCI (3) A ratio of portfolio returns above the returns of a benchmark (usually an index) to the volatility of those returns

ESG scores: aligning economic interest with common good

Economic
interest
+
Common
good

- Sustaining financial performance over the long run requires long term strategies.
- A company that respects the environment, values its human capital, and has good governance practices is better equipped to outperform economically and financially on the long run.
- ESG scoring criteria allow to depict the **best practices** in each sector, to evaluate **risks** companies are exposed to and to identify **opportunities**.

Amundi's approach is incentive and non-stigmatizing.