



UNEP  
FINANCE  
INITIATIVE

CONNECTING FINANCIAL  
SYSTEM AND SUSTAINABLE  
DEVELOPMENT:

**MARKET LEADERSHIP PAPER**

ADVANCE COPY

Input paper to  
**The Financial System We Need:  
From Momentum To Transformation (2<sup>nd</sup> Edition)**



**Inquiry:** Design of a  
Sustainable Financial System

## **UNEP FINANCE INITIATIVE**

The United Nations Environment Programme Finance Initiative (UNEP FI) is a unique global partnership between the United Nations Environment Programme (UNEP) and the global financial sector. UNEP FI works closely with over 200 financial institutions who are Signatories to the UNEP FI Statements, and a range of partner organizations to develop and promote linkages between sustainability and financial performance. Through peer-to-peer networks, research and training, UNEP FI carries out its mission to identify, promote, and realise the adoption of best environmental and sustainability practice at all levels of financial institution operations [www.unepfi.org](http://www.unepfi.org)

### **Acknowledgements**

Authors: Eric Usher, Yuki Yasui and Lara Yacob (all UNEP Finance Initiative); Contributors: Nick Robins, Iain Henderson, Olivier Lavagne d'Ortigue and Naurin Zhang (all UNEP Inquiry into the Design of a Sustainable Financial System); Elizabeth White and Edmond Mjekiqi (International Finance Corporation); Abyd Karmali (Bank of America Merrill Lynch).

The paper has been prepared by UNEP FI as a contribution to the second edition of 'The Financial System We Need' report of the UNEP Inquiry into the Design of a Sustainable Financial System.

Copyright © United Nations Environment Programme, 2016

### **Disclaimer**

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the United Nations Environment Programme concerning the legal status of any country, territory, city or area or of its authorities, or concerning delimitation of its frontiers or boundaries. Moreover, the views expressed do not necessarily represent the decision or the stated policy of the United Nations Environment Programme, nor does citing of trade names or commercial processes constitute endorsement.

### **Copyright**

Copyright ©

United Nations Environment Programme, October 2016

This publication may be reproduced in whole or in part and in any form for educational or non-profit purposes without special permission from the copyright holder, provided acknowledgement of the source is made. UNEP would appreciate receiving a copy of any publication that uses this publication as a source.

No use of this publication may be made for resale or for any other commercial purpose whatsoever without prior permission in writing from the United Nations Environment Programme.

# CONTENTS

<b>INTRODUCTION AND CONTEXT</b>	<b>2</b>
<b>1 MARKET LEADERSHIP IS BUILDING MOMENTUM</b>	<b>3</b>
1.1 Drivers	3
1.2 Leadership Innovations	6
1.3 Leadership in Sustainability Disclosure	9
<b>2 FROM LEADERSHIP MOMENTUM TO TRANSFORMING MARKETS</b>	<b>10</b>
2.1 Building market expectation through signaling	10
2.2 Building the Integrity of Green Financial Products – Towards standards with a financial value	12
2.3 From Green Financial Products to Green Financial Institutions	14
<b>3 CONCLUSIONS AND RECOMMENDATIONS</b>	<b>17</b>

# INTRODUCTION AND CONTEXT

The paper has been prepared by UNEP Finance Initiative as a contribution to the second edition of ‘The Financial System We Need’ report of the UNEP Inquiry into the Design of a Sustainable Financial System launched October 2016. One of the main goals of the Inquiry report was to consolidate and accelerate progress in aligning the financial system with sustainable development, one part of which involves establishing an annual benchmarking exercise.

This paper examines how financial institutions are individually and collectively driving change, across financial sectors and sustainability issues, and considers the life cycle of how leadership actions influence mainstreaming and transformation across the industry.

Part 1 broadly scopes the achievements of market innovation in banking, investing and insurance in the last 12 months and their relationship with policies and regulations. Part 2 considers some of the key developments in more depth to provide insights into how sustainable finance leadership can both mainstream while making the leap to market transformation.

It is important to distinguish between leadership, mainstreaming and ultimately transformation in order to not overstate the impact of either individual or collective actions. A key challenge to transformation is that mainstreaming should not water down or green-wash the concepts and approaches taken by the leaders, even as their actions are apparently being taken up across the industry. Wide-spread uptake of an innovation such as green bond issuance or integration of ESG criteria as part of risk management for different asset classes is essentially about mainstreaming. Leveraging these innovations to alter the purpose and flow of capital in the market is essentially about transformation. It will require financial institutions to consider not only the purpose of capital flows but governance as well. Voluntary and mandatory disclosure efforts such as those expected from the Financial Stability Board’s Taskforce on Climate Related Financial Disclosures will be a first step triggering financial institutions towards a path of transformation.

# MARKET LEADERSHIP IS BUILDING MOMENTUM

## I.1 DRIVERS

Public debate has advanced, in the financial community, civil society and the media more broadly on the need for the finance industry to be part of the solution to the sustainability challenges we face today. Recognition is growing among finance sector CEOs that sustainability is now a strategic aspect of their core operations.<sup>1</sup>

New framework agreements in 2015 such as the Paris Climate Agreement and the Addis Ababa Action Agenda highlight the need for the finance industry to be realigned in order to create new financial flows that meet sustainable development and climate goals. In response, financial institutions are increasingly aiming to be a positive, rather than an inhibitory force towards sustainability.

A growing number of financial institutions are marking out real leadership – defined as moving significantly beyond conventional practice – through individual institutional leadership, the collective efforts of voluntary industry initiatives and multi-stakeholder partnerships (Figure 1).

Some of the defining aspects of leadership as seen in the sustainable finance context include: promoting voluntary disclosure such as carbon footprinting; integrating Environmental, Social and Governance (ESG) considerations into investment decision-making; integrated reporting; stress testing; consideration of stranded assets; and moving from just considering sustainability risks to also seeking out the business opportunities that sustainable development provides.

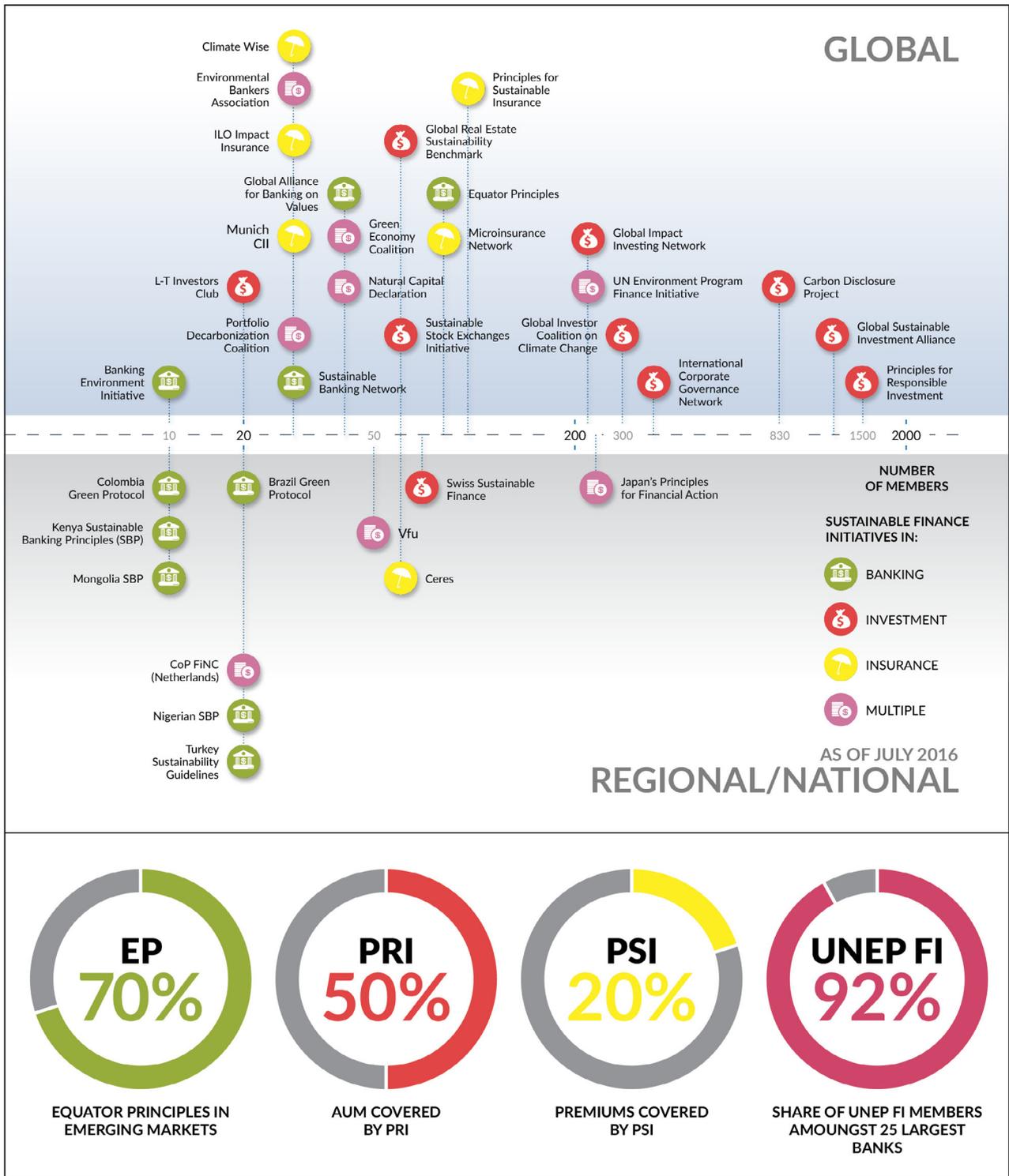


Figure 1: Voluntary Initiatives and Partnerships on Sustainable Finance<sup>2</sup>

Some leading financial institutions are starting to take action due to a number of drivers, which include an element of changing policy conditions with new commercial strategies from financial institutions. They can be exemplified by: (1) business opportunity and risk that come with environmental and social changes and technological developments; (2) reputational risk linked to evolving expectations from civil society and the general public and (3) meeting regulatory or industry voluntary requirements. While the macro-drivers listed above are exemplar of the general drivers across the financial system, the leadership and subsequent innovation are determined by a specific set of industry drivers.

## Banking

- Defined by the avoidance of credit and reputational risk, sustainability is increasingly included as a risk-avoidance strategy. The risks include: credit (defaults, payments rescheduling), loss of liability insurance coverage, negative publicity with shareholders or customers.
- Public and regulatory pressure on their 'license to operate' – GlobeScan Radar's 2014 study places banking as one of the least trusted industries and among industries facing the most amount of regulatory pressure.<sup>3</sup> Eg: Stricter capital requirements under Basel III (as of 2015) and specific financing requirements of the International Financial Institutions to banks in developing countries resulted in enhanced risk frameworks, less liquidity in the market and the need for banks to consider extra-financial risks that would impact the client credit-worthiness and the banks' bottom line.<sup>4</sup>
- Growing financial opportunities in a greener, more resilient and inclusive economy, particularly new customers and business lines. Financial inclusion is a key theme among banks operating in emerging markets.<sup>5</sup>
- Civil society and consumer pressure on a diverse range of issues – e.g. the sustainability of agricultural supply chains as evidenced first by the Consumer Goods Forum<sup>6</sup> pledging to remove deforestation from key supply chains by 2020 and then the New York Declaration on Forests (2014) and the Soft Commodities Compact (2015) being supported by an increasing number of signatory banks.

## Investment

- Changing risk/return profiles of equity portfolios and the credit risk of fixed income portfolios with evolving ESG awareness and conditions. Extra-financial Issues such as labour, human rights and community engagement are increasingly being factored into the risk/return profile of a company as they pose significant risks to investors. Investors are also investing resources into understanding and applying international guidance and agreements such as the UN Protect, Respect and Remedy Framework to help minimise their risks.
- Increasing awareness of the 'universal owners' theory – which postulates that there are clear links between the performance of large, diversified investment portfolios and the economy overall – that has resulted in some leading investors to mainstream ESG considerations across all of their asset classes.<sup>7</sup>
- Increasing recognition of ESG integration as part of investor obligations and duties (fiduciary duty) by asset owners and managers.<sup>8</sup>
- Growing ESG-related regulatory risks as evidenced by the 'stranded assets' debate: large asset managers like Blackrock are recognizing "regulatory risks are becoming key drivers of returns" and there is the potential for fossil fuel assets to be devalued, or rendered 'stranded', as policies are brought in to reduce emissions.<sup>9</sup>

## Insurance

- Climate change is a material and growing factor of instability for the insurance industry – insurance losses, withdrawal from high risk markets and unaffordable premiums.<sup>10</sup>
- Strengthening of environmental regulations globally poses business risks and opportunities for environmental liability insurance.
- Significant externalities such as ageing population, health, environment and growing middle class.

## I.2 LEADERSHIP INNOVATIONS

The drivers cited above have resulted in increasing leadership and subsequently innovation within the finance sector. In the last twelve months, these innovations have largely concentrated around financing solutions to mitigate or adapt to climate change, reflecting the advancement of this issue in public policy and social discourse. Examples of leadership include The Global Innovation Lab for Climate Finance, an effort that has already raised nearly USD 600 million through the Lab network for renewable energy, energy efficiency, climate-smart land use, and other mitigation and adaptation activities.<sup>11</sup> Financial institutions are also showing interest in wider positive impact issues, in strengthening the overall sustainability commitment such as financial inclusion and taking action in avoiding new controversies such as deforestation issues.

### I.2.1 Sustainable Banking Leadership

Innovations in sustainable banking have evolved in recent years from being driven by due diligence processes such as compliance with International Finance Corporation (IFC) performance standards to mainstreaming across credit risk functions and developing new business lines in response to environmental challenges.

Banks are moving from “risk to opportunity” by mobilizing capital for specific green assets through loan origination, the provision of credit and savings’ products as well as capital markets activities. Banks are the primary source of funding for renewable energy investments, and critical sources of capital for infrastructure and SMEs. Given their close relationship with their customers, banks have a unique role to play in financing disruptive innovations such as energy efficiency home improvements and eco-system services. Banks can also directly contribute to promoting financial inclusion and improving the financial resilience of their customers.

#### Driving ‘positive impact’ in banking

While various stocktaking reports<sup>12</sup> have captured many of the latest individual and collective innovations, this paper highlights the innovation around the idea of ‘positive impact’ in finance that builds on the idea of impact investing and green financial products and services, but broadens the role of banks in creating the demand for sustainable finance than merely responding to it.

Since October 2015, 10 leading banks have been developing a set of Positive Impact Principles that will guide providers of financial services in their efforts to increase their positive impact on the economy, society and the broader environment. Based on this, Société Générale launched its first Positive Impact Bond (EUR500 million/5 year note) in November 2015. The transaction attracted strong demand from 170 investors in excess of EUR3 billion.<sup>13</sup>

#### Minimizing negative impacts in banking

At the same time, minimizing the negative impact of finance continues to be a cornerstone of risk management within the banking sector. Developments in the last year have demonstrated a further shift to more strategic action, with leading banks exploring environmental stress testing and links between environmental and financial performance. For example:

- **Individual leadership actions:** for example, the Industrial and Commercial Bank of China (China’s largest bank with assets totalling US\$3.6 trillion) conducted the first stress test to explore the implications for its loan book of chronic air pollution. The aim of the study was to internalize the cost of environmental externalities onto the bank’s balance sheet. While the sectors covered were limited to cement and hydropower, the study makes the definitive link between environmental impacts and credit risk.<sup>14</sup>

- **Industry collaborations** such as the Natural Capital Declaration's efforts, launched in May 2016, to develop a framework for environmental stress testing. In a first step, a pilot effort will develop an analytical framework to enable bank stress testing models to include scenarios of the economic resilience of major industries to the risk of extreme droughts.<sup>15</sup>

## I.2.2 Responsible Investment Leadership

### Green bonds – A Major New Asset Class

Funds allocations to sustainable and green investments are increasing.<sup>16</sup> As part of scaling up, the realm of responsible investing has witnessed a shift from socially responsible funds to funds promoted as impact investing vehicles. Green and climate-related bond issuance worth approximately US\$600 billion in 2015<sup>17</sup> are the most prevalent of these types of financial instruments and in many ways are the 'indicator species' for new ways of raising sustainable finance. Green project bonds and green asset-backed securities (ABS) are both useful indicators of how much additional finance is going into the green space (as opposed to green 'use of proceeds' bonds). Renewable energy and energy-related projects together take up the largest proportion of proceeds of green bonds at well over 65% in 2015.<sup>18</sup> Other climate-related projects such as climate adaptation see only 4.1% and agriculture and forestry 2.2%, highlighting the lack of alignment with current development frameworks such as the UN Sustainable Development Goals (SDGs).

The first green bonds were issued by the development banks a decade ago and, building on the momentum of COP21, the last 12 months have given rise to a number of new green bond investment vehicles and issuance from emerging economies:

- **Investor coalitions:** at COP21, a green infrastructure coalition was established bringing together investors representing US\$2.6 trillion of assets under management (AUM) specifically to work with the Climate Bonds Initiative to grow a vibrant green bonds market.
- **Emerging market issuers:** the green bond market is growing more diverse in terms of geography and type of issuer. An important development in 2015-2016 was the rise of green bond issuance from emerging-market domiciled issuers. The first issuance of green bonds in emerging markets were in February 2013 in Korea and December 2014 in Peru<sup>19</sup> but became much more active in 2015 with issuances in India, China, Brazil and Mexico.<sup>20</sup> With the launch of regulatory green bond guidelines in January 2016 in China and India, the green bonds issuance in emerging economies is growing rapidly. For the first time in May 2016, the size of the green bonds market in emerging economies and developed countries was equal.<sup>21</sup>

For additional information on green bonds, please see Section 2.2.

### Mitigating Environmental and Social Risks in Investments

Investor action to minimize negative impacts largely consists of three actions:

1. **Divestment** of individual companies or entire sectors based on ethical or ESG exclusionary principles – e.g. Norwegian Government Pension Fund Global, the world's largest sovereign wealth fund, excluded oil exploration companies based on 'serious violations of fundamental ethical norms' in June 2016.<sup>22</sup>
2. **Engagement**, including initiating shareholder resolutions – e.g. all oil majors except two have accepted shareholder resolutions in 2015 to disclose how they view the financial risks associated with climate change.<sup>23</sup>
3. **Strategic asset allocation** – e.g. Institutional Investors Group on Climate Change (IIGCC) published guidance for investors on climate risk assessment and asset allocation.<sup>24</sup>

Failing to consider ESG issues in investment practice is increasingly seen as a failure of fiduciary duty with the public pension funds leading on this issue.<sup>25</sup> Building on over 10 years of work to clarify fiduciary duty (a concept applicable only in common law countries), UNEP FI, the PRI and Generation Foundation launched in June 2016, the Statement into Investor Obligations and Duties. This Statement goes beyond the common law concept of fiduciary duty to ensure it is relevant to all investors, pension and non-pension fund actors, across all jurisdictions.<sup>26</sup>

Investors are also reliant on the entire investment ecosystem to support these efforts. For example, as of July 2016, 23 exchanges – including the London Stock Exchange, the Egyptian Exchange, and the Bolsa Mexicana de Valores – have responded to the Sustainable Stock Exchanges Initiative’s campaign to close the ESG guidance gap and publicly committed to provide sustainability guidance to companies listing on their markets. Adding the stock exchanges that already provide guidance, nearly half of the world’s stock exchanges are set to offer ESG guidance in the near future.<sup>27</sup> Also, six of the world’s leading credit rating agencies – S&P Global Ratings, Moody’s, Dagong, Scope, RAM Ratings and Liberum – made a public commitment to collaborative action on sustainability in a joint initiative with institutional investors worth US\$16 trillion in AUM.<sup>28</sup> Such commitments are leading to action, for instance Moody’s downgrading the credit rating of the palm oil trader IOI following its suspension from the sustainability certification scheme.<sup>29</sup>

### 1.2.3 Sustainable Insurance Leadership

#### Leadership in Climate Resilience and Disaster Risk Reduction

The report *Insurance 2030: Harnessing Insurance for Sustainable Development*<sup>30</sup> issued in June 2015 included a stocktaking of the latest market innovations in sustainable insurance. Much of the activities that followed during the 12 months since have been dominated by developments around the Paris Climate Agreement. By the end of 2015, the global market capacity in environmental insurance was estimated to be more than US\$600 million.<sup>31</sup> Regulatory changes in China, the Republic of Korea, Mexico, Canada, South America and the European Union (EU) have increased the demand for global environmental insurance coverage and the frequency of environmental claims continues to rise by 20-30% each year.<sup>32</sup> Meanwhile, the size of outstanding catastrophe bonds by mid-year 2016 rose to a record US\$26.5 billion.<sup>33</sup>

COP21 and the 3rd UN World Conference on Disaster Risk Reduction in Sendai created opportunities in 2015 for governments to engage with the insurance industry and harness their expertise in managing risks. Some highlights and other market updates include:

- **Partnerships to meet global goals** – A number of initiatives launched around COP21 look to harness the expertise of the insurance industry (e.g. UN Secretary-General’s Climate Resilience Initiative: Anticipate, Absorb and Reshape (A2R); Vulnerable Twenty Group of Ministers of Finance (V20) Climate Risk Pooling Mechanism).
- **Global Risk Map** – An effort by members of the Principles for Sustainable Insurance to offer their expertise to public policymakers in better understanding and managing disaster risks, combining insurance data with 115 years of global natural disaster statistics.<sup>34</sup>
- **City Innovation Platform for African Infrastructure Risk and Resilience** – The platform, launched at the end of 2015, brings together insurance experts, the private sector and municipal leaders to prototype solutions to major infrastructure and resilience challenges in Africa.<sup>35</sup>
- **Sustainable Insurance Policy Forum** – A new platform for insurance regulators to work together and engage with the industry on sustainability issues.
- **ESG guiding principles for surety bond underwriting** – While the insurance sector has been generally slow to mainstream ESG in risk assessment and modelling, this inaugural effort has focused on the underwriting of infrastructure projects.

## I.3 LEADERSHIP IN SUSTAINABILITY DISCLOSURE

Changing public perceptions, evolving consumer demands and civil society actions are driving leadership around financial institution disclosure of sustainability risk.

The most recent disclosure innovations focus specifically on climate change. The Financial Stability Board's Task Force on Climate-related Financial Disclosures was set up in December 2015 to 'develop voluntary, consistent climate-related financial risk disclosures' including disclosures for the finance industry. Other industry efforts such as the Montreal Pledge<sup>36</sup> launched in September 2014 are seeing institutional investors mobilizing to measure and disclose the carbon footprint of their portfolios.

Some progress is being made on other disclosure themes such as natural capital accounting (e.g. Natural Capital Declaration's project since 2014<sup>37</sup>), although efforts are at the early stages of understanding the materiality of the exposure risks embedded in financial products.

### **Summary of Innovations in Leadership**

The financial sector has taken significant leadership to develop innovative products and services. The leadership is seen in emerging as well as developed markets, spanning financial services from banking and investing to insurance. The leadership has also given rise to innovations in risk management, sustainable finance (i.e., directing financial flows to positive outcomes) and finally disclosure. We have also started to see momentum around mainstreaming these innovations, mainly driven by voluntary industry coalitions. A holistic view of green financial flows is currently lacking, in essence where in the sustainability journey the industry is at and ultimately what impact these financial flows have on addressing sustainable development challenges.

# 2 FROM LEADERSHIP MOMENTUM TO TRANSFORMING MARKETS

The previous section highlighted the types of market leadership being undertaken by different parts of the finance sector. Part 2 of the paper looks at how leadership actions are in some cases becoming mainstreamed with the potential to transform the market, the ingredients needed for such transformation, and the potential role policy makers can play.

The analysis examines i) how market and policy expectations are built through signalling; ii) the role of standards and assurance mechanisms in establishing green product integrity; and iii) the need for financial institutions to transform their focus from green financial products to becoming green financial organizations. Doing so means accounting for both the positive and negative impacts of all business lines and working to become financial institutions that are fully aligned with sustainable, low-carbon development.

## 2.1 BUILDING MARKET EXPECTATION THROUGH SIGNALLING

As highlighted in 2015, first at the Third International Conference on Financing for Development in Addis Ababa and later at COP21 in Paris, the relationship and feedback mechanisms between state and non-state actors in policy and market development are becoming better established. Signals from market leadership actions are feeding into the policy formulation process, while policy signals are creating market expectations across the financial industry.

### 2.1.1 How Signalling from Market Leaders Contributed to a Deal in Paris

As governments increasingly look to the finance industry to respond to the pace and scale of capital formation needed to tackle climate change and sustainable development, COP21 marked a milestone in how private finance has become a key aspect of sustainability oriented public policymaking.

Market leaders in particular play an important role in seeding the transformative changes that will eventually lead to capital reallocation in the trillions of dollars.<sup>38</sup> Considering the scale of the challenge, the greatest near-term impact of market leaders is unlikely to be through their own financial transactions and the direct effect this has on increasing the cost of capital for 'brown' investments or lowering it for 'green' investments.

Market leaders play an important signalling role that goes beyond their direct value chain or even the financial markets as a whole. Besides signalling to their competition, market leadership actions send signals to policymakers and regulators that the needed behavioural and managerial changes are, in principle, feasible. Furthermore they spread confidence that market actors are prepared to make and foster such changes. In the political economy of environmental and social policy, such signalling – especially if it originates from mainstream, politically influential industry leaders – provides confidence to policy makers in their efforts to address difficult social and environmental issues like climate change.

Ahead of COP21, finance sector leaders launched a range of new initiatives and issued coordinated statements in support of climate action aimed at showing policymakers that the finance sector sees climate change as a material risk and that efforts are already under way to hedge or act on these risks and opportunities. Highlights include:

- *The Global Investor Statement on Climate Change*, which included 400 signatories with US\$24 trillion of AUM representing a strongly unified investor voice asking for a robust agreement and clear market signal on climate policy.<sup>39</sup>
- The Portfolio Decarbonization Coalition (PDC) mobilizing US\$600 billion of commitments from a leading group of institutional investors.<sup>40</sup>
- The Non-State Actor Zone Climate Action (NAZCA) platform, which was launched at the UN climate change conference in Lima and registers commitments to action by companies, cities, subnational regions and investors to address climate change. The platform registered 11,615 commitments to date, of which 966 from investors.<sup>41</sup>

## 2.1.2 How Policy Signals Create Market Expectations for Change

The Paris Agreement is widely expected to be a significant catalyst for large-scale lending and investments in low-carbon and climate-resilient technologies and infrastructure. However the leap from leadership-led action to transformation of the market does not happen automatically. The significance of the Paris Climate Agreement was that it created market expectation for change. Supranational and national policy/regulatory actions associated with or that have followed the Paris Agreement have had a clear impact on mainstreaming climate considerations into financial operations. For example:

- **Article 173 of the French law on Energy Transition for Green Growth (ETGG)** – In 2015, France became the first country to introduce mandatory climate change-related reporting for institutional investors. Investors are required to report not only on how they integrate ESG and climate considerations into their risk management but also specifically what role, if any, they are playing in the low carbon energy transition.<sup>42</sup> Sweden is considering similar legislation.
- **FSB’s Task Force on Climate-related Financial Disclosures** – In December 2015, at the request of the G20, the FSB established the Task Force on Climate-related Financial Disclosures (TCFD) to undertake a coordinated assessment of what constitutes efficient and effective disclosure, and to design a set of recommendations for voluntary financial disclosures of climate-related risks covering all industries including for the financial sector.<sup>43</sup> The Task Force is the first instance of the FSB taking up an environmental issue and signals that climate change is starting to be considered from a financial system perspective globally, reinforcing the expectations built from the Paris Agreement.
- **Regulatory guidelines on green bonds in China and India** – While many countries have yet to adopt the Paris Agreement, the regulatory guidelines from China and India issued in January 2016 have paved the way for a surge in domestic green bond issuances in these countries. (See more on this in Section 2.2).<sup>44</sup>

While we have yet to see a full integration of climate risks and decarbonization action across the finance industry, a key milestone for market leadership was achieved in 2015. The seeds of this transformation have been planted over some time: for instance the Climate Disclosure Project (now CDP) in the early 2000s led to initial disclosure mainstreaming from industry while Carbon Tracker since 2011 has increased awareness around stranded assets, both of which prepared the ground for the FSB to launch the TCFD. The outcomes of this leadership and mainstreaming of innovations will be determined in years to come via capital flows to green investments and positive impact finance that is the industry norm rather than led by an industry few.

Partnership and dialogue between private and public actors is an important factor. The mutual signalling between financial institutions and policymakers is an essential part of building the momentum needed for market transformation. Without this, each side could continue independently working to make strides on these challenges but the results will not be as impactful without the entire sector working towards these aims.

## 2.2 BUILDING THE INTEGRITY OF GREEN FINANCIAL PRODUCTS – TOWARDS STANDARDS WITH A FINANCIAL VALUE

The ultimate milestone for market transformation is arguably for the market to self-sustain and self-propel sustainable finance at scale without the need for additional subsidies or additional policy/regulatory support. This section includes two case studies, one on green bonds and the other on palm oil, to consider the role played by standards and assurance in building green integrity and how this contributes to market transformation.

### CASE STUDY ON GREEN BONDS

#### CONTEXT

- In 2007, the European Investment Bank (EIB) issued a EUR600 million Climate Awareness Bond in 2007 that focused on renewable energy and energy efficiency. By 2015, global issuance of green bonds had risen to US\$42.4 billion and in 2016 may surpass US\$50 billion.<sup>45</sup>
- The Climate Bonds Initiative puts the climate-aligned bond universe in 2015 at US\$597.7 billion of which US\$65.9 billion was labelled green bonds.
- Even as green bond issuance by development banks continues to increase, their proportion is decreasing, which is a sign that private finance is driving the growth of green bonds market today.

While the developments in the green bonds market are still limited to a few areas (mainly energy efficiency, low carbon transport and renewable energy), both private sector innovations and public interventions have been invaluable to its success so far. Some of the highlights are:

- Voluntary standardization – The growth of the green bond market requires the integrity that transparent labelling (or certification) systems provide to ensure that green bonds are in fact ‘green’ (e.g., Green Bond Principles, Climate Bond Standards, Barclays MSCI Green Bond Index).
- Third party assurance – With the development of industry standards, certification and the spread of reliable assurance services is seen as essential to market and scale-up. In addition to the green bonds standard-setters, which offer their own certifications, other service providers have reacted to this need. In addition to audit firms (e.g. EY, KPMG, PwC) and ESG consultancies and think tanks (e.g. CICERO, DNV, Sustainalytics), the credit-rating agency Moody’s has also entered the market in March 2016.<sup>46</sup>

- Stability and confidence from the development banks – The International Finance Institutions remain large issuers of green bonds and are important in meeting demand for AAA-rated bonds. Besides being issuers, development banks have also played an important role recently as cornerstone investors in labelled green bonds. For example, KfW has an explicit mandate in Europe while IFC has taken large investments in India’s PNB Housing Finance green bonds.<sup>47</sup>
- Regulatory guidance and support – In India, the Securities and Exchange Board of India (SEBI), the securities’ markets regulator, published their official green bond requirements in January 2016.<sup>48</sup> In China, the Green Financial Bond Directive of the People’s Bank of China (PBoC) was also issued in January 2016 and was additionally supported with a Preparation Instructions on Green Bond Endorsed Project Catalogue (2015 Edition).<sup>49</sup> Both sets of guidance are in line with the existing, voluntary, international Green Bond Principles and are expected to further spur green bond issuance in these countries. Indeed, halfway into 2016, China has already established itself as a global market leader. For example, the Bank of China issued a US\$3 billion international green bond in July 2016, the largest issuance of its kind to date.<sup>50</sup>
- Many green bonds have seen a strong uptake upon issuance, which is incentivizing other issuers. Issuance is also becoming large enough to allow secondary market trading, the first condition for a self-sustaining green bonds market. Leaders in emerging markets are also deepening their green bond investment and uptake. This will likely expand in the resilience (beyond climate adaptation), natural capital/conservation finance areas where the financial markets could help structure products to incentivize capital flows.

As described in the case study on green bonds, standards and assurance are playing a key role in unlocking funds from investors seeking credible green investment opportunities. The development and wide use of certifiable standards can therefore be considered as a key milestone in the pathway to scale. The Climate Bonds Initiative indicates that the aligned green bond universe is estimated to be US\$597.7 billion.<sup>51</sup> Currently less than US\$70 billion green bonds are labelled, demonstrating the large untapped market for investors to attract the ESG/Sustainable Investor base. Ensuring that the existing and subsequent labelled bonds are credible green bonds presents a tremendous opportunity to transform the sector and address climate-related challenges. The integrity of the assurance system such as Green Bond Principles needs to be maintained, especially with new entrants into the green bonds space. This is critical for broader mainstreaming and transformation to occur.

However to attain a full-scale transformation where essentially all bonds are actually green bonds, just proving the credibility is not going to be enough. Trust needs to become a 'currency'.<sup>52</sup> In short, environmental and social performance need to be convertible into tangible value that can be integrated into conventional financial performance indicators such as earnings per share (EPS), return on investment (ROI) and return on equity (ROE). In a financial market that is aligned to sustainable development, one would expect this to be the case.

This does now seem to be happening for green bonds, with investors now paying a premium to acquire green bonds, at least in the secondary market. A 2015 study from Barclays found an approximately 20 basis point difference between the spread of green bonds and comparable issues.<sup>53</sup> Interestingly, this green bond premium has increased steadily as the market has grown.

The issues around integrity of an assurance system show how it can be a catalyst for widespread industry action and a means to financialize sustainability standards. The case study below on the palm oil trader IOI shows how negative environmental performance can also have financial consequences. When IOI lost its sustainability certification through the Roundtable on Sustainable Palm Oil (RSPO), it was threatened with a credit rating downgrade, lost major customers and saw its share price slide. The IOI case did not happen by accident; it was a case of materialization of a transition risk to a company whose industry was shifting (i.e., transitioning) towards sustainability. For example, in 2015 European trade associations made a commitment towards '100% sustainable palm oil in Europe by 2020'<sup>54</sup> while many individual palm oil buyers have already started to sharply reduce the use of uncertified palm oil in the last few years.<sup>55</sup> The financial sector is also starting to take action through the Banking and Environment Initiative's member commitment to stop financing clients that do not have full RSPO certification by 2020 to financial institutions taking collective action as members of the RSPO.

As a result, we have a situation where a company losing its voluntary environmental certification has created a material market access risk, which in turn has translated into financial impacts. Trust can become a currency through an alignment between economic and sustainability goals.

## CASE STUDY ON A PALM OIL TRADER

### CONTEXT

- The Roundtable on Sustainable Palm Oil is a voluntary, self-regulated industry association and standard for the palm oil sector. The membership of 2,900 organizations includes 2,008 companies with some part of their supply chains certified according to the RSPO standards. To enable transparency and adherence to the principles of the standard, a complaints mechanism receives complaints levelled against RSPO members. The dispute settlement facility reviews these cases and in some instances suspends members from the RSPO for breaches of the principles and criteria.
- Add linkages to Inquiry real economy paper on agriculture
- In April 2016, the palm oil trader IOI was suspended from the RSPO. Subsequently, Moody's has

announced that it would review the downgrading of the palm oil trader citing uncertainty regarding IOI's operating performance following the RSPO suspension and resultant customer withdrawals.<sup>56</sup>

As at July 2016, large number of customers – not only consumer products companies such as Nestlé and Unilever but also by Cargill, one of the world's largest agricultural commodity traders – have ceased trading with the company.<sup>57</sup> The share price of IOI has also fallen sharply since the suspension.<sup>58</sup>

The drop in share price signals the power of market to react to wider acceptance of voluntary sustainable standards as a barometer of not only good governance but compliance to industry accepted operational standards.<sup>59</sup>

To follow the lead of the palm oil industry, further innovations in market development including innovation in effective public policy intervention is therefore needed for the finance industry. Governments in particular have an important role to play not only through their policy/regulatory roles but also via their procurement practices. For example, the Positive Impact Manifesto is calling for SDG-focused tenders and policies that successfully leverage private sector expertise and private finance for the attainment of their sustainable development objectives. It suggests a public-private effort to jointly develop guidelines for the issuance of tenders and the evaluation of bids. Some public policymakers are starting to take notice. The EU's new Biofuels Directive (2015) mandates that 20% of palm oil entering the European market must be certified sustainable palm oil (CSPO). On one hand, this is an important trigger or signal to the industry to create a demand for this product, however the industry (and financiers) are wary of potentially creating a dual market for sustainable and conventional palm oil, which is markedly cheaper to produce. To transform this sector, a level-playing field needs to be created, one where the industry is incentivized to further mainstream sustainability and where governments provide support to industries (and markets) that need to assistance towards innovation and transformation.

## 2.3 FROM GREEN FINANCIAL PRODUCTS TO GREEN FINANCIAL INSTITUTIONS

As a small group of leading financial institutions pulls the sustainability agenda forward, what is considered conventional practice is also changing, with some aspects of ESG integration seeing uptake across the broader finance community. As seen throughout this paper, stronger 'push' and 'pull' drivers are creating market-led innovations that are cascading across the financial sector.

Since the turn of the century, the financial industry has made significant progress on the sustainability front. Figure 2 shows some of the major trends, including the early sustainability focus on ethics and reputational risks, the evolution by the mid 2000s of seeing ESG issues as a business risk, and the more recent trend towards sustainable development as a market opportunity.

The fourth trend identified is really only at the very early stages of realization. Few mainstream financial institutions today can claim to be truly sustainable or green across all their businesses and corporate strategy.

Notwithstanding the significant optimism around green bonds and other green financial products, a product-centred approach is not sufficient to achieve the scale of transformation that is required. Product innovation is certainly required, as is leadership in the uptake of these products and approaches. However, until organizations and markets become green, the products in themselves can only deliver modest outcomes.

Essentially, the final ingredient needed for market transformation is the steering of financial institutions in ways that fully align with sustainable development and the 2-degree economy. This means not only focusing on new green products, services and business lines, but also assessing and mitigating the risks from brown business activities organization-wide.

## GLOBAL TRENDS IN SUSTAINABLE FINANCE

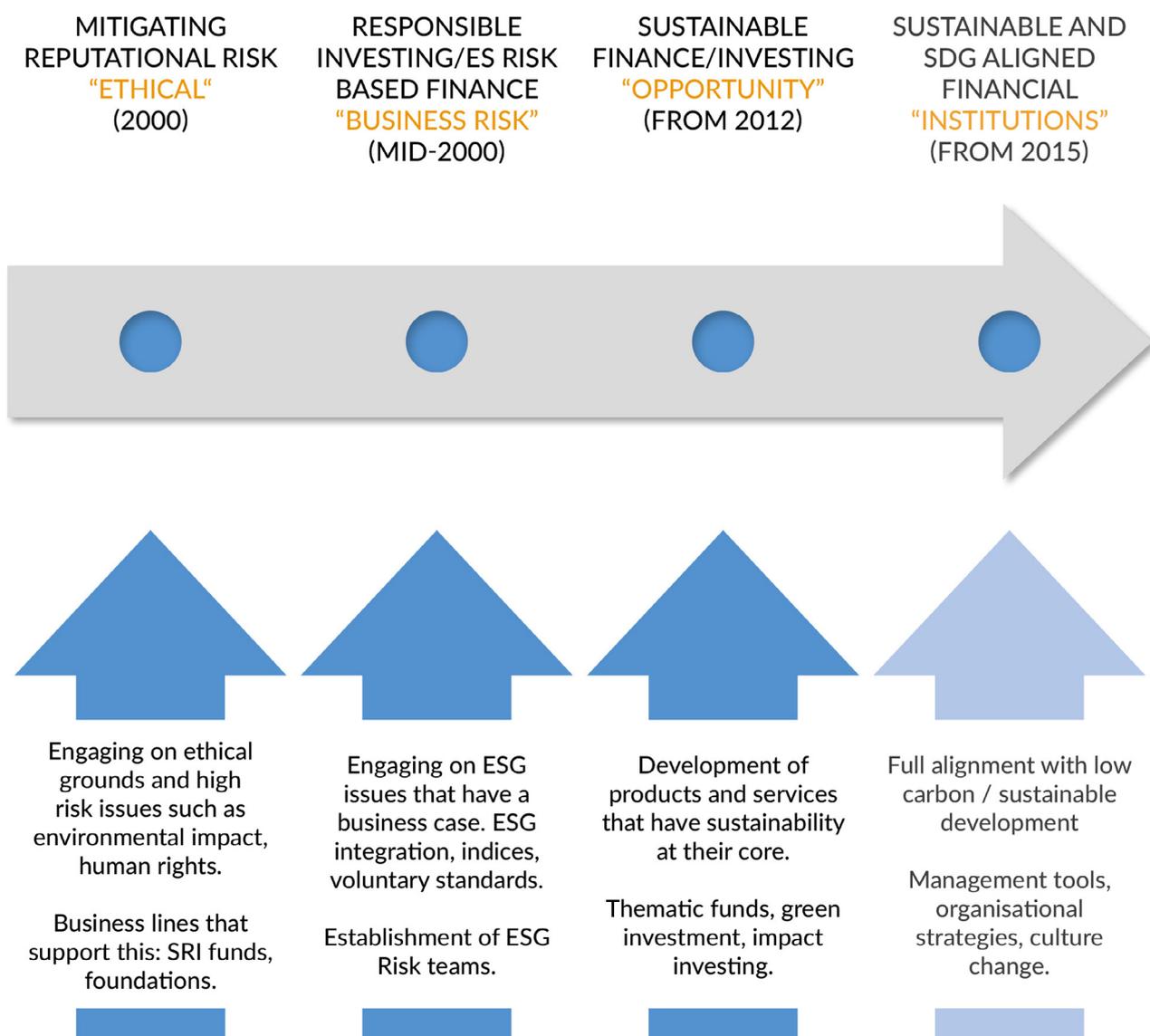


Figure 2: Evolution of sustainable finance

## **Capturing the status of 'green' and 'brown' financial flows – Net-positive Impact of Finance**

As discussed above, most of the latest innovations at the industry and regulatory levels are around disclosing climate change risk exposure (i.e. Montreal Pledge, Article 173 of the ETGG French law and FSB's TFCFD). However as shown on Figure 2, this only captures the second step, the 'Business Risk', in the evolution of sustainable finance. It is further limited to one sustainability issue – climate change.

With a few notable exceptions such as the annual *Global Trends in Renewable Energy Investment*<sup>60</sup> and Bonds and Climate Change: State of the Market<sup>61</sup> reports, much of the disclosure surrounding the progress in mobilizing the 'opportunities' of sustainable finance remain confined to pockets of uncoordinated leadership and case studies that do not allow for effective aggregation.

While many assessment and disclosure frameworks and ESG analysis on financial institutions exist,<sup>62</sup> they are either assessments of processes and procedures, or are not suited for comparison and aggregation. What emerges from a stocktaking exercise is therefore a fragmented and largely ad hoc representation of sustainable finance skewed to the efforts of the market leaders and their innovations.

One of the key recommendations from the G20 input paper on Greening the Banking System is therefore a call for a systematic view of 'green' financial flows. In markets where sustainable financial practices are maturing and moving to scale, a lack of appropriate information flow between the real economy and the financial economy is a critical challenge – with systemic implications. Clear measures of financial flows are key to the implementation of industry innovations to avoid fragmentation of efforts and to continue to send clear signals to policymakers.<sup>63</sup>

We take the recommendation from the G20 input paper one step further and identify the need to track not only 'green' financial flows but the net-positive impact by also taking into account the 'brown' financial flows so that we arrive at an overall assessment of the finance sector in its sustainability alignment. Such a performance framework could also help in understanding the state of the finance industry and how change can be measured over time. If developed bottom-up from information obtained at the institutional level, it could enable comparisons across institutions as well as geographies. Such information could provide greater opportunities to capture innovation and momentum for transformation. It may also be possible to assess the performance of laggard institutions to understand common bottlenecks they face. Identifying this as an urgent challenge to industry, a voluntary project has been launched by UNEP FI in Q4 2016 to develop a *Global State of Sustainability in Financial Institutions* report. The report will aim to include a performance measurement framework to be used by financial institutions in self-assessing their state of sustainability, and at the aggregate level in assessing the state of the finance industry in national/regional/global contexts and for measuring progress over time.

# 3 CONCLUSIONS AND RECOMMENDATIONS

1. A series of market-leading innovations have appeared this year from financial institutions, largely associated with COP21 and climate-focused developments. Analysis of market leadership leads to a conclusion that policy and market developments generally go hand in hand but the relationship is generally not one-way but mutually reinforcing with signalling playing an important role. The **importance of effective multi-stakeholder engagement and signalling for successful policy outcomes and industry actions** is therefore a key takeaway of this paper.
2. The success of the green bond market and events in the palm oil market highlight how voluntary or regulated **standardization and certification** provides the transparency and integrity necessary for the development of new sustainable financial assets. The extent to which greening will be mainstreamed will rely heavily on how such attributes get factored into financial performance and the policy/regulatory environment that governments can create to provide the further incentive for industry transformation.
3. Financial institutions need to begin **aligning fully with sustainable development and the transition to a 2-degree economy**. This means not only focusing on new green products, services and business lines, but also assessing and mitigating the risks from brown business activities organization-wide.
4. There is **little information on how close, or how far, the finance industry is from becoming green or sustainable**. The latest innovations at the industry and regulatory levels are around **carbon footprinting investment portfolios and climate change risk exposure**. The banking input paper to the G20 Green Finance Study Group additionally calls for a **systematic measurement of 'green' financial flows**. This paper additionally identifies the need to track 'brown' financial flows to arrive at the **state of net-positive impact**. A voluntary initiative to obtain this information directly from financial institutions is underway to close the information gap.
5. While some industry members are demonstrating leadership around innovations such as natural capital accounting, climate-related disclosures and green bonds, we have yet to see effective mainstreaming and market transformation. Financial institutions will need to rethink their governance models and purpose, while regulators should consider what supportive actions they can take to spur the collective mainstreaming and transformation of the sector.

# END NOTES

1. McKinsey (2014) McKinsey Global Survey results, Sustainability's strategic worth. Retrieved from: <http://www.mckinsey.com/business-functions/sustainability-and-resource-productivity/our-insights/sustainabilitys-strategic-worth-mckinsey-global-survey-results>
2. EP = Project finance portfolio covered by Equator Principles in emerging market; PRI = Asset Under Management (AUM) covered by PRI members compared to the total AUM of the investment market (source: Signatory base AUM hits \$59 trillion); Total premiums issued by PSI compared to the world premiums issued. UNEP FI (2015). Insurers Managing \$14 Trillion Commit to Backing Sustainable Development [http://www.unepfi.org/0psi/wp-content/uploads/2015/06/insurance2030\\_pressrelease.pdf](http://www.unepfi.org/0psi/wp-content/uploads/2015/06/insurance2030_pressrelease.pdf); UNEP FI = UNEP FI membership compared against Forbes "The World's Biggest Public Companies "Major Banks" category sorted by asset values; Total assets of UNEP FI members compared to the total assets of the finance industry. Available: <http://www.equator-principles.com/>
3. GlobeScan (2014). Banking/Finance Industry Report. Retrieved from: <http://www.globescan.com/component/edocman/?view=document&id=221&Itemid=591>
4. Perera, O. (2012) Basel III: To what extent will it promote sustainable development. Retrieved from: <http://www.iisd.org/pdf/2012/basel3.pdf>
5. IFC (2007). Banking on Sustainability: Financing Environmental and Social Opportunities in Emerging Markets. Retrieved from: [http://www.ifc.org/wps/wcm/connect/1b-ba68804886595eb902fb6a6515bb18/FINAL\\_IFC\\_BankingOnSustainability\\_web.pdf?MOD=AJPERES&CACHEID=1b-ba68804886595eb902fb6a6515bb18](http://www.ifc.org/wps/wcm/connect/1b-ba68804886595eb902fb6a6515bb18/FINAL_IFC_BankingOnSustainability_web.pdf?MOD=AJPERES&CACHEID=1b-ba68804886595eb902fb6a6515bb18)
6. Consumer Goods Forum includes 400 of the largest consumer goods companies on the planet who are key clients for many financial institutions.
7. PRI (2011). Universal Ownership: Why externalities matter to institutional investors. Retrieved from: [http://www.unepfi.org/fileadmin/documents/universal\\_ownership\\_full.pdf](http://www.unepfi.org/fileadmin/documents/universal_ownership_full.pdf)
8. UNEP FI (2015). Fiduciary Duty in the 21<sup>st</sup> century. Retrieved from: [http://www.unepfi.org/fileadmin/documents/fiduciary\\_duty\\_21st\\_century.pdf](http://www.unepfi.org/fileadmin/documents/fiduciary_duty_21st_century.pdf)
9. Environmental Finance (2015). Blackrock warns on stranded assets. See: <https://www.environmental-finance.com/content/news/blackrock-warns-on-stranded-assets.html>
10. Global Risk Institute (2016). Climate Change: Why financial institutions should take note: Global Risk Institute. Retrieved from: <https://globalriskinstitute.org/publications/climate-change-why-financial-institutions-should-take-note/>
11. See: <http://climatefinancelab.org>
12. For example see: *Greening the Banking System: Taking Stock of G20 Green Banking Market Practice* (2016 forthcoming), Trends in Private Sector Climate Finance (Oct 2015). SDG Industry Matrix: Financial Services (2016)
13. <https://www.societegenerale.com/en/content/societe-generale-success-first-positive-impact-bond-issuance-contributing-financing-low-0>
14. [http://www.greenfinance.org.cn/upfile/upfile/file/ICBC环境压力测试论文\\_2016-03-19\\_08-49-24.pdf](http://www.greenfinance.org.cn/upfile/upfile/file/ICBC环境压力测试论文_2016-03-19_08-49-24.pdf) This report gives an overview of the first study involving environmental stress testing by a bank.
15. Natural Capital Declaration (2016). Leading Financial Institutions to Test Lending Portfolios for Environmental Risk. Retrieved from: <http://www.naturalcapitaldeclaration.org/2016/05/leading-financial-institutions-to-test-lending-portfolios-for-environmental-risk/>
16. Financial Times (2016). Chinese banks lead 'green' bond boom. Retrieved from: <https://next.ft.com/content/9ee1a5f4-20d2-11e6-aa98-db1e01fab0c>
17. Climate Bonds Initiative (2016). Bonds and Climate Change: State of the Market. Retrieved from: <https://www.climatebonds.net/resources/publications/bonds-climate-change-2016>
18. Climate Bonds Initiative (2015). Green Bond Market update. Retrieved from: <http://www.climatebonds.net/resources/publications/2015-green-bonds-market-update>
19. For example see: <https://www.climatebonds.net/2014/05/korean-exp-imp-bank-500m-green-bond-way-oversubscribed-95bps-over-ust-bingo-bravo> and <http://www.latinfinance.com/Article/3411361/Energia-Eolica-brings-dawn-to-LatAm-green-bond-market.html#.V-KREE0UXGg>
20. See note 17.
21. See note 15

22. Norges Bank Investment Management (2016). Decision on exclusion of companies from the government pension fund global. Retrieved from: <https://www.nbim.no/en/transparency/news-list/2016/decision-on-exclusion-of-companies-from-the-government-pension-fund-global/>
23. Wall Street Journal (2016). Exxon, Chevron Shareholders Narrowly Reject Climate-Change Stress Tests. Retrieved from: <http://www.wsj.com/articles/exxon-chevron-shareholders-narrowly-reject-climate-change-stress-tests-1464206192>
24. IIGCC (2015). Climate Change Investment Solutions. Retrieved from: <http://www.iigcc.org/publications/publication/climate-change-investment-solutions-a-guide-for-asset-owners>
25. Examples include: France's public service pension scheme, ERAFP's proactive ESG integration, and public pension reserve fund, FRR's tender for the asset manager who is able to deliver value from ESG; Canada's largest pension plan, CPPIB's initiative to focus investment objectives entirely on long-term performance
26. UNEP FI (2016). Fiduciary Duty in the 21st Century. Retrieved from: <http://www.unepfi.org/fileadmin/documents/FiduciaryDutyStatement.pdf>
27. Sustainable Stock Exchanges Initiative (2016). SSE campaign to close the ESG guidance gap. Retrieved from: <http://www.sseinitiative.org/engagement/esg-guidance/>
28. PRI (2016). Credit ratings agencies embrace more systematic consideration of ESG. Retrieved from: <https://www.unpri.org/press-releases/credit-ratings-agencies-embrace-more-systematic-consideration-of-esg>
29. Moody's Investor Service (2016). Moody's reviews IOI Corporation Berhad's Baa2 ratings for downgrade. Retrieved from: [https://www.moodys.com/research/Moodys-reviews-IOI-Corporation-Berhads-Baa2-ratings-for-downgrade--PR\\_348708](https://www.moodys.com/research/Moodys-reviews-IOI-Corporation-Berhads-Baa2-ratings-for-downgrade--PR_348708)
30. Bacani, B., Robins, N. and McDaniels, J. (2015). Insurance 2030: Harnessing Insurance for Sustainable Development. Retrieved from: [http://unepinquiry.org/wp-content/uploads/2015/06/Insurance\\_2030.pdf](http://unepinquiry.org/wp-content/uploads/2015/06/Insurance_2030.pdf)
31. Wells Fargo (2016). 2016 Insurance Market Outlook. Retrieved from: <https://wfs.wellsfargo.com/insights/clientadvisories/Documents/WCS-1780103-WFI-2016-PC-Mkt-Outlook-WIP-FNL-PG-NoCrops.pdf>
32. Willis (2016). Willis Marketplace Realities 2016: Bringing the Pieces Together. Retrieved from: [http://www.willis.com/documents%5Cpublications%5CMarketplace\\_Realities%5CMarketplace\\_Realities\\_2016%20-%20v1.pdf](http://www.willis.com/documents%5Cpublications%5CMarketplace_Realities%5CMarketplace_Realities_2016%20-%20v1.pdf)
33. Artemis (2016). Q2 2016 Catastrophe bond & ILS Market Report. Retrieved from: [http://www.artemis.bm/artemis\\_ils\\_market\\_reports/](http://www.artemis.bm/artemis_ils_market_reports/)
34. UNEP FI (n.d.). Global Risk Map. Retrieved from: <http://globalriskmap.nicta.com.au/About.html>
35. UNEP FI (2016). City Innovation Platform for African Infrastructure Risk and Resilience (2016). Retrieved from: <http://www.unepfi.org/psi/wp-content/uploads/2016/03/CityInnovationPlatform.pdf>
36. See <http://montrealpledge.org/>
37. Natural Capital Declaration (2013). Working towards natural capital accounting and integrated reporting by financial institutions. Retrieved from: [http://integratedreporting.org/wp-content/uploads/2013/11/NCD\\_IIRC-Presentation\\_20131030.pdf](http://integratedreporting.org/wp-content/uploads/2013/11/NCD_IIRC-Presentation_20131030.pdf)
38. For instance, the International Energy Agency has estimated that the investment required to meet the Paris Agreement goals could be \$1 trillion annually. See: <http://www.americanbanker.com/bankthink/banks-key-to-determining-success-of-paris-climate-deal-1080598-1.html>
39. Retrieved from: <http://investorsonclimatechange.org/statement/>
40. See <http://www.unepfi.org/fileadmin/documents/PortfolioDecarbonizationCoalition.pdf>
41. See: <http://climateaction.unfccc.int>
42. See : <https://www.unpri.org/news/what-the-french-energy-transition-law-means-for-investors-globally>
43. See: <https://www.fsb-tcfd.org>
44. See : <http://chinawaterrisk.org/opinions/what-chinas-new-green-bond-rules-mean/>
45. Ridley, M. (2016). Green bonds' growth booms. Retrieved from: <http://www.gbm.hsbc.com/insights/economics/green-bonds-growth-booms>
46. Moody's Investor Service (2016). Moody's launches new Green Bond Assessment service. Retrieved from: [https://www.moodys.com/research/Moodys-launches-new-Green-Bond-Assessment-service--PR\\_346590](https://www.moodys.com/research/Moodys-launches-new-Green-Bond-Assessment-service--PR_346590)
47. See note 16.

48. Kidney, S. (2016). India's securities' regulator finalises official green bond listing requirements + says green bonds are a tool to finance India's INDC (national climate change plan) - yes they are! Retrieved from: <https://www.climatebonds.net/2016/01/india%E2%80%99s-securities%E2%80%99-regulator-finalises-of-ficial-green-bond-listing-requirements-says-green>
49. See <http://www.icmagroup.org/News/news-in-brief/new-official-rules-for-chinese-green-bond-market/>
50. Financial Times (2016). Bank of China issues \$3bn in international green bonds. Retrieved from: <https://next.ft.com/content/2034d8a0-4370-11e6-9b66-0712b3873ae1>
51. Climate Bonds Initiative (2015). Bonds & Climate Change: The State of the Market in 2015. Retrieved from: <https://www.climatebonds.net/resources/publications/bonds-climate-change-2015>
52. Rachel Botsman (2012). The Currency of the New Economy is Trust. Retrieved from: [https://www.ted.com/talks/rachel\\_botsman\\_the\\_currency\\_of\\_the\\_new\\_economy\\_is\\_trust?language=en](https://www.ted.com/talks/rachel_botsman_the_currency_of_the_new_economy_is_trust?language=en)
53. Environmental Finance (2015). Barclays Bank, The Cost of Being Green. Retrieved from: [https://www.environmental-finance.com/assets/files/US\\_Credit\\_Focus\\_The\\_Cost\\_of\\_Being\\_Green.pdf](https://www.environmental-finance.com/assets/files/US_Credit_Focus_The_Cost_of_Being_Green.pdf)
54. ESPO (2015). Commitment to Support: 100% Sustainable Palm Oil in Europe by 2020. Retrieved from: <http://www.sustainablepalmoil.org/wp-content/uploads/sites/2/2015/12/European-Sustainable-Palm-Oil-Initiative.pdf>
55. RSPO (2015). Impact Update 2015. Retrieved from: [www.rspo.org/publications/download/f4aad4e0d5fabf8](http://www.rspo.org/publications/download/f4aad4e0d5fabf8)
56. Moody's (2016). Moody's reviews IOI Corporation Berhad's Baa2 ratings for downgrade. Retrieved from: [https://www.moody.com/research/Moodys-reviews-IOI-Corporation-Berhads-Baa2-ratings-for-downgrade--PR\\_348708](https://www.moody.com/research/Moodys-reviews-IOI-Corporation-Berhads-Baa2-ratings-for-downgrade--PR_348708)
57. Financial Times (2016). Cargill suspends ties with palm oil trader IOI. Retrieved from: <https://next.ft.com/content/eda1a164-76d8-39a2-af2b-9aad46e33ad8>
58. Financial Times (2016). Palm oil battle spreads beyond ethical investors. Retrieved from: <https://next.ft.com/content/d9c87b0e-229c-11e6-aa98-db1e01fab0c>
59. The International Trade Centre and IFC launched the Standards Map, an online portal which compares 210 standards. See: <http://www.standardsmap.org/identify>
60. Frankfurt School-UNEP Centre/BNEF (2016). Global Trends in Renewable Energy Investment. Retrieved from: <http://fs-unep-centre.org/publications/global-trends-renewable-energy-investment-2016>
61. See note 16.
62. Sustainalytics (2014). Sustainalytics Key Issue Report: Banks & Responsible Finance. Retrieved from: <http://www.sustainalytics.com/node/2054/lightbox2>
63. UNEP Inquiry (2016). Greening the Banking System: Taking Stock of G20 Green Banking Market Practice. Retrieved from: <http://unepinquiry.org/publication/greening-the-banking-system/>



# UNEP FINANCE INITIATIVE

---

CHANGING FINANCE, FINANCING CHANGE

---

 [www.unepfi.org](http://www.unepfi.org)

 [info@unepfi.org](mailto:info@unepfi.org)

 [/UNEPFinanceInitiative](https://www.facebook.com/UNEPFinanceInitiative)

 [@UNEP\\_FI](https://twitter.com/UNEP_FI)

**UNEP Finance Initiative**

International Environment House

15 Chemin des Amenomes

CH-1219 Chatelaine

Geneva, Switzerland

---