

CLIMATE FINANCE



Creating Markets, Creating Opportunities

July 2019

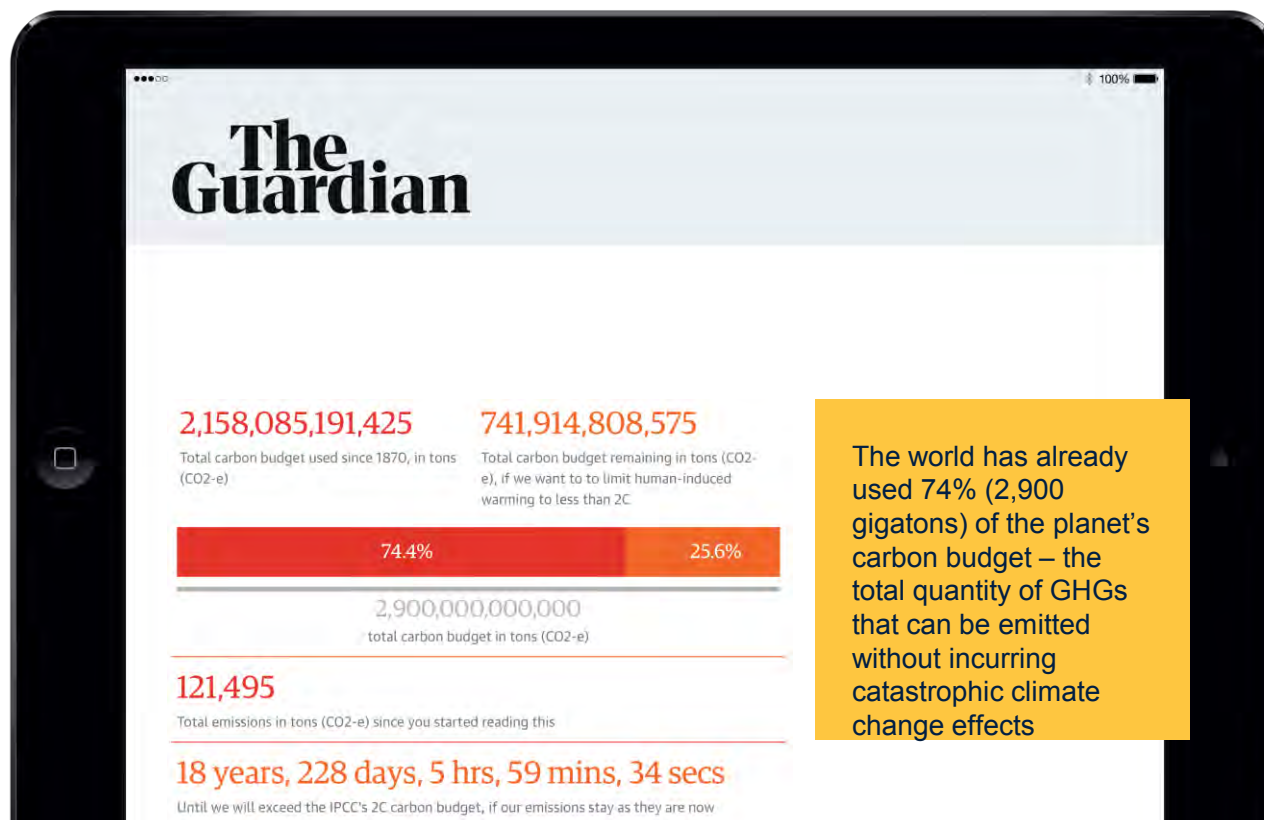
2030 Outlook



Creating Markets, Creating Opportunities

CARBON COUNTDOWN CLOCK

Carbon countdown clock shows 18 years left until planet's carbon budget is depleted



The world has already used 74% (2,900 gigatons) of the planet's carbon budget – the total quantity of GHGs that can be emitted without incurring catastrophic climate change effects

8,100 2100 PROJECTION

2,900 CARBON BUDGET

India and Other Developing: 43%
China: 13%
Other Developed: 20%
EU: 17%
US: 20%

INVESTMENT OPPORTUNITY FOR CLIMATE IN EMS



East Asia and Pacific
US\$ 16,046 Billion

Latin America and the Caribbean
US\$ 2,640 Billion

South Asia
US\$ 2,234 Billion

Europe and Central Asia
US\$ 665 Billion

Sub-Saharan Africa
US\$ 783 Billion

Middle East and North Africa
US\$ 265 Billion

US\$ 23
TRILLION

Is the investment
opportunity for
climate in emerging
markets that needs
to be financed by
2030

Buildings
US\$ 16,334 Billion

Transport
US\$ 3,699 Billion

Renewables
US\$ 1,765 Billion

Electric transmission
and distribution
US\$ 413 Billion

Industrial Energy Efficiency
US\$ 307 Billion

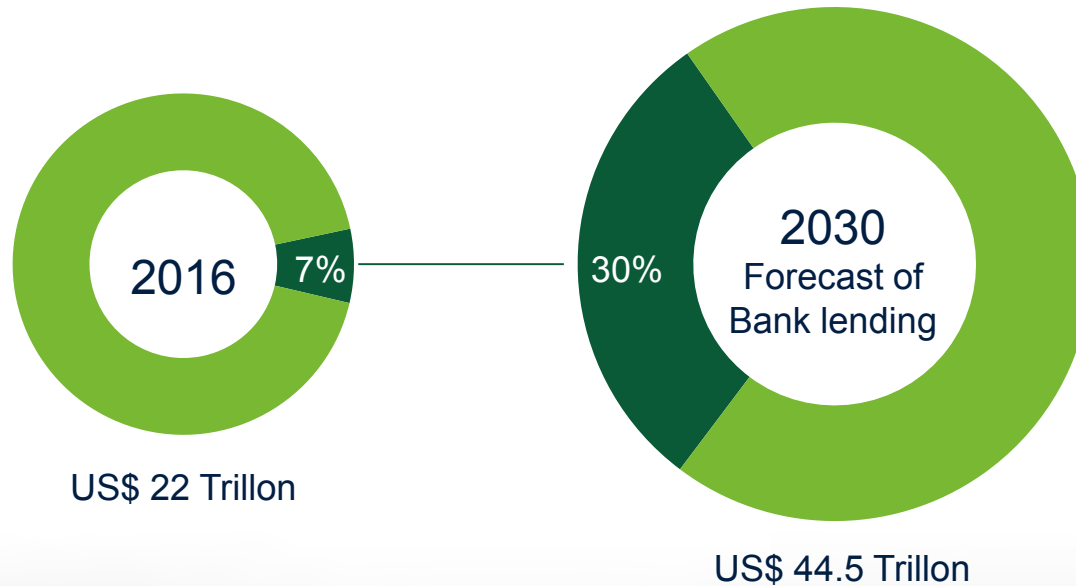
Waste
US\$ 115 Billion



GREEN FINANCE NEEDS TO GROW



- Bank loans
- Bank lending for climate

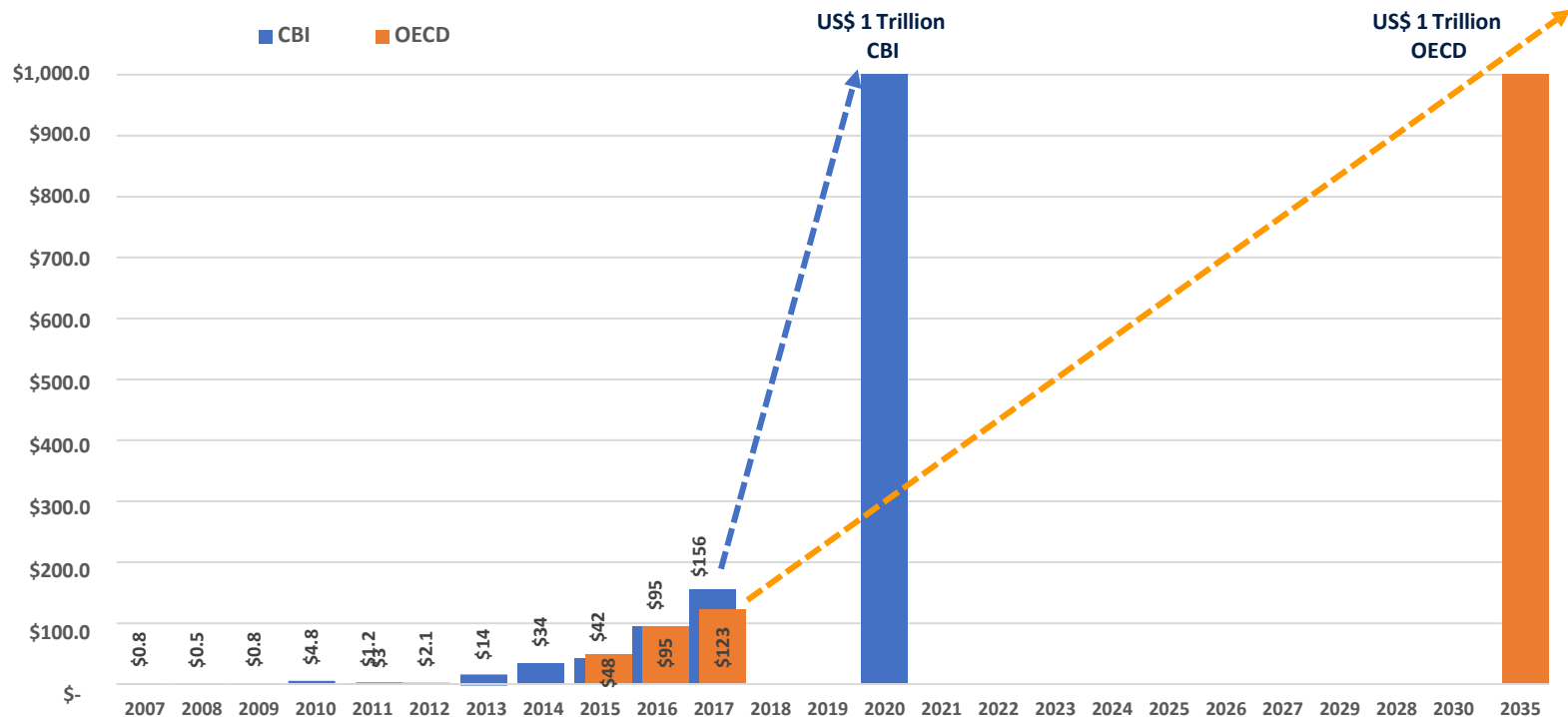


Note: In 2017 the world's biggest banks increased their financing of "extreme fossil fuels" by 11 per cent, committing \$115bn to fund projects in tar sands, Arctic and ultra-deepwater oil extraction, liquefied natural gas export, coal mining and power

GREEN FINANCE THROUGH THE CAPITAL MARKETS

PROJECTIONS OF LABELLED GREEN BONDS MARKET GROWTH (CBI AND OECD DATA)

OECD report* suggests that by 2035 in a 2°C energy investment scenario, bonds financing and refinancing the three sectors (RE, EE, low emission vehicles) in the four markets** studied have the potential to scale to USD 620-720 billion in annual issuance.



*Mobilizing Bond Markets for a Low-Carbon Transition

**China, EU, Japan, US are the largest markets, accounting for 76%, or USD 74 trillion, of the global debt securities markets valued at USD 97 trillion in 2014.

GREEN FINANCIAL INSTRUMENTS



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Green finance is booming



Banks

- Banks provide bulk of green lending
- Driven by opportunities and risks **they realign portfolio's**
- Renewables and energy efficiency top list
- Estimates IFC: 9% balance sheet is now green



Institutional investors

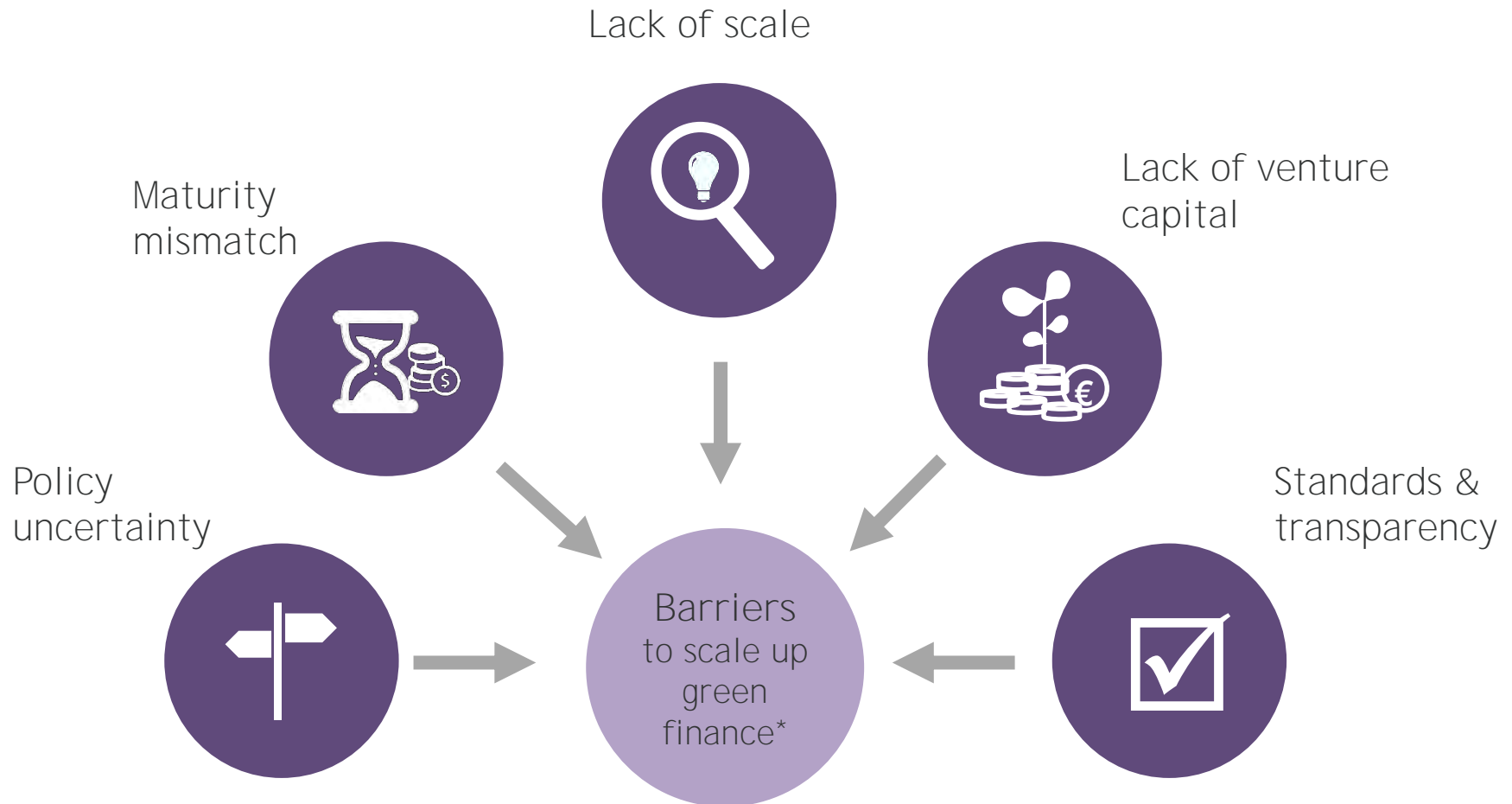
- Institutional investors integrate ESG considerations across asset classes
- **'Greening' started with listed equities**, now moving to the fixed income space
- Driven by risk/return and increasingly impact



Public sources & MDB

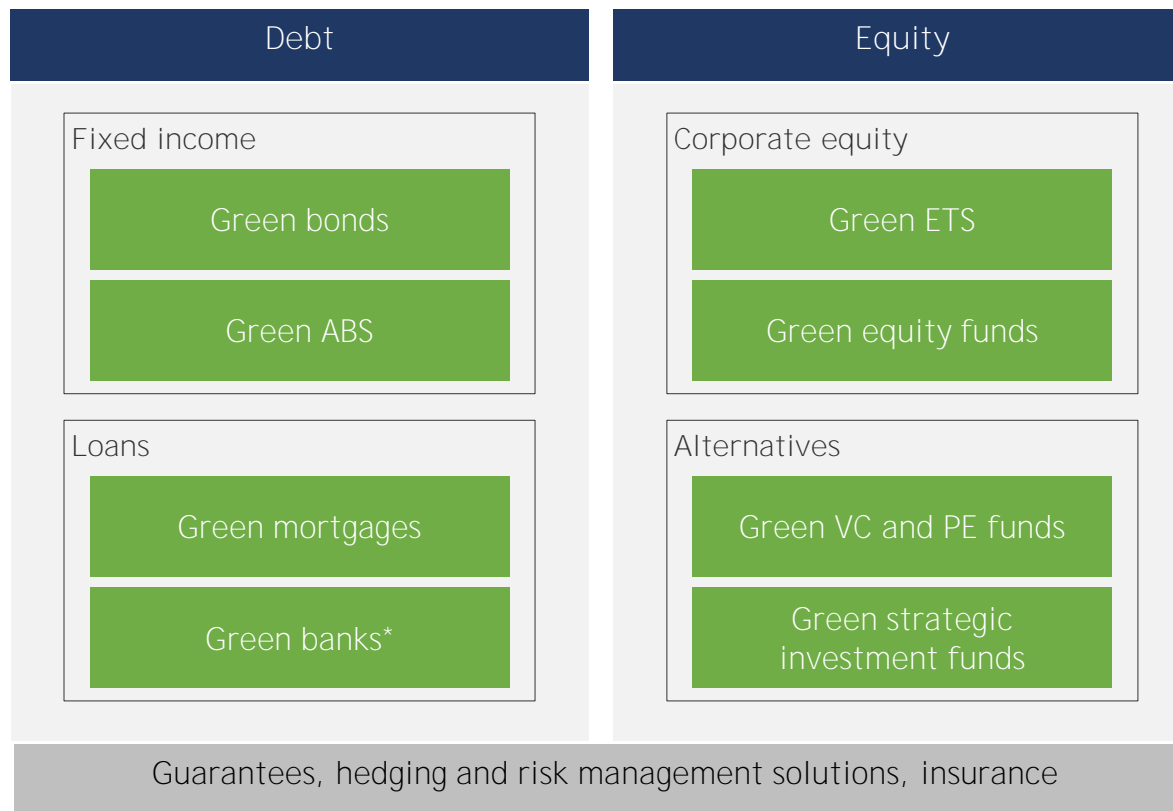
- Increasingly public and/or MDB finance is used to scale up private sector investments in green finance
- Also known as blended finance

At the same time, capacity to mobilize capital at envisioned levels remains constrained



* DNB (2016). Barriers for Green Finance

Green finance instruments help to address some of these barriers and speed up the transition



* Green banks can also invest in equity.

Further uptake of smartly designed green financial instruments and approaches can help to address barriers for scaling up green finance



- Green labeled instruments help to boost transparency



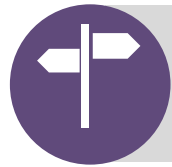
- Green bonds & ABS help to address maturity mismatch, freeing up bank lending



- Green VC & PE, and SIFs help to increase venture capital



- Green funds, green bonds & securitization help to address the issue of scale by bundling projects



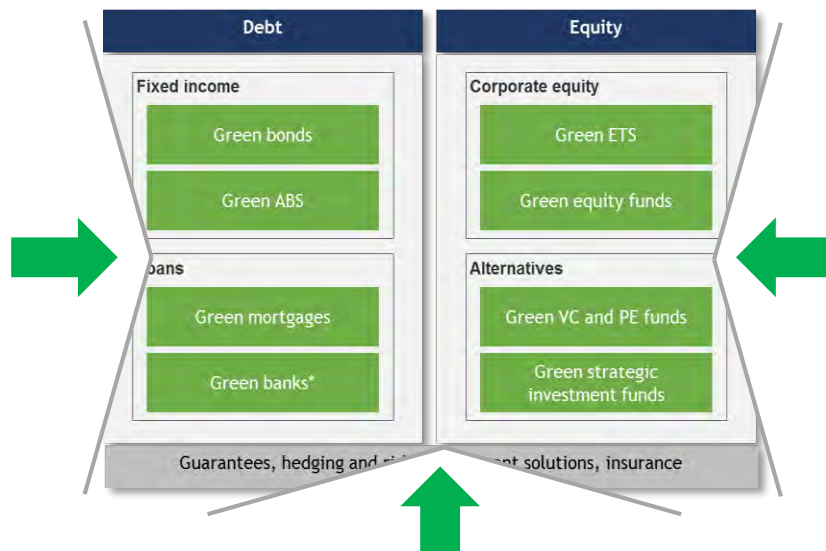
- Blended finance solutions, like SIFs can help to balance risk return for investors
- Instruments can improve the business case and raise demand

- *Increase supply of green finance*
 - *Free up bank lending*
 - *Increase long term finance*
 - *Increase venture capital*
- *Increase demand for green finance*

Policy and regulatory instruments drive adoption and proliferation of green finance instruments and approaches

National development plans

- Long term commitments to climate mitigation and environmental goals



Financial policies, regulations and supervisory actions

- Mandatory disclosures
- Fiduciary duties
- Supervisory activities (stress tests, capital requirements etc.)

Public policies

- Pricing externalities (taxes, ETS)
- Subsidies
- Offering guarantees
- Prohibitions

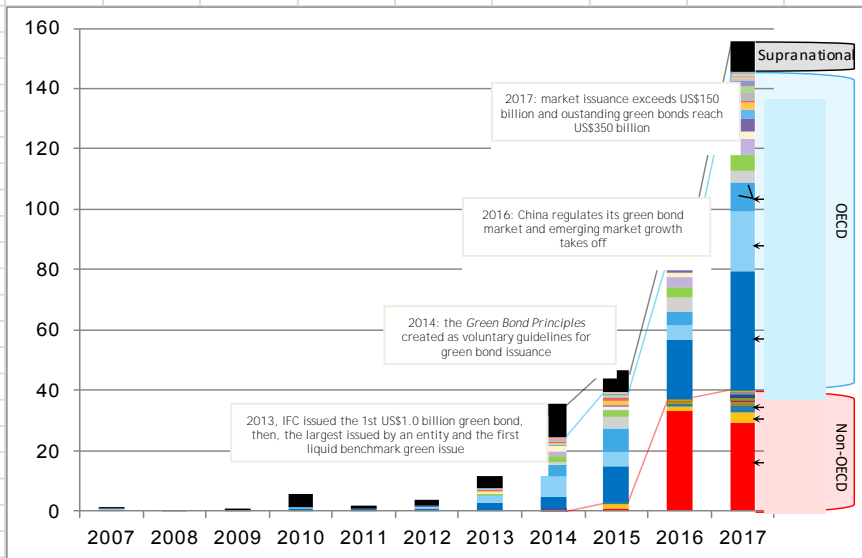
GREEN BONDS MARKET OVERVIEW



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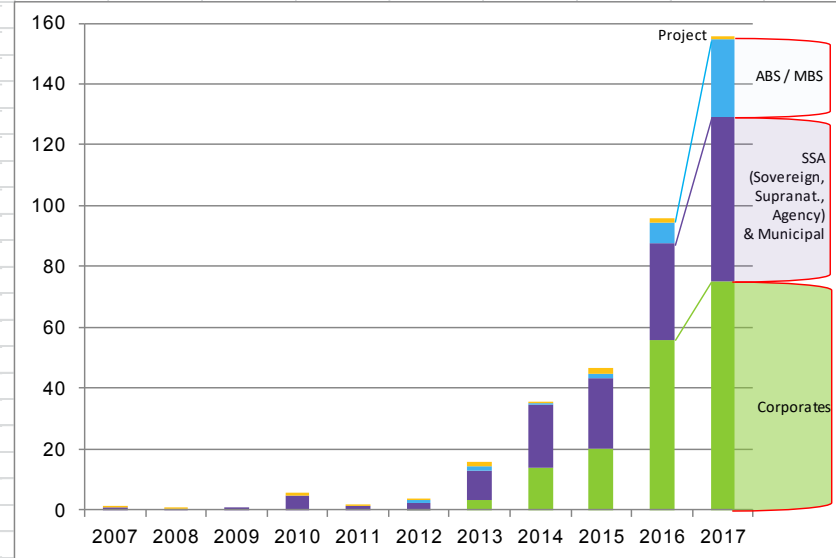
Green bond market has grown rapidly since 2012

Green bond market growth by domicile of issuers
(Amount issued, US\$ billion)



Source: SEB analysis based on Bloomberg (BNEF) & SEB data

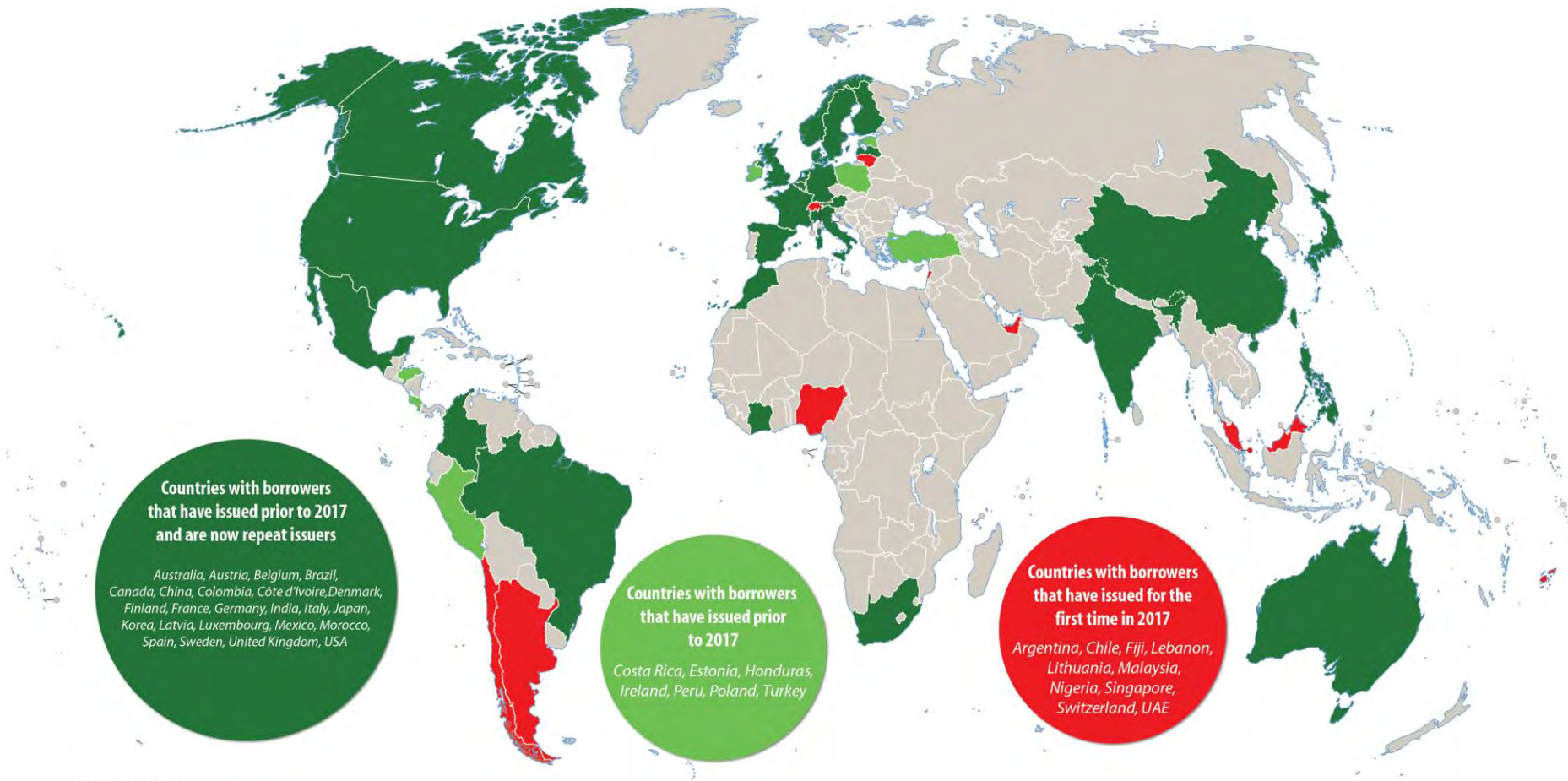
Green bond market growth by type of issuers
(Amount issued, US\$ billion)



Source: SEB analysis based on Bloomberg (BNEF) & SEB data
Note: ABS/MBS = Asset / Mortgage Backed Securities

- The Skandinaviska Enskilda Banken AB reported in a July market update that US\$47 billion was raised through green bonds in the second quarter of 2018, the second-highest quarterly figure on record
- EM green bond issuances have predominantly been in China and India, but there have been bank issuances in Brazil, Colombia, Costa Rica Mexico, South Africa, Turkey, Philippines, Indonesia, Thailand, etc.

Global green bond issuance is expanding



IBRD 43630 | APRIL 2018

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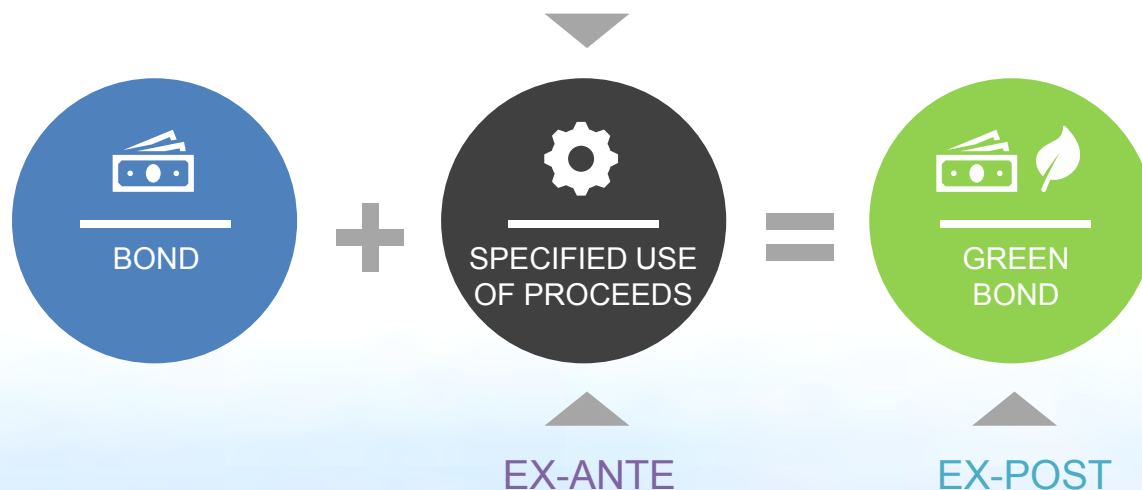




OVERVIEW OF GREEN BOND PRINCIPLES

What are green bonds?

For green bonds' use of proceeds, IFC applies its [definitions and metrics for climate related activities](#)



Ex-ante screening of eligible assets is conducted through the process of External Review provided by a third-party

Ex post reporting is both on the use of proceeds and the impact of the financed projects. The Issuer has to prepare annual impact report on financed projects

Green Bond Principles - a transparent framework

What are Green Bond Principles (GBP)?



Green Bond Principles are voluntary international guidelines which the issuer can put in place to issue a credible green bond that will also attract socially responsible and impact investors. Certain countries have developed domestic green bond frameworks to govern the development of the market in the country.

Green Bond Principles are the most used framework in the green bond market. They encourage disclosure and transparency which is key for the integrity and the credibility of the market - and for investors to have confidence in the product.

Web-link:

<https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>

Green Bond Principles - a transparent framework



Key considerations

- Criteria for use of proceeds should be clearly defined. It is critical to note that for use of proceeds IFC uses its Definitions and Metrics for Climate-Related Activities
- There should be a specific process for project selection.
- The issuer has to appropriately manage the funds ensuring that they are only used for applicable projects in line with the eligibility criteria
- The issuer has to report on its use of proceeds, available amounts and projects financed
- External review to confirm alignment of green bond issuances to the key features *Green Bond Principles* is advised



Why are *Green Bond Principles* necessary ?

- Are a voluntary process guidelines that recommend transparency and disclosure and promote integrity in the development of the green bond market
- Provide issuers guidance of the key components involved in launching a credible green bond
- Aids investors, by ensuring availability of information necessary to evaluate the environmental impact of their green bond investment
- Assists underwriters by moving the market towards standard disclosures which will facilitate future growth of climate-smart transactions

IFC can transfer all the accumulated experience as one of the World's largest issuer of green bond and Executive Committee Member of the Green Bonds Principles

Green Bond Principles - a transparent framework

Four key components

Use of Proceeds

- Identify eligible Green Project categories (e.g. [IFC definitions and metrics for climate related activities](#)) where funds will be used and disclose this in the Use of Proceeds section of the legal documentation for the green bond
- Issuers should make, and keep, readily available up to date information on the use of proceeds to be renewed annually until full allocation and on a timely basis in case of material developments

Process for Project Evaluation and Selection

- The issuer of a green bond should clearly communicate to investors:
 - The environmental sustainability objectives
 - The process by which the issuer determines how the projects fit within the eligible Green Projects categories identified above
 - The related eligibility criteria, including, if applicable, exclusion criteria or any other process applied to identify and manage potentially material environmental and social risks associated with the projects

Management of Proceeds

- The net proceeds of the green bond, or an amount equal to these net proceeds, should be credited to a sub-account, moved to a sub-portfolio or otherwise tracked by the issuer in an appropriate manner, and attested to by the issuer in a formal internal process linked to the issuer's lending and investment operations for Green Projects

Reporting

- Issuers should make, and keep, readily available up to date information on the use of proceeds to be renewed annually until full allocation, and on a timely basis in case of material developments
- The annual report should include a list of the projects to which green bond proceeds have been allocated, as well as a brief description of the projects and the amounts allocated, and their expected impact

IFC team can help an issuer to understand and apply above guidelines necessary for a green bond

External review recommended to ensure alignment with GBP

There are a number of types and levels of review an issuer can obtain



Second Party Opinion

An institution with environmental expertise, that is independent from the issuer may issue a Second Party Opinion. The institution should be independent from the issuer's adviser for its green bond framework, or appropriate procedures, such as information barriers, will have been implemented within the institution to ensure the independence of the Second Party Opinion. It normally entails an assessment of the alignment with the Green Bond Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability, and an evaluation of the environmental features of the type of projects intended for the Use of Proceeds.



Verification

An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/ or environmental criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from green bond proceeds, statement of environmental impact or alignment of reporting with the *Green Bond Principles*, may also be termed verification.



Certification

An issuer can have its green bond or associated green bond framework or Use of Proceeds certified against a recognized external green standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.



Green Bond Scoring / Rating

An issuer can have its green bond, associated green bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialized research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental performance data, the process relative to the *Green Bond Principles*, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material environmental risks.



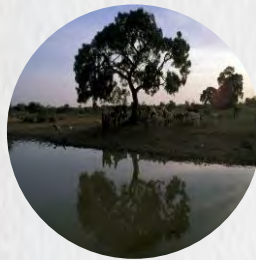
OVERVIEW OF IFC Role in Green Bond development

Green bond technical support

IFC debt capital market products offering

Funded and unfunded instruments: IFC offers a range of instruments to help potential issuers access Debt Capital Markets from bridge financing to security credit enhancement and direct investment in the new issue

A flexible approach to support the issuance process: the different products available may be proposed within a single credit approval in order to provide flexibility in the funding strategy and help prospective issuers adjust to changing market environment



Anchor Investment



Bridge Financing



Credit Enhancement



Advisory Services

Helping clients access to financing through a wide range of solutions

Private and public green bond issuances provide different benefits

Private green bond issuance

- Green bond issuance may be placed with a handful of qualified institutional buyers including IFC in a private placement
- Privately placed bonds, technically must be registered with a securities regulator and include the same disclosures etc. as a public bond issuance.
- Privately placed bonds may be listed on an exchange
- Privately placement provide issuers a number of benefits including flexibility of having to negotiate with only a handful of investors and are less expensive to issue due to lower distribution cost
- For first time issuers, a private placement is a means to build a core investor base before a full fledged public bond issuance
- A privately placed green bond may however not provide as much publicity benefit and may limit the ability of a bank to show case its climate commitment

Public green bond issuance

- Public bonds will be distributed through a public offering usually led by an investment bank/ transaction advisor
- Offering circular of a public bond is usually reviewed by the securities regulator and must be approved by the regulator prior to offering the bond to the public
- Public bond issuances while being more expensive due to the cost of marketing among others offers unique benefits including.
 - Being more attractive to investors due to presumed higher liquidity
 - Better diversification of investor base
 - Better price discovery
 - Greater publicity mileage and ability to influence green bond issuance practices

IFC has the tools to support all types of bond issuances from being the lead investor in a first time issuer's privately placed green bond to anchoring the green bond of a known issuer

IFC - a market leader - as an issuer and investor in green bonds (1/2)

Why work with IFC

IFC's green bond experience



IFC is a pioneer in the green bond market and one of the largest global issuers of green bonds



IFC has issued 133 green bonds - 16 currencies – US\$8.8 billion. In Feb 2013, IFC issued a US\$1.0 billion green bond, the largest issued at that time by any entity and the first liquid benchmark green issue that helped main stream green bonds as a market instrument

US\$1.6 BILLION

Over the last three and a half years, FIG has helped 21 financial intermediaries and one utility issue bonds, of which 16 are green bonds worth US\$1.6 billion, and six are bond issuances with partial proceeds toward climate-smart projects worth US\$362 million. In addition, IFC invested US\$256 million in one green bond fund (size US\$1.42 billion). All green bonds issued by our financial institution clients were their first-time green bond issuances, except for IFC's very first green bond investment in 2015, which was the first cross-border green bond issuance from an emerging market but the issuer's second green bond issuance



IFC - a market leader - as an issuer and investor in green bonds (2/2)

Why work with IFC

IFC's green bond experience



In 2014, IFC became the first international investor in an EM green bond when it subscribed to a US\$50 million equivalent Indian Rupee green bond issued by Yes Bank, which became the first EM cross border green bond issuance



IFC is a member of the *Green Bond Principles* and sits on the Executive Committee. IFC has leveraged its experience as an issuer and investor in green bonds and a member of the executive committee of the *Green Bond Principles* to shape green bond guidelines in a number of countries



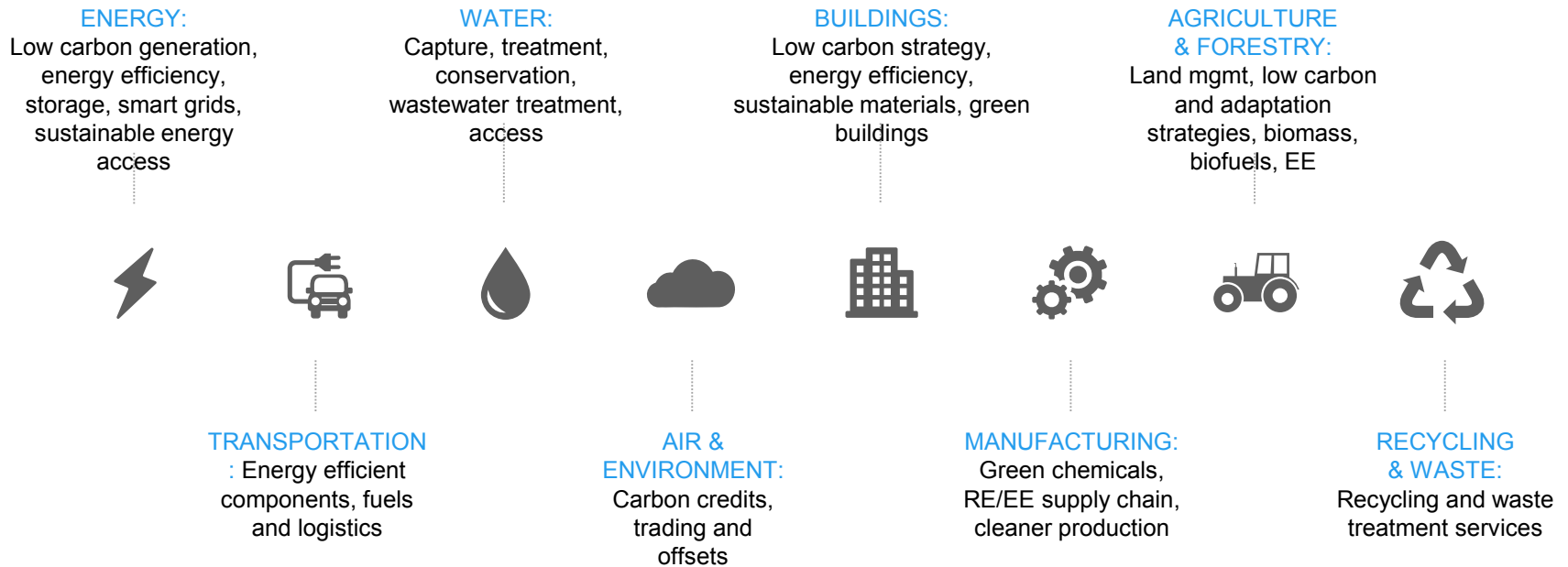
In partnership with Amundi, IFC has set-up the world's largest green bond fund with a US\$2 billion investment strategy to support green bonds issued by banks active in EMs



Benefits to the issuer

- ✓ Enhancement of Franchise value by helping issuers effectively communicate their sustainability strategy
- ✓ Encouraging greater institutional focus on climate and environmental finance and creating internal synergies between financial and sustainability departments
- ✓ Experience issuing green bonds will enhance the issuers credibility in competing for opportunities with a sustainability dimension
- ✓ Tapping a wider investor base and creating a value added offering for the existing investor base
- ✓ Establishment of improved monitoring and reporting requirements to better capture positive impacts of the bank's environmental finance activities
- ✓ Over time, increased demand is likely to drive favorable terms and a better price for the issuers, compared to a regular bond from the same issuer
- ✓ Risk mitigation: regulations in certain markets allow an issuer to raise longer term funding, a critical source for banks to expand their infrastructure funding, and alleviate its asset liability mismatches

Sectors with climate / green projects



CREATING A MARKET FOR GREEN BONDS

IFC helped catalyze the market for green bonds in the Philippines

BDO
UNIBANK



- USD150 million 7-year green bond issued in February 2018
- First green bond issued by a Philippine FI; first green bond investment of IFC in East Asia and Pacific
- Use of Proceeds: For renewable energy, energy efficiency and green building projects
- Private Placement with IFC



- USD150 million 7-year green bond issued in June 2019
- Use of Proceeds: For renewable energy, energy efficiency, green building, waste water treatment and water conservation projects
- Private Placement with IFC



- IFC participated as anchor investor, investing US\$50 million in AC Energy's US\$300 million green bond issue
- First Climate Bond certified infrastructure-focused green bond to be publicly listed in Southeast Asia. The five-year green bond is listed on the Singapore Exchange.
- Use of Proceeds: For AC Energy's expansion in Southeast Asia



- IFC issued a US\$90 million equivalent green bond (IFC Mabuhay Bond) which is the first AAA-rated Philippine peso green bond
- Tenor: 15 years
- Use of Proceeds: To support EDC's capital expenditures which is focused on optimizing the generation output of its geothermal power plants and improving resiliency to climate impacts
- Public bond listed in Philippines



THANK YOU