



Introduction to Green and Social Bond Markets

November 2018

Presentation sequence

1. Overview
2. Green bonds
3. Social and Sustainability bonds
4. Governance & market development
5. Opportunities and challenges
6. Appendix: transaction cases - examples

1. Overview



Why green & social bonds

Why are Green Bonds credible, scalable and globally relevant?

- **Market consensus behind GBP**
- **Transparency & accountability**
 - Needed by both authorities and markets
- **Sufficient flexibility** for local interpretation

Building the Green & Social Bond Market

Market needs

Credible green fixed income solution

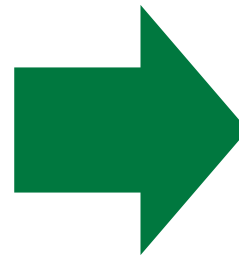
Clear-cut green investment

Environmental benefits - evidence

Environmental expertise,
accountability, due diligence

Standardised / comparable reporting

Strategic consistency / risk mitigation



ICMA Green/Social Principles

Broad buy & sell-side consensus +
balanced governance

Use of proceeds restricted to green
assets

Transparency - regular reporting

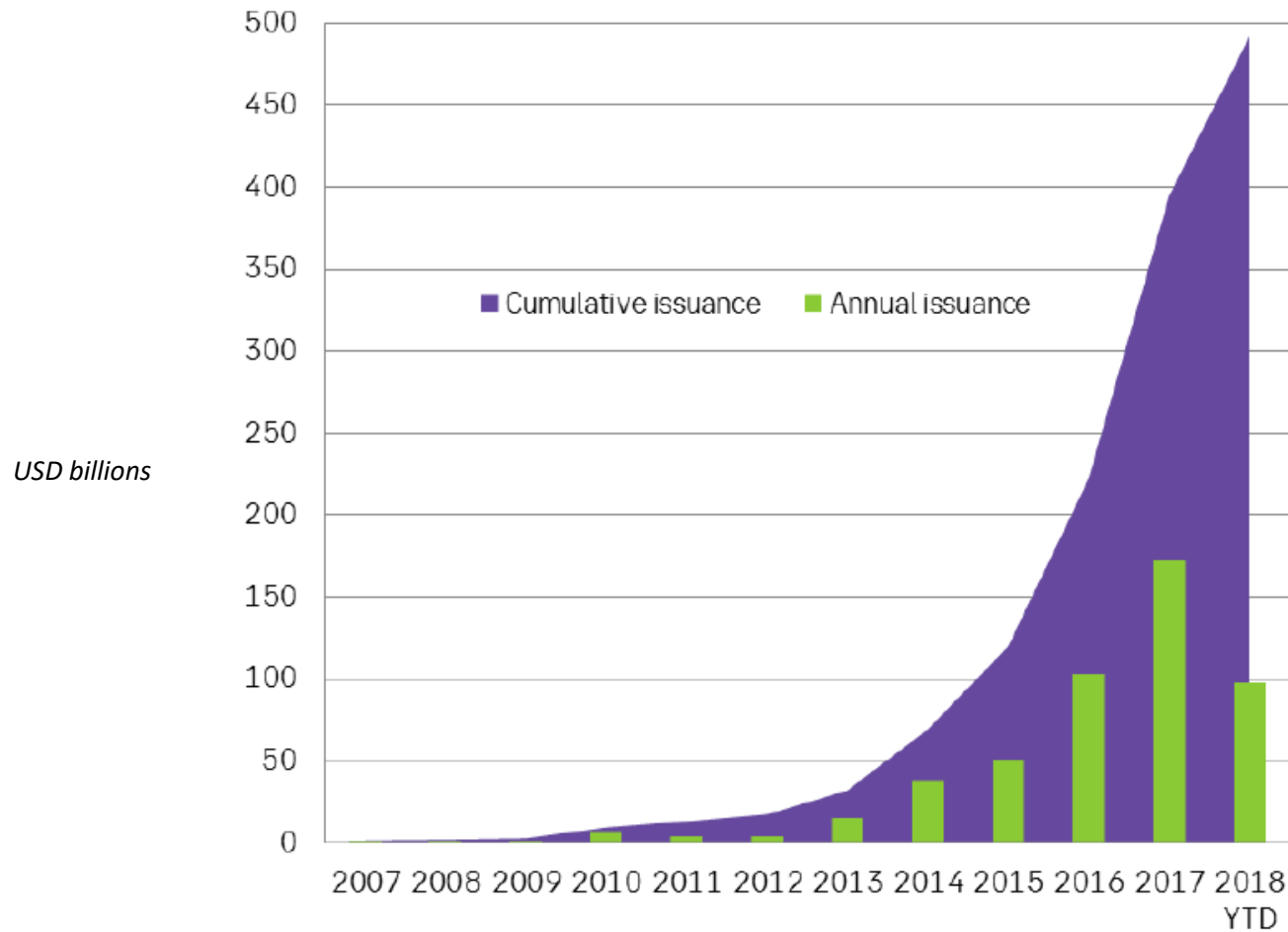
External reviews

Reporting templates – focus on green
impact

Disclose alignment of corp / green /
social strategy with green / social bond

Green bond issuance growth

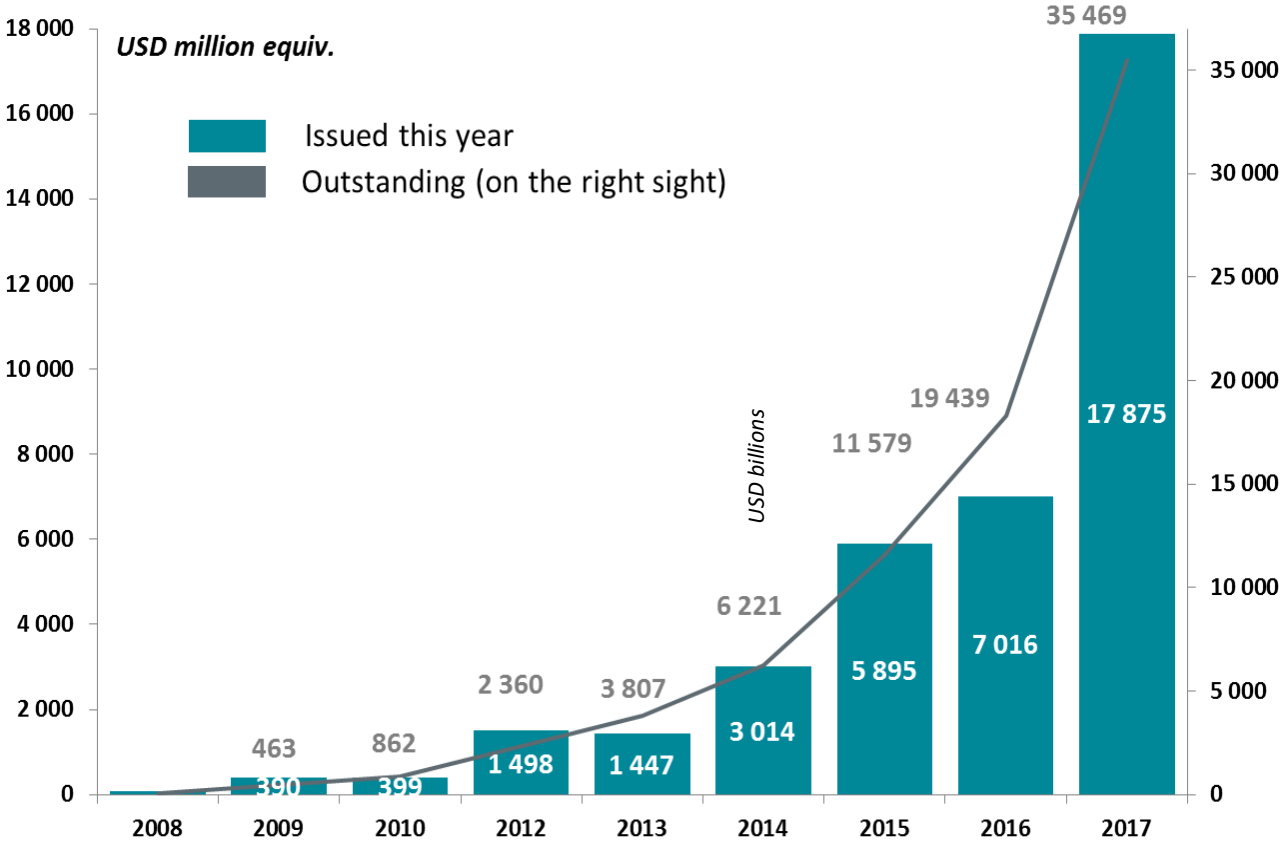
Cumulative and Annual Issuance



Source: SEB analysis based on Bloomberg (BNEF) and SEB data as at August 2018

Social and Sustainability bond issuance

Cumulative and Annual Issuance

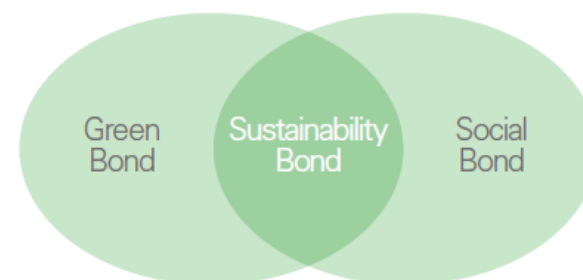


Source: Bloomberg, Crédit Agricole CIB (As of December 31st 2017)

Product snapshot

- **Strong demand** for bonds dedicated to environmental, social and sustainability considerations.
- Green, Social and Sustainability Bonds are **bond instruments where the proceeds will be exclusively applied to eligible environmental and social projects.**
- **Green Bond Principles (GBP)** and **Social Bond Principles (SBP)**, as well as the **Sustainability Bond Guidelines (SBG)**, referred to as the “**Principles**”, have become the leading framework globally for issuance of green, social and sustainability bonds.
- **Governance:** Led by Excom, voted by Members. Hosted by ICMA on behalf of ExCom and other Members (investor/intermediary/issuer), as well as Observers (other stakeholders).

Bond Type	Use of Proceeds
Green Bond	Projects with a clear environmental benefits (e.g. renewable energy, energy efficiency, climate change adaptation)
Social Bond	Projects that address social issues and/or seek to achieve positive social outcomes, especially for a target population (e.g. poor, vulnerable, unemployed, etc.)
Sustainability Bond	Mix of green and social projects



Key Features of the Principles

The Green & Social Bond Principles

Pillar 1

Use of proceeds –
Identifying eligible
projects

Pillar 2

Process for project
evaluation and
selection

Pillar 3

Management of
Proceeds:
Ring-fencing
or notional
equivalence

Pillar 4

Reporting:
use of proceeds,
impact etc.

External review recommendation

Update 2018 + New Publications

- **Updated Principles** released: the Green Bond Principles (GBP), the Social Bond Principles (SBP) and the Sustainability Bond Guidelines (SBG).
- Important **new publications**: further strengthen and interconnect market ecosystem
 - **Guidelines for External Reviews**: promoting best practice and integrity in the provision of external review services
 - **SDG mapping**: High-Level Mapping of project categories to UN's Sustainable Development Goals, recognizing market interest in referencing SDGs
 - **Framework for Impact Reporting of Social Bonds**: designed to accelerate progress on impact reporting for social and sustainability bonds
 - **Investor survey**: 51 investors globally / 90% of buy-side Members & Observers



2. Green Bonds



Debt currently finances the majority of infrastructure investment. In particular, bond finance is a natural fit for low-carbon and climate-resilient infrastructure assets.

Source: OECD report: “Mobilising Bond Markets for a Low-Carbon Transition” (2017)

Green Bonds: Official Assessment of Benefits

“Green bonds can offer several important benefits for green investment including:

- providing an additional source of green financing;
- enabling **more long-term green financing**;
- enhancing issuer’s **reputation** and clarifying environmental strategy;
- offering **potential cost advantages**;
- facilitating the **“greening” of traditionally brown sectors**; and
- **making new green financial products available to** responsible and long-term investors.”

Source: **OECD** “Mobilising Bond Markets for a Low-Carbon Transition” 2017

Sustainable investment – buy-side momentum

Table 1: Growth of SRI Assets by Region 2014–2016

Region	2014	2016	Growth over period	Compound Annual Growth Rate
Europe	\$ 10,775	\$ 12,040	11.7%	5.7%
United States	\$ 6,572	\$ 8,723	32.7%	15.2%
Canada	\$ 729	\$ 1,086	49.0%	22.0%
Australia/New Zealand	\$ 148	\$ 516	247.5%	86.4%
Asia ex Japan	\$ 45	\$ 52	15.7%	7.6%
Japan	\$ 7	\$ 474	6689.6%	724.0%
Total	\$ 18,276	\$ 22,890	25.2%	11.9%

Source: Global Sustainable Investment Alliance, US\$bn

Environmental & Social factors in Credit Risk

Moody's (Sept. 2018 update):

- Assessment of 84 sectors / \$74.6trn in rated debt (universe +10% yoy) for credit exposure to environmental risks
- 11 sectors (\$2.2trn in rated debt) with elevated credit exposure to environment risks (+10% yoy)
- 16 sectors with “very high” or “high” exposure to carbon regulation
- 13 sectors with “very high” or “high” exposure to air pollution – susceptible to more stringent enforcement

S&P:

- Between mid-2015 and mid-2017: 346 ratings in which social risks were an important factor, 42 in which those risks were key to a rating action
- Social factors contributed *less* frequently to rating actions than did environmental and climate factors

Sources: Moody's, S&P

Short history of market development

2015-2016: Growth spreads, infrastructure built

- **Surge of Asian issuance** – China leads on volume
- **Exchanges launch** green segments: Oslo, Stockholm, London, Mexico, Luxembourg

2014: GBP Launch Spurs Ecosystem & Growth

- **First iteration of the Green Bond Principles** is published
- **First GB Indices:** BAML, MSCI Barclays, S&P, Solactive
- Green Bond **volumes triple**

2013: The Green Bond market takes off

- Green Bonds had been mainly a product for select institutional and retail investors until 2013
- **Larger deals** start coming to market
- **Institutional investor interest increases**

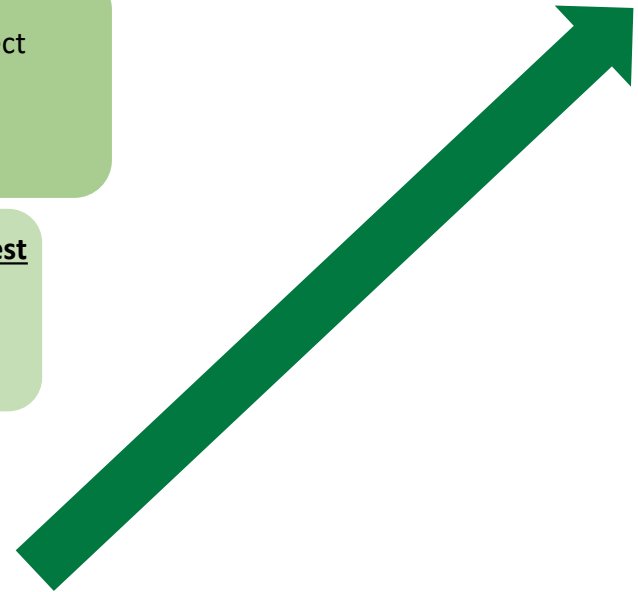
2012: Launch of Climate Bond Standard galvanizes interest

- **Start to define green** (selected sectors)
- **Verification / external review** promoted
- Clear **labelling** process

2007/8: EIB and IBRD issue first Green Bonds

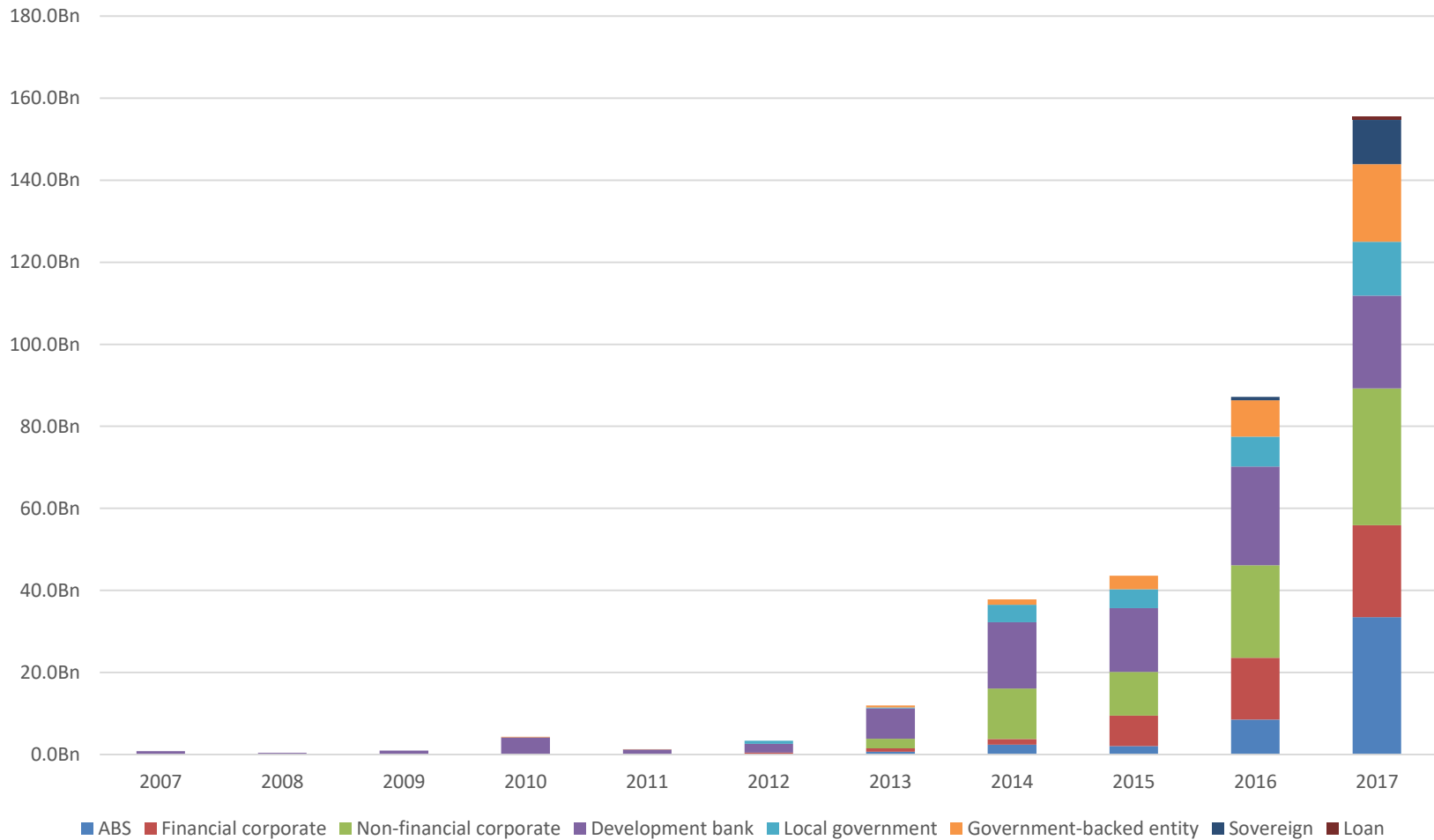
Establish now familiar pillars

- **Proceeds linked to green projects**
- **Reporting** on use of proceeds



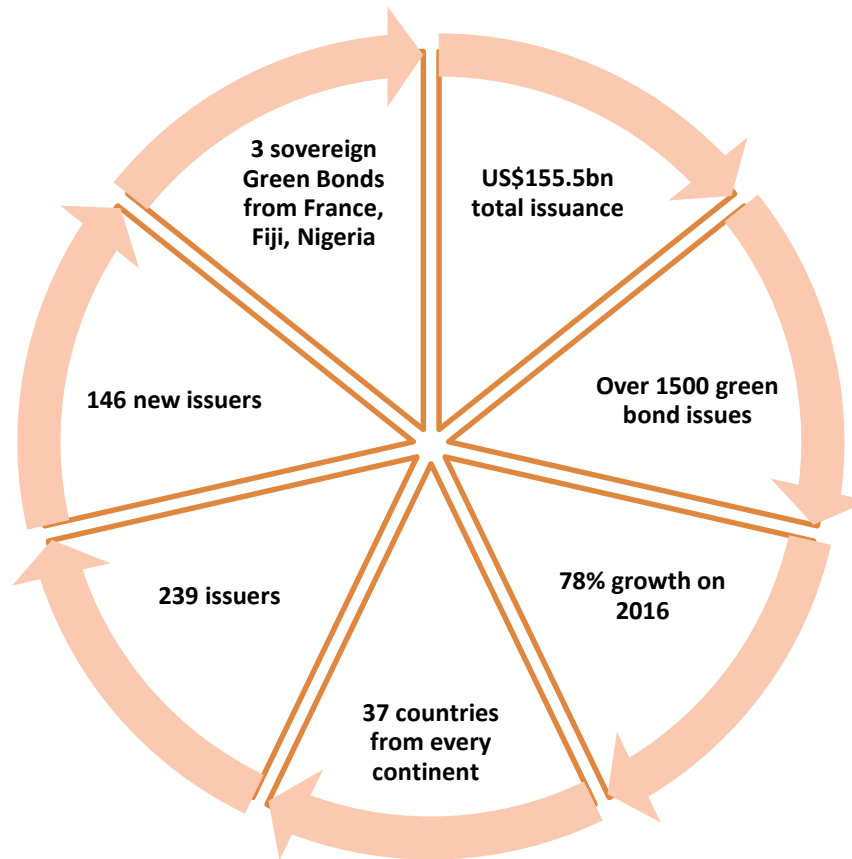
Issuance growth and diversification

Annual Issuance – by Issuer Type

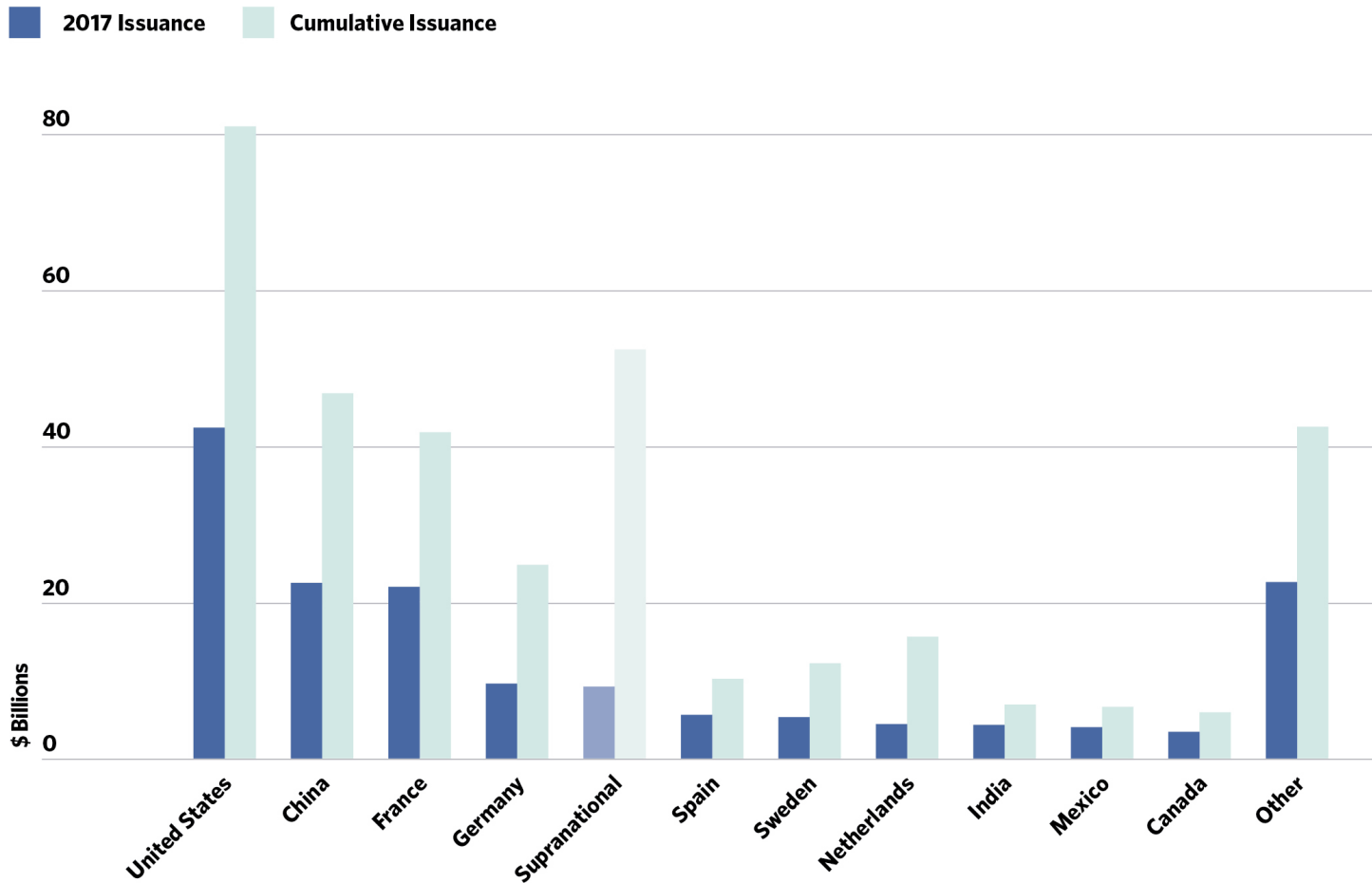


Source: CBI

2017 highlights



National and supranational leaders

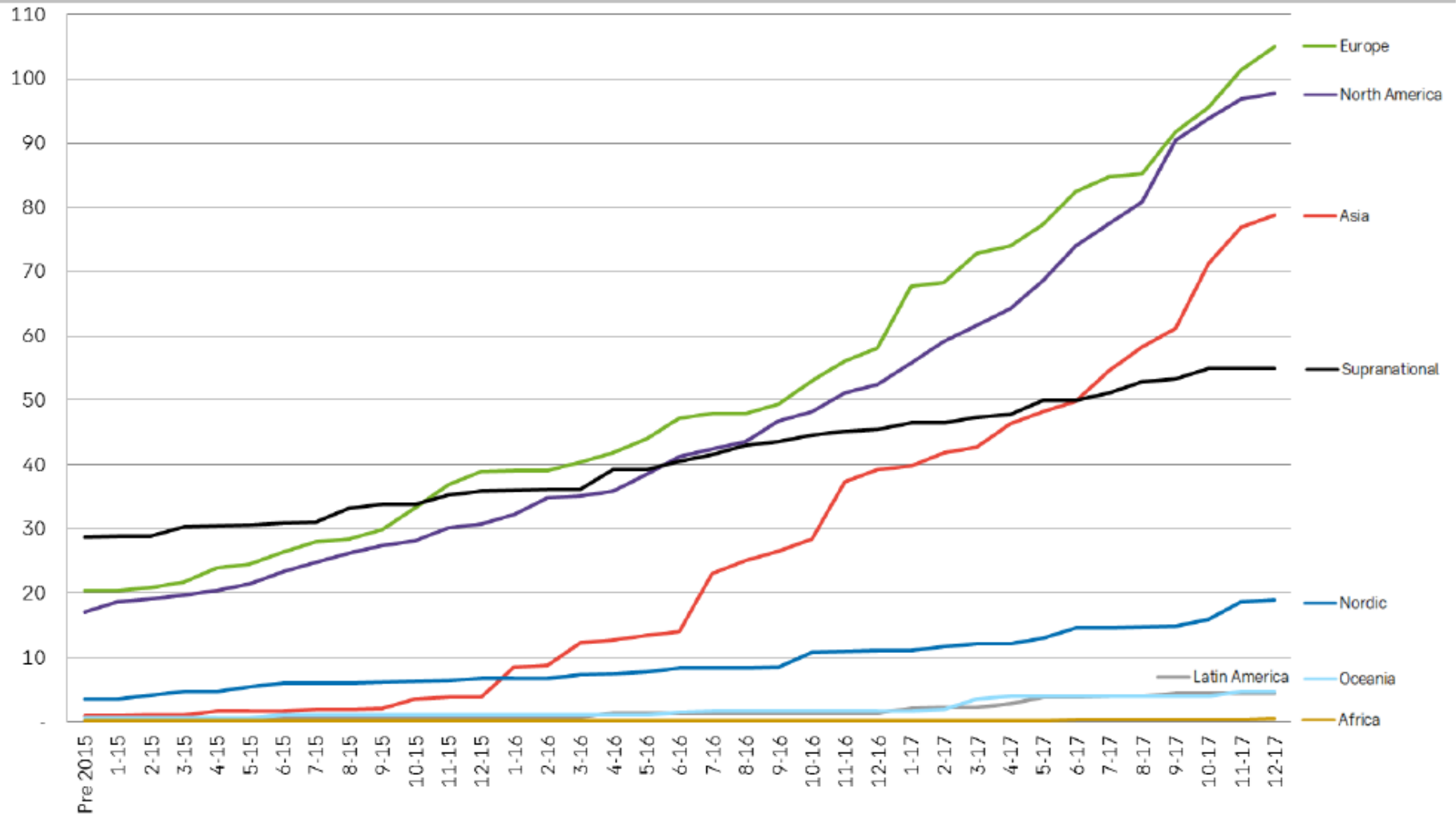


December 2017

Source: CBI

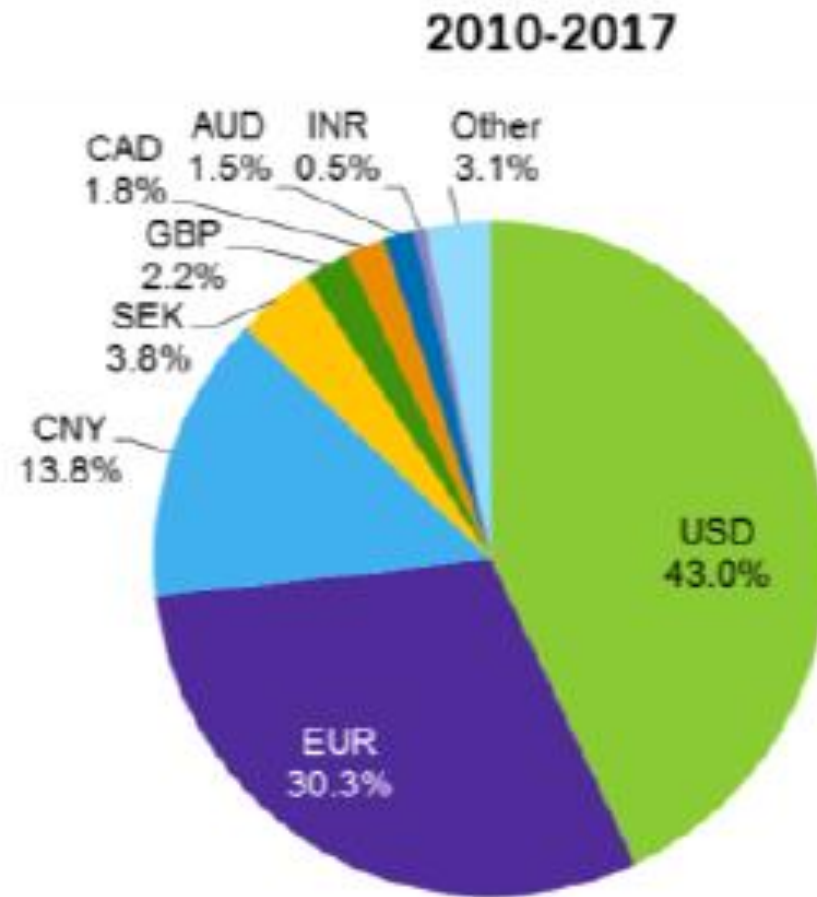
Regional trends

Growth by Geography (2015-2017 USDbn)



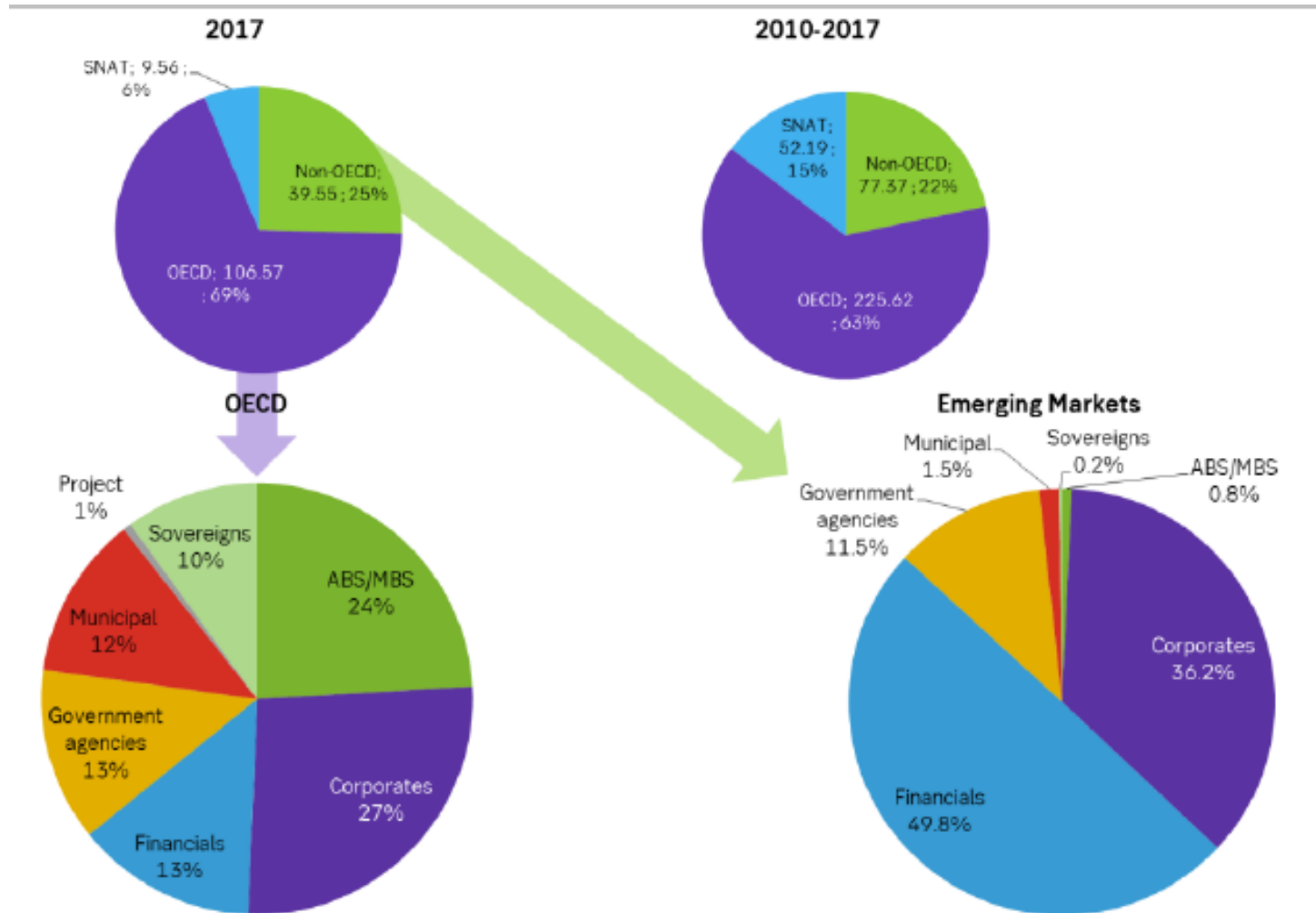
Source: SEB analysis based on Bloomberg and SEB data

Currency distribution: reflects market strength in EU/US/CN + diversification



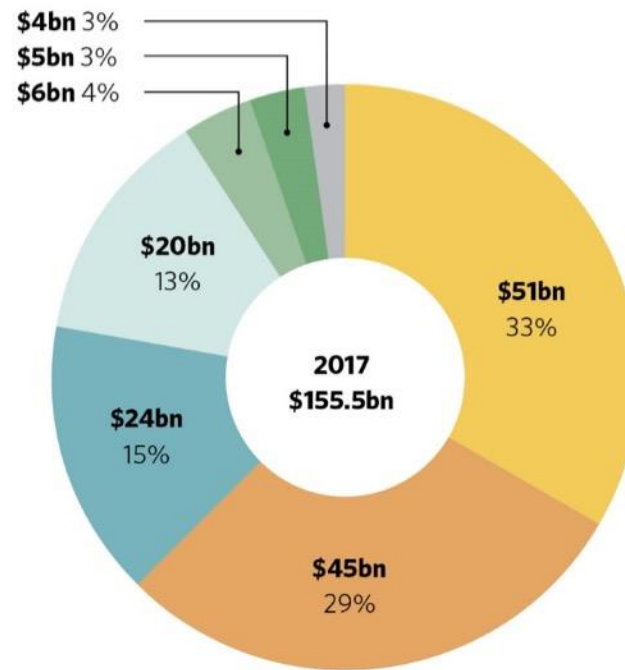
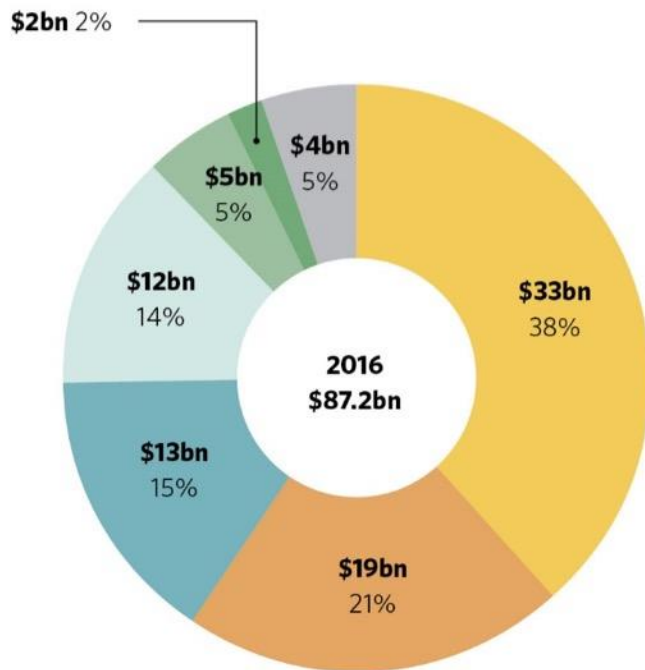
Source: SEB

OECD vs EM



Source: SEB

Use of proceeds – recent developments

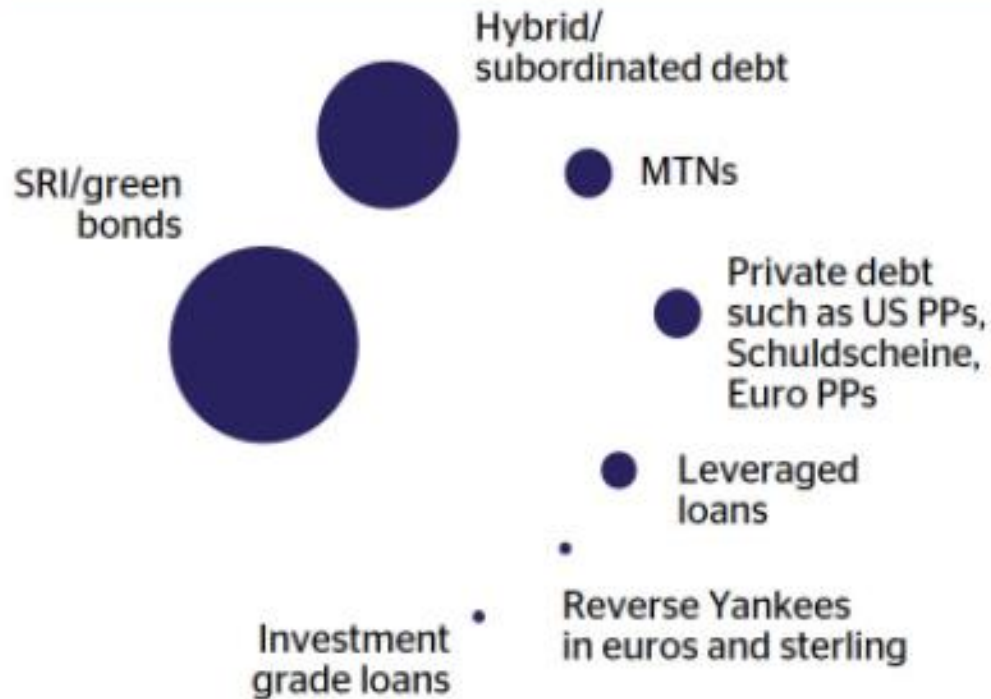


December 2017 Source: CBI

Primary market potential

Importance of Green to primary bond market

Which products are you most optimistic about by volume?



Source: GlobalCapital Survey of 20 DCM Heads, December 2017

Pillar 1 – Use of Proceeds - Investments tied to Green Bonds

GBP high-level green definitions (2018 edition)

New: Recognition for 5 high-level environmental objectives

Projects “contribute to environmental objectives such as: climate change mitigation, climate change adaptation, natural resource conservation, biodiversity conservation, pollution prevention & control” (previously referred to 4 areas of “concern”)

Project categories: Further refined

- **Renewable Energy**
- **Energy Efficiency**
- **Pollution prevention & control**
- Environmentally sustainable management of **living natural resources and land use**
- Terrestrial and aquatic **biodiversity** conservation
- **Clean transportation**
- **Sustainable water and wastewater** management
- Climate change **adaptation**
- **Eco-efficient and/or circular economy** adapted products, production technologies and processes (adding circular economy)
- **Green buildings** (now highlighted as a separate category)

Pillar 2: Project evaluation and selection

- **Fit with strategy**, policy or process for environmental sustainability
- Specific **environmental sustainability objectives**
- Process to ensure fit with **eligible green project categories**
- Material **environmental and social risk factors** of target projects
- External **green standards** may be referenced
- Specify relevant **exclusions**
- **External review** of approach

Pillar 3 – Management of proceeds

- Degree of ring-fencing
- **Amount allocated** vs. amount raised
 - At full allocation reconcile “equivalence” of volumes raised/spent
- Intended types of **temporary placement** for unallocated proceeds
- Auditor or other 3rd party to verify **tracking** method & allocation

Pillar 4 – Reporting

- **GB Framework:** Summarise alignment with 4 pillars and external review
- **Use of Proceeds reporting:** Annually until full allocation, or if material news
 - **New 2018:** Timely reporting of material developments highlighted
- **Impact reporting:** Forward-looking and if possible backward-looking; qualitative and if possible quantitative; disclose methodology
- **Templates** on Resource Centre
 - Issuer: articular alignment with 4 pillars
 - External review key facts
 - Impact reporting by sector (4 so far) - more sectors coming

External Review – overview

Significant change in 2018:

- New **Guidelines for external reviews** – promoting best practice & integrity in external review services
- Reviewer categories / descriptions refreshed in line with market practice.

Existing considerations:

- Recommend **public disclosure of external review**, or at least executive summary
- Partial or Full coverage of GBP alignment / conformity with 4 Pillars
- **Pre-issuance** focus on plans / green bond framework
- **Post-issuance** verify results vs. plan
- **Template** for external review summary on Resource Centre

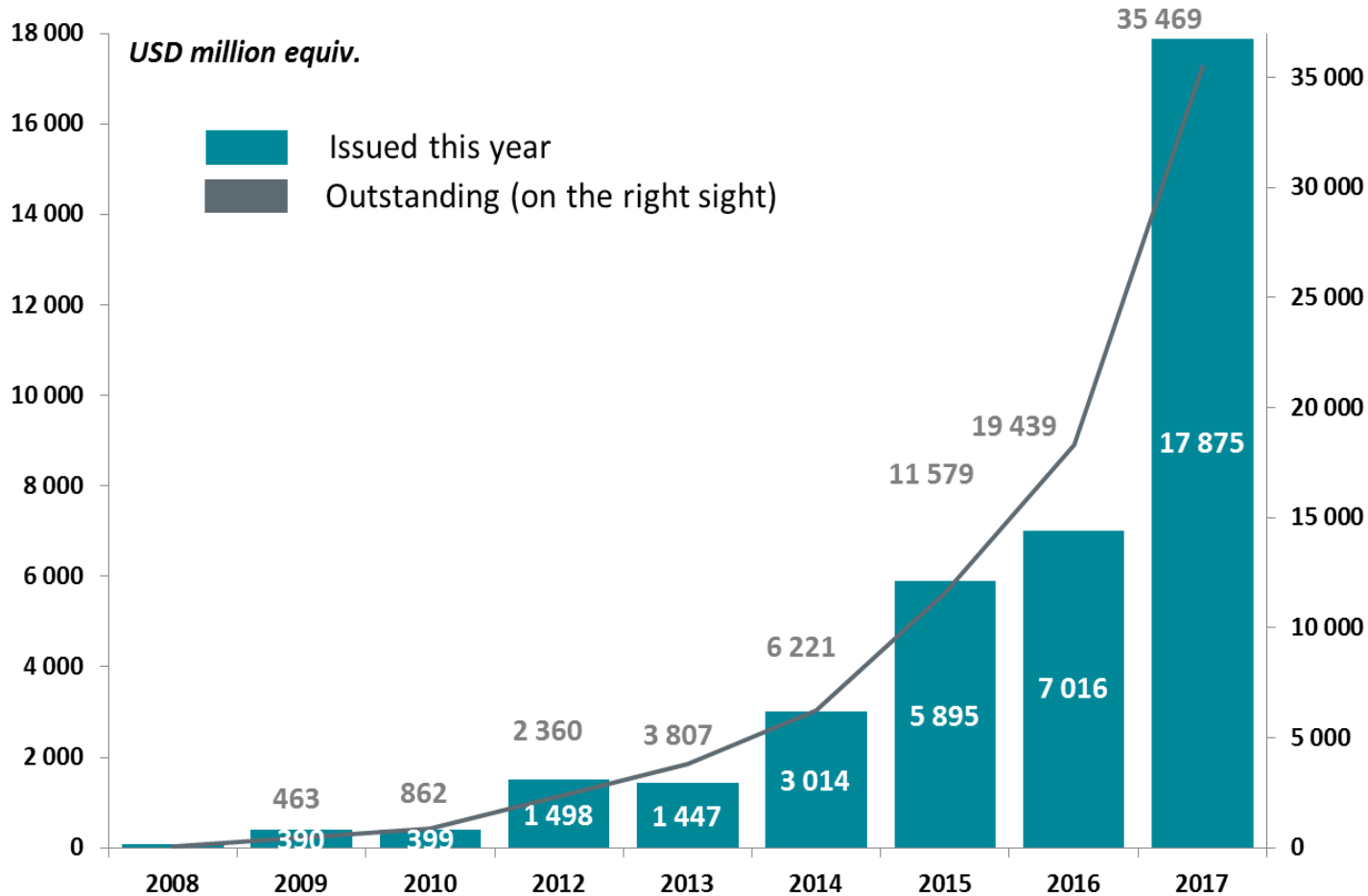
3. Social and Sustainability Bonds



History of Social & Sustainability Bonds

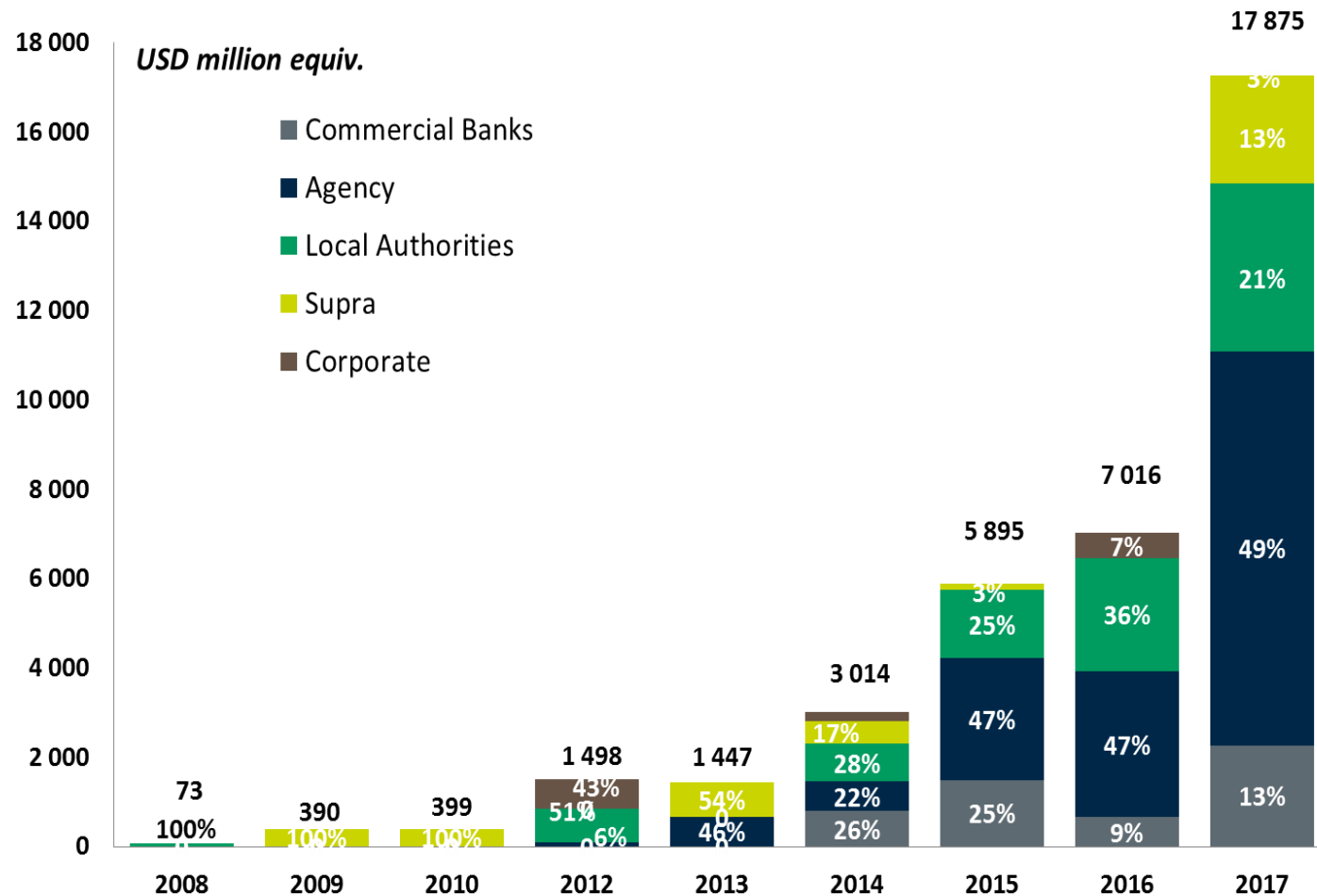
- Social Bond Guidance launched in 2016
- **Social Bond Principles (SBP) and Sustainability Bond Guidance (SBG) issued 2017**
- **ASEAN Social and Sustainability Bond Standards launched October 2018** – closely following SBP / SBG, and making explicit exclusions, plus guidance on reporting
- GBP / SBP ExCom leadership - **SBP Working Group**
- **SDGs:** Mapping in 2018 to GBP / SBP Use of Proceeds
- **Social: Refining definitions** – for target populations in 2018
- **Social Impact Reporting:**
 - **Inaugural Guidance 2018**
 - **Recommends clarity on project eligibility, impact indicators, indicator methodology**
 - **Ongoing work to develop metrics** – beyond nr of beneficiaries

Issuance growth – social and sustainability bonds



Source: Bloomberg, Crédit Agricole CIB (As of December 31st 2017)

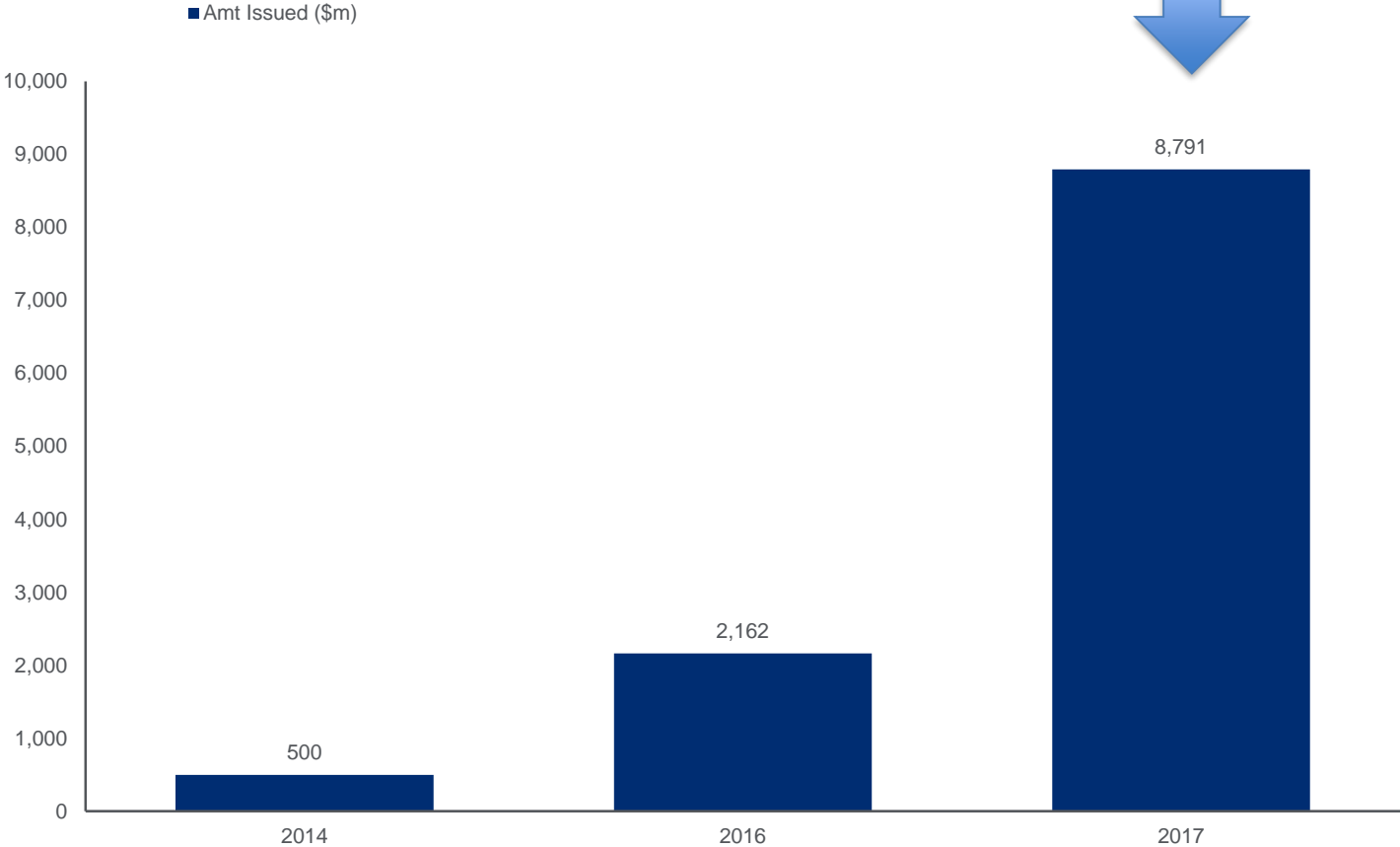
Issuer diversification



Source: Bloomberg, Crédit Agricole CIB (As of December 31st 2017)

Social bond issuance - flourishes after Principles launched

ICMA Social Bond Principles Launched



Source: Citi

4. Governance & market development



Governance and Working Group Focus

- **ExCom – who:**
 - elected market participants
 - Chair: NIB, Vice-Chairs: JP Morgan, Zurich Insurance
 - Members: 24, balanced by type of participants
- **ExCom – role:**
 - decide updates of Principles, with Member & Observer input / annual consultation
- **AGM & Conference – Week of Events:**
 - Flagship series of annual events presenting updated Principles, debate topical issues
 - Coupled with meetings of Working Groups, Official Sector, ExCom, plus training
- **GBP Governance:**
 - Decided by all market participants who are Members (vote)
- **Annual consultation:**
 - Opportunity for all stakeholders to give input
- **Working Groups:**
 - 2018-19: Green Projects Eligibility, Impact Reporting, Index & Database, Social & Sustainable Bonds, New Markets, Research. External Review completed workplan and is inactive for now.

GBP 2018-19 Executive Committee (since June)

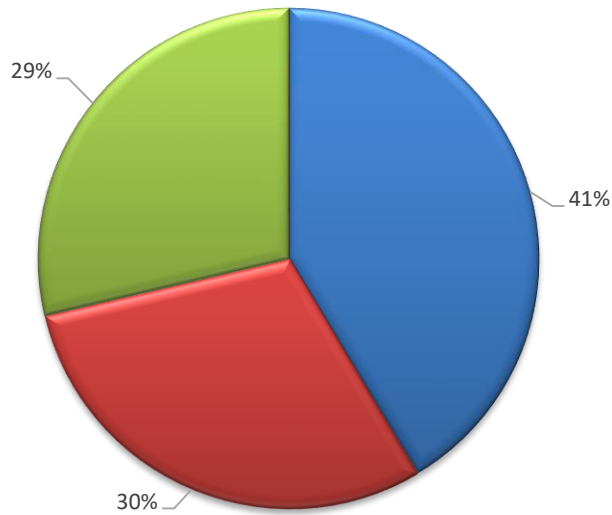
Investors	Issuers	Underwriters
ACTIAM*	BANK OF CHINA	BofA MERRILL LYNCH
AMUNDI AM	EDF	BNP PARIBAS
AXA IM	EUROPEAN BANK OF RECONSTRUCTION AND DEVELOPMENT	CREDIT AGRICOLE CIB
BLACKROCK	EUROPEAN INVESTMENT BANK	HSBC
KFW	INTERNATIONAL FINANCE CORPORATION	JP MORGAN
MIROVA	KOMMUNALBANKEN NORWAY	NATIXIS
TIAA-INVESTMENTS	NORDIC INVESTMENT BANK	RABOBANK
ZURICH INSURANCE GROUP	WORLD BANK	SKANDINAVISKA ENSKILDA BANKEN AB

* **NEW MEMBER**

Members & Observers

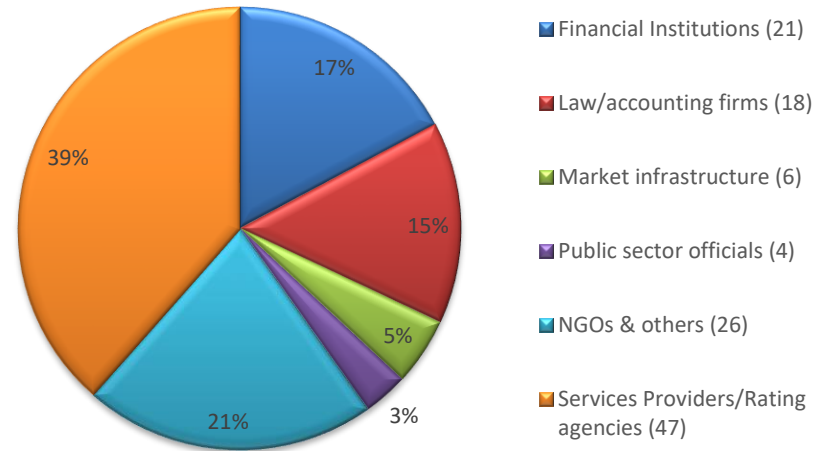
Status at Mid-2018

Members (157)



■ Underwriters (65) ■ Investors (47) ■ Issuers (45)

Observers (122)



■ Financial Institutions (21)
■ Law/accounting firms (18)
■ Market infrastructure (6)
■ Public sector officials (4)
■ NGOs & others (26)
■ Services Providers/Rating agencies (47)

Role of ICMA Secretariat

- Align with ICMA mission: promote resilient & well-functioning markets
- Day to day management support for Principles' operations
- Facilitate collaboration, learning, development of best practice

Coverage and services

- Maintain 3 core documents that now comprise “The Principles”: GBP, SBP and SBG
- Nearly 300 Members and Observers of the Principles as of Q4 2018, vs. 80 in 2014
- Monthly/weekly Excom & Steering meetings and calls
- Coordination support for multiple active working groups focused on specific themes
- Quarterly conference calls for Member and Observers
- Maintain extensive website
- Expanded and more global role and services:
 - International policy and regulatory dialogues (e.g. EC HLEG / TEG, G20) to promote consistency and compatibility with international market practices
 - Planning and co-hosting multiple industry events internationally; GBP Annual Conference has grown 300% in attendance - over 900 registered this year; expansion of Regional events
 - Regular review of market developments - newsletter

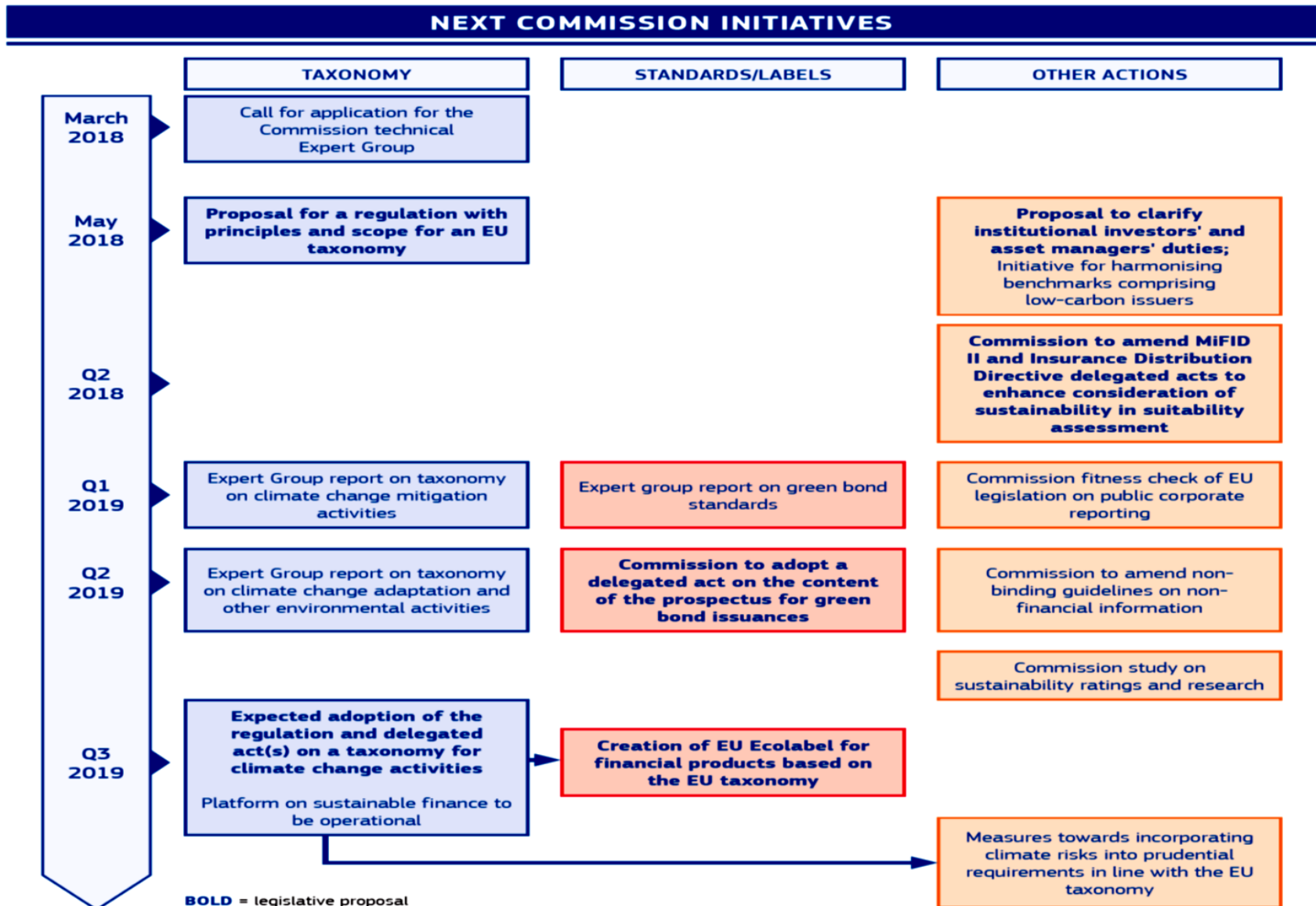
Official sector guidance & regulation

- GBP most widely accepted
 - More than 10 national green bond guidelines have been published and largely based on the GBP
- Public authorities consult ICMA and GBP actively
 - e.g. proposed EU Green Bond Standard
- **Public guidance typically based on GBP and CBI**
- GBP work closely with **Climate Bond Initiative - incorporates GBP**

Comparison of selected official GB rguidelines and regulations

	ASEAN	China	India	Japan	EU HLEG proposal
Scope	<ul style="list-style-type: none"> Guidelines 	<ul style="list-style-type: none"> Regulation 	<ul style="list-style-type: none"> Regulation (listing requirements) 	<ul style="list-style-type: none"> Guidelines 	<ul style="list-style-type: none"> Regulation
4 core components of GBP	✓	✓	✓	✓	✓
Taxonomy	<ul style="list-style-type: none"> High level categories 	<ul style="list-style-type: none"> Taxonomy 	<ul style="list-style-type: none"> High level categories 	<ul style="list-style-type: none"> Detailed project categories 	<ul style="list-style-type: none"> EU Taxonomy
Incentives	<ul style="list-style-type: none"> No 	<ul style="list-style-type: none"> Yes, comprehensive incentives 	<ul style="list-style-type: none"> No 	<ul style="list-style-type: none"> No 	<ul style="list-style-type: none"> Optional
Verification	<ul style="list-style-type: none"> Recommended 	<ul style="list-style-type: none"> Strongly recommended 	<ul style="list-style-type: none"> Recommended 	<ul style="list-style-type: none"> Recommended 	<ul style="list-style-type: none"> Obligatory with verifier scheme

EC Action Plan timetable



Cross-asset initiative prompted by ICMA: Global Green Finance Council

- **Created in 2017 - led to launch of Green Loan Principles**
- Objective: bring together market participants and other stakeholders involved in the green financing, represented by associations
- Coordinate efforts to promote green finance, facilitate cross-fertilisation between related markets and asset classes
- Ambition to act as a representative counterparty to the official sector on green finance policy matters.
- The GGFC aims to cover a variety of products including bonds, loans, private debt, equity, asset back securities and hybrid markets.
 - **Green Loan Principles** launch by LMA / APLMA March 2018 – based on GBP



5. Opportunities & Challenges



How might it develop?

Outlook & Challenges



6. Resources & Contacts



GBP / ICMA Resources

- GBP website within ICMA website
 - <https://www.icmagroup.org/green-social-and-sustainability-bonds>
- Secretariat based in Paris (expanded)
 - Contact: greenbonds@icmagroup.org