

**JEAN MONNET PROJECT on
«Development and Harmonization of
Socially Responsible Investing in the European Union»**

Workshop

**«THE DEVELOPMENT OF SRI HARMONIZATION IN THE NEW ROADMAP
TOWARDS A MORE SUSTAINABLE FINANCE IN EUROPE»**

Dipartimento di Economia e Management

Pisa – 04 maggio 2018



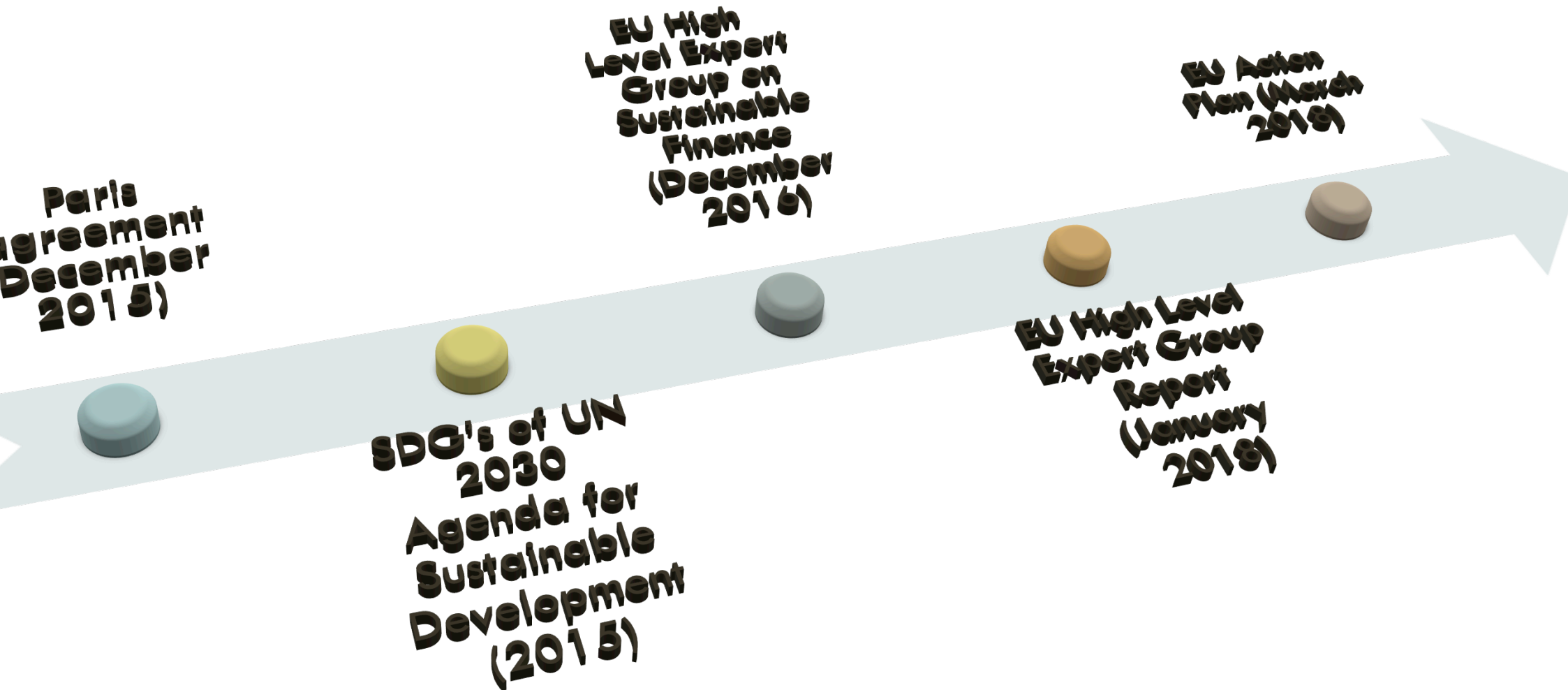
Prof. Maria Cristina Quirici

Università di Pisa

**GREEN
BONDS**

**Towards a new
European
Standardization**

TOWARDS A SUSTAINABLE GROWTH



WHY GREEN BONDS ARE SO IMPORTANT?

In 2015 the UN 2030 Agenda for Sustainable Development was adopted and on January 2016 the SDGs (17) of this agenda came into force. It is a very ambitious project that aims to reduce inequalities, to end all the forms of poverty and tackle climate changes.

Green bonds are surely one of the financial instrument being able to underpin the SDGs of UN 2030 Agenda. In fact, Green Bonds are a particular category of the “Sustainable Development Bonds”.

SUSTAINABLE DEVELOPMENT GOALS



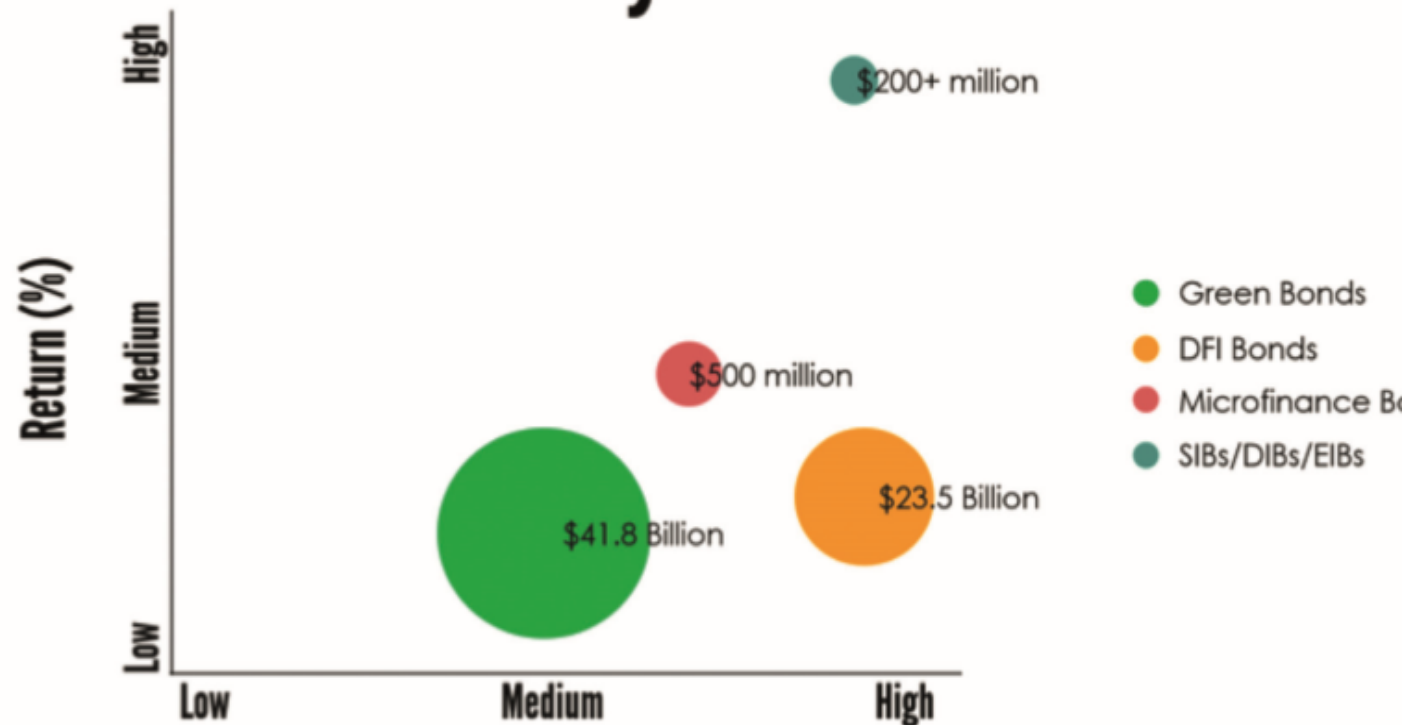
Source: United Nations

SUSTAINABLE DEVELOPMENT BONDS

SDBs by Classification

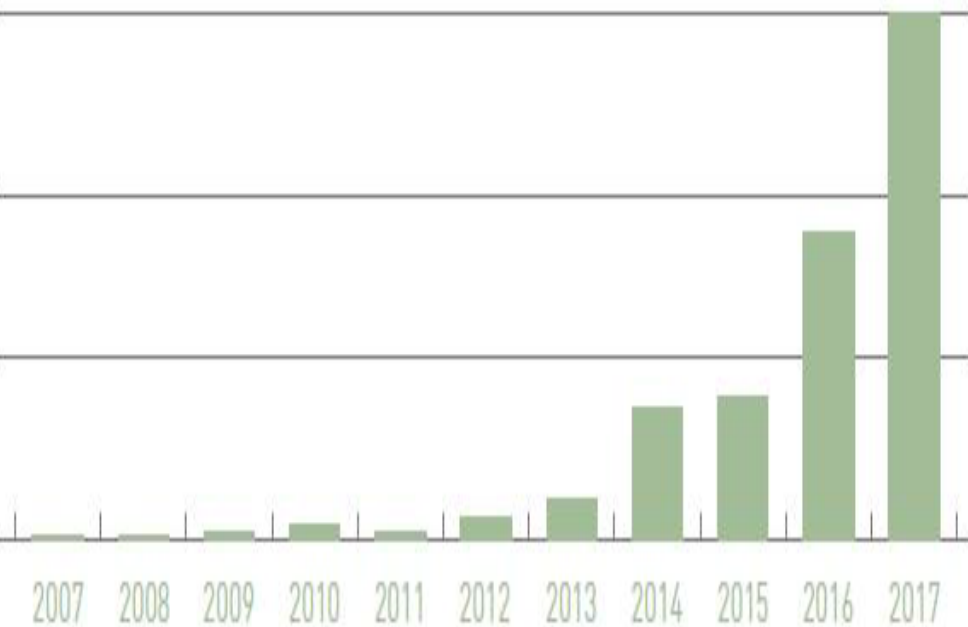
SDBs are debt securities issued by private or public entities to finance activities or projects linked to sustainable development.

The Green Bonds represent the largest share of the SDBs market with a value of \$41,8 billion and typically have low-medium returns (around 2-3%) and impact.



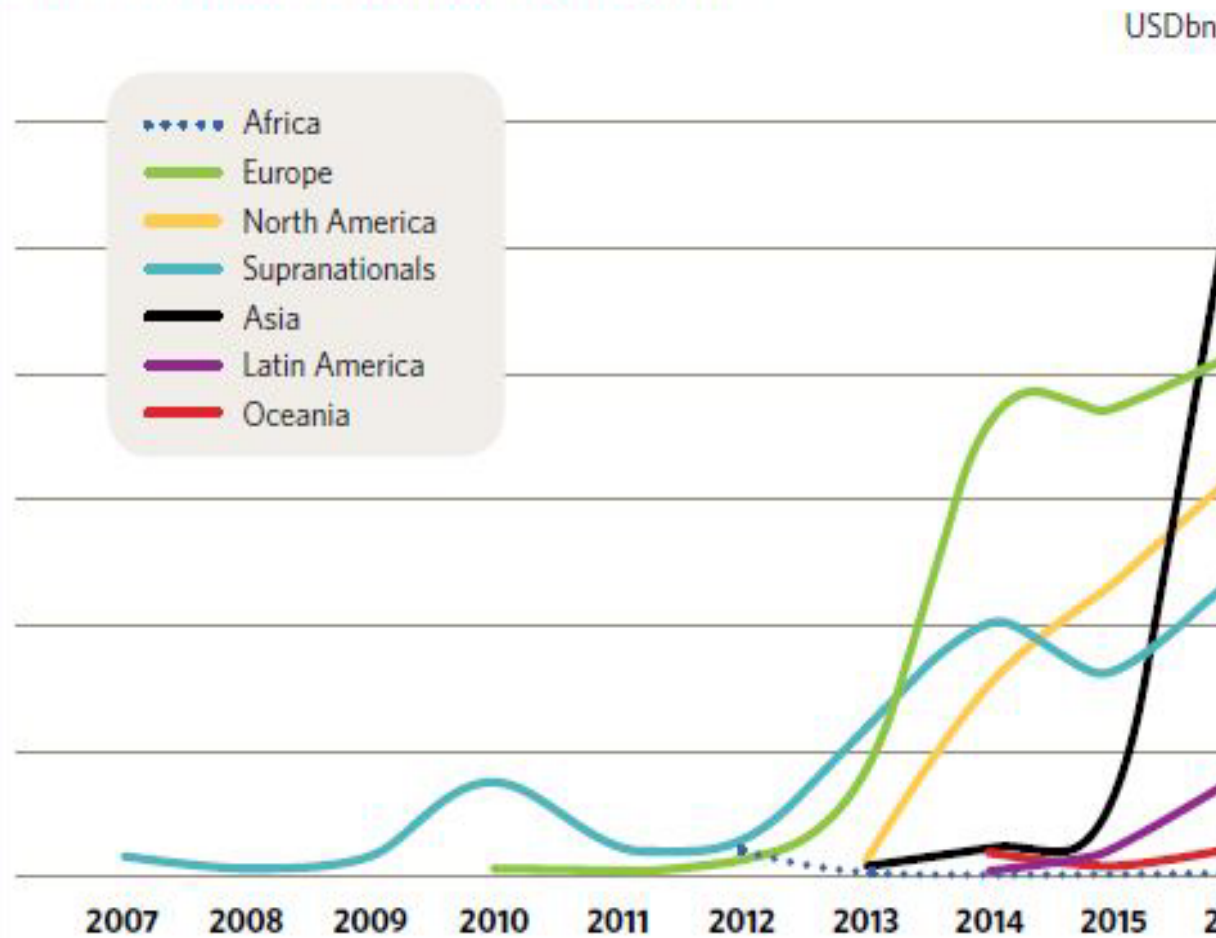
Source: European Impact Investing Luxembourg

Growth in green bonds market

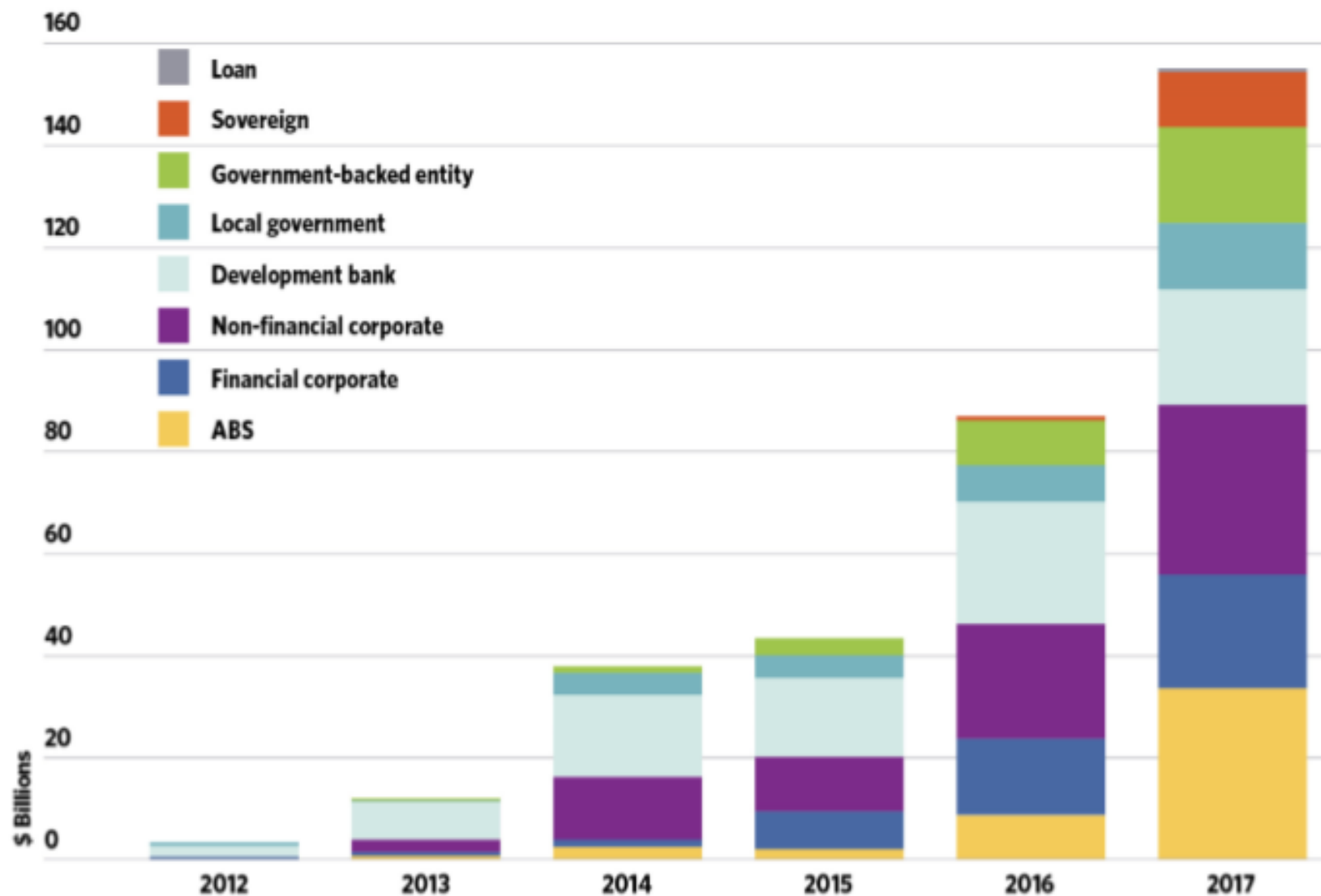


Source: Climate Bonds Initiative (2017 estimate)

Green bond issuance by region



GREEN BOND MARKET EVOLUTION



Source: Climate Bonds Initiative, 2017

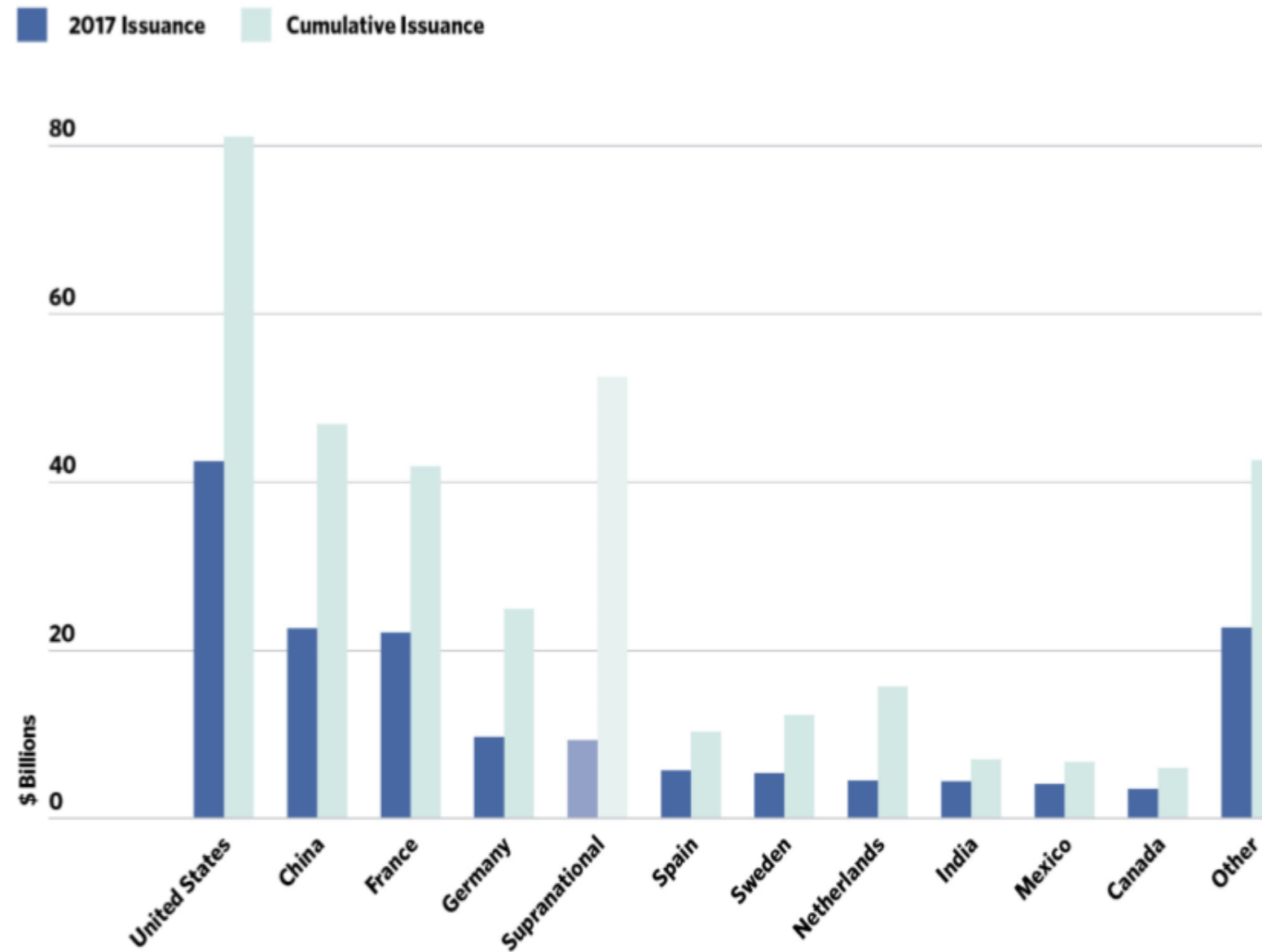
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GREEN BONDS MARKET

In the last years the global issuance of Green Bonds has increased and in 2017 has reached USD 155.5 bn (Climate Bond Initiative, 2017).

- The 56% of the 2017 issuances is linked to USA, China and France, but it is also appreciable an important growth of the Emergent Market's issuance of Green Bonds.
- In USA the most relevant issuer is US Agency Fannie Mae, with USD 24.9 bn. In China the Green Bonds market is dominated by the private banks (74% of issuance) while in France, the French sovereign bond is the main issuer (Climate Bond Initiative, 2017).

THE MOST IMPORTANT GREEN BOND ISSUERS BY COUNTRY



Source: Climate Bonds Initiative, 2017

United States

Sweden



Denmark



France



Other Developed (Canada,
Netherlands, Germany, Finland, Italy,
Spain, Switzerland, UAE, Australia,
Norway, Japan, UK, Belgium)



Mexico



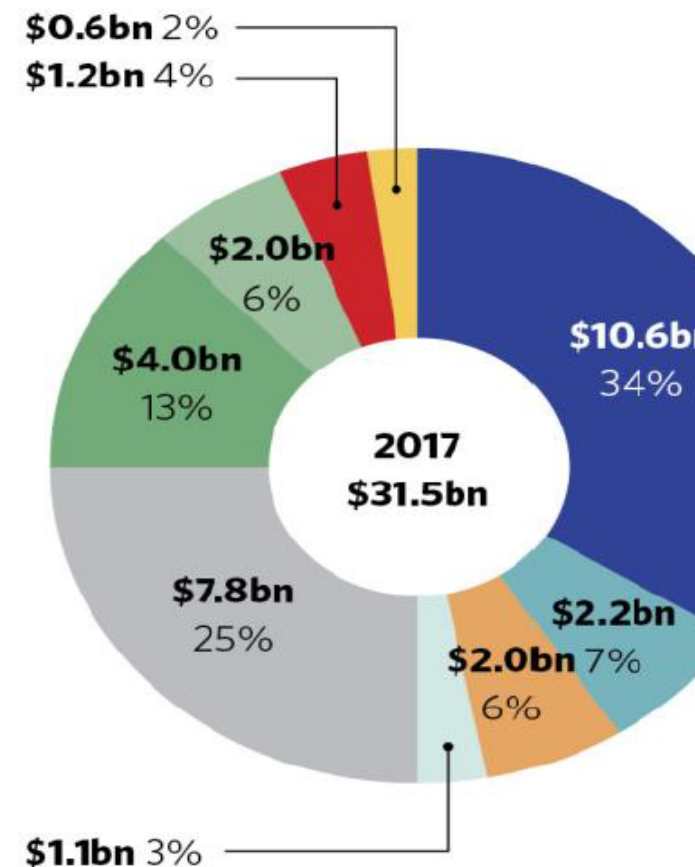
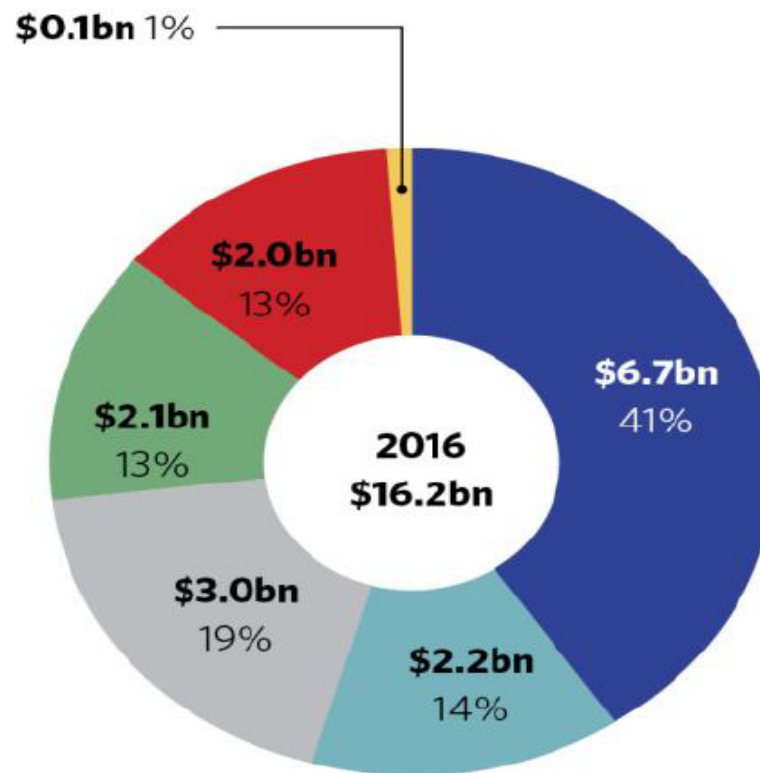
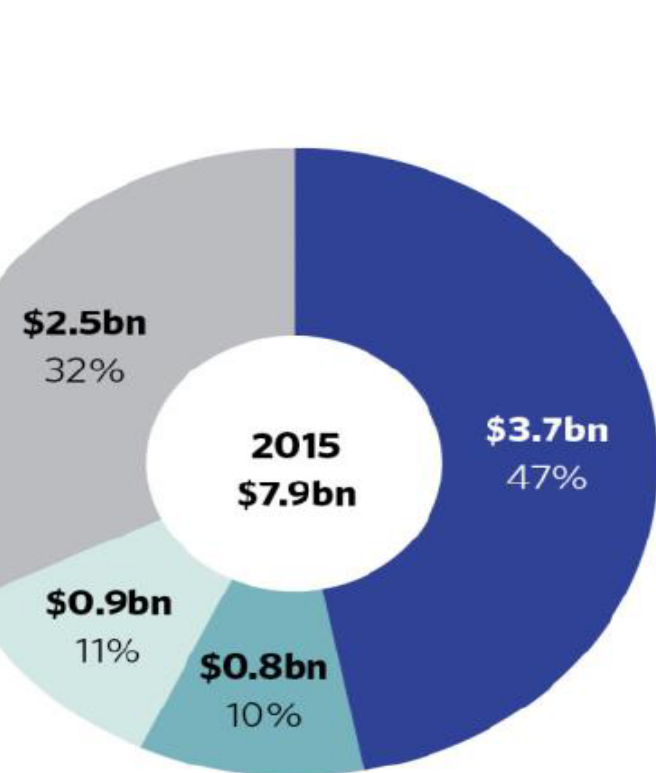
India



China & Hong Kong

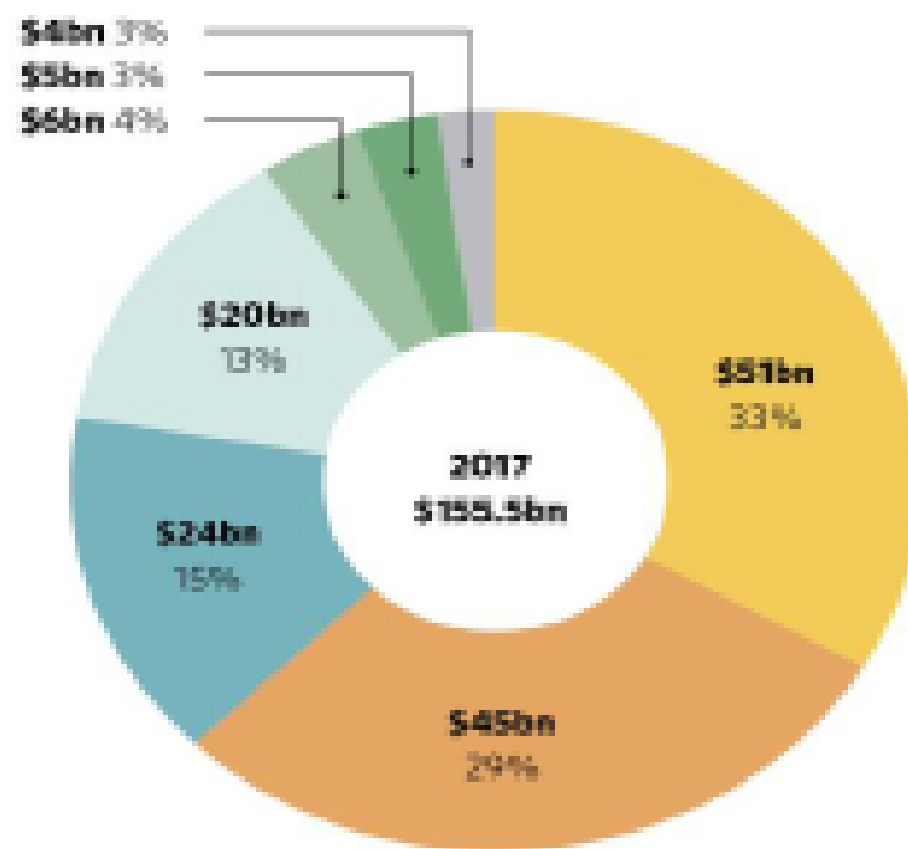
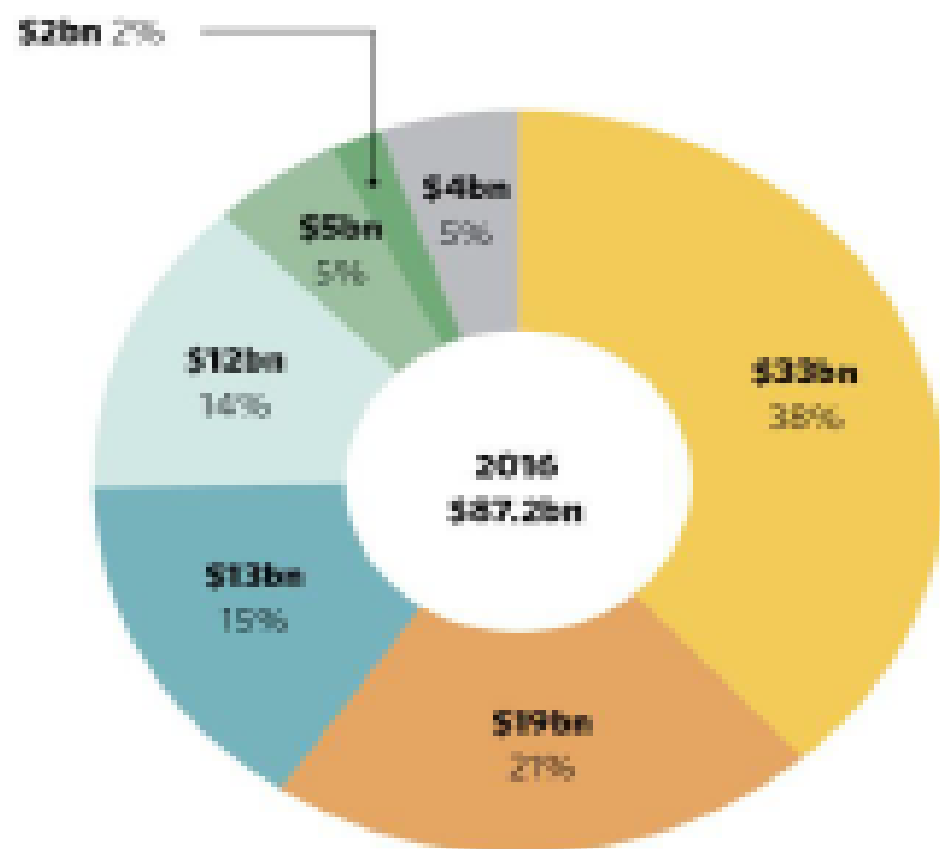


Other Emerging
(Argentina,
South Africa, Morocco)



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Renewable Energy going strong but Low Carbon Buildings/Energy Efficiency post record growth



TOO MANY CERTIFICATIONS

- The Green bonds market is evolving rapidly, but it accounts for less than 1% of the whole bonds market. Creating an EU standard could help to channel more resources in green projects.
- Moreover, since the relevant amount of green bond issuances, it is also fundamental to decide when a bond could be considered or not as a green bond. In fact, there are too many certifications and it is not clear the characteristics that a bond has to have for being considered as a green one.
- For this reasons at European level it has been understood the importance of a clarification about what could be considered *sustainable*. It's fundamental to develop a sustainable taxonomy being able to identify under which conditions an investment could contribute to the EU's sustainability objectives (**EU High-Level Expert Group on Sustainable Finance, 2018**).

GREEN BOND: A DEFINITION

According to «Green Bond Principles» (ICMA*, June 2017) a green bond is a type of bond where the proceeds will be applied to finance or re-finance a new or an existing eligible Green Project

A green bond has to be aligned with the four Green Bond Principles:

1. *Use of Proceeds for environmentally sustainable activities*
2. *Process for Project Evaluation and Selection*
3. *Management of Proceeds*
4. *Reporting*

5. ** ICMA= International Capital Market Association*

USE OF PROCEEDS

The proceeds have to be used to finance «Green Projects», namely projects being able to provide clear environmental benefits (in activities linked to climate change, natural resources depletion, loss of biodiversity, air, water or soil pollution)

It is also necessary an assessment of these benefits and, where it is possible, it has to be quantified by the issuer.

It is also possible to refinance an existing project: in this case it is recommended to communicate the amount of resources that will be used for refinance and which project is going to be refinanced.

It is difficult to decide if a particular activity is to be considered *green* and this is one of the biggest problem concerning this field.

PROCESS FOR PROJECT EVALUATION AND SELECTION

The Green Bond issuer should communicate to investors the following informations (ICMA, June 2017):

- The environmental sustainability objectives;
- The process by which the issuer determines how the Projects fit within the eligible Green Projects categories;
- 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 AND REPORTING

MANAGEMENT OF PROCEEDS: The proceeds of the bond have to be set aside in a sub-account, or in a sub-portfolio or in any event in a system that can be tracked by the issuer in the best way (ICMA, June 2017).

REPORTING: Issuer should provide clear, up to date information regarding the use of proceeds, renewed at least annually until the full allocation. There should also be shown a list of the projects in which the proceeds were channelled and a description of these projects. Moreover qualitative indicators and, if it is possible, quantitative performance measurements are recommended (ICMA, June 2017).









GREEN BONDS CERTIFICATION

Actually, there is more than one rule for deciding if a bond can be considered a green bond. For example we can mention the following:

- CBI Climate Bonds certification
- Cicero Second Opinions
- Moody's Green Bond Assessments
- Standard & Poor's Green Evaluations

CICERO SECOND OPINIONS

CICERO (Center for International Climate Research) is an independent center research based in Oslo. It provided the *second opinion* in relation to the first green bond issued by World Bank in 2007. Second Opinions are characterized by four different degrees of assessment.

SHADES OF GREEN	EXAMPLES
 Dark green is allocated to projects and solutions that correspond to the long-term vision of a low carbon and climate resilient future.	 Wind energy projects with a governance structure that integrates environmental concerns
 Medium green is allocated to projects and solutions that represent steps towards the long-term vision, but are not quite there yet.	 Plug-in hybrid busses
 Light green is allocated to projects and solutions that are environmentally friendly but do not by themselves represent or contribute to the long-term vision.	 Efficiency in fossil fuel infrastructure that decreases cumulative emissions
 Brown for projects that are in opposition to the long-term vision of a low carbon and climate resilient future.	 New infrastructure for coal

Source: Cicero Second Opinions on Green Bond

CLIMATE BONDS CERTIFICATION

This certification is characterized by two phases (Climate Bonds Standard, version 2.1):

1. **Pre-Issuance Certification:** Assessment and certification of the bond issuer's internal processes, including its selection process for projects & assets, internal tracking of proceeds, and the allocation system for funds. This includes a Verifier undertaking procedures to assess the readiness of the issuer and the proposed bond to conform to the Standard, and follows an agreed Protocol (or checklist) to assess the conformance with the Pre-Issuance Requirements of the Climate Bonds Standard.
2. **Post-Issuance Certification:** Assessment and certification of the bond, which must be undertaken after the allocation of bond proceeds is underway, and includes assurance from the Verifier that the issuer and the bond conform with all of the Post-Issuance Requirements of the Climate Bonds Standard.

	CBI CLIMATE BONDS CERTIFICATION	CICERO SECOND OPINIONS	MOODY'S GREEN BOND ASSESSMENT	STANDARD AND POOR'S GREEN EVALUATION
USE OF FUNDS MUST BE TIED TO GREEN INVESTMENT	✓	✓	✓	✓
ELIGIBILITY CRITERIA DIFFER BY SECTOR	✓	✗	✗	✓
EX POST MONITORING/ASSESSMENT	✗	✗	✓	✗
GRANULAR ASSESSMENTS OF GREENNESS	✗	✓	✓	✓
QUANTITATIVE WEIGHTS FOR SPECIFIC FACTORS	✗	✗	✓	✓

DIFFERENCES AMONG THE CERTIFICATIONS

Source: BIS, Quarterly Review, September

THE EU SUSTAINABILITY TAXONOMY

What the Sustainability Taxonomy would be...	What the Sustainability Taxonomy would not be...
A classification system identifying activities, assets and revenue segments that deliver on key sustainability goals based on the eligibility conditions set out by the taxonomy. Designed as a 'meta' framework onto which existing (and future) definitions that are used in a variety of contexts can be mapped, enabling comparability of different standards and products.	A standard by itself. A standard will need a system of thresholds, reporting, management and oversight. Standard-setters are expected to use the taxonomy to inform their respective standards.
Designed to provide a level of granularity that minimises ambiguity to the extent possible.	Populated with specific, quantified metrics. More work would be needed to establish appropriate metrics for any EU standard.
An evolving tool. The science around sustainability is dynamic and evolving, as are social expectations as well as investor and market needs. Therefore, the taxonomy should be considered to represent the best of our currently available knowledge and will require continuous review.	Set in stone.
A neutral framework that can be applied to a variety of financial instruments, including but not limited to project finance, bonds and equity. It provides insight at the individual activity level.	The complete picture for a portfolio of assets or non-pure play companies. Decisions will need to be taken as to what proportion of assets need to meet the eligibility criteria in order for a bundle to be deemed sustainable, or whether to account solely for the parts that are.
Built on existing understanding schemes developed by hundreds of scientific, technical and financial experts.	Not a means of prioritising or ranking investments where multiple benefits are possible, or exploring potential optimal mixes of outcomes and impacts for individual investments.
Focused on assets, revenue segments and activities related to financial assets and services.	Covering the conduct or management of a company or entity.

Source: EU High-Level Expert Group on Sustainable Finance, , Final Report, 2018

EU STANDARD FOR GREEN BONDS

The EU Taxonomy is also essential for creating an EU Standard for Green Bonds, since HLEG defines a Green bond as a bond that satisfies the following characteristics (High-Level Expert Group on Sustainable Finance, Final report 2018):

1. The proceeds will be exclusively used to finance or refinance in part or in full new and/or existing eligible green projects, according to the future EU Sustainability Taxonomy; AND
2. The issuance documentation of the bond shall confirm the intended alignment of the EU Green Bond with the EU Green Bond Standard; AND
3. The alignment of the bond with the EU Green Bond Standard has to be verified by an independent and accredited external reviewer.

THE ISSUES THAT ARE TO BE SOLVED

The current market best practices are not completely satisfying and they lead to several issues that EU Green Bond Standard will try to address (High-Level Expert Group on Sustainable Finance, Final report 2018):

- Uncertainty on the application of some aspects of best practice;
- Confusion on green project definitions;
- Doubts on the additionality of certain green projects and their impact, as well as concerns that green bonds have in some cases merely been used to re-label existing investments;
- Insufficient disclosure and data on how green bonds lead to the scaling up of investments in green projects and activities; and
- Inconsistencies in the quality of certain external reviews and verifications, and the qualification of their providers.

COMPARISON WITH GREEN BONDS PRINCIPLES

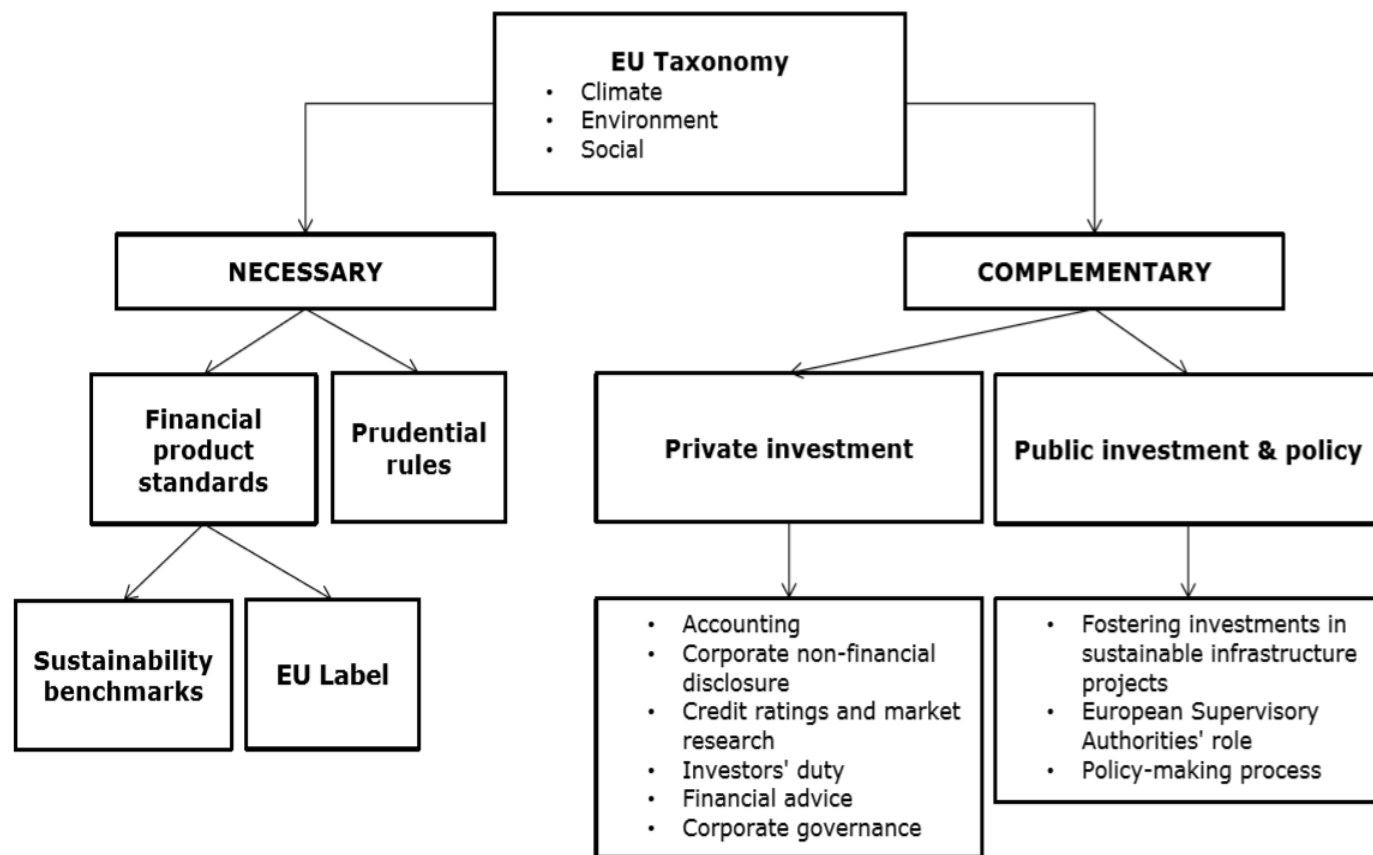
As we can see, the Green Bond Principles are simply voluntary issuance guidelines, while EU Green Bond Standard will provide a more precise assessment of a bond, addressing issues linked to the areas that require more accurate criteria.

Specific topic	Green Bond Principles provision	EU Green Bond Standard provision
Reference of alignment with GBPs/EU GBS in legal documentation	Recommended	Required
Eligibility criteria for green projects	Guidance on high-level categories	Compliance with a detailed EU Sustainability Taxonomy
Disclosure of proportion of proceeds used for refinancing	Recommended	Required
Impact monitoring and reporting	Recommended wherever possible	Required to report whether issuer is monitoring impact or not and if so, disclose estimated/actual impact.
External review requirements	Recommended. External review may be partial, covering only certain aspects of an issuer's green bond or associated Green Bond framework or full, assessing alignment with all four core components of the GBP*	Required. External review must confirm, at a minimum, the alignment, at issuance, of the EU green bond with all four core components of the EU GBS*, or alternatively, confirm the alignment of the EU Green Bond programme as a whole.
Publication of external review	Recommended	Required
Accreditation of external reviewers	Not addressed in GBPs	Sets out accreditation requirements for external reviewers.

Source: EU High Level Group on Sustainable Finance, 2018

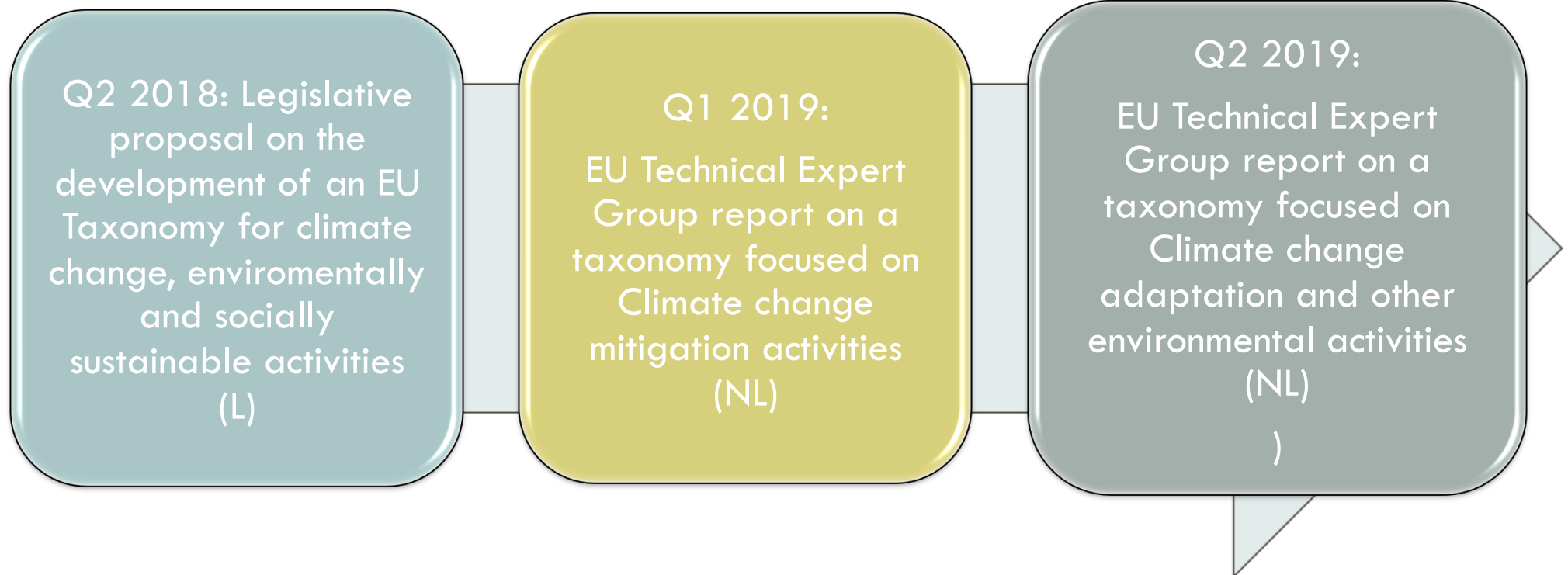
EU ACTION PLAN: FINANCING SUSTAINABLE GROWTH

The importance of an EU Taxonomy is clear also in the Action Plan (EU Commission, 8/03/18). Everything starts from Taxonomy since it is fundamental to understand what can be considered *sustainable* (Action 1).



Source: European Commission, Action Plan: Financing Sustainable Growth, 2018

ACTION 1: ESTABLISHING AN EU CLASSIFICATION SYSTEM FOR SUSTAINABILITY ACTIVITIES



Source: European Commission, Action Plan (2018)

A SPECIFIC FOCUS ON GREEN BONDS

The importance that the European Commission, Action Plan (march 2018) gives to Green Bonds can be understood by reading the Action 2 of the Plan

Action 2: Creating standards and labels for Green Financial Products

- 1. As a first step, the Commission's Technical Expert Group on Sustainable finance will be responsible, on the basis of the results of a public consultation, for preparing a report on an EU green bond standard by Q2 2019, building on current best practices (NL)*.*
- 2. Within the framework of the Prospectus Regulation, the Commission will specify by Q2 2019 the content of the prospectus for green bond issuances to provide potential investors with additional information (L2)**.*
- 3. The Commission will explore, as of Q2 2018, the application of the EU Ecolabel framework to financial products, to be applied once the EU sustainability taxonomy is adopted (NL).*

* NL= Non legislative measures ** L2= Level 2 measures

HOW IS IT POSSIBLE TO TAKE IN ACCOUNT INVESTORS' PREFERENCES REGARDING SUSTAINABILITY?

MiFID and IDD should consider the investors' preferences about sustainability but in order to make it possible it is necessary to modify these directives.

Action 4: Incorporating sustainability when providing investment advice

- *Subject to the outcome of its impact assessment, the Commission will amend the MiFID II and IDD delegated acts in Q2 2018 to ensure that sustainability preferences are taken into account in the suitability assessment (L2).*
- *Based on these delegated acts, the Commission will invite the European Securities Markets Authority (ESMA) to include sustainability preferences as part of its guidelines on the suitability assessment to be updated by Q4 2018 (NL)*

THE FIRST EFFECTS OF EUROPEAN SUSTAINABLE POLICY

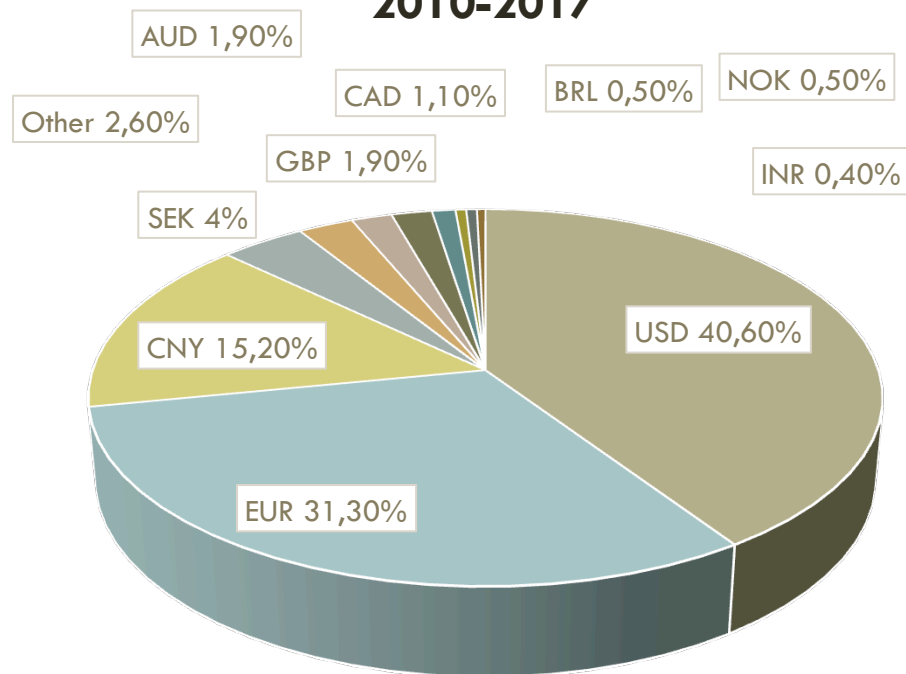
Looking at the data concerning the first months of 2018, it is clear a big shifting to EUR green bond issuances. In fact, the attention of EU in that topic has increased in the last months and the Action Plan and the Expert Group's Final Report are very focused on green bond.

The market share of EUR Green Bonds is now 56% from the 33% of 2017. If we consider the period 2010-2017, the share of EUR green bonds is around 31%, so it is evident an upward trend of EUR issuances in the first months of 2018.

Focusing on the regional distribution of the green bonds in 2017, it is possible to notice that Europe has already had the main role, but in first months of this year the share of Green Bonds issued in EU has risen again, reaching 58%.

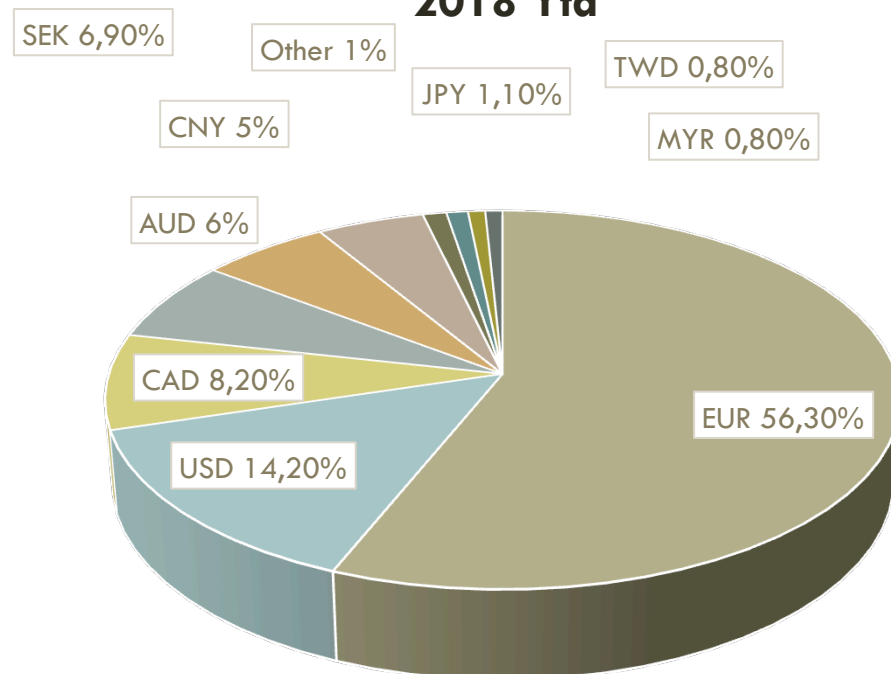
GREEN BONDS ISSUANCE BY CURRENCY

2010-2017



■ USD ■ EUR ■ CNY ■ SEK ■ Other ■ AUD
■ GBP ■ CAD ■ BRL ■ NOK ■ INR

2018 Ytd

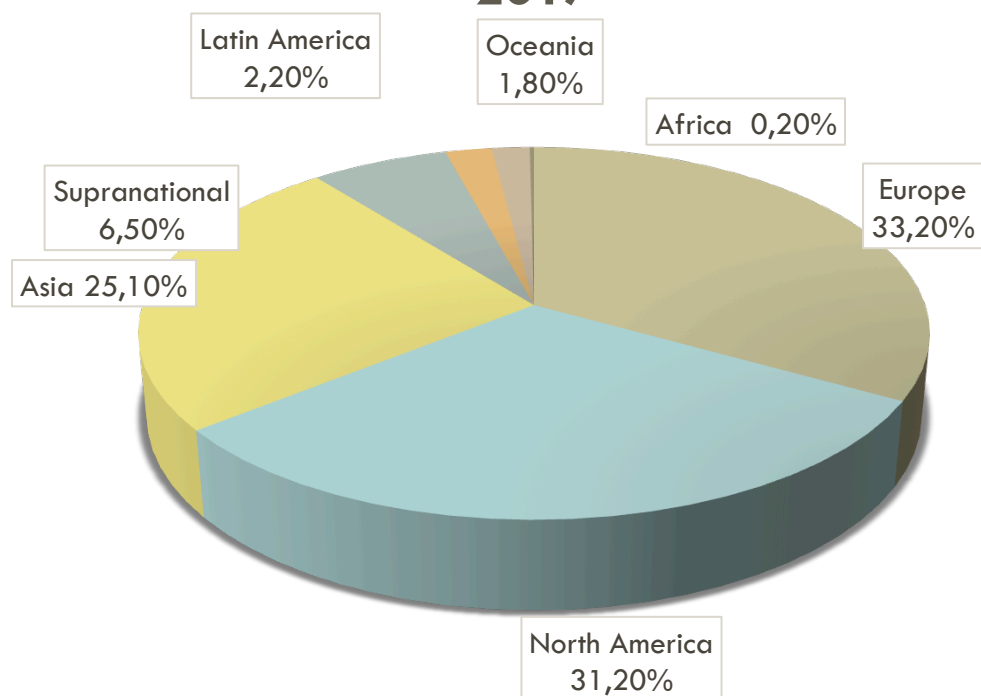


■ EUR ■ USD ■ CAD ■ SEK ■ AUD ■ CNY ■ JPY ■ Other ■ TWD ■ MYR

Source: SEB, March 2018

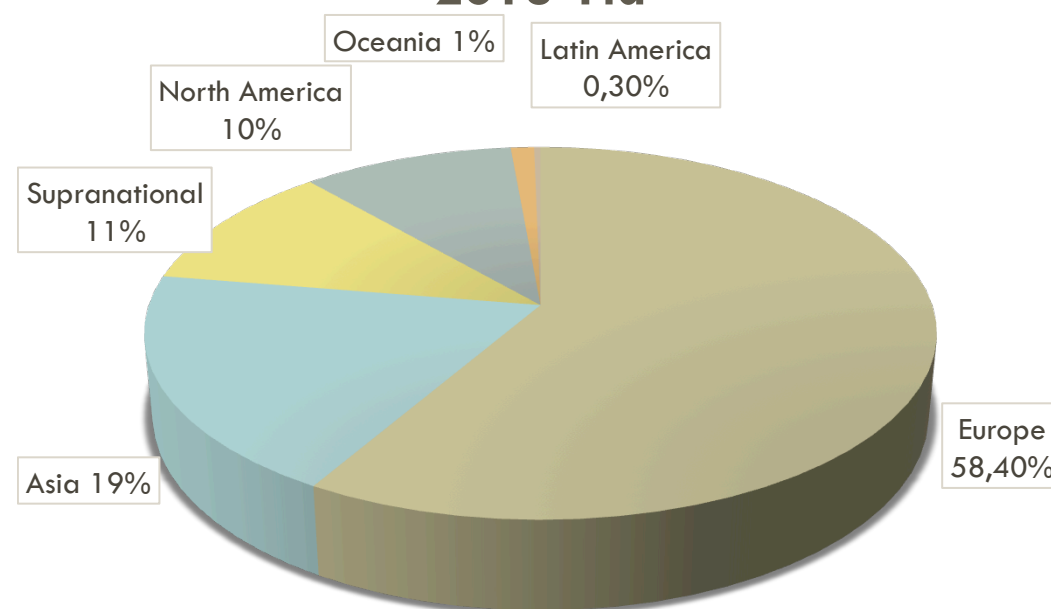
REGIONAL DISTRIBUTION OF ISSUANCES

2017



Europe North America Asia Supranational
Latin America Oceania Africa

2018 Ytd



Europe Asia Supranational
North America Oceania Latin America

Source: SEB, March 2018

CUMULATIVE GREEN BOND ISSUANCE IN EUROPE

Source: Climate Bonds Initiative, April 2018

