Europe is celebrating historical achievements this year:

the 60th anniversary of the Treaties of Rome and the 10th birthday of the green bond market initiated by EIB, the EU bank.

EIB’s green bonds, labelled Climate Awareness Bonds, offer investors the opportunity to participate in long-term, sustainable, impact investments. The EU bank is supporting the European climate action to deliver the COP21 goals. We are determined to mobilise further growth of this unique capital market for investments necessary to future generations.

Werner Hoyer,
President of the EIB
Achievement of the first green bond

The European Investment Bank pioneered the green bond market with its first Climate Awareness Bond (CAB) in July 2007. CABs have a focus on Renewable Energy (RE) and Energy Efficiency (EE), in line with Art. 194 of the Lisbon Treaty and the Energy Action Plan adopted by the European Council in 2007. Through earmarking and separation of proceeds to a dedicated treasury portfolio, CABs establish a transparent and accountable link between funds raised on the capital markets and disbursements to projects with environmental benefits, thereby innovating climate finance through enhanced transparency. The issuance volume of the first CAB amounted to EUR 600m and the proceeds were allocated to 14 projects in 6 countries during 2007/2008.

**First CAB issued in 2007 - Allocation by Country**

- Spain: 44%
- Germany: 25%
- Austria: 16%
- Portugal: 10%
- Iceland: 4%
- Slovenia: 1%

**First CAB issued in 2007 - Allocation by Sector**

- Renewable Energy: 83%
- Energy Efficiency: 17%

**Example of a project financed by the first CAB: Andasol Solar Thermal Power**

**Location:** Spain  
**Sector:** Renewable Energy  
**Allocation from the first CAB:** EUR 99m

The Andasol I project is the first large scale commercial thermal solar power plant in Europe. It is located in the Sierra Nevada mountain range in Spain, close to Granada. The plant incorporates state of the art technology, combining a parabolic trough solar generator with a thermal energy storage system containing molten salt that allows additional electricity production regardless of weather conditions. The plant has a capacity of 50 MW, went operational in 2008 and supplies energy the national power grid. It was enlarged by two further expansions: Andasol II and Andasol III, each generating another 50 MW. Today the plant has an aggregate electricity generation of 150 MW.

In 2006 Andasol was awarded the European Renewables Solar Deal of the Year by the magazine Project Finance.

[Link to the article]
Florilège of the first green bond’s press coverage

The EIB’s first green bond issuance was the EIB’s transaction most covered by the press to date, with more than 100 articles published across twelve countries.

“Green light for environmentally friendly bonds. Fancy making a little money while salving your green conscience? […] If so, the new Climate Awareness Bond from the European Investment Bank may just be the thing.”

Sunday Independent – June 2007, Ireland

“Europe moves to green bonds. The big European finance goes green, led by the European Investment Bank.”

Il Sole, 24 ore, – July 2007, Italy

“Now there is a bond from which the Environment also benefits.”

Chora, – May 2007, Greece

“The European Investment Bank will issue the first bond of climate awareness. This bond will help finance initiatives related to climate protection.”

Jornal de Negocios, – May 2007, Portugal

“EIB grasps the green nettle. The European Investment Bank aims to aid integration and development of EU member states, and has launched ‘climate awareness’ bonds as part of its strategy.”

The Banker, – July 2007, UK

“Investors feel the green beat with EIB. The EIB offers retail and institutional investors the opportunity to invest in the first bond dedicated to climate.”

La Tribune, May 2007, France

“Investing in bonds, a new way to fight climate change”

Economista.es, May 2007, Spain

“The European Investment Bank enriches the world of sustainable investing with another colour.”

FAZ, – May 2007, Germany
Additionality of green bonds

Eila Kreivi,
Director and Head of Capital Markets,
EIB, Chair of the Executive Steering Committee,
Green Bond Principles

Eila Kreivi, Director and Head of Capital Markets, EIB, Chair of the Executive Steering Committee, Green Bond Principles

Do green bonds actually add any value?

No, say some, as they only finance investments that are financially viable and would thus have been financed in any case. It is true that green bonds are financing profitable projects, as they should. Surely, we do not want green bonds to finance barely bankable or badly structured projects, which are having trouble finding funding. And thus, in a world flush with liquidity, where billions are chasing good investment opportunities, the appropriate measure for additionality is not whether a project would have been financed (in any case) due to its investment return, but rather, whether priority is given to financing green projects.

Market benefits

With Green Bonds, financial markets and borrowers have started to engage with investors at a whole new level, providing information on the use of proceeds and even the estimated impact achieved. Remember the standard phrase ‘funds will be used for general corporate purposes’?

This allows for not only a one-directional information flow but for an open dialogue on allocations, transparency and strategies as well as on ESG approaches. Accountability has experienced a paradigm shift for borrowers but equally for investors, as clients and other stakeholders can now demand information they know their asset managers possess.

Best practices

Similarly, the way the Green Bond market best practices have been evolving with the Green Bond Principles, established in 2014, is truly remarkable. Which other initiative has ever gathered investors, issuers and competing investment banks around the same table, discussing and even agreeing on common recommendations. Of course, with other initiatives there have been statements, perhaps principles written by one party and signed by others. It is truly novel that all parties, even competing ones, are actually sitting down together, writing rules word by word. This holistic approach enables market players to strike the right balance between coherent standards and the necessary flexibility to allow new investors entering the market to address evolving needs. This in turn facilitates the financing of additional green projects.

Green Bonds trigger the prioritisation of green assets by corporate issuers

Berlin Hyp

Bodo Winkler, Head of Investor Relations from Berlin Hyp, says “before issuing our first Green Pfandbrief, financing particularly energy efficient and sustainable buildings was something of a side business. Due to the bank’s success on the green bond market it is now a core part of its strategy with the defined goal to increase the share of loans for green buildings in Berlin Hyp’s overall loan portfolio to 20% by 2020.

It is our firm belief that modern, low-consumption buildings are part of our future and that their value will outperform the value of less efficient and less sustainable buildings; moving forward we incentivize them with a discount of 10 basis points”.

Alan Gordon, Deputy Treasurer of The State of California, comments “The State of California has been a pioneer of green bond issuance in the U.S. capital markets. Our experience has encouraged us to look closely at our future infrastructure financing needs, to identify those projects that could serve as asset base for green bond issuance and if possible, to prioritize them”.

EIB Climate Awareness Bonds 4
New investors

Indeed, some of the statements on these pages, collected from various issuers worldwide, are testimony of a different kind of additionality. Issuers bring their first green bond and find that new investors get involved; a rare treat for the frequent issuers. With new investors, deal execution is smoother and longer maturities, better pricing and secondary market performance are also achievable. So why not get more of the same?

Challenges ahead

The constraint is on the asset side as more suitable assets, loans, projects or expenditures must be identified. In addition, the structure of projects already in the pipeline to qualify for Green Bond proceeds could be improved. For example, banks have shown how they actively source green mortgages or green corporate loans to form the asset base for issuing green bonds.

As one corporate treasurer put it: ‘nowadays, our management needs to be convinced if we do not issue a green bond’. In other words, this corporate management actually requires justification for a non-green investment.

Green bonds are not the deus ex machina that will solve all problems of climate change. But they can contribute to limiting the effects of global warming, as they create a virtuous circle of transparency, accountability, positive market response and priority given to green investments. This is additionality for all stakeholders.

Green Bonds spur stronger investor participation in transactions

Magnus Borelius, Head of Group Treasury, City of Gothenburg, says “The interest from investors in green alternatives on the financial markets is increasing, and we can see that green bonds as a phenomenon continue to grow. In June 2017, the City of Gothenburg will issue their fifth green bond. Apart from a regular bond, we see that investors are now in queue to invest in the City’s green bonds.

Many investors also want to participate in the marketing of the bond.

Green bonds do not only result in a positive outcome on the environment but also to the city as a whole, our work with green bonds has brought a positive light on City of Gothenburg”.

Green bonds influenced our approach to development and financing of green projects

Alexandre Marty, Senior Investor Relations Manager at EDF says: “EDF is and intends to stay a significant investor in renewables, regardless of its financing sources, with a plan to increase by 20GW its net renewables capacity by 2030. That being said, green bonds are strongly promoting EDF’s renewables projects, in several different ways.

First, issuing green bonds enabled EDF to highlight its activities and strategy in renewables, to underline that EDF is a leader in renewables in Europe with high ambitions for the future.

Second, green bonds have become an essential instrument in EDF’s financing “toolbox”. Indeed, diversification of the investor base is core to the Group’s financing policy and green bonds are contributing towards that goal in a significant way. This supports the current acceleration of strategic capital allocation to renewables within the Group.

Third, under EDF’s green bond Framework, proceeds are ring fenced for exclusive allocation to eligible investments within 2 years of issuance. In other words, issuing green bonds further secures the financing of eligible renewable projects compared to other investments in the Group’s pipeline.

Last, issuing green bonds commits the Group to enhanced scrutiny and reporting on green bond-financed projects. This helps drive continuous improvement both in terms of ESG performance and transparency for the Group”.

EIB Climate Awareness Bonds
A Market Catalyst

Marius Cara,
Deputy Head of Investor Relations, EIB

The EIB devised its Climate Awareness Bonds as instruments for implementing EU objectives in the areas of energy policy and environment protection, but in order to be effective any financial instrument needs a market, which means not only demand and supply but also rules (standards) and scale. How did EIB contribute to each of these areas?

Market supply at scale – liquidity is important

EIB is not only the world’s largest issuer of Green bonds, with more than EUR 18bn issued across 11 currencies, but it is also mindful of investors’ need for liquidity. In EUR, the Bank has been building a Green Bond yield curve (2-, 6-, 9- and 20-year lines) that provides market participants with a reference for pricing and trading. The Bank has also provided liquid size transactions in GBP and USD. In May a third USD benchmark reference was issued (May 2027 USD 1.5bn).

EIB has raised more than EUR 18bn in green bonds to date* across 11 currencies

EIB was the first issuer in this market and for several years this was a multilateral development banks’ (MDBs) game only. Demand was limited as investors did not know what to expect from the product. As market standardisation evolved – notably through the GBPs, but also at national level – the product got traction. More players entered the market encouraged by demand from investors in search for a product which addresses the climate concern in an economical way. It took almost ten years for the sovereigns to enter the stage. But now, the panorama of issuers is spanning continents and the credit spectrum and we can talk about a well-defined, cross-sector asset class which is here to stay.

“...The EIB started this market. It continues to push and grow the market, and to ensure the market maintains a critical focus on climate change. We owe the Bank a great debt.”

Sean Kidney, CEO, Climate Bonds Initiative

*As of 17 May 2017
Market standards

EIB set from the very beginning clear rules for its Climate Awareness Bonds from the very beginning as far as the use of proceeds, the selection of projects, and the management of proceeds were concerned (segregating the bond proceeds in a distinct treasury portfolio and allocating them to eligible projects in renewable energy and energy efficiency fields (RE and EE), after careful selection of such projects and thorough due diligence as per high EIB standards). Reporting on EIB CABs was quickly established, and has evolved from proceeds allocation reporting in 2008, to proceeds allocation by project and by bond in 2014, impact reporting later in 2014 and project completion reports in 2016.

However, reports and metrics must be comparable, from one issuer to another, for the same type of projects receiving allocations from green bonds. In order to facilitate comparisons, EIB coordinated in December 2015 a group of 11 IFIs to establish a harmonization framework for Green Bond impact reporting in RE and EE. EIB was the first issuer to implement this framework, which was then promoted as value of reference for other issuers in the 2016 edition of the GBP.

Verification was the next step discussed by market participants and EIB took the initiative again. Thanks to EIB’s coordination, in 2016 the GBP clarified the different types of external reviews (consultancy, verification, certification, rating).

In 2016 KPMG has performed a dedicated audit of EIB’s Green Bond practice and published the first reasonable assurance report in the market (the prevailing market practice at the time was just “limited assurance”).

EIB’s role does not stop here

Over the past ten years, EIB pursued a determined strategy of growing the green bond market and promoting for the benefit of investors, issuers and project promoters, best practices expected of a mature market. Obviously, there is still some way to go in the development towards maturity but the market evolved from zero to more than EUR 200bn in 10 years and EIB is proud to have planted the first seed.

Going forward, besides continuing to provide liquidity and building reference yield curves through further CAB issuance, EIB has ambitious projects of collaboration with other market participants in order to map various green bond frameworks and to identify modalities of alignment. EIB will continue the issuance at the pace allowed by our project pipeline. And EIB expects to continue to refine its reporting features in order to meet an increasing appetite for tangible proofs of environment amelioration from investors.
Green bonds have been devised as a contribution to wider policy objectives, and they are meant to play a crucial role in climate finance.

EIB issued the first green bond in the context of the EU’s climate action policy in 2007, following the adoption of the EU’s Energy Action Plan by the European Council, under the auspices of the “Declaration of Berlin” on the occasion of the 50th anniversary of the signature of the Treaties of Rome. Energy policy and climate protection were highlighted by the Declaration among fundamental ideals and commitments of the European Union. The launch of the first green bond was a response to the new policy goal of the EU which, as the EU bank, has a unique role in implementing EU policies.

Recently, the alignment of green bonds with international policy expectations was affirmed with the COP 21 Paris Agreement of 12/12/2015 which established “transparency, accountability and compliance” as core conditions for the delivery of the agreed policy targets. And EIB’s green bonds are aligned with the Green Bond Principles (GBP) that promote “transparency, accuracy and integrity of information”. Being both financial instruments and tools devised for policy implementation, green bonds foster the convergence of policy and financial markets in addressing the challenge of climate change.

Shared market practices and standards have supported the growth of the green bond market, whether driven by market participants or regulators.

This market expansion is multidirectional, resulting in issuer diversification, crossing borders, and sovereign green bond-issuers such as Poland and France.

Following the release in 2016 of the regulatory guidelines for establishing the green financial system in China, the sustainable bond market has been building momentum in Asia. The green bond market is set to blossom in Japan following the release of the first green bond guidelines by Japan’s ministry of environment in March 2017. This government initiative makes direct reference to the GBP, and highlights the public sector’s contribution to the development of green finance.
The entry of sovereign issuers is a game changer, providing investors with an enlarged pool of issuer-types, opening the exposure to new green asset classes.

Poland pioneered the first sovereign green bond late 2016 with a EUR 750m issue. Piotr Nowak, Undersecretary of State, Ministry of Finance of Poland, says: “We see ourselves as part of a community that cares strongly about the environment. Poland opened the sovereign green market and invites others to join. We hope our green bond issue will encourage other issuers, particularly in our country, to use this way of financing. We understand that it was only the first step in a long-lasting process, but Poland is determined to continue the efforts”.

In January 2017 France issued the largest green bond ever (EUR 7bn). The first green OAT could reach this impressive size thanks to high demand but also to an enlarged scope of eligible green investments.

The flow of green eligible assets is not even close to running dry.

In its report, *Mobilising Bond Markets for a Low-Carbon Transition*, released in April 2017, the OECD estimates that in the next 15 years more than USD 90 trillion in infrastructure investment is required to finance the low-carbon pathway. Moreover, the report highlights that being the bulk of infrastructure investment financed with debt, bonds are a natural fit. Furthermore, OECD’s findings are crystal-clear: in the 2°C objective agreed in the COP 21 Paris Agreement, by 2035 issuance of bonds financing and refinancing low-carbon sectors have the potential to exceed USD 700bn per year. This underpins continued action by EIB, dedicating at least 25% of its annual investments to climate action.

The virtuous circle of Green Bonds: the French Experience

Anthony Requin, Chief Executive, Agence France Trésor

A robust political engagement at the root

“The issuance of the first green bond by the French state in January 2017 is a proof of the commitment made by the French President, following the COP 21 summit in Paris and the Energy transition law. It is a strong commitment to climate action and green finance development. Prior to France, no sovereign state had ever issued a benchmark bond dedicated to green assets.

The aim was to combine traditional state financing objective and techniques with the promotion of a responsible green financing, compliant with international best standards

A new asset class following international best market practice and avoiding double counting

The framework for France’s green bond is aligned with the Green Bond Principles, Climate Bond Initiative standards and the French label for energy and ecological transition. Moreover, France adopted a conservative approach for eligible green expenses by avoiding any potential risk of double counting of investment with public entities issuing green bonds and excluding any investment already financed by a dedicated tax.

By integrating in its framework unusual investments for green bond issuers, such as R&D, tax incentives to households and companies, France has established a new asset class contributing strongly to environment and climate with best international standards”.

The virtuous circle of Green Bonds: the French Experience

Anthony Requin, Chief Executive, Agence France Trésor
A harmonisation move is on the way and will push back the green frontier

A variety of stakeholders - public and private, civil society and market - is calling for harmonisation to ensure the market’s integrity and sustainable growth. In other words, the complex nature of the climate challenge and the diversity of parties involved require the development of a common language that facilitate interactions between climate experts, as well as between climate specialists and capital markets, and across borders.

The emergence of a common climate language and harmonisation is supported at high levels. Niall Bohan, Head of the Capital Markets Union of the European Commission says: “The EIB has been playing an important role in strengthening the EU’s capacity to finance sustainable investment and championing sustainability in the European Union context. As an important market player, EIB was invited to join in observer capacity the High Level Expert Group on sustainable finance which prepares recommendations to reinforce sustainable finance in the context of the EU Capital Market Union.”

To enrich a climatic lingua franca with a Eurasian lexicon, EIB initiated a dialogue with the People’s Bank of China (PBC) and its Green Finance Committee. This cooperation should materialise in a joint report or “White Paper” elaborating on a mapping exercise of green bonds standards from China and from the multilateral development banks community, which is expected to be released before COP 23 in Bonn.

Dr Ma Jun, Chief Economist of the People’s Bank of China and Chairman of the Green Finance Committee comments: “tackling together the lack of consistent standards between markets will facilitate cross-border green capital flows”.

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EIB – a trailblazer for green bond standards and market development

Peter Munro, Director, ICMA

Standardization, harmonisation of rules and shared know-how is crucial for the scale we need,” EIB President Dr. Werner Hoyer said in his speech to the ICMA AGM, 5 May 2017. This is precisely what the GBP has contributed to the green bond market, benefiting from a vital EIB contribution to market leadership and development.

When EIB brought the first green bond to market in 2007, it also blazed a trail for what we know today as the GBP, the most widely accepted guidelines for green bonds, introduced in 2014.

The GBP are voluntary guidelines elaborated by key market participants, under the coordination of the International Capital Markets Association (ICMA).

Within a decade, the green bond segment has mushroomed into a market with over $200bn outstanding and produced a significant platform for mobilisation and prioritization of capital for positive green outcomes.

The growth has been combined with internationalisation and diversification, as well as official recognition for the GBP, ranging from a report for the G20 and across markets including China, France, India, Japan and ASEAN. EIB green bonds are regularly cited as leading example.

Bertrand de Mazières, Director General, Finance, EIB, says:

"In the past ten years the green bond market shifted from millions to billions. To scale the market to trillions required by climate action worldwide, a comprehensive approach encompassing all good wills is needed to build a common language and shared market practices for climate finance.

With high ambitions and relentless endeavour, let’s look forward with determination and optimism to many other anniversary celebrations of the green bond market."

Celebration of CAB’s 10th anniversary

On the occasion of the CAB’s 10th birthday, EIB showcases a dedicated video featuring several projects supported by CABs, interviews with various stakeholders such as project promoters, WWF France, Crédit Agricole CIB, Mirova and EIB.

Link to the video
Global green bond issuance since the first CAB in 2007: USD 214.6bn*

Note: Issuance volume from multilateral development banks is indicated separately from national issuance volumes in the chart below.

MDB Green bond issuance in USD m

- EIB: 20,732
- IBRD: 10,078
- IFC: 5,264
- ADB: 2,782
- NIB: 2,728
- AfDB: 1,848
- EBRD: 1,367
- NDB: 448
- CABEI: 74

*source: Climate Bonds Initiative, as of 17 May

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