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Green Bond Issuance Is Expected To Shoot Up Further

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S&P Global Ratings expects strengthening green bond market fundamentals to fuel about a 30% increase in self-labeled instruments globally in 2018, pushing issuance to around $200 billion for the year. Issuance skyrocketed last year to $155 billion, up from a mere $13 billion in 2013, according to the Climate Bonds Initiative. The green bond market has grown by 80% a year over the past five years, demonstrating rapid development of new green markets, combined with the continuous and global political push to address climate change. While we expect this growth will slow down in 2018, we believe solid market fundamentals may drive the expansion of the green bond market to new types of issuers, geographies, and financing types.

Overview

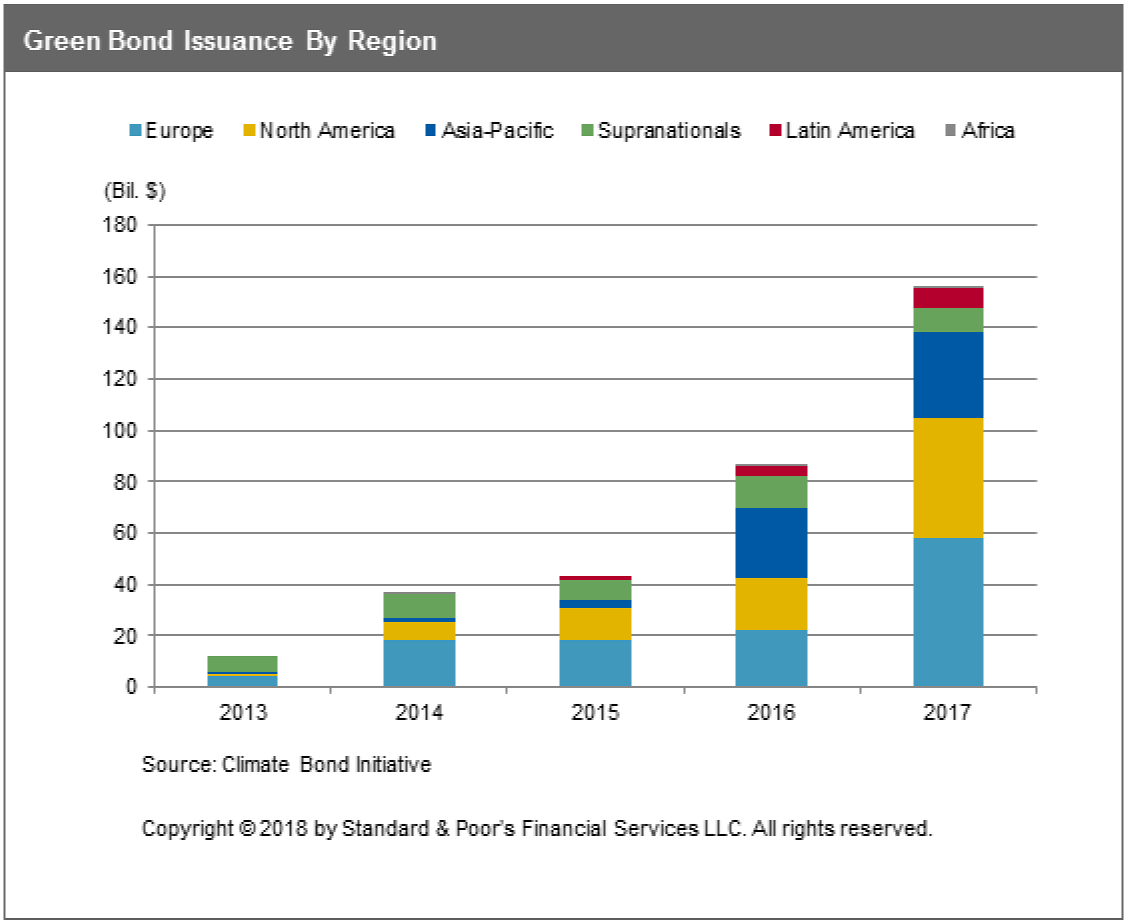
- Green bond issuance in 2017 continued its expansion to new types of issuers, across more diverse geographies, and to include a greater variety of financing types.
- Technological, financial, and regulatory innovations, unlikely to slow over the course of 2018, are fueling growth.
- Green securitization, sovereign issuance, and resilience investments are among the key trends to watch for in the coming year.
- We expect emerging markets as well to maintain their involvement in the market, led by China, India, and Mexico, while the U.S. is likely to remain one of the leading countries for green bond issuance in 2018.

The Green Bond Market Continues Expanding Its Frontiers

As the market for green bonds grows, we believe we will see further diversification of issuers, financing types, and assets. We expect to see new issuers getting involved with new forms of financing vehicles such as green loans, green funds, and green structured products. We also anticipate new issuances of green Islamic bonds (so-called green sukuks) following the first $58 million issuance by the Malaysian company Tadau-Energy in September 2017. Low-carbon technologies in the energy, transport, and buildings sectors are likely to remain the main beneficiaries of green investments, reflecting the importance of emissions reductions in these sectors in the fight against climate change. That said, we do see some growth potential for projects in the water, waste, and air pollution sectors. The $13 billion green bond program issued to finance the U.K. Thames Tideway Tunnel is one of the recent examples of green proceeds allocated to the water and wastewater sectors.

We also expect the green finance market to broaden to new geographies. While Europe remained the primary region for green bond issuance in 2017, North America is rapidly bridging the gap. In the U.S., the self-labeled green bond market more than doubled in 2017, driven largely by states, municipalities, and corporates, despite volatile federal climate policies (see "Green America: The Prospects For The Development Of The Green Bond Market In The U.S.," published on Sept. 5, 2017). While the recently revised U.S. tax code and the expected tightening of monetary policy could reduce this growth to some extent, particularly from public issuers, we expect the U.S. to remain one of the leading countries for green bond issuance in 2018. Emerging markets are also likely to maintain their involvement in the market, led by China, India, and Mexico. The contribution of those three countries to global labeled green bond issuance rose significantly over the last two years, to 20% in 2017 from 7% in 2015. Last year's largest issuers included the Bank of Beijing ($5 billion), the Indian energy company Greenko ($1 billion), and Mexico City Airport ($4 billion).

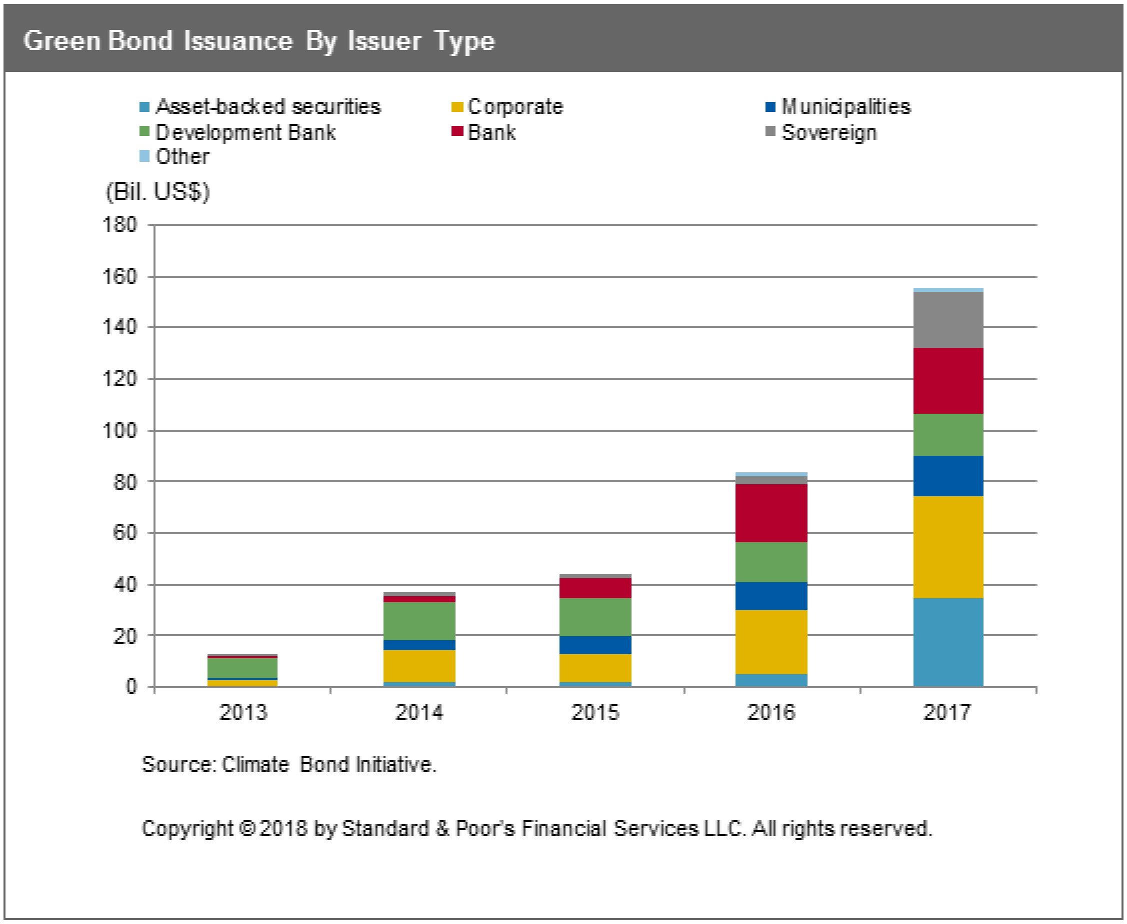
Chart 1



Green Bonds: A Bellwether For Private Green Finance

While development banks played a key role in the initial take-off of the green bond market, they now appear to be on the decline, representing 11% of labeled green bond issuance in 2017 compared with 60% in 2013. In contrast, we saw a surge in the involvement of private issuers, corporates, banks and more recently, originators of structured finance products. Together, these private entities represented two-thirds of green bond issuance in 2017. We expect these private entities to remain at the forefront of green investments in 2018.

Chart 2

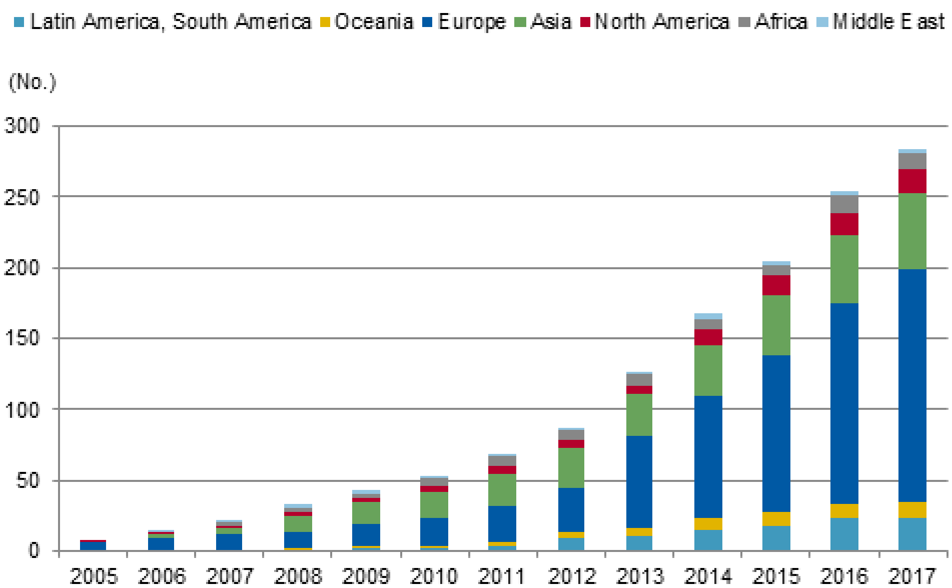


We have already identified the role of private investments in green financing (See "Green Finance: The Next Driver Of Real Growth?" published on March 28, 2017). In our opinion, the green bond market has been one of the most widely adopted tools to channel private investments into climate and environment-related projects so far. We see this trend resulting from increased policy initiatives, regulation, and new business opportunities in the green space.

Mounting regulatory pressure has pushed private entities to accelerate the financing of green projects. Companies and investors are increasingly required to better monitor, manage, and report on their environmental footprint as well as their contribution to the transition to a low-carbon economy (see chart 3). From that perspective, green bonds offer a way for the capital markets to track and evidence their green investments. We expect these requirements to become more widely adopted as national regulators implement the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD), further supporting green bond issuance. France was an early mover in this space with its Energy Transition for Green Growth Act enacted in 2016, which included the first investor climate-reporting mandate.

Chart 3

Responsible Investment-Related Legislation And Soft Law Initiatives By Region



Note: Shown are regulations and soft law initiatives (non-binding standards, principles and guidelines) related to responsible investment. Responsible investment is an approach to investing that aims to incorporate environmental, social and, governance (ESG) factors into investment decisions. Source: Principles for Responsible Investment.

Efforts to combat climate change have become an increasingly noteworthy political and economic trend, at the federal or regional level, or both. This, in turn, has channeled public and private investment, and accelerated the development of new environmentally friendly and cost-competitive technologies. Among them, renewable energy has emerged as the main established green market industry with $263 billion invested in 2016, including about 90% coming from private sources, according to "Global Landscape of Renewable Energy Finance 2018," by the Renewable Energy Policy Network for the 21st century. We expect it will remain the leading sector financed by green bonds in 2018, though we also see some potential for the financing of new technologies such as battery storage, as costs continue to decline (see "Going With The Flow: How Battery Storage Economics Are Changing Power Consumption," published on Jan. 11, 2018).

The Rise In Green Securitizations And Loans

The development of green financial products reflects, in our view, how the market is approaching new business opportunities arising within the green space. Among those products, green lending and green securitization have been on the rise over the last two years, reaching a record-high in 2017 of close to $36 billion of issuance. Green loans include those which finance projects that involve some form of environmental benefits. Green structured products are financial products whose underlying collateral or assets are green or which reinvest their proceeds in green technologies.

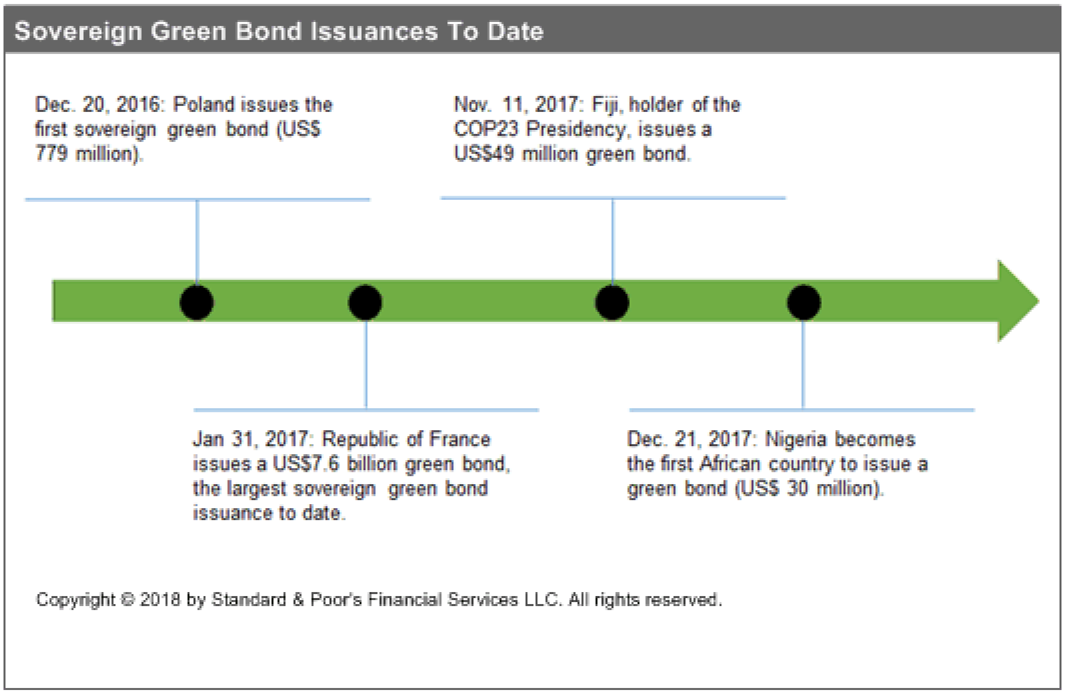
These new products constitute an answer to the increasing retail demand for green investments while leveraging the return potential of often diverse and small-scale low-carbon projects such as energy efficiency initiatives (see "How Standard & Poor's Views The Credit Risk Of Energy Efficiency Projects," published on Nov. 16, 2015).

We expect the U.S. to lead the green securitization market in 2018, supported by existing state and government programs as well as positive momentum in collateralized loan obligations and mortgage-backed securities issuance. The rise of green structured products observed in 2017 was driven by the U.S. issuer Fanny Mae's $25 billion MBS program, which aims to improve the energy and water performance of U.S. properties. Despite this geographic concentration in the structured green products market, we nonetheless see growth potential for green lending across a broader range of geographies, including emerging and developing markets.

Political And Regulatory Support Widens

We expect political support for green bond issuance to further ramp up in 2018, through new sovereign and subsovereign issuance as well as via increasing regulatory support for private issuance.

Since Poland's inaugural sovereign green bond in 2016, sovereign and subsovereign issuance has increased substantially, to $11 billion in 2017 from $0.8 million in 2016. France, Fiji, and Nigeria joined the group of sovereign green bond issuers last year, while countries such as Belgium, Morocco, and possibly Sweden are likely to follow this year.



We expect this trend to continue as green bonds remain a significant tool for countries to meet the ambitious targets set under the Paris Agreement. Our previous research found that green bonds were considered by some policymakers to help countries finance their plan to achieve reductions in their greenhouse gas emissions (known as Nationally Determined Contributions or NDCs) and ramp up their ambitions under the ratchet mechanism (see "Paris Agreement Climate Pledges: Where Will The Money Come From?, published on Nov. 6, 2017"). Furthermore, we expect sovereign and subsovereign entities to play a key role in the development of adaptation green bonds, which have so far remained in their infancy (see box).

Increasing The Pace Of Adaptation Financing

The 23rd U.N. Framework Convention on Climate Change in November 2017 in Bonn followed a year of multiple extreme weather events, underlying the vulnerability of many countries to changing weather patterns. We previously highlighted the increasing role of adaptation investment in increasing communities' resilience to climate change (see "COP23: Two Degrees, With Separation," published on Nov. 23, 2017).

We expect that the amount allocated to adaptation projects may gradually increase. We expect that the financing for adaptation projects will continue to form part of the wider group of green bonds predominantly focused on mitigation projects, rather than through 100% adaptation green bonds. Developments banks, local authorities, and water companies are likely to continue to be the main issuers of such bonds.

The key challenge for the growth in adaptation is the difficulty of monetizing the benefit of adaptation projects, absent a clear cashflow stream, unlike for mitigation projects. Most of the benefits of adaptation projects make society and business more resilient to unfavorable weather events. However, it is often hard to quantify the financial benefit of reduced damages or increased revenues had the adaptation project not been carried out.

The consequence is that public resources or development banks finance most adaptation projects. In times of strained public finances, such projects are unlikely to be seen as high priority especially when the expected benefit of the adaptation project may not become evident in the short term. Extreme weather events highlight the benefits of adaptation financing.

Nevertheless, we believe the recent increase in material damage to economies from extreme climatic events may focus the attention of public authorities on the need for adaptation investments. This may accelerate the growth of adaptation green bonds in the medium term.

The rise in green bond issuance has also resulted in multiple actions from regulators across the world.

- Green labeling: Regulatory authorities have accelerated the issuance of standards related to green labeling. These standards define the requirements an issuer must meet to label its bond as green. This includes criteria regarding proceeds tracking, disclosure, and project selection. In particular, regulatory authorities have been working on developing project classifications that define what project types would qualify as green under their regulatory regime or the so-called green taxonomy. In November 2017, the European Investment Bank and the Chinese Green Finance Committee published a white paper comparing the different green bond classifications across the globe and stated their intention to gradually align the Chinese and European classifications, according to the European Investment Bank.
- Incentive schemes: Last year saw a series of initiatives from regulatory authorities to support the development of their domestic green bond market. For instance, in March 2017, the Singapore Monetary Authority launched a green bond grant scheme that allows issuers to offset a portion of the costs incurred from obtaining an independent review based on international green bond standards. More innovations and initiatives in the space are planned for 2018.

We see these new regulatory developments driving potential positive effects, including raising awareness among market participants, increasing transparency, and ensuring the environmental integrity of the green bond market, especially as the range of projects and financing types broaden.

Climate Finance Is Heating Up

Green capital market instruments, especially green bonds, have been an efficient tool to channel investments into climate finance so far. We expect the market to maintain steady growth in 2018, supported by further technological, financial, and regulatory intervention. We also expect the increasing focus on climate change impacts to further drive political and business mobilization and stimulate additional investment in mitigation and adaptation financing. With 2017 being the hottest year on record globally, green finance is unlikely to cool down.

Related Research

- Going With The Flow: How Battery Storage Economics Are Changing Power Consumption, Jan. 11, 2018
- The Nordics Continue To Blaze The Trail For Green Bonds, Dec. 12, 2017
- Frequently Asked Questions: S&P Global Ratings' Analytical Approach In Evaluating Green Transactions, Dec. 6, 2017
- COP23: Two Degrees, With Separation, Nov. 23, 2017
- Paris Agreement Climate Pledges: Where Will The Money Come From? Nov. 6, 2017
- Understanding Climate Change Risk And U.S. Municipal Ratings, Oct. 17, 2017
- Green America: Renewable Standards, Tax Credits, And What's Next, Oct. 10, 2017
- Green Bonds Are Increasingly Expanding France's Public Sector Investor Base, Sept. 26, 2017
- Green America: The Prospects For The Development Of The Green Bond Market In The U.S. Sept. 5, 2017
- Beyond Green Bonds: Sustainable Finance Comes Of Age, April 26, 2017
- Green Evaluation Analytical Approach, April 26, 2017
- Green Finance: The Next Driver Of Real Growth? March 28, 2017
- How Standard & Poor's Views The Credit Risk Of Energy Efficiency Projects, Nov. 16, 2015