

Green Finance: Modest 2018 Growth Masks Strong Market Fundamentals For 2019

January 29, 2019

Key Takeaways

- The green bond market is expected to remain resilient to the bearish global fixed-income market, with issuance likely to reach \$180 billion in 2019, following a record high of \$167 billion in 2018.
- Strong market fundamentals--policy and regulation, rising awareness of environmental risks, and new business opportunities--are likely to continue to support growth in green financing in 2019.
- However, we expect growth in new green-labeled issuance to remain below the historical annual growth rate of 80%, as the market matures and macroeconomic uncertainty persists.
- Financial institutions are expected to continue to play a more prominent role, both as issuers and investors in the green bond market.
- We expect sustainable finance to continue to grow as issuers incorporate broader sustainability considerations into their investment decisions.

The labeled green bond market may grow by a healthy 8% in 2019, despite slowing global issuance overall and the likelihood of a shift in the credit cycle. In S&P Global Ratings' view, strong market fundamentals and a continuous stream of new issuers and financing instruments may push green issuance to around \$180 billion in 2019 from a record-high \$167 billion in 2018 (source: the Climate Bonds Initiative [CBI]). We expect financial institutions in particular to continue to increase their share of green bond issuance in the coming years, as investment needs for the transition to a low-carbon economy increase. Beyond the green bond market, we also foresee the issuance of other sustainability-related financing instruments, such as environmental, social, and governance (ESG) bonds, accelerating.

As part of the global fixed-income market, green bonds aren't immune to changes in credit conditions there. Macroeconomic factors--in particular the gradual tightening of monetary policies in Europe and the U.S.--are triggering a shift in the credit cycle and contributing to a 3%-4% decline in absolute fixed-income issuance globally. Although not a decline, growth in annual green bond issuance slowed to 3% in 2018, from 85% in 2017 (see chart 1). In the U.S., the slowdown in new green-labeled issuance from U.S. municipalities mirrored that in the broader

PRIMARY CREDIT ANALYST

Noemie De La Gorce
London
+ 44 20 7176 9836
Noemie.delagorce
@spglobal.com

SECONDARY CONTACTS

Michael Wilkins
London
(44) 20-7176-3528
mike.wilkins
@spglobal.com

Miroslav Petkov
London
(44) 20-7176-7043
miroslav.petkov
@spglobal.com

RESEARCH CONTRIBUTORS

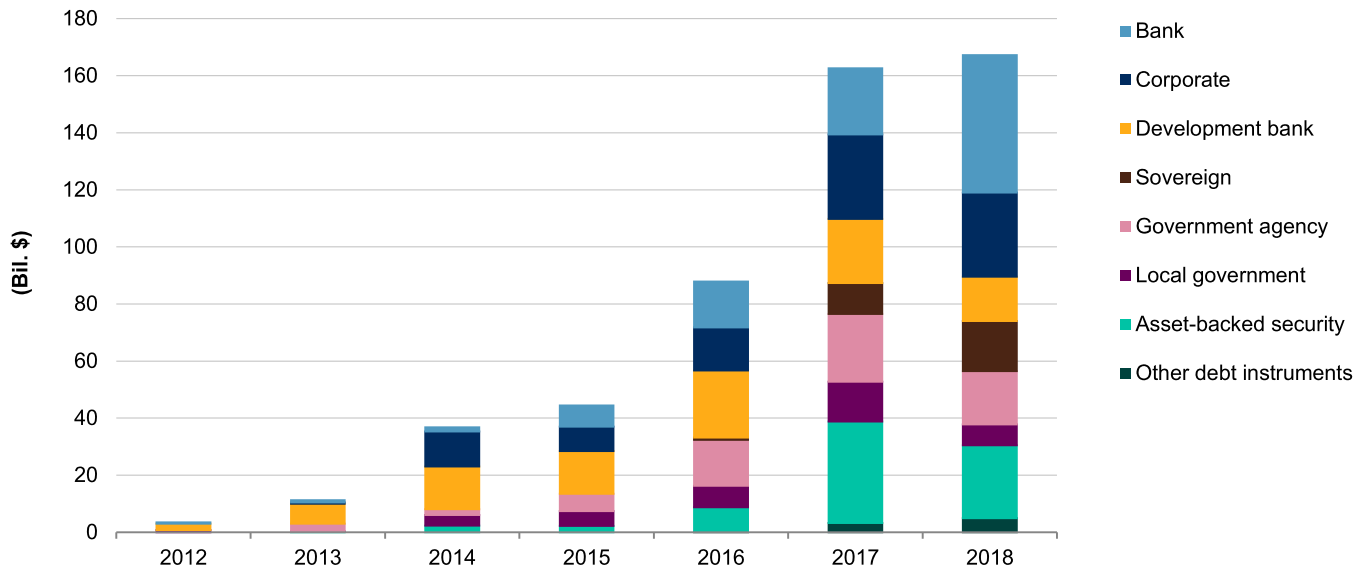
Snehal G Suryawanshi
Mumbai
(91) 99-3024-5977
snehal.suryawanshi
@spglobal.com

Lizzy Moir
London
lizzy.moir
@spglobal.com

U.S. fixed-income market following the revision of the U.S. tax code in 2017, which significantly reduced issuers' ability to refinance their existing debt.

Chart 1

Annual Green-Labeled Issuance By Issuer Type



Source: Climate Bonds Initiative.
 Copyright © 2019 by Standard & Poor's Financial Services LLC. All rights reserved.

Financial Institutions May Drive New Growth

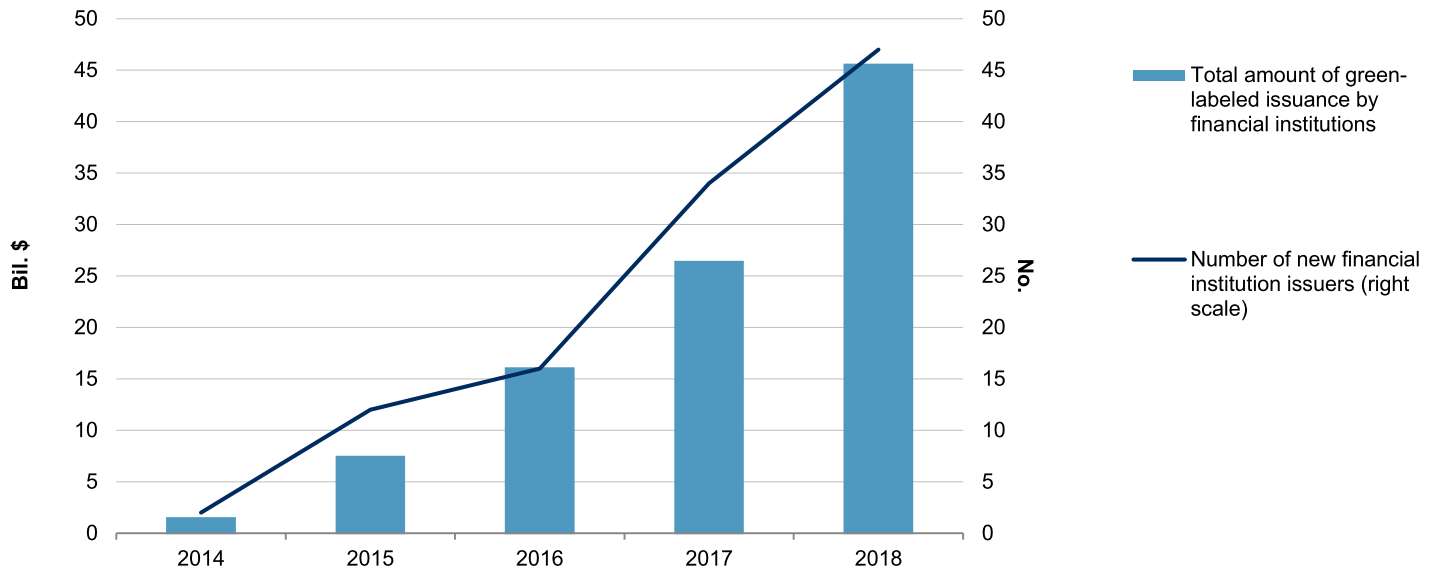
Despite the unfavorable context, green bond issuance rose to \$163 billion in 2018 from around \$163 billion in 2017, according to the CBI, somewhat short of the \$200 billion we forecast (see "Green Bond Issuance Is Expected To Shoot Up Further," published Jan. 29, 2018). We foresee the market dynamics we observed in 2017 continuing: Europe will likely remain the primary region for green bond issuance; we expect the majority of green bond proceeds to continue to be allocated to the energy, transport, and buildings sectors; and the market may diversify further by country and financing instrument.

That said, we also anticipate new growth drivers emerging, in particular, issuance from financial institutions. These issuers were the primary drivers of growth in 2018, doubling their new issuance compared to 2017 (see chart 2). In contrast, we estimate that total fixed-income issuance from financial institutions decreased by 1%-5% globally last year. We expect financial institutions to continue to grow their share of green bond issuance in the coming years as investment needs for the transition to a low-carbon economy increase (see "A Look At Banks' Green Bond Issuance Through The Lens Of Our Green Evaluation Tool," published March 2, 2018). According to a report by the Organization for Economic Cooperation and Development, "Mobilizing Bond Markets for a Low-Carbon Transition By 2035," annual green investment required for the two-degree global warming scenario will exceed \$4.3 trillion. We also expect financial institutions to continue to drive

demand as they seek to demonstrate their contribution to the financing of a greener economy.

Chart 2

Green-Labeled Issuance From Financial Institutions

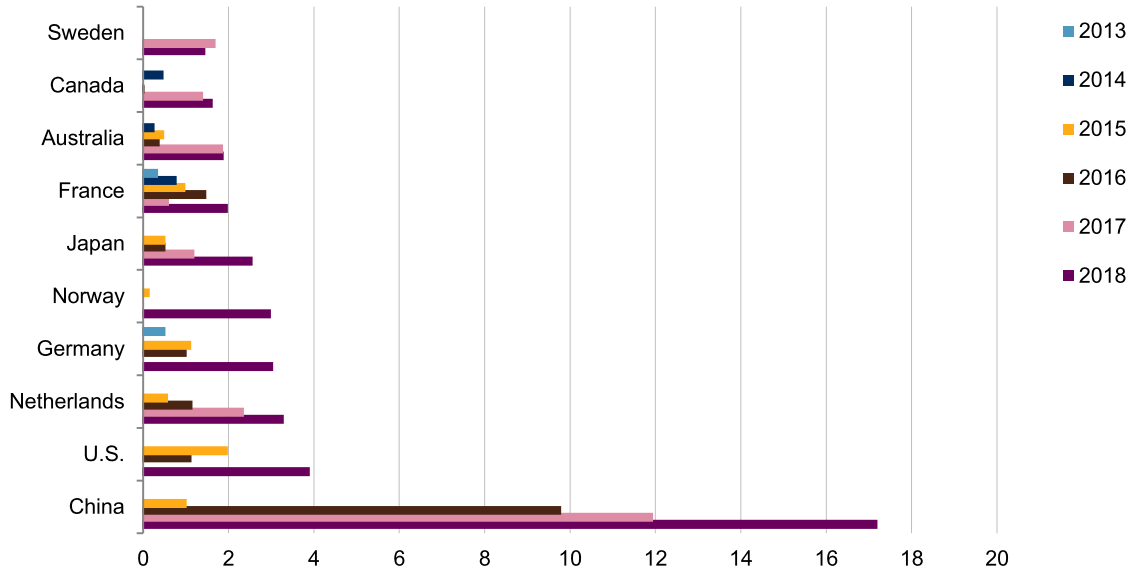


Source: Climate Bonds Initiative.
 Copyright © 2019 by Standard & Poor's Financial Services LLC. All rights reserved.

Close to 40% of new green-labeled issuance from financial institutions in 2018 came from China (see chart 3). This reflects the important role Chinese banks play in delivering the country's ambitious green growth strategy (see "Greener Pastures: China Cuts A Path To Becoming A Green Superpower," published Nov. 19, 2018). However, the growth came mostly from financial institutions in Western Europe and North America, supported by new issuers coming to the market.

Chart 3

Green-Labeled Issuance From Financial Institutions: Top 10 Countries



Source: Climate Bonds Initiative.

Copyright © 2019 by Standard & Poor's Financial Services LLC. All rights reserved.

Market Fundamentals Remain Favorable

Political pressure is here to stay

Policy initiatives have fueled the growth in the green bond market historically, and we expect this trend to continue as policy-makers seek to incentivize public, private, and multilateral financing to achieve their environmental ambitions. These ambitions include the nationally determined contributions set out under the Paris Agreement, which outline the steps countries will take to reduce their emissions and adapt to climate change. For a growing number of sovereign issuers, green-labeled issuance has become a new tool to finance the country's green strategy. Over the past two years, sovereign issuance has grown by more than 60% to represent around 10% of total new issuance, and we expect sovereign issuers to remain important players in the next year.

Sovereign Issuance

The share of sovereign issuance in total green bond issuance has grown rapidly since 2016, from 1% to 10% in 2018. While France remains the biggest issuer following its landmark \$7.6 billion green bond in 2017, new countries including Belgium, Indonesia, and, more recently, Ireland, joined the group of sovereign green bond issuers last year. Other countries, such as the Netherlands, could follow in 2019.

Sovereign issuers have been allocating more than one-half of their proceeds to the energy, buildings, and transportation sectors, in line with other issuer types in the green bond market. However, sovereigns tend to invest a larger proportion of their proceeds in climate change adaptation, agriculture, and biodiversity projects compared to other issuer types. This may reflect a persistent lack of private financing for those sectors, as well as the high share that the agricultural sector represents in the national GDP of some of those countries. In addition, sovereign issuers display strong governance practices articulated in public green bond frameworks. For example, close to three-quarters of sovereign issuers use a separate sub-account to avoid the contamination of green and non-green proceeds. Transparency is also high, especially for smaller issuance, for which issuers can provide information on proceeds allocation and environmental impact at the project-level.

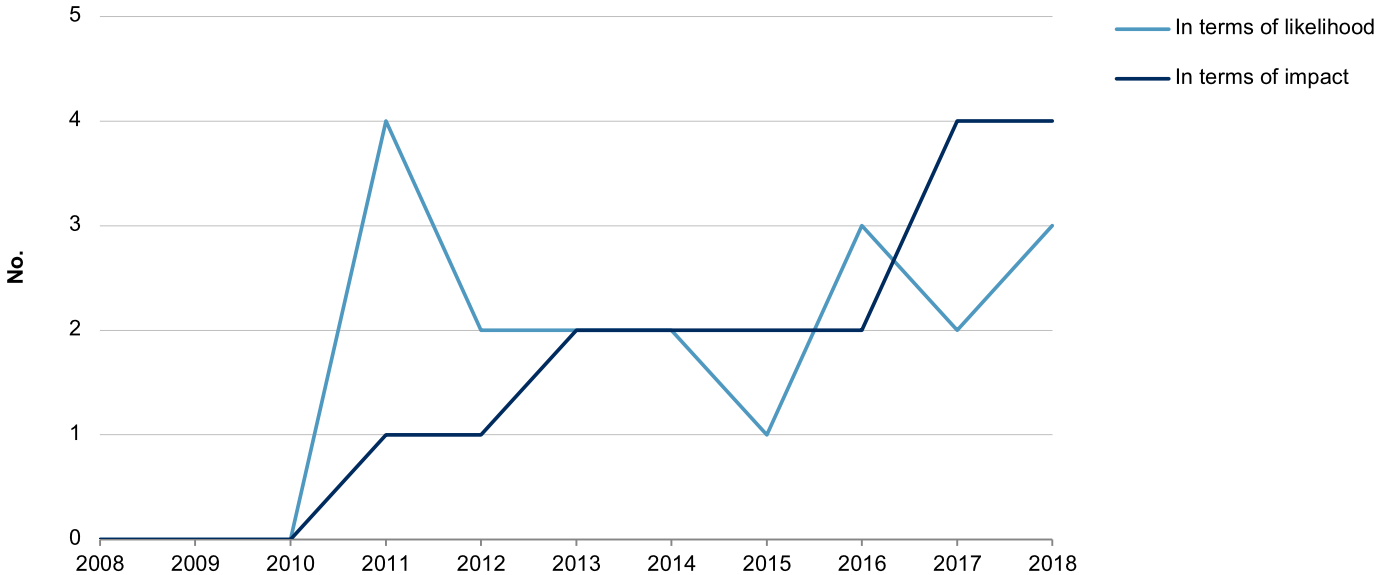
In parallel, regulators are maintaining their efforts to strengthen transparency in the green-labeled market. In Europe, the European Commission unveiled its Action Plan on Sustainable Growth in March 2018, announcing a series of initiatives covering the role of the financial sector in steering long-term, sustainable investment. We expect the Commission to publish a series of legislative and non-legislative measures in 2019 covering the classification of environmental activities, the labeling of green financial products, as well the integration of ESG in investment research, among other topics. Other major regulatory developments are likely to come from China, as the country implements the green investment principles for the "Belt and Road Initiative" (BRI) recently published by the China-U.K. Green Finance Taskforce, along with other major measures of its green finance reform from June 2017. The BRI is an extensive infrastructure and economic development plan across around 70 countries and territories spanning Asia, Africa, and Europe along the Silk Road Economic Belt and 21st century Maritime Silk Road.

Green-related risks and opportunities are becoming increasingly important

Regulation and policy are no longer the only drivers of green financing. Rising awareness of the risks associated with climate change, water scarcity, and biodiversity loss has pushed entities to consider these new threats in their strategic decisions. We expect this trend to increase following the International Panel on Climate Change's recent special report "Global Warming of 1.5 degrees"; the Fourth National Climate Assessment in the U.S.; and the continuous increase in the occurrence of extreme weather events, such as the repeated wildfires in California, recent heatwaves in Europe, and major floods in China. As environmental risks materialize and climate science improves, the perceived impact of environmental threats among experts and decision-makers will increase (see chart 4). This may result in businesses investing more in mitigating their effects on the natural environment and strengthening their resilience to climate change.

Chart 4

Number Of Environmental Factors Among The Top Five Global Risks



Source: World Economic Forum.

Copyright © 2019 by Standard & Poor's Financial Services LLC. All rights reserved.

Adaptation Attracts Attention But Volumes Remain Low

The amount of green proceeds allocated to climate change adaptation projects remained just 2% of total new issuance in 2018. In our view, the lack of tangible cash flows that these projects generate largely explains this limited amount of financing (see "Plugging The Climate Adaptation Gap With High Resilience Benefit Investments," published Dec. 7, 2018). With private entities facing challenges in monetizing the benefits of their investments in resilience to normal weather conditions, sovereign and supranational issuers remain the main providers of funding for adaptation projects.

However, we see growing attention on adaptation financing in the climate change community as countries increasingly need to deal with the physical effects of climate change. The commitment by the World Bank at the 2018 United Nations climate change conference to invest around 50% of its climate financing in adaptation projects is likely to pave the way to more adaptation investment, including through green-labeled financing. Nevertheless, we expect issuers to continue to allocate a minor portion of green proceeds they raise for mitigation projects to adaptation, rather than raising adaptation funds on a stand-alone basis.

Green Finance: Modest 2018 Growth Masks Strong Market Fundamentals For 2019

Increased political and economic efforts to prevent socioeconomic damage from the depletion of natural resources and climate change have also accelerated the development of new green markets, such as those to fund hydrogen technologies and battery storage, and have created new business opportunities in some sectors. Rhode Island Infrastructure Bank's recent issuance of \$19.8 million bonds to finance onshore wind, solar power, heating, ventilation, and air conditioning, and LED lighting projects is one example of the allocation of green proceeds to new low-carbon technologies in the energy and building sectors.

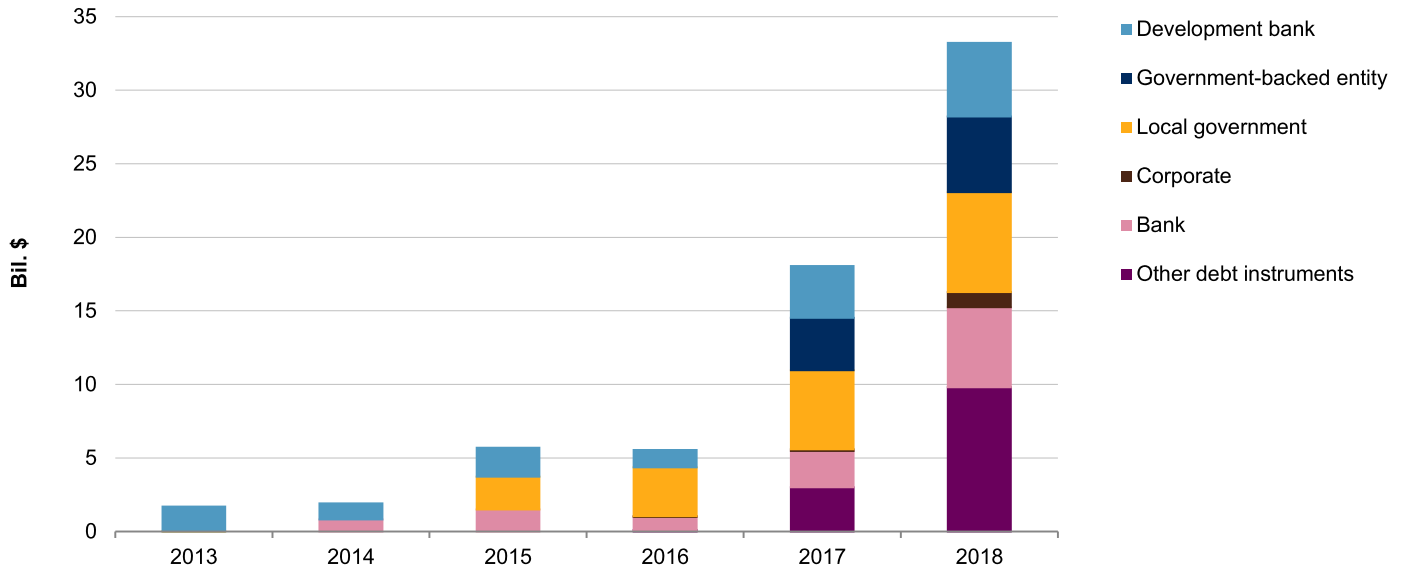
Some issuers choose to finance their investment in green markets and other environmentally beneficial projects with green financing, hoping to demonstrate their commitment to a greener economy, diversify their investor base, and achieve pricing benefits. A recent study from the CBI suggests that around one-third of green bonds tracked during the first half of 2018 had tighter spreads than their non-green equivalents in the secondary market. At the same time, some recent issuance, such as Royal Schiphol Group N.V.'s €500 million green bond, suggest that incremental price tightening can be achieved during book-building. The potential pricing advantages seem to vary based on the issuer's specific circumstances and region of issuance.

Beyond Green: The Rise In Sustainable Finance

Although the market is still in its infancy, sustainability-labeled instruments have gained momentum over the past two years. Sustainability-labeled instruments target both environmental and social benefits. The United Nations' creation of the sustainable development goals (SDGs) in 2015 marked a turning point in the rise of this market by providing concrete targets to the broad objective of sustainable development, that is, development that meets the needs of the present without compromising the ability of future generations to meet their own needs. More recently, the International Capital Market Association released its sustainability bond guidelines to support the issuance of sustainability-labeled instruments in a consistent and transparent manner globally. This may help to avoid some of the challenges the green bond market faced in its early stages, including a lack of transparency on the use of proceeds and the environmental impact associated with the financing.

Chart 5

Annual Sustainability-Labeled Issuance By Issuer Type



Source: Climate Bonds Initiative.

Copyright © 2019 by Standard & Poor's Financial Services LLC. All rights reserved.

Issuers of sustainability bonds have been mostly public entities in Western Europe, with countries such as the Netherlands, Spain, France, and Germany at the forefront. However, the market also saw some landmark financings from the private sector last year, such as French consumer products group Danone S.A.'s \$1 billion credit facility linked to ESG criteria, and a €938 million sustainability bond from the Australian and New Zealand Banking Group Ltd. to fund social infrastructure, green energy, and water projects. We expect the rise in the issuance of sustainability bonds to continue as issuers seek to support a broader sustainability agenda.

Innovation Lies Ahead

In our view, increased social and ESG-linked financing could reduce green bond issuance to a certain extent, as issuers incorporate green financing into broader sustainability considerations. That said, we expect the sustainability finance market as a whole to continue to grow, fueled by high demand from investors and increasing available supply. The market could also benefit from a larger pool of potential eligible projects, issuers, and sectors as it includes a broader set of sustainability objectives beyond green. On the flip side, this growth is likely to raise new questions, including which indicators should be used to provide evidence of progress against sustainability objectives, and how to report on those indicators in a consistent manner. With those challenges lying ahead, sustainable financing seems just at the start of its innovation journey.

Related Research

- Credit Trends: Global Financing Conditions: Bond Issuance Continues Its Decline, Dec. 10, 2018
- Plugging The Climate Adaptation Gap With High Resilience Benefit Investments, Dec. 7, 2018
- Greener Pastures: China Cuts A Path To Becoming A Green Superpower, Nov. 19, 2018
- A Look At Banks' Green Bond Issuance Through The Lens Of Our Green Evaluation Tool, March 2, 2018
- Green Bond Issuance Is Expected To Shoot Up Further, Jan. 29, 2018

Other sources:

- Preliminary 2018 Data On Green And Sustainable Bond Issuance, Climate Bonds Initiative, January 2019
- Green Bond Pricing In The Primary Market: January-June 2018, Climate Bonds Initiative, October 2018
- Sustainability Bond Guidelines, International Capital Market Association, June 2018
- Commission Action Plan On Financing Sustainable Growth, European Commission, March 8, 2018

This report does not constitute a rating action.

Copyright © 2018 by Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw or suspend such acknowledgment at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

STANDARD & POOR'S, S&P and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.