BONDS AND CLIMATE CHANGE

THE STATE OF THE MARKET IN **2013**

A USD346BN CLIMATE-THEMED BONDS UNIVERSE

Climate Bonds INITIATIVE

HSBC

Prepared by Climate Bonds Initiative.

Commissioned by HSBC.

Introduction

Following the recent financial crisis, the bond market is attracting growing interest as a source of debt capital to finance the 'green infrastructure' the climate economy needs. This report is an update on our 2012 report *Bonds and Climate Change: the state of the market* and has been commissioned by the HSBC Climate Change Centre of Excellence.[1] In addition to answering our key questions around size, themes, regional markets and market outlook, this year we have added analysis on credit ratings.

Our methodology follows on from the 2012 report with a deeper analysis of the universe. Our seven climate themes of Transport, Energy, Climate Finance, Buildings & Industry, Agriculture & Forestry, Waste & Pollution Control, and Water correspond to our view of the emerging low-carbon, climate-resilient economy. It is designed to ring-fence goods and services that enable the transition to low-carbon growth that is also resilient to the impacts of a changing climate. These bonds are derived from corporates, financial institutions, municipalities, state-backed entities and project SPVs (special purpose vehicles).

We have screened the use of proceeds of the global bond market according to our seven themes mentioned above to arrive at a universe that is 100% aligned with the low-carbon, climate-resilient economy. Each issuer's Bloomberg description and revenue breakdown is cross-checked with company disclosures and other market sources to confirm alignment with climate themes. Credit ratings of parent companies, or governments in the case of state agencies, are applied if existing bond rating data is not available on Bloomberg or from other sources.

Only bonds issued since 2005 and that remain outstanding on 1 March 2013 are included in the analysis. Improved source data has allowed us to pick-up a greater array of sovereign-linked entities than last year. The screening of bonds outstanding as of 1 March 2013 provides an up to date snapshot of the current market state. It also, however, makes year-by-year comparisons difficult as not all issued bonds are taken into account. The report therefore provides a current snapshot of 'bonds in the market in 2013' rather than an account of how the market has grown historically.

We screened the use of proceeds of the global bond market against our low-carbon, climate resilient themes to arrive at a 100% aligned climate-themed bond universe.

Why bonds and climate change?

Bonds are particularly suited for providing the capital for the long-term environmental infrastructure required to build a low-carbon, climate-resilient economy. The extra upfront investments are often balanced by much lower operating costs, particularly in the building, energy, industrial and transport sectors.

It is estimated that around USD10trn in cumulative capital investments will be required globally between 2010 and 2020 to drive low-carbon energy alone.[2] The historical 60:40 split between debt and equity means that cUSD6trn could be required in the form of bank loans and bonds.

The success of climate policies has meant that key clean technologies are now reaching a stage of maturity appropriate for greater bond investment. From a regulatory perspective, new financial regulations (such as Basel III) could result in a shift to more capital-market funding of project finance transactions. Basel III could discourage banks from holding longer-term loans on their balance sheets, prompting increasing costs, reductions in the term of loans and introducing greater refinancing risk.[3] In addition, changing asset allocation strategies are generating greater demand from investors such as pension funds and insurance companies who need long-term fixed-income investments to match their liabilities.

Finally, institutional investors are extending the integration of sustainability factors beyond listed equities into other asset classes, creating appetite for bonds linked to climate change.

1 www.climatebonds.net
2 HSBC, Sizing the Climate Economy, September 2010
3 IDDRI, EU Low-Carbon Investment and New Financial Sector Regulation: What Impacts and What Policy Response?

An Updated USD346BN Climate-Themed Bond Universe

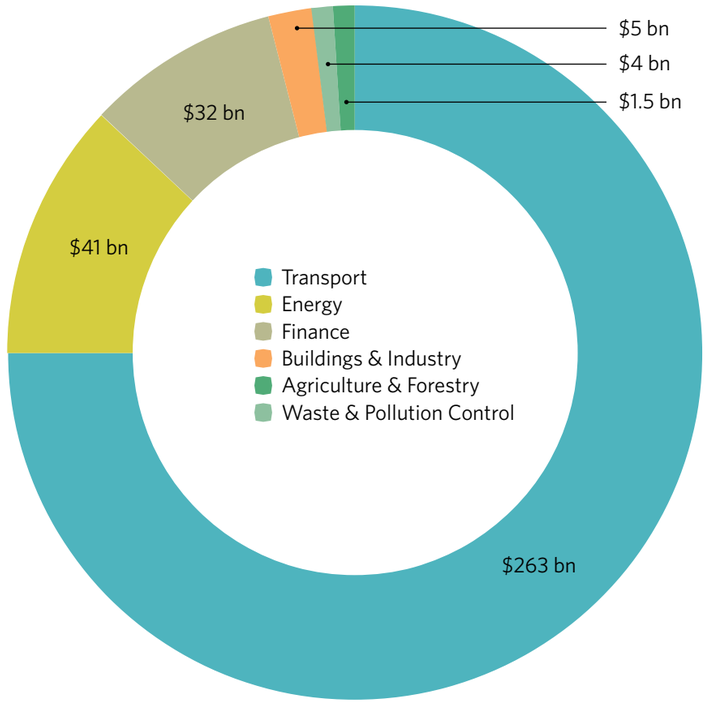
We screened the use of proceeds of over 10,000 bonds from 2,300 corporations that populated our climate screen. Of these, 1200 bonds from 260 issuers were deemed to be fully aligned with our seven themes.

The universe of climate-themed bonds outstanding in 2013 totals USD346bn, a significant expansion on the 2012 estimate of USD174bn. It remains dominated by Transport (USD263bn), Energy (USD41bn) and Finance (USD32bn).

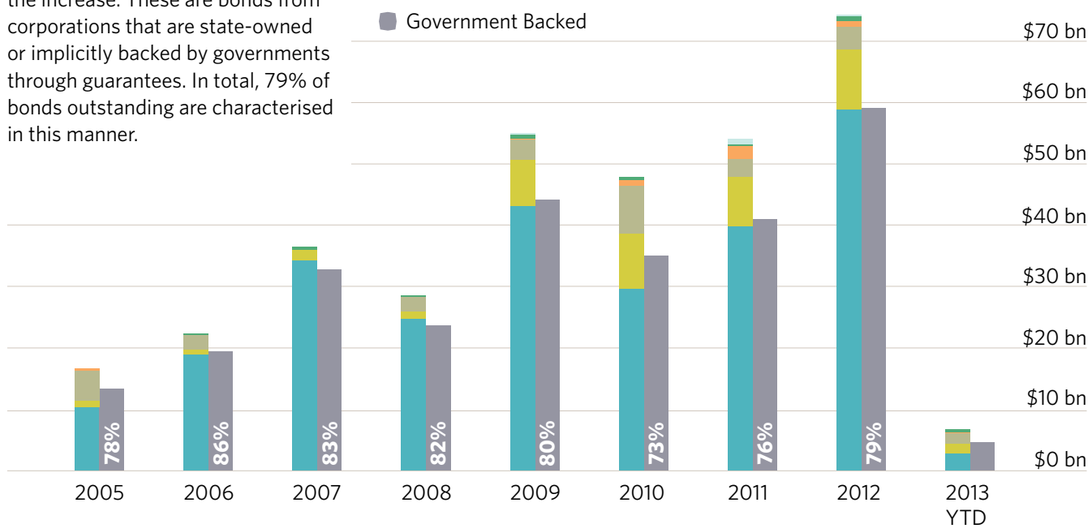
Due to inclusion of only issuers who have current bonds outstanding, it is difficult to judge how the market is growing year-on-year or to compare one year to the next. Nevertheless, 2012 was a bumper year of the issuance of new climate-themed bonds with approximately USD74bn in bonds issued with transport dominant at 79%. The first quarter of 2013 sees a more equal weighting between issuance from rail, renewable energy and development banks issuers.

While there are no sovereign bonds included, this year we have conducted a deeper analysis of sovereign-linked entities that accounts for most of the increase. These are bonds from corporations that are state-owned or implicitly backed by governments through guarantees. In total, 79% of bonds outstanding are characterised in this manner.

Thematic breakdown of USD346bn climate-themed bond universe



Year of issuance of climate-themed bonds outstanding in 2013 by theme (USD Amt outstanding)



A Chunk of Investment-grade Offerings

To provide a deeper analysis of the universe, we have filtered the overall market estimate by a few index-type inclusion rules, specifically:

- Investment-grade ratings
- Currencies eligible on benchmark indices[4]
- Issuance sizes over USD100m

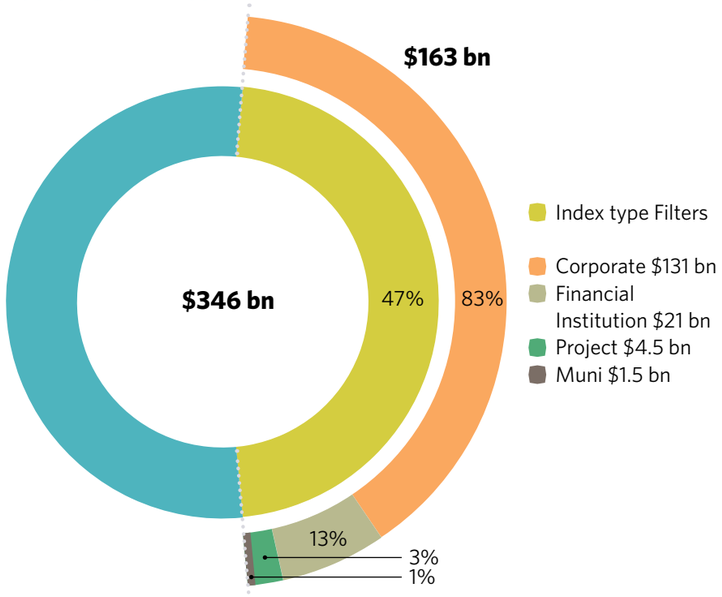
Applying this filter leaves USD163bn in bonds outstanding, 83% of which are corporate bonds, 13% bonds from financial institutions, with 1% project bonds and a small number of municipal bonds that are above the USD100m issuance threshold.

USD is the benchmark currency of choice for these bonds with 37% of investment-grade bonds denominated. Only half of the USD-denominated bonds are issued from the US, with European, Canadian, South Korean and Russian issuers also choosing to issue in the currency. Bonds denominated in other benchmark currencies such as GBP and EUR are mostly derived from issuers in those countries of origin.

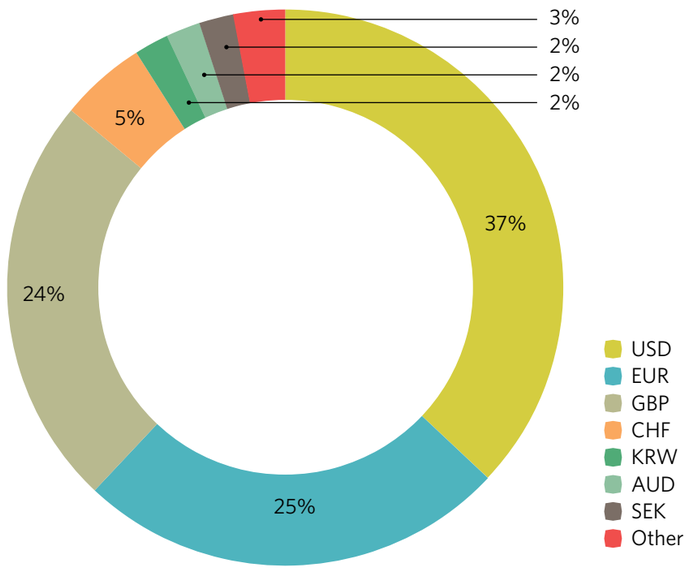
Yields are relatively low with almost 30% of bonds outstanding applying the index-type filter with yields of less than 1% and 40% in the 1-3% yield bracket. There does however remain almost USD35bn of bonds outstanding with yields of 5% or higher providing some opportunity to investors.

4 These are USD, CAD, EUR, GBP, CHF, CZK, DKK, HUF, NOK, PLN, SEK, JPY, AUD, HKD, KRW, NZD, SGD, TWD, MYR, THB, CLP, MXN, ZAR

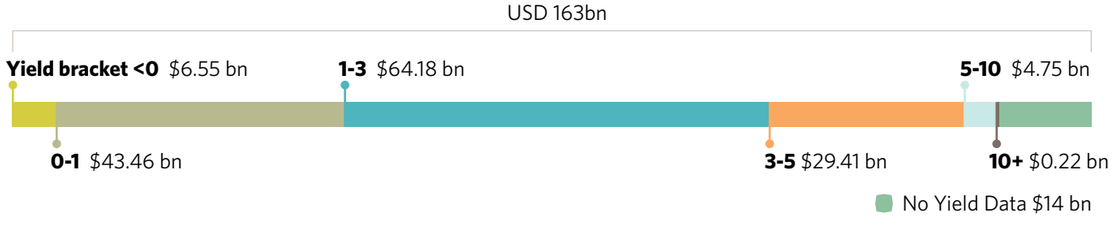
Applying index-type filter to climate-themed bond universe



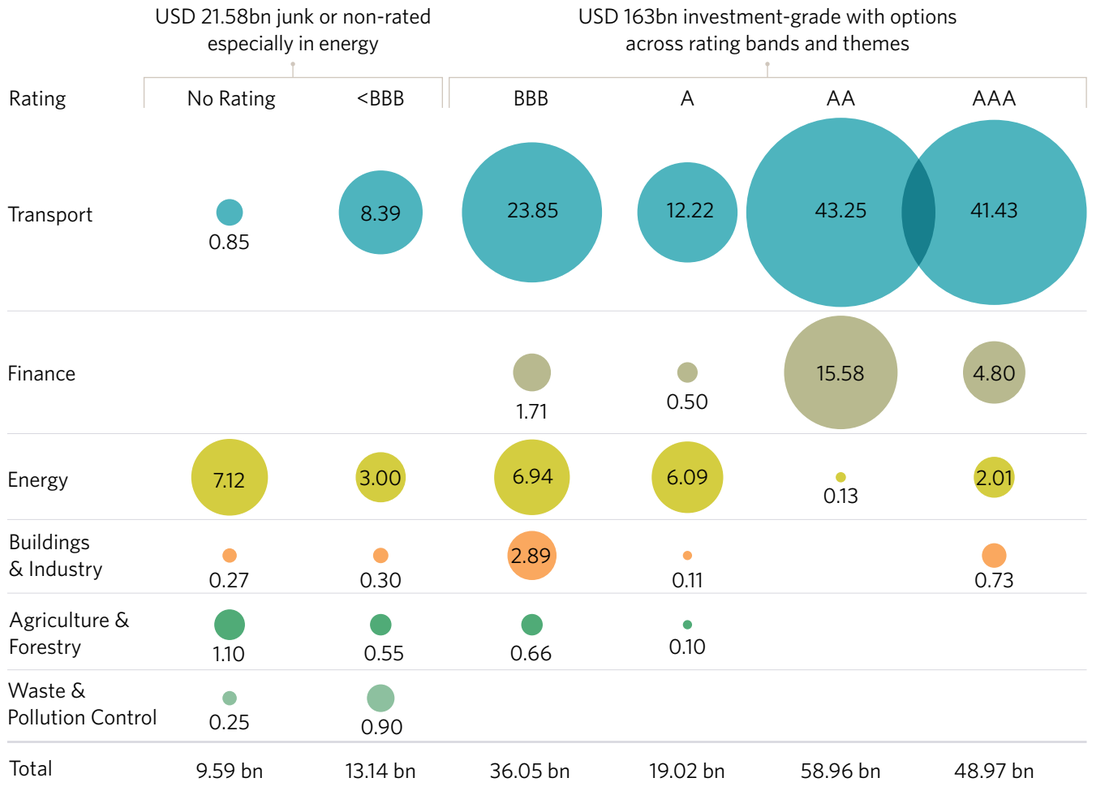
Distribution by benchmark eligible currencies



Yields across USD163bn filter



Ratings distribution of bonds filtered by index-type rules (USD Amt outstanding)



The distribution by rating category demonstrates the broad availability of climate-themed bonds across different rating bands. With 74% of the USD163bn in bonds outstanding in the Transport theme, 14% from Finance themes, and 9% from Energy, investors have diversification opportunities away from the green bond labelled issuances of multilateral development banks. In particular, the AA-rated USD58.95bn band and the BBB-rated USD36.06bn bands provide investment-grade yields while another USD22bn is available in junk or non-rated bonds from issuers such as renewable energy manufacturers.

The long-term nature of these bonds is demonstrated by the range of tenors, offering pension funds and insurance companies sufficient assets to match their liabilities. Almost USD87bn is available in tenors over ten years, with another USD54bn from 5-10 years. Notably there is a balanced distribution across the investment-grade rating bands in the 5-10 year category.

Tenor ranges in bonds from index-filtered rules

Behind the Themes

Transport:

- Includes rail operators, infrastructure and rolling stock, due to its low carbon intensity compared to other passenger and freight transport modes, as well as manufacturers of sustainable biofuels and electric vehicles. (See graph)
- Rail built for coal transport has been excluded.
- As with last year's report, rail remains the dominant technology at USD263bn.
- Many of the bond relate to high-speed rail and rail refurbishment in China, where annual USD100bn capital expenditures have been announced.[5]
- Other significant players are Network Rail in the UK, SNCF and RFF in France.

Agriculture & Forestry:

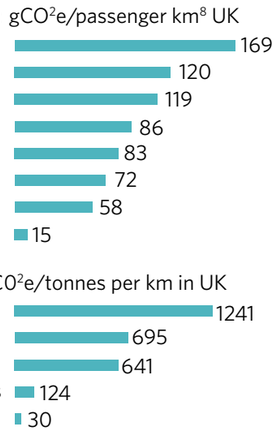
- Increase of chain-of-custody sustainability certifications across supply chains in sustainable forest management and pulp & paper production allows increase in bonds identified.
- USD3.8bn identified in this year's screen.
- 88% of the theme from forest management and paper manufacturers particularly in Sweden, Portugal and the US.
- Climate resilient agriculture practices such as improvements in crop yields and resistance to drought and flooding yet to feature in bond market.

Energy:

- USD11.6bn in issuance in 2012 and early 2013 brings this theme to USD41bn with bonds linked to nuclear power (32%), solar (21%), wind (24%), hydro (18%) and other renewables (4%). (See graph)
- Bonds linked to large hydropower in tropical regions are not included due to potentially high carbon footprints which can be equal to, or double that of coal-fired plants.[6]
- USD5.5bn of wind and solar project bonds with three landmark Canadian project bonds.
- In Mexico, the Oaxaca II and IV 18-year wind bonds issued by Spanish developer Acciona, represented the first investment-grade project bonds from an emerging market at USD300m BBB-rated.
- Non-rated renewable energy technology manufacturers issued USD2.3bn in 2012.

The carbon outperformance of rail

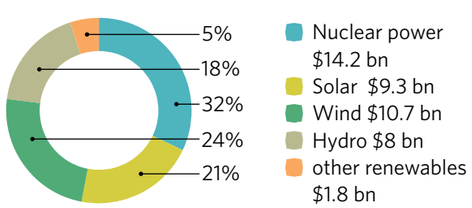
The UK is shown here as an example where rail has a far lower carbon footprint than flights or diesel cars. The difference between these carbon footprints would likely become starker as the grid greens.



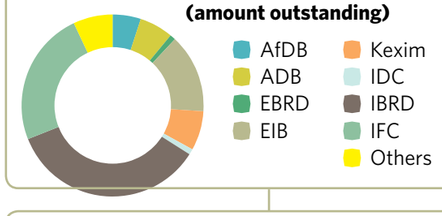
China's Ministry of Railways bonds – to be or not to be

Bonds listed from China's Ministry of Railways stand at approximately USD117bn of our USD346bn universe. One of the few ministries permitted to issue bonds, the Railways ministry was responsible for raising funds for different provincial railway construction companies and operators. China's Government announced the dismantling of the Ministry in March 2013 with administrative and regulatory functions transferred to the Ministry of Transport and commercial construction and revenue activities housed in a new state-backed rail corporation. It is unclear whether the existing rail construction debt will be absorbed by the Ministry of Finance or transferred to the new corporation. [9]
For more on this subject see http://goo.gl/BQx2I

Energy theme breakdown by climate technology (Amount outstanding)



Breakdown of climate/green labelled bond programs (amount outstanding)



Is the CAT in or out?

Catastrophe bonds have been touted in recent years as a way for reinsurers to mitigate extreme weather risks that may be linked to climate change.[10] Cat bonds are bonds where payment depends on the non-occurrence of a predefined catastrophic event.

We identified approximately USD5.2bn of bonds outstanding that are linked solely to extreme weather events such as hurricanes.[11] We have not included these bonds as the link to more frequent and extreme events remains difficult to input into models. It's also unclear if investors, by hedging against the probability of extreme weather events, are supporting climate resilience or not. Cat bonds may, for example, incentivise construction in areas at risk to extreme weather. A standardised way of climate-proofing insurance coverage will be required before they're viewed as contributing to climate resilience.
For more on this topic see http://goo.gl/bOJSC

PACE-ish Developments

Property Assessed Clean Energy (PACE) bonds in the US, where energy efficiency retrofits for residential and commercial buildings can be financed upfront by municipal bonds, have seen plenty of market developments but few bonds at scale. 33 states now have enabling legislation in place with 7 states facilitating 16 different PACE programs, mainly focusing commercial buildings. But municipal bonds for commercial building loans are relatively few as they await projects to achieve the scale necessary to justify transaction costs.[12] CaliforniaFIRST has been authorised to issue USD14bn in bonds while USD12m has been issued in Toledo, Ohio to fund 50 commercial building projects and the City of Ann Arbor[13]. For residential, PACE financing has been delayed by a Court decision supporting a Federal Housing Finance Agency direction that stops Fannie Mae and Freddie Mac underwriting mortgages on PACE households.
For more on this topic see http://goo.gl/0nA3V

5 http://news.xinhuanet.com/english/china/2013-01/17/c_132109568.htm
6 Steinhurst, William., Patrick Knight., and Melissa Schultz. "Hydropower Greenhouse Gas Emissions - State of the Research", Synapse, Energy Economics, Inc. Cambridge, M.A, February 14, 2012
7
8 Defra, 2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting
9 http://www.bloomberg.com/news/2013-03-10/china-unveils-rail-ministry-breakup-to-curb-corruption.html
10 Dlugolecki, A. et al.(2009), "Coping with Climate Change: Risks and opportunites forInsurers."Chartered Insurance Institute, London/CII_3112; ADB (2012), Addressing Climate Change and Migration in Asia and the Pacific, Bangkok, Thailand.
11 http://www.artemis.bm/deal_directory/
12 http://www.bloomberg.com/news/2013-03-10/china-unveils-rail-ministry-breakup-to-curb-corruption.html
13 Managan K. & Klimovich, K (2013) Setting the PACE: Financing Commercial Retrofits, Institute of Buildings Efficiency, Johnson Controls

Climate Finance:

- USD5.2bn of financial institution bonds were issued in 2012 and early 2013 to bring this themes total to USD32bn.
- The green labelled bond programmes of multilateral development banks (MDBs) saw significant issuance in the last year of USD2.5bn, but its overall amount outstanding remains static at USD7.4bn due to previous bonds reaching maturity.
- The benchmark AAA-rated USD1bn green bond from the International Finance Corporation (IFC) and the AA+-rated USD500m bond from the Export-Import Bank of Korea (Kexim) in February represented a breakthrough for investor awareness of labelled bonds.
- Both were heavily oversubscribed in several hours, with a 50-70% of buyers from mainstream investors in the US and Europe, rather than the typical focus on Japanese and Scandinavian markets.[7]

Water:

- Bonds that finance a water supply resilient to the impact of a changing climate remain elusive to our screening of the bond market.
- This year we found greater appreciation of the need to integrate climate adaptation scenarios into business planning, particular in the UK, although we were unable to identify with sufficient confidence any bonds linked to climate compatible water infrastructure or conservation solutions.

Waste & Pollution Control:

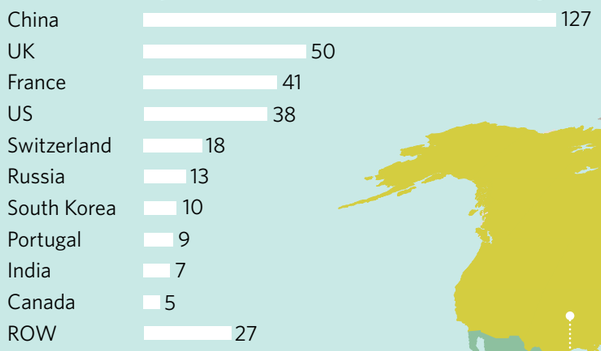
- USD1.4bn in bonds outstanding identified mostly derived from industrial recycling activities.
- Large waste management companies remain too diversified to allow their bonds to be identified as fully dedicated to climate and sustainability solutions.

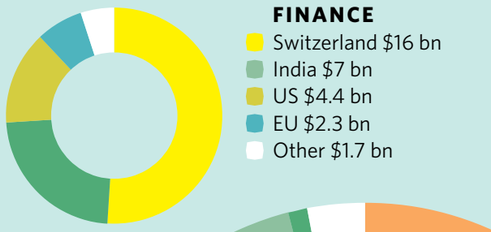
Buildings and Industry:

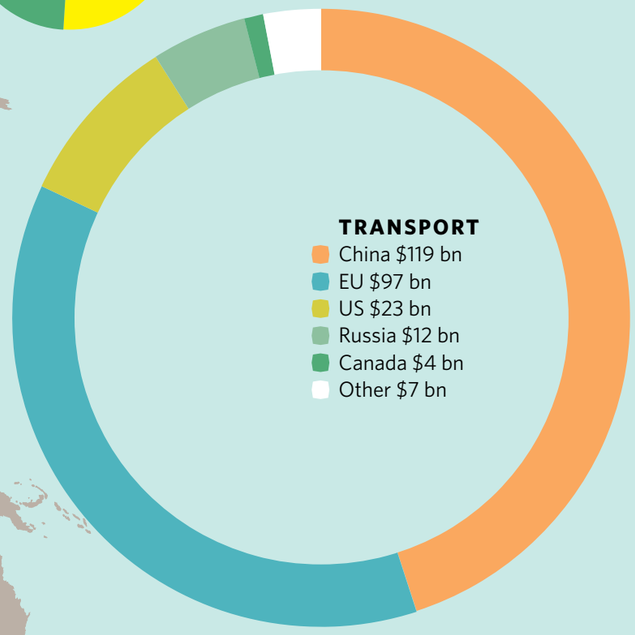
- Bonds linked to manufacturers and service providers fully dedicated to energy efficiency in buildings and industry now total USD4.8bn.
- 13% are derived from LED manufacturers, 52% from LG Electronics due to its near-total Energy Star certification penetration across its appliances with other bonds from US municipal EE programmes.
- Many energy efficiency solutions are located in internal divisions of large corporates such as Siemens, GE and Schneider Electric and so their bonds are not fully aligned.

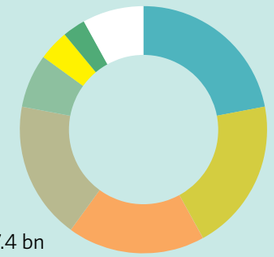
Across the regions

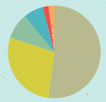
Full Universe: Top 10 Countries of issuance Bn outstanding

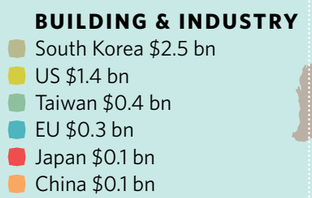


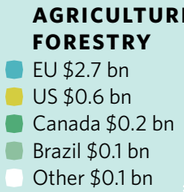












North America:
In total, USD43bn of bonds outstanding originate from the North American region, with USD10.6 issued in 2012 and early 2013. The US is no longer the only home for renewable energy project bonds with three BBB issuances originating from Canada in the past year totalling USD855m - the USD440m Comber Wind portfolio, the USD243m L'Erable wind deal, and the USD172m St.Clair solar PV farm. In the US, the federal government's municipal bond programmes for renewable energy (CREBs) and energy conservation (QECBs) grew marginally to USD1.16m but still face barriers to fulfilling it potential issuance allocation of over USD5bn. Reasons for the relatively poor take-up among local governments include an aversion to taking on more debt; small allocations not justifying transaction costs; and a lack of awareness or limited technically capabilities.

Latin America:
Although the Mexican USD300m BBB Oaxaca wind project bonds issuance was a pioneering effort, we do not expect many project bonds to originate from Mexico in the near term as even with the credibility of Spanish developer Acciona behind the projects, the coupon had to be increased by 75bps in order to sell. Brazil remains the largest potential South American originator of climate-themed bonds. This year's estimate includes the entry of Renova Energia USD150m of bonds backed by their portfolio of wind and small hydro plants. More portfolios driven by industrial-scale sustainable bioenergy and biofuels plantations as well as solar power can be expected to come to market this year. The national development bank BNDES disbursed BRL18.5bn to climate projects in 2011 or 13% of its total, however there remains no sign that it will establish a green bond programme.

Europe:
New types of issuers have entered the market in Europe where the bond market is not as traditional source of financing as bank debt. The UK saw two solar portfolio bonds issued last year at USD160m in total while three municipalities in France issued sustainability bonds for a total of USD550m. In last year's report, we pointed to the potential of the EU's Project Bond Initiative to support clean energy infrastructure. The PBI was approved in November 2012 with EUR230m provided by the European Commission for a first year trial, with the EIB expected to leverage triple this figure. The funding is being used to provide credit enhancement for energy, transport and ICT infrastructure projects to the tune of 20% of senior debt. Most projects in the running for support in the pilot phase include roads and gas pipelines with the UK's offshore transmission links being the primary climate-themed investment eligible.

Far Eastern Asia
Issuers from far eastern Asian countries are responsible for USD140bn of climate-themed bonds outstanding, although 90% is CNY-denominated on the mainlaind onshore Chinese bond market and so restricted to international investors. Shortly after the release of last year's report, the Chinese government cancelled its pilot bond issuance programme for four municipalities earmarked as low carbon cities citing worries over debt levels. In more bad news, leading solar module manufacturer Suntech defaulted on its USD-denominated 541m of bonds. South Korea's green growth strategy is being gradually reflected in our country ranking with 6th in terms of climate-themed bonds outstanding. The AA rated USD500m issue from the Export-Import Bank of Korea (Kexim) was the first green bond issue by a bank, if still implicitly linked to the government. We expect that the Kexim bond will see greater interest from commercial banks in issuing thematic green or climate bonds this year.

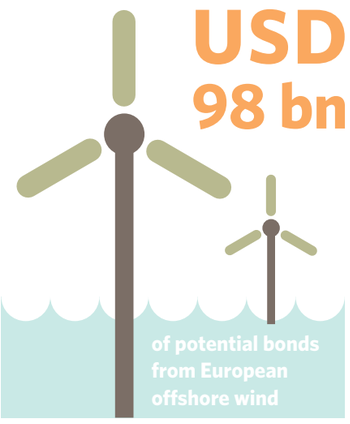
Outlook to 2014

Our updated 2013 estimate has reiterated the perception that the climate-themed bond market is not niche, lacking scale or liquidity. At USD346bn it is almost double our previous estimate. In addition, about USD163bn of the bonds follow index-type rules for currency, credit rating, and greater than USD100m issuance size, and are broadly available across different themes.

Over the next year, we expect institutional investors to expand their screening criteria to include a broader range of investment grade bonds.

We expect two factors to accelerate this trend. The first is the growing focus on the implementation of the environmental, social and governance goals of the Principles for Responsible Investment to fixed income portfolios. Over 1000 signatories of the PRI represent USD32trn in assets under management. The second driver comes from the policy agenda and the need for institutional investors to position themselves ahead of the 2015 climate agreement. Approximately USD22trn of assets under management are part of the Global Investor Coalition on Climate Change that issues regular policy statements outlining investor requirements on international and national climate policy.

But different investors will respond to this availability in different ways. To date, investor exposure to the climate-themed bond universe has been limited to the thematic funds populated by supranational issuance. This has fostered green bond mandates such as the 15% allocation adopted by Local Government Super in Australia.



On the investor side, the next year will likely see a trend of investors broadening their green bond inclusion criteria from supranational issuance to other investment-grade project and corporate bonds as they become available.

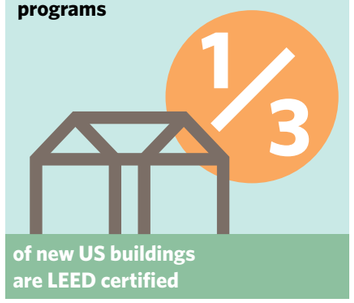
Here we take a look at where the next disruptive climate-themed bond might originate.

- **Labelled green/climate bond issuance:** Supranational and national development banks will continue to raise awareness of the market with the IFC committing to USD1bn a year issues. Already, South Africa's Industrial Development Finance Corporation has joined this labelled thematic market.
- **Muncipalities and local government:** Municipalities issuance will also increase in the US. A number of green banks have been established, in New York, Conneticut, and Hawaii, to provide public finance for clean energy and energy efficiency. As well California has set ambitious renewable energy and energy efficiency targets and New York and others States are following suit.
- **Utility-scale renewable energy projects:** The refinancing of European offshore wind projects features prominently in BNEF's estimate of a potential bond market size from a pipeline of US and European wind and solar projects. USD98bn of the USD142bn potential bond market size is derived from that source.[18] Unfortunately, the Europe 2020 Project Bonds Initiative (PBI) is unlikely to help out in the short-term. The PBI was approved in November 2012 with EUR230m provided by the European Commission for a first year trial, and the EIB expected to leverage triple this figure. The funding is being used to provide credit enhancement for energy, transport and ICT infrastructure projects to the tune of 20% of senior debt. Most projects in the running for support in the pilot phase include roads and gas pipelines with the UK's offshore transmission links being the primary climate-themed investment eligible.
- In the US, approximately USD40bn in bonds originating mostly from onshore wind and solar thermal are in the Bloomberg New Energy Finance pipeline. However the estimate can be deemed conservative as it only includes projects over 95MW and so does not take into account the potential for portfolio bonds from solar rooftops and onshore wind.

We expect a growing focus on climate and ESG to accelerate demand for climate bonds

EE and solar PV in buildings: We witness emerging aggregation initiatives in the solar rooftop and energy efficiency in buildings areas. Efforts to standardise loan contracts and terms to easily allow asset-back securities to re-finance deployment will likely lead to ABS issues by the end of 2013. The National Renewable Energy Laboratory in the US convened a working group in March 2013 to attempt to make the solar rooftop securitisation market a liquid one. The group consisting of solar companies, rating agencies and investment banks will aim to standardise power purchase agreements and leases for residential and commercial building deployment as well as robust datasets to assess credit default risks. It is reported that installation and lease companies such as SolarCity, SunRun and SunPower will issue asset-backed securities by the end of 2013. [19] It is also hoped that the proliferation of building sustainability rating systems raises the possibility of debt issued by Real Estate Investment Trusts being eligible as climate-themed bonds. Research has shown that some existing REITs have 80% Energy Star certified properties or 43% LEED-certified. With one-third of all new construction LEED-certified in the US, it is predicted that debt issued by green REITs will become a new feature of the energy efficiency market.[20]

Dummy head breakdown of climate/green labelled bond programs



- **Industrials and commercial banks issuing climate-linked corporate bonds:** We register increasing interest from large industrial corporations for example in the power, auto and energy efficiency equipment sectors to issue thematic bonds given appropriate transaction costs. The owners of clean energy projects remain the big opportunity for new climate-themed bond issues. In our bond market screening we are able to identify some bonds linked to clean energy portfolios that were later bought by utilities such as Iberdrola. With rating agencies identifying how the capex required for offshore wind development, along with independent power producer's capture of market share, is negatively affecting the credit quality of large utilities, it remains imperative for them to lay the ground for a clean energy securitisation market.[21] Bonds from RWE, for example, may be linked to the almost USD1.3bn share of renewables in their capital expenditure last year, or Iberdrola's renewable assets, valued at USD28bn. It is also likely that commercial financial institutions will seek to issue thematic bonds following the success of the Kexim bond issue. Investors could be assured of the credibility of these issues through the Climate Bond Standard and Certification Scheme (see box at right).

Our updated 2013 estimate shows the climate-themed bond market is not niche, nor lacking scale or liquidity.

18 BNEF (2013) Green Bonds Market Outlook 2013**6**
19 http://www.greentechmedia.com/articles/read/Securitization-Another-Innovation-In-Solar-Finance
20 Eichholtz, P. et al (2012) Portfolio greenness and the financial performance of REITs, Journal of International Money and Finance
21 S&P (2012) Credit FAQ: How the explosive growth in offshore wind generation could affect European utilities credit quality; Moody's (2012) Wind and solar power will continue to erode thermal generators credit quality

Corporate climate bond certification

The Climate Bonds Initiative has launched a project to establish a Climate Bond Standard and Certification Scheme.

The Scheme is supervised by a Board of institutional investors and environmental not-for-profits. It's backed by a broad coalition of organisations.

The Scheme has a transparent multi-stakeholder structure with specialist working groups to advise on technical criteria for what should be deemed climate-credible bonds.

The Climate Bond Standard allows for the straightforward certification of project, portfolio, corporate and sovereign bonds tied to assets relevant to a rapid transition to a low-carbon and climate resilient economy.

For corporate bonds a simple, low-cost ring-fencing exercise is required to assure that the money raised by the bond is backed by a pool of climate-credible assets.

Bonds are verified by a third-party provider that they conform with the Standard and then certified by the Climate Bond Standards Board.

For more information contact: http://standards.climatebonds.net

"We are looking for investment-grade returns that also address climate change. The Climate Bond Standard will allow us to know that investment opportunities put before us will be the right ones to build a Low Carbon Economy."
— Jack Ehnes, CEO of California State Teachers Retirement System

Climate Bond Certified

Key Findings:

$346 bn TOTAL
CLIMATE-THEMED BONDS OUTSTANDING

25%
INCREASE IN ISSUANCE IN 2012

$163 bn
INVESTMENT-GRADE BENCHMARK-TYPE BONDS OUTSTANDING

Climate Bonds 3-point agenda for market acceleration

Innovative solutions from governments, investors and industry alike are needed if we are to finance the transition to a low-carbon, climate-resilient economy. Below are three key ways identified by the Climate Bonds Initiative of accelerating investor engagement and market expansion.

1
Entrench Standards for what is climate or green.

Mainstream investors require both liquidity and commoditized products in order to participate in this market. For this, scale is required in the thematic market. The industry-backed Climate Bond Standard has the potential to scale up the market by standardizing and commoditizing climate products.

For more details go to:
http://standards.climatebonds.net

2
Support a Green Securitization market.

Recapitalisation pressures on banks have reduced their allocations to project lending; developing a loan securitization pipeline would allow them to do more with less. Green securitization of operating assets will help aggregate a fragmented renewable energy market to meet the needs of institutional investors. This will involve appropriate regulatory measures and support by developing banks to help kickstart markets.

3
Structure to investment grade.

Policy imperatives means low-carbon assets need to be developed at an unprecedented speed and scale; without track record ratings for assets can be expected to remain in the low investment grade bands or below. Pubic sector support in the form of policy guarantees, tax incentives and credit enhancements will be essential if targets for emissions reduction are to be met.

Disclaimer This report does not constitute investment advice and the Climate Bonds Initiative is not an investment adviser. The Climate Bonds Initiative is not advising on the merits or otherwise of any bond or investment. A decision to invest in anything is solely yours. The Climate Bonds Initiative accepts no liability of any kind for investments anyone makes, nor for investments made by third parties.

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The Climate Bonds Initiative is an investor-focused not-for-profit, mobilizing debt capital markets for a rapid transition to a low-carbon economy.

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