

Introduction to the Climate Bonds Standards & Certification Scheme

December 2015













The Climate Bonds Initiative: What we do

- Information flows for ratings agencies & index providers
- Climate Bonds Standard & Certification Scheme
 - Definitions for investors and guidelines for bond issuers
 - Assurance through certification
- Outreach to inform and stimulate the market
 - Policy models and government advice
 - Efforts in emerging markets to grow issuance (China, India, etc)
 - Facilitating discussions on securitization, covered bonds, Islamic Finance
- Partners Program
 - Platform for market participants to get involved during the formative stages
 - Tailored way to support the CBI's efforts to accelerate growth in green bond issuance and demand



Climate Bond Certified













Launched: Investor **Statement**

FROM INVESTORS REPRESENTING US\$10 TRILLION

The Paris Green Bonds Statement 9 DECEMBER 2015

We, the undersigned signatories to this statement, represent asset owners, investment managers and individual funds managing a combined US\$10 trillion of assets. We are substantial investors in the US\$100 trillion global bond market. We understand:

- 1. That climate change poses a significant risk to societies, economies, and to the investments we make on behalf of our beneficiaries around the world.
- 2. That the response to climate change requires substantial investments in areas such as clean energy, low-carbon transport, water infrastructure; and in adaptation measures for communities and to improve existing infrastructure. It requires a rapid transition to a low-carbon and climate resilient economy.
- 3. That a large proportion of the mitigation and adaptation solutions required can be structured as **investible assets** that will suit the yield and risk levels required to meet the needs of our handia:

investment in green bonds, climate bonds and other bonds financing mitigation of and adaptation to climate change that meet our risk and return requirements as institutional investors:

- 1. Governments to act through policy, regulation, risk mitigation, guarantees, tax credits and other mechanisms to support the issuance of bonds that both address climate change and allow us to meet our obligations to our beneficiaries.
- 2. Experts in low carbon and climate resilient investments to develop clear and independent industry standards for the climate change impacts and benefits of bond financed projects, noting that they need to be sufficiently ambitious to meet emissions reduction and adaptation challenges, while being technologically and economically f_{easible.}
- 3. Issuers to ensure transparency around the use of proceeds and their impact, and for corporate issuers to have credible independent reviews of the environmental credentials of climate bonds and green bonds and confin

SIGNATORIES

ACTIAM — Jacob de Wit, CEO

Addenda Capital — Brian Minns, Sustainable Investing Specialist

Affirmative Investment Management — Stuart Kinnersley, CEO & Co-Founder AllianceBernstein — Peter S. Kraus, Chairman

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AP3/Tredje AP-fonden — Peter Lundkvist, AP3 Head of Corporate Governance

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AXA Investment Managers — Andrea Rossi,

BlackRock — Kevin Holt, Co-head of Americas

BNP Paribas Investment Partners — Helena Viñes Fiestas, Head of Sustainability Research California Teachers' State Retirement Systems

Calvert Investments ... P





Launched: Coalition of investors + governments + development banks



Launched: Aggregation **Platform**

The Climate Aggregation Platform (CAP) for **Developing Countries** Introducing the CAP











Energy systems around the world are in the midst of a fundamental transition. The energy systems of the future will incorporate many millions of individual small-scale low-carbon energy access made-up of both distributed renewable Energy systems around the world are in the midst of a fundamental transition. The energy systems of the future will energy assets, made-up of both distributed renewable energy generation and consumer-driven energy efficiency measures. The Climate Aggregation Platform (CAP) aims to accelerate this transition in developing countries, promoting the scale-up of husiness and financial models which aggregate small-scale low-carbon energy investments. The platform aims to help

The Climate Aggregation Platform (CAP) aims to accelerate this transition in developing countries, promoting the scale-up of business and financial models which aggregate small-scale, low-carbon energy investments. The platform aims to help accept and to devalor low-cost sources of financing or business and financial models which aggregate small-scale, low-carbon energy investments. The platform aims to help fanning new and diverse investor bases.

The CAP will be a concerted, coordinated effort – a global coalition of key actors – seeking to raise awareness, exchange information and huild momentum around financial aggregation. It will be structured around 3 core activities:

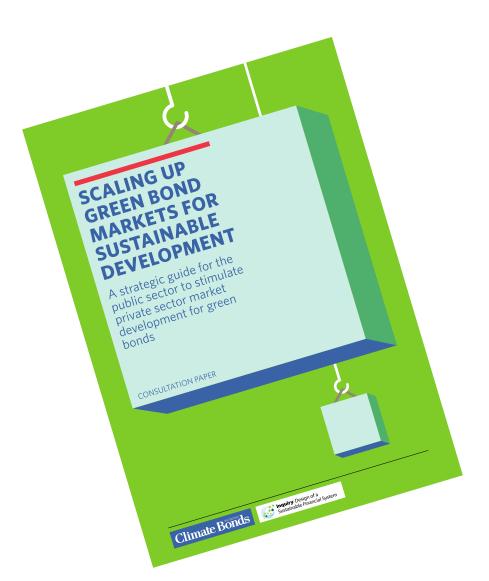
- information and build momentum around financial aggregation. It will be structured around 3 core activities:
 - A global working group, to promote engagement and coordination amongst key finance and industry Standardised tool-kits (template contracts, performance metrics, transaction structures), capable of regional and In-country demonstrations and scale-up, show-casing and providing technical support for pilot transactions, and archieve scale.
 - key industry actors)







Launched: Guide for Governments



Basic steps

- Demonstration bonds
- Investment pipelines
- Catalyst banks / funds

Support tools

- Regulatory Credit support
- Aggregation

Financial system

- Build bond markets
- Risk weighting
- Central bank buying













气候债券倡议组织

http://cn.climatebonds.net

















2015 saw almost \$42 billion of labelled green bonds

issued

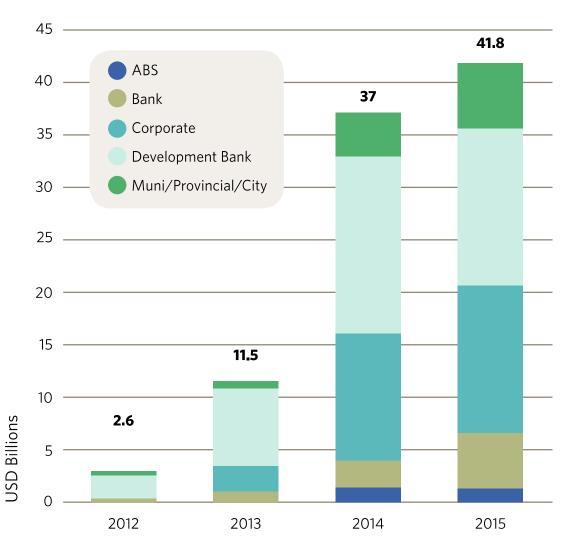
Diverse issuers, wide range of green assets

Review and audit required

Evolution of standards

Strong demand

We need supply







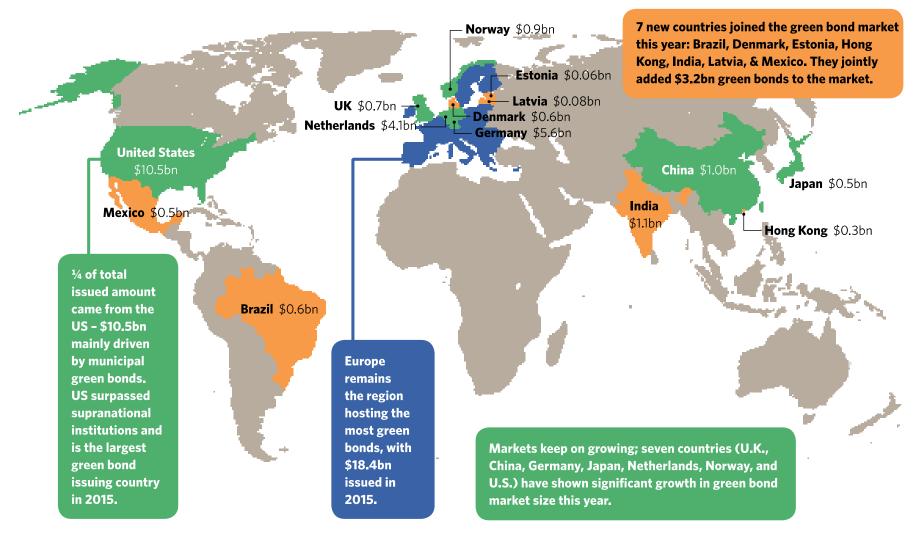








Spreading across the world during 2015









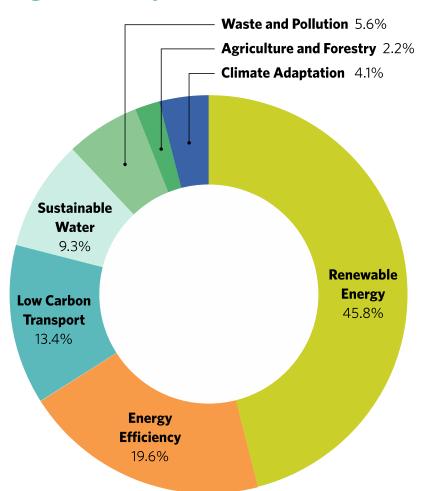






Renewable energy is largest segment

2015 green bond proceeds



Any issuer can go green

Benefits

- Investor diversification
- Stickiness
- Longer tenors
- Corporate portfolio















It's about mitigation and adaptation/resilience



Solar, wind grid
Bioenergy, Geothermal
Hydro, Marine



Sustainable water mngmt Water infrastructure Storm adaptation



Low-carbon buildingsGreening industry



Waste & pollution mngmt Methane reduction Recycling



Low emission vehicles Electric Vehicles Rail, BRTs



Agriculture
Food supply chain
Forestry, wood, paper

ICT & Broadband











Investors are calling for standards, assurance and certification of Green / Climate Bonds

- Investor demand for Green Bonds & Climate Bonds is strong, and will increase in line with the delivery of quality products into the market
- **Standards, assurance & certification** have been identified as key to improved confidence and transparency, and further strong growth within the mainstream debt capital markets
- The Green Bond Principles, released in March 2015, encourage the development and use of standards for certification of Green Bonds, as do various investor statements
- The Climate Bond Standard represents an important step, moving from broad integrity principles to a robust and effective Certification scheme
 - Standard with clear mandatory requirements (use of proceeds, tracking, reporting)
 - Specific eligibility criteria for low carbon and climate resilient projects & assets
 - Assurance framework with independent verifiers and clear procedures
 - Certification by an independent Climate Bond Standards Board made up of \$34 trillion AUM















Environmental credibility+ low transaction costs



Climate Science Framework

Potsdam Institute Climate Science / Climate Analytics













Key features of the Climate Bonds Standard

- Green Bond Principles are fully integrated
 - Climate Bond Standard V2.0 basically converts the GBP into a set of requirements and actions which can be assessed, assured and certified in a robust and repeatable way
- Provides a detailed set of technical criteria for eligible projects and physical assets
 - removes the subjective judgements which the GBP approach requires
- Wide variety of bond types are eligible for certification
 - The Standard has specific requirements for each of these bond types to address particular risks which are apparent for that structure
- The Standard is structured to provide a consistent approach to selection of investments, use of proceeds, reporting by issuers, and assurance while allowing the detailed technical criteria for each of the investment areas to be developed, approved, and updated

Environmental standard, **not** a financial standard. Investors must do their own credit analysis













Development of detailed technical criteria

Low Carbon Bus Rapid Completed Solar Wind **Buildings Transit Low Carbon Geothermal Transport** Agriculture Water Ready soon! Hydropower **Bio-energy** & Forestry Infrastructure **Industrial Energy** Waste & Storage & **Broadband Energy Pollution Efficiency Capture Other priority areas** Resilient Infrastructure





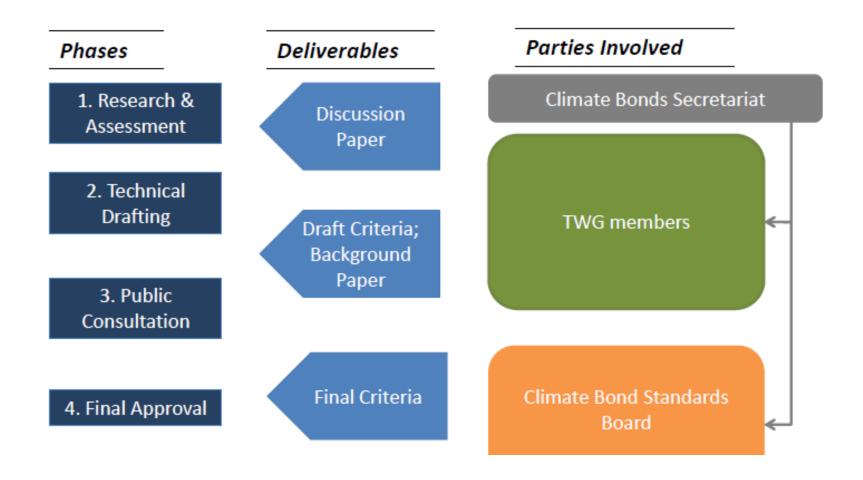








How the Technical Working Groups operate















Independent Standards Board and Certification

- The Climate Bonds Standard & Certification Scheme is led by a Climate Bonds Standards
 Board of pre-eminent investor entities, collectively representing \$34 trillion of assets under management:
 - International Cooperative Mutual Insurers Federation; State Treasurer of California;
 Institutional Investor Group on Climate Change (EU); Investor Group on Climate Change (Australia); Ceres Investor Network on Climate Risk (US); California State Teachers
 Retirement System; CDP; Natural Resources Defense Council
- The Standards Board provides oversight over the implementation of the Climate Bonds Standard and the Certification scheme
 - Approval of all standards and documentation relating to guidance and strategic development of the scheme
 - Certification decisions for individual Climate Bonds
- The Standards Secretariat provides support and coordination, working with issuers and verifiers to step through the certification process





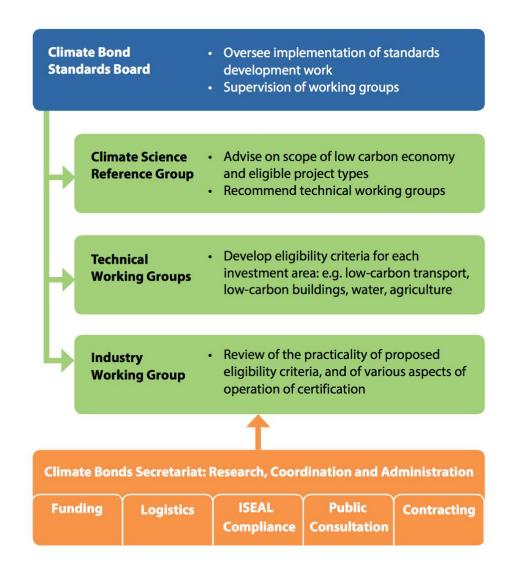








Governance Structure















Climate Bonds Standard V2.0

Introduction to the Climate Bonds Standard

- Provides clear requirements for issuers and their bonds to be labelled as Certified Climate Bonds
- Aligns with the normal phases of the bond market
 - Pre-issuance
 - Post-issuance
- Three parts
 - General Requirements
 - Climate Bonds Taxonomy and Sector-Specific Standards
 - Specific Requirements for Different Bond Structures
- Certification Process





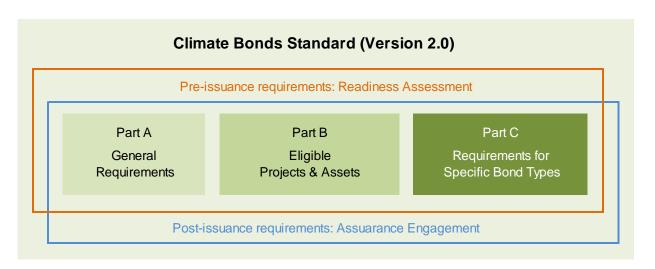




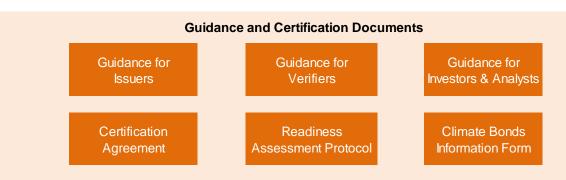




Package of documents







Focus of the requirements in the Standard

- Requirements in the Standard are focused on three main areas:
 - Internal procedures inside the bond issuer
 - Reporting arrangements which have been set up by the issuer
 - Eligibility of projects & assets
- Pre-issuance checks are focused on the readiness of the issuer to meet the requirements and the likely eligibility of projects & assets
- Post-issuance assurance is a more thorough assessment of whether the issuer and the bond meet all of the requirements of the Standard













Pre-Issuance and Post-Issuance certification

- The Climate Bond Standard allows Certification of a bond prior to its issuance, enabling the issuer to use the Climate Bond Certification Mark in marketing efforts and investor roadshows
 - Pre-Issuance focuses on selection of eligible projects & assets as well as the readiness of the issuer's internal processes to track and report on use of proceeds
 - The issuer must engage a Verifier to provide assurance over the eligibility and readiness
- After the bond has been issued and allocation of the bond proceeds has begun, the issuer must follow through with confirming the Certification
 - Post-Issuance focuses on the actual use of proceeds, ongoing eligibility of the projects & assets, use of funds not yet allocated ("non-contamination"), and the adequacy of and output from the issuer's internal systems
 - The issuer must engage a Verifier to provide assurance over the actual use of proceeds and reaffirm that internal systems & controls are functioning properly
- Requirements are split in this way to align with the phases of the bond cycle such as preparation, marketing, issuance and allocation of funds













Reporting requirements made clear for issuers

- The Climate Bonds Standard (v2.0) includes explicit minimum requirements for when and what issuers must report, and who those reports must go to:
 - Reporting to the Standards Board prior to issuance of the bond
 - Annual reporting to bond holders and the Standards Board
 - Recognition that there may be confidentiality issues to observe
 - May also report publicly as desired by the issuer or investors
- Issuers must report at least annually on:
 - The projects & assets being funded by the bond, and their eligibility
 - Use of proceeds, including how any unallocated funds have been deployed
- May also include reporting on the climate outcomes and other impacts of the projects & assets funded by the bond. This is **not mandatory** beyond what might be needed for demonstrating the ongoing eligibility of the projects & assets











Add-ons will provide guidance for issuers on reporting outcomes and impacts

The impact reporting pyramid

Asset capacity

Asset performance

Implications for CO₂ emissions

Adherence to environmental standards and best practice

Sustainable development impacts for communities close to the assets

Wind or solar assets

Installed capacity (MW)

(MWh per year)

Emissions avoided from grids (tCO₂)

Certifications, evidence, records

Localised impacts and SD metrics













Eligibility of projects & assets

 A two-step process is used to determine the eligibility of specific projects and physical assets

Climate Bonds Taxonomy

- Provides clear guidelines on the mitigation and adaptation investment opportunities across the major sectors of the global economy
- Serves as an initial screen for clear inclusions and exclusions for all sectors based off of the latest climate science and the delivery of a low carbon and climate resilient economy

Sector-Specific Standards

- Separate documents for each investment area identified in the Taxonomy
- Technical criteria contained in these documents must be met for projects and assets to be considered eligible













Sector-Specific Standards

Low Carbon Bus Rapid Completed Solar Wind **Buildings Transit Low Carbon** Geothermal **Transport** Agriculture Water Ready soon! Hydropower **Bio-energy** & Forestry Infrastructure **Industrial Energy** Waste & Storage & **Energy Broadband Pollution Efficiency Capture** Other priority areas Resilient Infrastructure













Internal procedures for issuers

- The issuer of a Climate Bond needs to have an internal "Green Bonds / Climate Bonds Framework" which lays out the following information:
 - Environmental objectives of the Climate Bond (or Bonds)
 - Selection process for eligible projects & assets to be funded by the bond proceeds
 - Internal procedures to meet the requirements in the Standard, such as management of proceeds, use of unallocated proceeds, and regular reporting which the issuer will provide
 - Sign off processes so that there is appropriate internal endorsement of the information contained in the reports.
- Bond issuers are usually very large organisations, so this "framework" will describe
 how existing procedures inside the issuer are used to meet the requirements of
 the Standard as well as any new procedures to provide eligibility information













Steps in the certification process (1/2)

- 1. **Pre-Issuance Certification**: Assessment and certification of the bond issuer's internal processes, including its
 - selection process for projects & assets,
 - internal tracking of proceeds,
 - the allocation system for funds.
- Verifier undertakes procedures to assess the readiness of the issuer and the proposed bond to conform with the Standard
 - Follows an agreed Readiness Assessment Protocol (or checklist) to assess the conformance with the Pre-Issuance Requirements of the Standard
 - Provides a Report of Factual Findings to the issuer, who then provides it to the Standards Secretariat
- This is the first part of the engagement between the verifier and the issuer, which
 is followed by the post-issuance activities













Steps in the certification process (2/2)

- **2. Post-Issuance Certification**: Assessment and certification of the bond, which must be undertaken after the allocation of bond proceeds is underway
- Verifier undertakes procedures so that it can provide assurance that the issuer and the bond conform with all of the Post-Issuance Requirements of the Standard
 - Verifier must use accepted standards for undertaking assurance work, such as ISAE3000, which provide clear structure and process for this work
 - Limited assurance is the minimum requirement, but many issuers prefer to see reasonable assurance
 - Report produced by the verifier must contain an assurance statement
- Verifier's report is provided to the issuer, who then provides it to the Climate Bonds Standards Secretariat with its application to confirm the Certification
 - A "publishable" version of the verifier's report must be provided













Overall process for certification

1. Pre-Issuance Certification

Issuer prepares for Certification draft of Information Form to CBI Verifier undertakes readiness assessment Issuer submits updated Info Form & verifier report to CBI Standards Board confirms Pre-Issuance Certification

2. Post-Issuance Certification

Issuer closes book and issues bond Proceeds allocated to projects & assets

Verifier undertakes assurance procedures Issuer submits updated Info Form & verifier report to CBI Standards Board confirms Climate Bond Certification













Guidance material provided with v2.0

- Version 2.0 of the Climate Bond Standard is accompanied by a variety of documents to help each of the different actors to participate with confidence and efficiency
- **Guidance for Issuers** provides information on how to prepare for Climate Bond issuance, the internal systems & controls required, how to get ready for assurance engagements, and the steps in the Certification process
- **Guidance for Verifiers** provides information on the role of Verifiers, the audit standards to be used, key risks to consider, and recommended procedures
- Guidance for Investors & Analysts explains how Certification provides confidence in the integrity of the Climate Bond and what it is funding
- **Sector-Specific Standards** spell out the technical criteria for the inclusion of specific projects & assets to be funded by Climate Bonds (e.g. wind, solar, low carbon buildings, low carbon transport, water etc.)













www.climatebonds.net











