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
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 beneficiaries.

We encourage, in order to scale up 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 feasible.

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 confirm assets as such.

SIGNATORIES

ACTIAM — Jacob de Wit, CEO
Addenda Capital — Brian Minns, Sustainable Investing Specialist
Affirmative Investment Management — Stuart Knnersley, CEO & Co-Founder
AllianceBernstein — Peter S. Kraus, Chairman and CEO
Allianz Global Investors — Franck Dixmier, Global CIO Fixed Income
Amundi Asset Management — Bernard Carayon, Deputy CEO
APG Asset Management — Herman Slooijer, Managing Director Global Credits
AP1/Fårsta AP-Fonden — Mikael Angberg, CIO
AP2/Andra AP-Fonden — Ulrika Danielson, Head of Communications
AP3/Tredje AP-fonden — Peter Lundkvist, AP3 Head of Corporate Governance
AP4/Fjärde AP-Fonden — Arne Ljöö, Head of Corporate Governance and Dr Ulf Erlandsson, Senior Portfolio Manager Credit
Aviva Investors — Dr Steve Waygood, Chief Responsible Investment Officer
AXA Investment Managers — Andrea Rossi, CEO
BlackRock — Kevin Holt, Co-head of Americas Fixed Income
BNP Paribas Investment Partners — Helena Viteris Fiestas, Head of Sustainability Research
California Teachers’ State Retirement Systems (CalSTRS) — Jack Ehrnes, CEO
Calvert Investments — VP Sustainability
Launched: Coalition of investors + governments + development banks

INDCs => 3-5 year green investment plans
Investor-country dialogue

**GREEN BONDS & CAPITAL MARKETS**

**Green Infrastructure Investment Coalition**

**Investors + Public Sector + Development Banks**

**Multi-trillion dollar investor coalition backs green investment platform**

At the UN Climate Conference last year, investors representing some $43 trillion of assets under management signed statements about the importance of acting quickly on climate change. They also said they stand ready to invest in climate solutions, with insurers specifically aiming to multiply by 10 their climate related investments by 2020.

Investors representing $2.6 trillion AUM specifically undertook to work with the Climate Bonds Initiative to grow a vibrant green bonds market.

Clearly, capital is available to invest.

From the institutional investor perspective, opportunities are available investible in green bonds and other financial instruments to their needs.

**Coalition Organisers**

Climate Bonds

PRI Principles for Responsible Investment

**Coalition Members**

The following organizations have confirmed participation:

- The Climate Bonds Initiative is an investor focused NGO working to mobilize debt capital markets for green investments.
- The Principles for Responsible Investment represent investors with assets under management of US$50 trillion.
- The International Cooperative Mutual Insurers Federation represents insurers around the world with assets under management of US$9 trillion.
- The UNEP Inquiry brings together regulators, central banks, governments and institutional investors to examine how to align the financial system with sustainable development.

The European Investment Bank is the European Union’s nonprofit long-term lending institution and the world’s largest non-commercial lending institution.
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 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 business and financial models which aggregate small-scale, low-carbon energy investments. The platform aims to help build in-country pipelines of standardised, low-carbon energy assets and to develop low-cost sources of financing, tapping 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 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 stakeholders. The working group will include regional, national and technical sub-committees.
- Standardised tool-kits (template contracts, performance metrics, transaction structures), capable of regional and national modification. This will promote the standardisation essential to aggregation.
- In-country demonstrations and scale-up, show-casing and providing technical support for pilot transactions, and creating the policy and market architecture to build pipelines and achieve scale.
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

7 new countries joined the green bond market this year: Brazil, Denmark, Estonia, Hong Kong, India, Latvia, & Mexico. They jointly added $3.2bn green bonds to the market.

¾ of total issued amount came from the US – $10.5bn mainly driven by municipal green bonds. US surpassed supranational institutions and is the largest green bond issuing country in 2015.

Europe remains the region hosting the most green bonds, with $18.4bn issued in 2015.

Markets keep on growing; seven countries (U.K., China, Germany, Japan, Netherlands, Norway, and U.S.) have shown significant growth in green bond market size this year.
Renewable energy is largest segment

2015 green bond proceeds

- Renewable Energy 45.8%
- Energy Efficiency 19.6%
- Low Carbon Transport 13.4%
- Sustainable Water 9.3%
- Waste and Pollution 5.6%
- Agriculture and Forestry 2.2%
- Climate Adaptation 4.1%

Any issuer can go green

Benefits
- Investor diversification
- Stickiness
- Longer tenors
- Corporate portfolio

Climate Bond Certified

Climate Bonds Initiative
It’s about mitigation \textit{and} adaptation/resilience

- Solar, wind grid
  - Bioenergy, Geothermal
  - Hydro, Marine
- Low-carbon buildings
  - Greening industry
- Low emission vehicles
  - Electric Vehicles
  - Rail, BRTs
- Sustainable water mngmt
  - Water infrastructure
  - Storm adaptation
- Waste & pollution mngmt
  - Methane reduction
  - Recycling
- 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

$34tn Standards Board

Climate Science Framework
Potsdam Institute Climate Science / Climate Analytics

Verifiers
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

Completed
- Wind
- Solar
- Low Carbon Buildings
- Bus Rapid Transit
- Low Carbon Transport
- Geothermal

Ready soon!
- Agriculture & Forestry
- Water Infrastructure
- Hydropower
- Bio-energy

Other priority areas
- Waste & Pollution
- Industrial Energy Efficiency
- Broadband
- Energy Storage & Capture
- Resilient Infrastructure
How the Technical Working Groups operate

- **Phases**
  1. Research & Assessment
  2. Technical Drafting
  3. Public Consultation
  4. Final Approval

- **Deliverables**
  - Discussion Paper
  - Draft Criteria; Background Paper
  - Final Criteria

- **Parties Involved**
  - Climate Bonds Secretariat
  - TWG members
  - Climate Bond Standards Board
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 Bond Standards Board**
- Oversee implementation of standards development work
- Supervision of working groups

**Climate Science Reference Group**
- Advise on scope of low carbon economy and eligible project types
- Recommend technical working groups

**Technical Working Groups**
- Develop eligibility criteria for each investment area: e.g. low-carbon transport, low-carbon buildings, water, agriculture

**Industry Working Group**
- Review of the practicality of proposed eligibility criteria, and of various aspects of operation of certification

**Climate Bonds Secretariat: Research, Coordination and Administration**
- Funding
- Logistics
- ISEAL Compliance
- Public Consultation
- Contracting
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
Climate Bonds Standard (Version 2.0)

Pre-issuance requirements: Readiness Assessment

Part A
General Requirements

Part B
Eligible Projects & Assets

Part C
Requirements for Specific Bond Types

Post-issuance requirements: Assurance Engagement

Sector-Specific Standards for Part B Eligible Projects & Assets

Solar
Geothermal
Low Carbon Transport
Water
Bioenergy
Energy Efficiency

Wind
Other Renewables
Low Carbon Buildings
Infrastructure Resilience
Agriculture & Forestry
Waste Management

Guidance and Certification Documents

Guidance for Issuers
Guidance for Verifiers
Guidance for Investors & Analysts

Certification Agreement
Readiness Assessment Protocol
Climate Bonds Information Form
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)
- **Electricity production** (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

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- Wind
- Solar
- Low Carbon Buildings
- Bus Rapid Transit
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- Geothermal

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Other priority areas
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- Industrial Energy Efficiency
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- Energy Storage & Capture
- 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
   - Issuer provides 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