

of green bonds through effective, credible, widely-accepted and fully developed standards



Agenda

- 1. (Green?) debt-security markets an overview
- 2. Why (and how) does WWF work on green bonds?
- 3. In a nutshell: WWF's recent report "Green bonds must keep the green promise!"
- 4. Questions & Answers

The green bond market



The term 'green bond' is widely used, mostly by issuers and other stakeholders, to describe bonds that

- not only encompass financial obligations (e.g. the repayment of principal capital at a given maturity date, regular payments of coupons/interest, etc.),
- but also **incorporate environmental benefits** claimed by the green bond issuer.

Labelled green bonds account for 17% of our climate-aligned bond universe



Key Takeaways

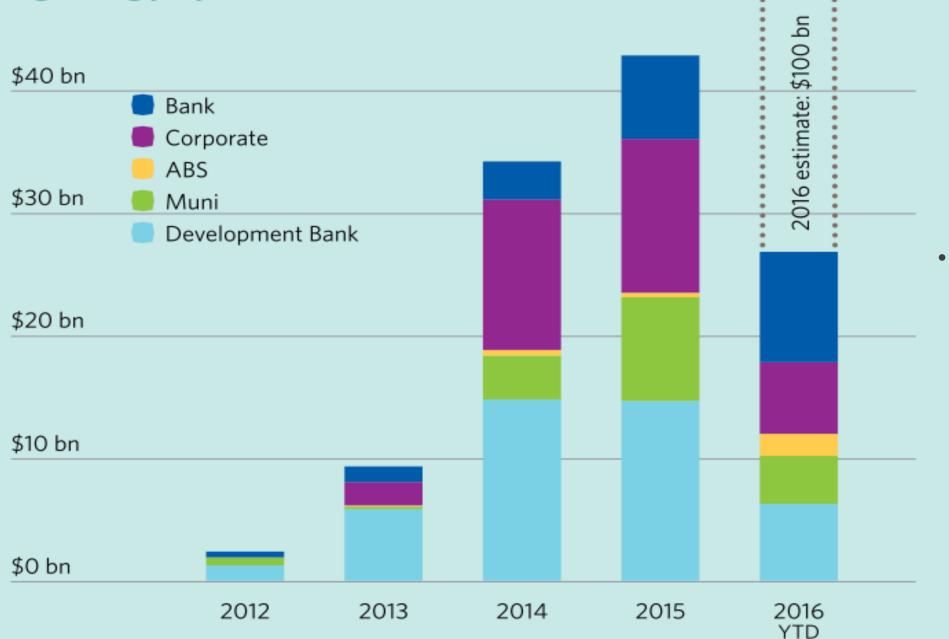
- The climate-aligned bond market amounts to \$694bn outstanding
- Labelled green bond market stands at \$118bn outstanding (17% of total)
- \$576bn outstanding is currently not labelled as green but is climate-aligned
- At 67%, low-carbon transport is the dominant theme
- It's a long dated market: 70% of bonds have tenors of 10 years or more

The climate-aligned bond market amounts to US\$ 694 billion outstanding

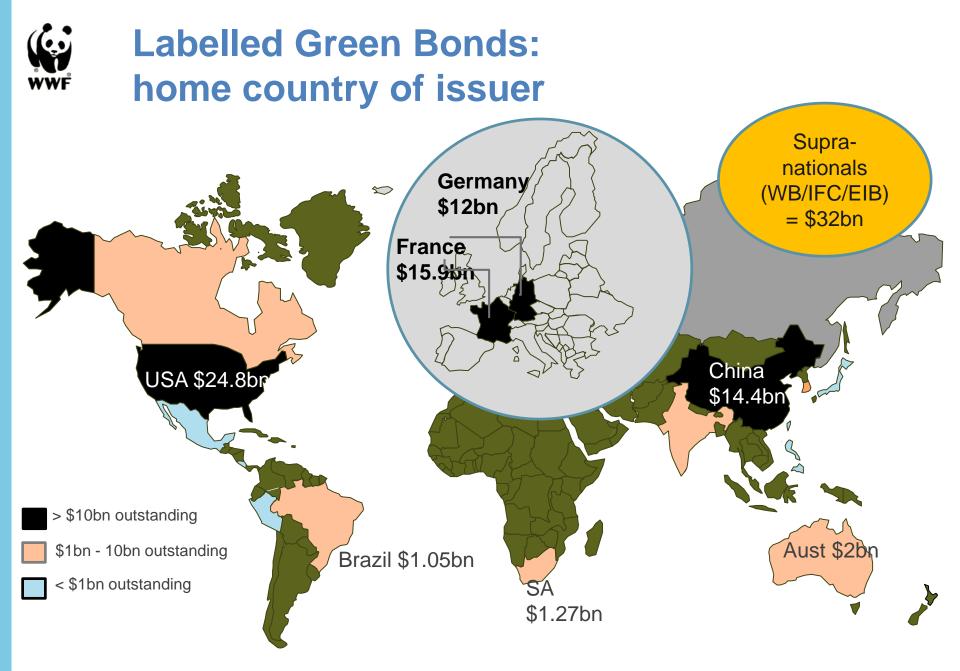
The 'tip of the iceberg', US\$ 118 billion of labelled green bonds outstanding, account for 17% of CBI's climatealigned bond universe

However, that's about 0.1% of the global debt capital markets

Corporate and muni bonds make up a growing proportion of issuance



Climate Bonds





Green Bond Principles – ICMA

Proceeds must go to green / Explain process for project selection; use 2nd party review / Track proceeds; use auditor to verify / Report each year on details

Climate Bonds Standard & Certification: green definitions + assurance



Green Bond

Bond

Certified

Principles

China: Central Bank-led **France**: "Energy and Ecological Transition for Climate" Label

Moody's, S&P green ratings

G20 Green Bond recommendations



- City of Paris: public transportation systems.
- EDF (French utility, mostly nuclear): renewable energy through subsidiary EDF renewables.
- Engie (formerly GDF Suez, a French energy conglomerate): energy infrastructure, including large-scale hydropower (including Jirau dam project in the Amazon).
- Mexico City international airport "designed to be the world's most sustainable airport", LEED platinum certification for control tower and ground transportation centre to receive LEED 'gold' certification.
- **D.C. Water** green infrastructure finance (30/100 yrs maturity).

Why and how does WWF work on green bonds?



Some WWFoffices among the early cornerstone investor in green bonds since 2010 Observer member to the Green Bond Principles since March 2015

Actively involved in Technical Working Groups (TWC) convened by the Climate Bonds Initiative since 2014: Agriculture, forestry & other land use (AFOLU), water, marine, hydropower, etc. WWF report "Green Bonds must keep their green promise!" published on June 13th, 2016



Credibility...?

WWF Report: The green promise and how to keep it!

controversy!



The proliferation of standards, frameworks and guidelines and the diversity of market practices in terms of definitions and requirements create complexity and confusion among issuers and investors, which could hamper the confidence needed for the green bond market to thrive in the long term.



WWF believes that robust, credible, fully developed and widely-accepted industry standards for green bonds with clear criteria for what qualifies as truly green (i.e., leading to a fully sustainable economy within the limits of the Planet) -- are urgently needed.

Only a bond for which the issuer can demonstrate measurable environmental benefits, certified by an independent party according to such widely-accepted, fully developed standards, should qualify as a green bond

Key messages at a glance

- The credibility of green claims is one of the most critical elements of a green bond, in the same way that creditworthiness is critical for any bond.
- Green bonds need to have both of these characteristics.
 - While they need to show how they preserve the investor's financial capital and create financial returns,
 - they also need to demonstrate to society how they preserve, restore and enhance natural capital and provide returns to the environment over the lifetime of the underlying investments.
- Today, the green bond market is still very small and has yet to show evidence that it has helped preserve, restore and enhance natural capital and shift capital towards a sustainable economy. Market growth is thus an imperative.
- But without the right level of commitment and collaboration among stakeholders to develop effective and credible, science-based standards for green bonds, the market is running the risk of being 'in default' of its green pledge.



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Green bonds must keep the green promise!

A call for collective action towards effective and credible standards for the green bond market Effective & credible standards can help structure the emerging green bond market and create the trust and confidence that investors need.

• WWF's calls for **collective action** towards effective & credible standards to ensure sustainable growth in the green bond market that delivers on 'its green promise'



- Pathways to green bond standards: moving on from self-declared green benefits to standardized approaches
- 2. Building on existing principles and climatefocused standards to develop standards for green
- 3. Seven critical elements are still missing!
- Collective action towards the 'next generation' of private sector standards and supportive public policies



If we want to unlock the potential of the green bonds market we need effective, credible, widely-accepted and fully developed standards!

Thank you for your attention!

Jochen Krimphoff Technical lead iInterim Finance Practice WWF International

Questions & Answers

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"Vivre simplement pour que simplement d'autres puissent vivre "

GANDHI, homme politique et philosophe indien [1869 – 1943]



Backup Slides



critical elements for the green bond market

Element #1 – Green bond standards should cover and, address all critical environmental challenges

- Standards are currently **largely focused on climate change** (i.e., 'climate bonds vs. green bonds')
- Standards should cover all key environmental challenges with significant impact on natural capital that societies are facing, including (but not limited to) the depletion of natural resources other than energy, pollution prevention and waste reduction, as well as conservation of biodiversity, etc.
- Alignment with nationally and internationally public policy priorities including, for example, UNFCCC NDCs. Aïchi targets under UN CBD, SDGs, etc.
- Green bond standards should take into account environmental, social and governance safeguard policies through a risk-based approach.



Element #2 – Green bond standards should focus on achieving verifiable 'actual' instead of 'promised' or 'pledged' environmental benefits

- Demonstrate the underlying assets' net positive impact on the environment, and any potential negative environmental and social impacts (current or foreseeable) should be identified and mitigated
- Consistent insight into these environmental benefits will allow investors to start differentiating the pricing of various types of green bonds.
- Demonstrate environmental impacts that have been actually achieved, rather than those simply promised. This means that standards should include commonly-accepted outcomeoriented performance metrics and robust methodologies for reporting actual environmental impact



- The meaning of 'green' changes over time, due to evolving societal expectations and circumstances as well as technological progress.
- This means that standards, and their future revisions, should not be restricted to the state of green in a certain timeframe
- Rather, standards should be **long-term-oriented**, **forwardlooking and resilient** over time: what could be labelled as an eligible project now should remain so in three, five or 10 years, in particular in cases where maturities of green bonds are very long.
- Science-based approaches, such as the WWF supported
 Science-Based Targets (SBT) Initiative should be used



Element #4 – Green bond standards should apply a sector-by-sector approach to determine what is green

- Detailed green taxonomies, performance metrics and assessment methods are needed.
- They should also include potential exclusion criteria.

Box 5: Activities that WWF perceives as being incompatible with a sustainable, 'One Planet' economy

WWF believes that for obvious environmental and risk assessment reasons the activities in sectors listed below are not compatible with a sustainable 'One Planet' economy, and bonds with underlying assets from the following sectors should not qualify as 'green' because they might undermine the credibility of the green bond market:

- Nuclear power production⁴²
- Trade in CITES Appendix 1 flora and fauna
- · Animal testing for cosmetic and other non-medical products
- Medical testing on endangered species
- Fossil fuels (specifically oil, gas, and coal), including 'clean coal'43

Furthermore, we also recommend that in addition to the sectors above, activities related to arms, weapon systems and tobacco, as well as adult entertainment and pornography, should be excluded entirely for ethical reasons.



Element #5 – The burden of proof lies with the issuer: in sectors where certification schemes are currently not available, standardized disclosure is needed to demonstrate actual environmental benefits

- For some types of underlying assets and some sectors effective and credible certification schemes do not exist yet, or are still under development.
- In these sectors reporting on outcomes and environmental impacts should also become one of the key characteristics of the standards around 'green'. This would enable issuers to focus on the outcomes and impacts of the green investments of the bond, instead of on its intention or aspiration.

"A call for better disclosure: before any comprehensive assessment of the green impact delivered by different bonds can be done, comprehensive disclosure across the board is required." S&P Dow Jones/Trucost April 2016



Element #6 – Independent third-party assurance and accreditation as an essential element to enhance credibility

- Green claims must be independently verified by a certification body accredited to the certification scheme, as the use of third parties for certification and accreditation offers the highest levels of checks and balances.
- The certification scheme must have several accredited certification bodies to avoid **perceived or real conflict of interest**.

Source: WWF Principle #13 – Require independent third-party certification and accreditation.

Element #7 – Existing environmental standards can provide shortcuts and help close existing gaps

Green bond standards should build as much as possible on existing initiatives such as the **Green Bond Principles** and the **Climate Bonds Standard** (including its eligibility criteria).

ISEAL environmental standards (MSC, FSC, ASC, SuRe©, AWS, HSAP, etc.) could be used as 'proxy-standards' for underlying assets while robust and credible eligibility criteria are being developed.

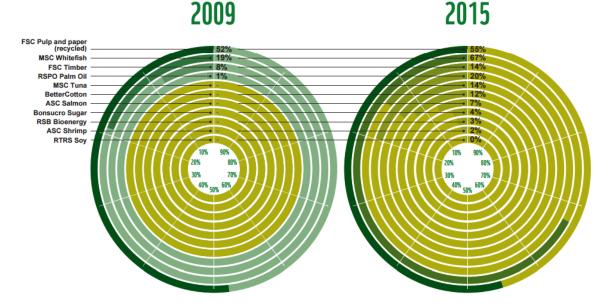


Figure 4: Sustainability standards for agricultural commodities moving from niche to mainstream: increase of market share for selected ISEAL sustainability standards between 2009 and 2015.

WWF's call for collective action

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WWF calls on issuers to...

- **Communicate the business case for green bonds**, including the relationship between environmental and company value creation from intangibles, as effectively as possible to investors;
- Ramp up issuance of high-quality green bonds, taking into account existing standards, and convince other issuers that have not yet issued green bonds to do the same; and
- Contribute to the development of industry responses on critical elements of green bond standards, in particular commonly accepted performance metrics, impact reporting guidance, assessment methods and definitions of green.



WWF calls on underwriters to...

- Safeguard the integrity and improve the quality of the green bond market via client dialogue on green aspects of bonds with issuers. In particular, underwriters should integrate ESG considerations into issuer client acceptance processes by applying the ESG risk management policies and procedures such as the Equator Principles; and do likewise for underwriting clients.
- Develop industry-wide disclosure requirements and documentation frameworks. Share potential disclosure requirements and documentation frameworks for issuers openly with other underwriters and develop an industry-wide consensus on those market practices (e.g. by building upon and leveraging experience acquired in project finance markets, where dialogues resulted in the development of the Equator Principles). They should also advise their issuing clients on environmental-related disclosures, and provide guidance – and potentially set requirements – with regard to environmental-related disclosures in the prospectus or offering memorandum of the green bond.



- Develop a strategy for green bond investments to better allocate available capital and communicate investors' expectations to the market.
- Join investor coalitions that advocate for transparency, assurance and the development of industry standards (e.g. Paris Green Bonds Statement).
- Voluntarily disclose information about their holdings (e.g. percentage of green bonds in fixed-income portfolios) and their environmental impacts (e.g. total CO₂ emissions avoided, natural capital preserved, restored or enhanced), taking into account and anticipating recommendations for disclosure currently being developed by the Task Force on Climate-related Financial Disclosures (TCFD) convened by the Financial Stability Board (FSB). This information should be made available to asset owners and, as far as possible, the general public.



- Integrate ESG factors in financial sector supervisory instruments, so they become part of the mandates of public funds such as pension funds and sovereign wealth funds.
- Use the best available applicable standards in strategic issuances. Promote convergence of market practices and enhance credibility of green bond standards by applying existing and emerging standards in their strategic issuances (by public or para-public entities, local or regional governments, central banks, and through sovereign green bonds) and purchase programmes (by municipalities, development and central banks and other public agencies).
- Actively stimulate and arrange global cooperation between national governments seeking convergence of green bond standards through appropriate platforms, in particular the G20. Governments should seize the opportunity of the Green Finance Study Group (GFSG) convened by the Chinese Presidency of the G20 to promote common standards including standardised terms and definitions, standardised disclosure, standardised certification requirements, the integration of green considerations into credit ratings, and credible dispute-resolution mechanisms.



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WWF's vision: 'One Living Planet' economy: natural capital is preserved and restored and enhanced rather than destroyed.

WWF's mission: WWF's mission is to stop the degradation of the planet's natural environment and to **build a future in which humans live in harmony with nature**, by conserving the world's **biological diversity**, ensuring that the **use of renewable natural resources is sustainable**, and promoting the **reduction of pollution and wasteful consumption**.

WWF's level of ambition for the green bond market: The green bonds market has the potential to make a significant contribution to a One-Living-Planet economy.



Standards in the green bond market: where are we?



The estimated amount of capital needed to fund transitions towards a sustainable economy.

>US\$11tn

Value of assets managed by a coalition of investors, who pledged to work with the Climate Bonds Initiative (CBI) to grow a vibrant green bond market.



Green bonds eligibility criteria developed by CBI

Energy	Low carbon buildings	Industry & energy intensive commercial	Waste & pollution control	Transport	Information technology & communications	Agriculture, forestry & other land-use (AFOLU)	Adaptation
Solar	New residential	Manufacturing	Recycling facilities	Rail	Power management	AFOLU mitigation	Water
Wind	New commercial	Energy efficiency processes	Recycled products & circular economy	Vehicles	Tele- conferencing	AFOLU adaptation	Energy
Bioenergy	Retrofit	Energy efficiency products	Waste to energy	Mass transit	Resource efficiency	Agricultural products	Industry & waste
Geothermal	Products for building carbon efficiency	Retail & wholesale	Methane management	Bus rapid transport		Lang regeneration	Transport
Marine & coastal		Data centres	Geo- sequestration	Alternative fuel infrastructure		Forest protection	Information & Communicatior Technologies
Dedicated transmission		Process & fugitive emissions		Water-borne transport		Plantation forestry	Building
Energy distribution & management		Energy efficient appliances					Food security
Hydro Power		Combined heat & power					Coastal

Box 4: Taxonomy provides green definitions for the Climate Bond Standard & Certification Scheme. Highlighted in black: areas where eligibility criteria have been developed by CBI. Green: eligibility criteria currently under development (as of May 2016). In other areas CBI still needs to convene expert committees.

Strategic approach & limitations

- WWF has more than two decades of experience in supporting the development of sustainability standards
- Use of "16 WWF principles for credible & effective standards" (SCT, 2015) and apply to the green bond market
- WWF has no plans to develop a proprietary green bond label, to become a verifier or certifier of green bonds or to develop its own green bond standards.
- WWF will rather seek to work with partners and existing platforms, in particular the Green Bond Principles and CBI, to support and promote the development of such standards through multi-stakeholder dialogue.
- Participation in the Green Bond Principles and Climate Bonds Initiative (CBI) may not be construed as an endorsement of principles, standards or the certification schemes currently controlled by these two organisations.