WHAT’S A GREEN / CLIMATE BOND?

- Bonds = loans, often as a source for infrastructure investments
- Climate bonds are the same as green bonds
- As a class, green bonds are intended to emphasize an environmental benefit
- Climate bonds emphasize some climate benefit, specifically climate mitigation and/or climate adaptation

climate mitigation:

*eg*: energy efficiency programs

climate adaptation:

*eg*: water efficiency programs
STATE OF THE MARKET FOR GREEN BONDS

2018 FAST FACTS

- USD167.6bn total green bond issuances
- Water projects represent ~15-20%
- Over 1500 green bonds issued
- 44 countries from six continents
- 320 different issuers
- Only 3% growth from 2017
- Estimating USD250bn for 2019

Explosive growth driven by investors’ demand that climate / environmental risks be addressed.
CLIMATE BONDS: THE WHO AND WHERE

- Issuers include commercial and development banks, utilities, municipalities, and national governments.
- Buyers vary greatly from treasuries to pension funds to corporations.
- Climate bonds finance projects globally.

Fastest growth rates have come from outside Europe and North America, especially China, South America, and Africa.
CLIMATE BONDS: THE WHY

• “Our utility ratepayers can see that we’re directly addressing the water and climate security of our city and that we care about resilient ecosystems.”

• Rating agencies such as Moody’s now state that climate risks must be made explicit to investors. Unstated risks are hidden risks. Moody’s has begun to reward certified bonds with higher ratings and lower interest rates.

• Green and climate bonds convert private sector investment into climate finance

• Credible green infrastructure now has another vital mechanism for funding
CREDIBILITY THROUGH STANDARDIZATION

- Concern about “greenwashing” or misrepresenting environmental benefits
- Need for transparent, evidence-based standards that consistently and clearly communicate relative climate risk and green credibility between different bond issuances — a system where more “green” and more resilient projects score higher
• Led by Climate Bonds Initiative
  • similar to “Fair Trade” seal of approval
  • standard + sector-specific criteria
  • developed by industry and technical experts

• Requires completion of a vulnerability assessment, possibly also an adaptation plan

• Criteria are scored against these prepared documents by the bond issuer, verified by an independent organization, then certified by Climate Bonds Initiative
Climate Bonds Standard Water Criteria

https://climatebonds.net/standard/water

Criteria are available to download today!
Climate Bonds Standard Water Criteria

https://climatebonds.net/standard/water

Resilient Water Infrastructure = **Flexible** + **Robust**

- Risk Assessment
- Treatment Program

**Section 1. Allocation:** Addressing how water is shared by users within a given basin or aquifer.

**Section 2. Governance:** Addressing how/whether water will be formally shared, negotiated, and governed.

**Section 3. Technical Diagnostics:** How/whether changes to the hydrologic system are addressed over time.

**Section 4. Nature-based Solutions:** (for nature-based and hybrid infrastructure only) addressing whether issuers have sufficient understanding of ecological impacts at/beyond project site with ongoing monitoring and management capacity.

**Section 5. Assessment of the Adaptation Plan:** Checking the completeness of the coping mechanisms to address identified climate vulnerabilities.
FINANCING RESILIENT NATURE-BASED SOLUTIONS

• Green and/or hybrid infrastructure must:
  • protect, manage, or restore existing ecosystems; and/or
  • use engineering to emulate ecosystem processes in some way, particular when existing systems are degraded (e.g., building new wetland)

• Potential applications for:
  • water collection, storage, and treatment
  • flood protection
  • drought resilience
  • watershed and ecosystem management
FINANCING RESILIENT NATURE-BASED SOLUTIONS

- First issuance explicitly using RNBS criteria coming May 2019
- Dutch State Treasury Agency
- Part of €4 - €6 billion offering
  - Flood defense - Room for River / green spaces
  - Water quality investments - Restoration of wetlands
  - Sluice upgrades - Improving estuaries, benefits migratory fish
- Three additional green/hybrid issuances coming in 2019, >USD1.5bn
HOW TO LEARN MORE

https://climatebonds.net/standard/water

Interview with Anna Creed, CBI

Additional Reading:

Join AGWA’s community of practice

Policy: alliance4water.org
Technical: AGWAguide.org
Newsletter on resilient water management, including EbA:
AGWAguide.org/get-involved

@Alliance4Water
@ClimateReadyPod
#ClimateIsWater

Thank You!
Alex Mauroner • amauroner@alliance4water.org
**Steps of Certification**

**Issuer prepares**

- Identify assets that meet the relevant sector criteria and compile supporting information.
- Create Green Bond Framework setting out how proceeds of the bond will be used.