

Bonds and Climate Change

The State of the Market in 2014

London 17 July



Context: \$45 trillion of “interest”

\$80^{tn} assets under management

\$30^{tn} Pension funds – 19 out of 20 are public sector

\$27^{tn} Insurance

\$3^{tn} Sovereign wealth

\$20^{tn} Mutuals & Foundations

Local pension funds

50-60% bonds



\$22.5 trillion

C



Investor Network on CLIMATE RISK



Investor Group on Climate Change



GLOBAL INVESTOR COALITION ON CLIMATE CHANGE



Making it easy for investors

‘Green Bonds Market’: proceeds are for climate/ environmental projects and they are labelled as ‘Green’, ‘Climate’ or ‘Sustainable’ (or maybe ‘Blue’).

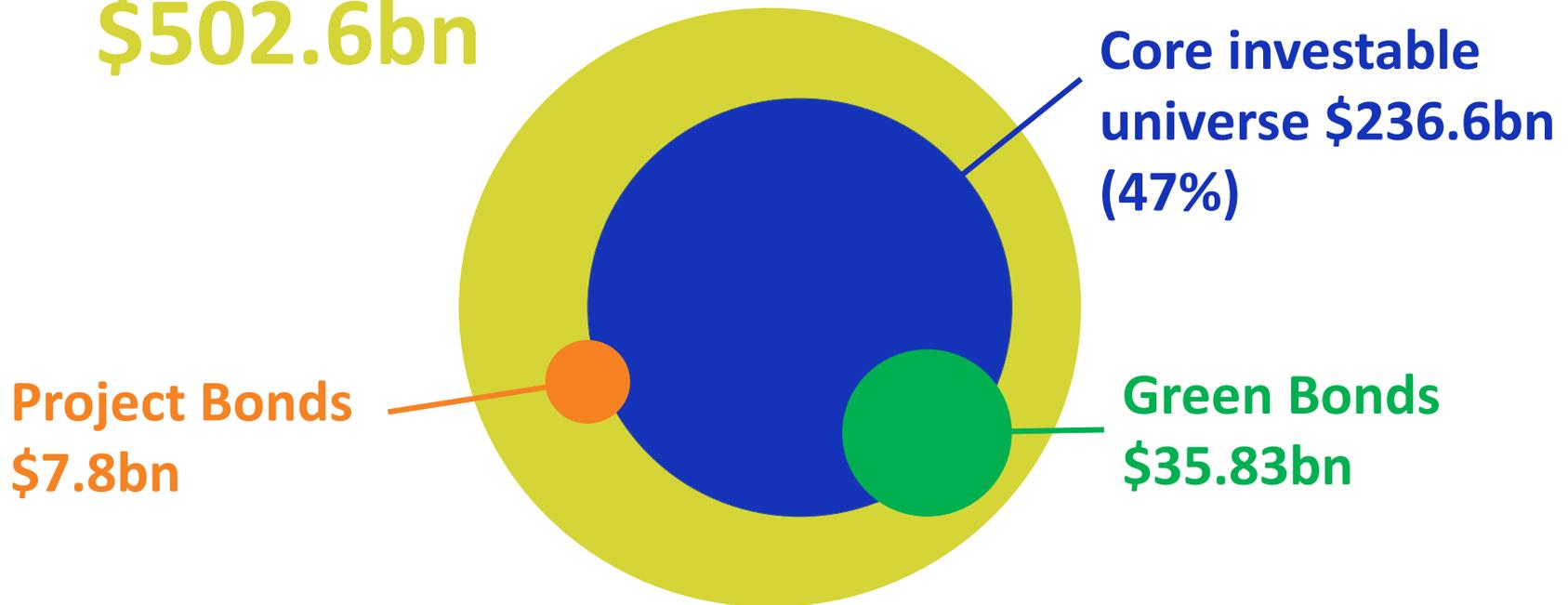
‘Climate-themed bonds universe’: proceeds are directed to climate projects, but *both* labelled and unlabelled bonds.

Unlabelled universe indicates where future bonds can be labelled.

Labelling = Discovery for investors

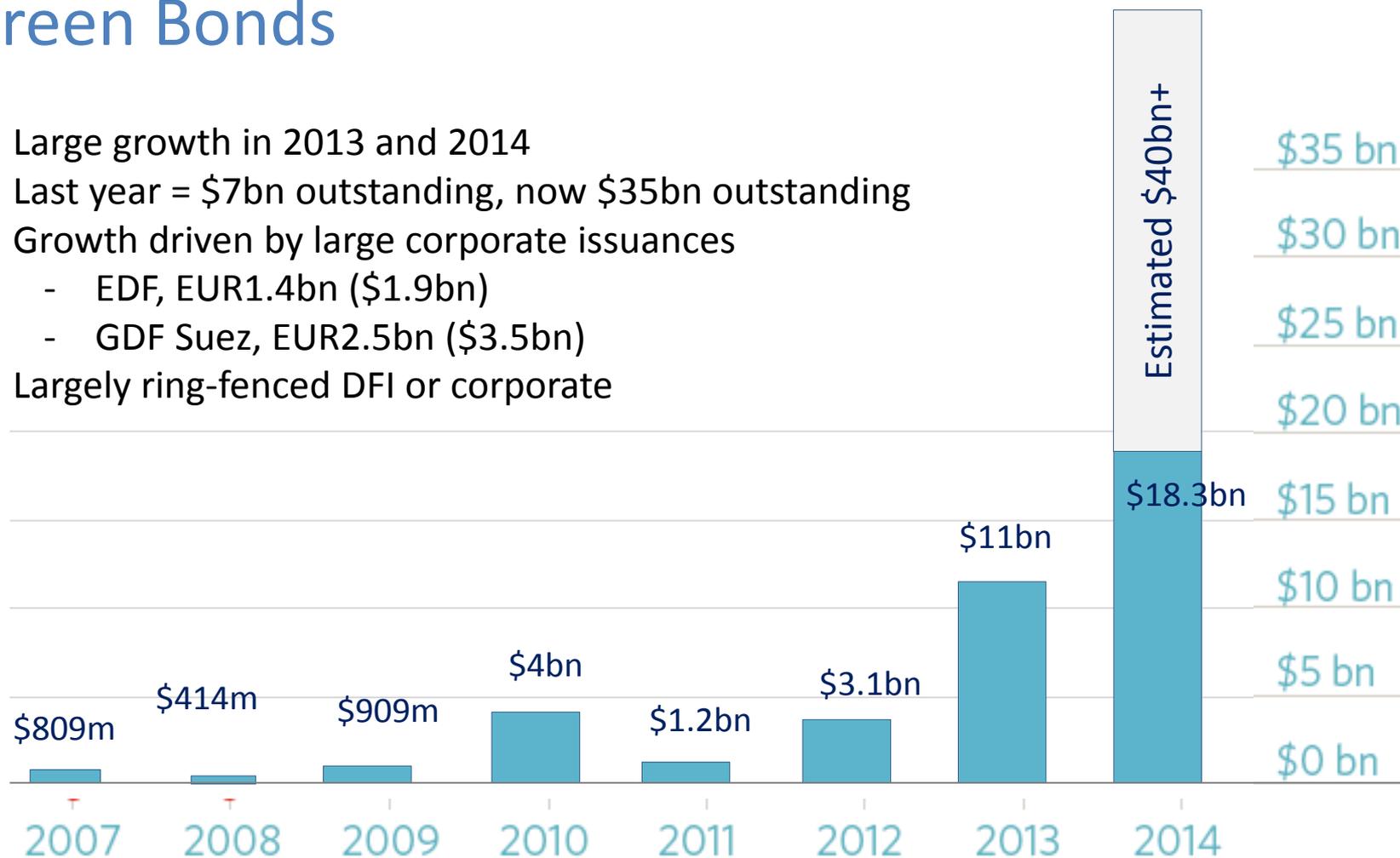
Findings

**Climate-themed bonds
\$502.6bn**



Green Bonds

- Large growth in 2013 and 2014
- Last year = \$7bn outstanding, now \$35bn outstanding
- Growth driven by large corporate issuances
 - EDF, EUR1.4bn (\$1.9bn)
 - GDF Suez, EUR2.5bn (\$3.5bn)
- Largely ring-fenced DFI or corporate



The Basics

Proceeds to Green

- Proceeds to ring-fenced green projects
 - *Labelled* and *Unlabelled* market

INTELLECTUAL FOUNDATIONS

- Ring-fence to give comfort without risk - from DFIs
- Equal yield & rating, with green as bonus feature
- Keep it vanilla – no fussy coupons

Any entity

- Governments & DFIs
- Corporates – this year's growth area
- Asset owners: PPPs, banks, utilities, etc

- Yes it's *packaging* (that highlights purpose).
- Bond markets start with high grade issuance. Material benefits take 2-5 years, after we get momentum

Reporting

- Substantive green criteria
- Independent review
- Reporting on use of proceeds

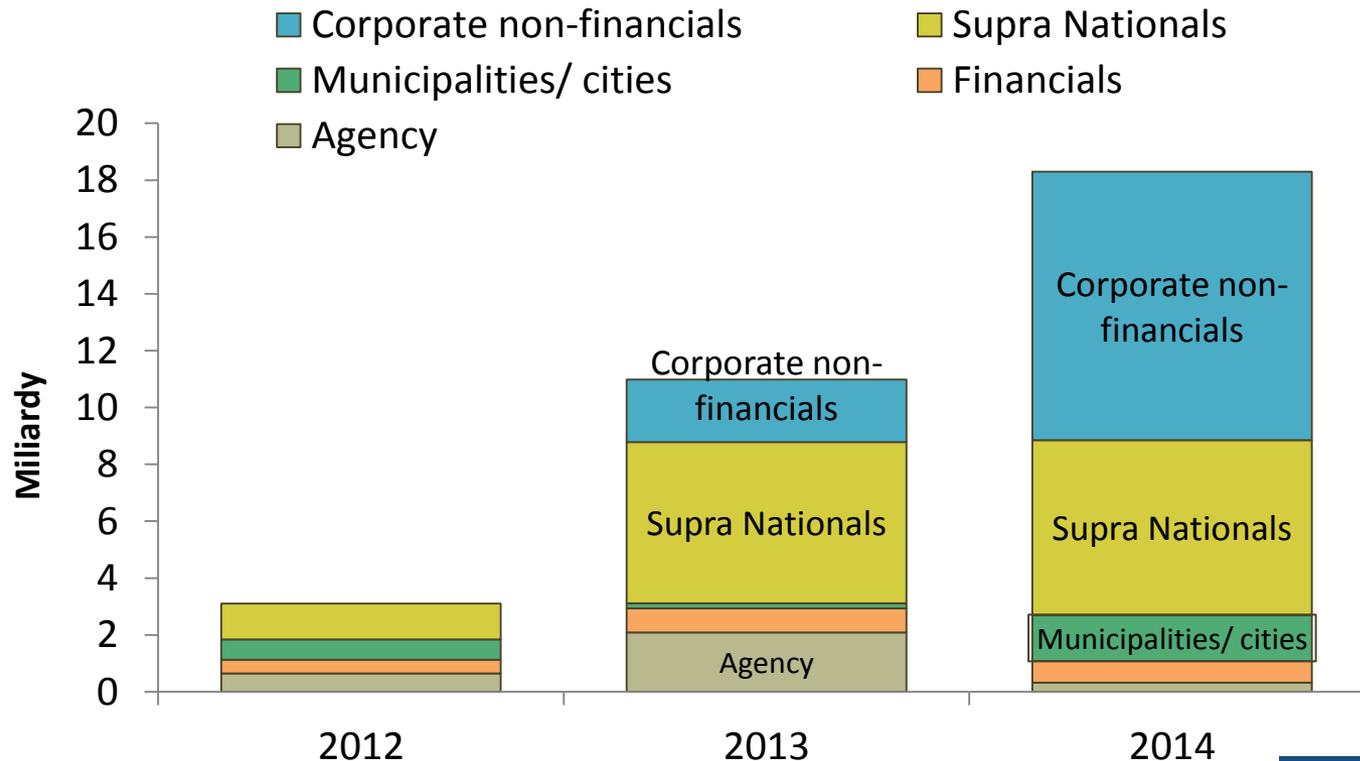
Simplicity+Trust

Verified labeling will drive growth to the next stage



Green Bonds issuer type are changing

- Growth in issuance is coming from corporations and municipalities
- Supra-National issuance remains strong



Green Bond Principles

The banks are getting into the act. That means global

- Stressing it's about assets not companies
- Transparency & reporting central



From DFI seeds



Marketing terms

- Green bonds
- Climate Bonds (EIB)
- Sustainability Bonds (EBRD)
- Blue Bonds (Sec. State Kerry)
- Water Bonds (ADB)
- Carbon bonds (China)

Benefits

Investor Diversification (reputation?)

SRI investors \$13tn global

\$32tn pension + insurance funds
signing climate statements

Corporates!



Tenor?



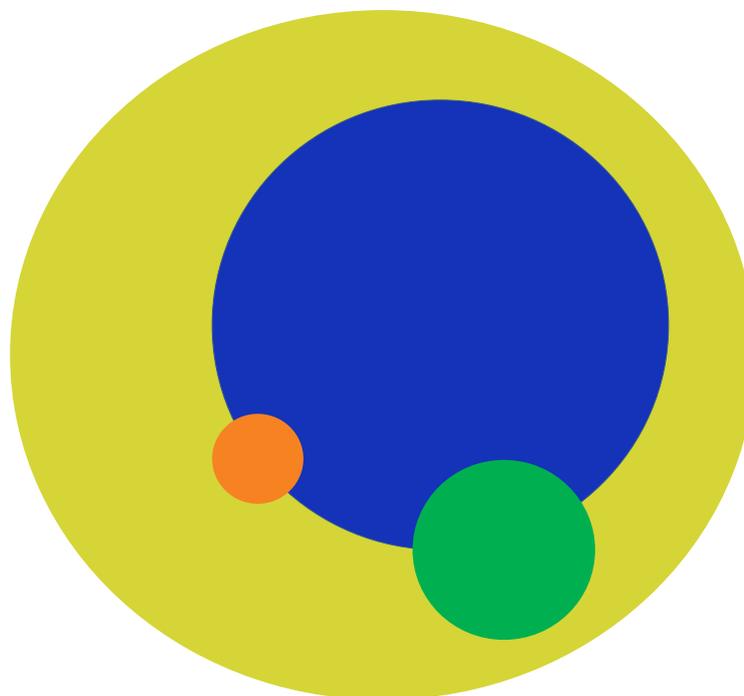
Price? Cost vs illiquidity premium battle

Tightening? Johburg, GDF Suez, Hera

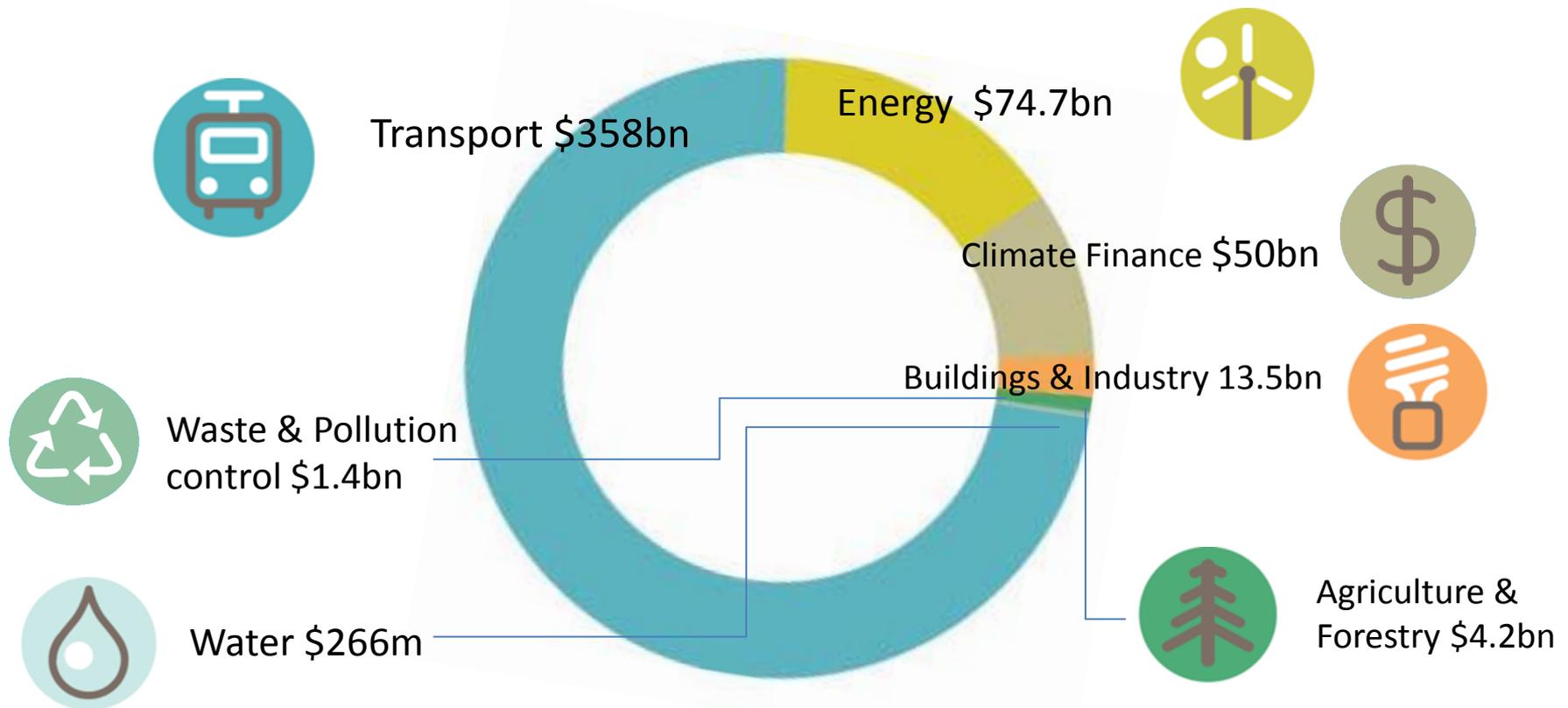


Findings

Climate-themed bonds
\$502.6bn



Results: Climate-themed bonds



Behind the themes

Energy

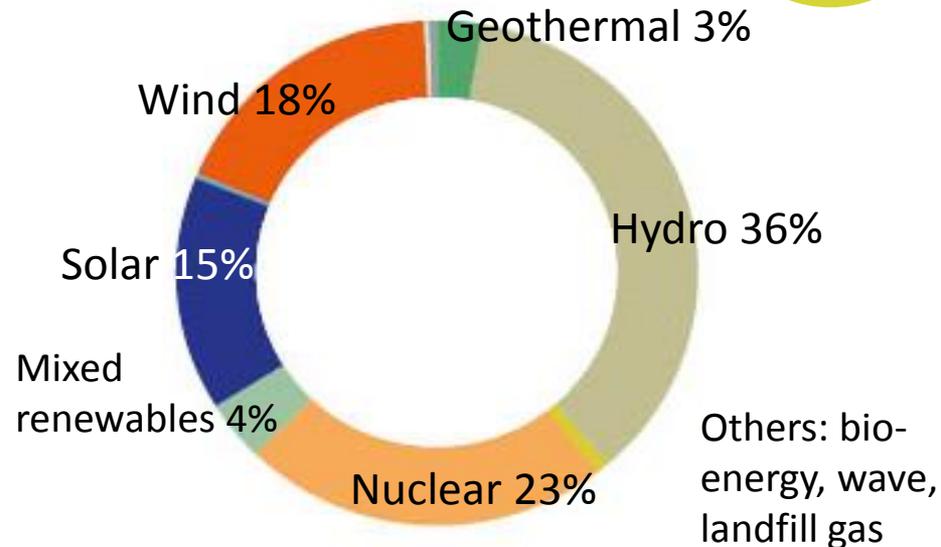
- 15% of the total universe.
- 84% corporates, 11% project
- Utilities: EDF, GDF Suez, Iberdrola
- Projects: Solar Star, Greater Gabbard

Transport

- \$358.4bn (71%)
- Rail bonds in China, UK, France, USA.
- NEW: EV manufacturers Tesla, Toyota
- China Rail is largest single issuer

Climate Finance

- \$50bn (10%)
- 39% labelled but growing
- USD 25%, EUR 20%, INR 18%



Behind the themes

Buildings & Industry

- 13.5bn (2%)
- EE appliance/products - LG Electronics
- Property: Vasakronan, Regency, Vornado
- REITs with high performance ratings.

Water

- 267m (0.05%)
- \$53.5m California groundwater recovery
- \$213m New York Env. Facilities Corp.
- Adaptation planning limited

Agriculture & Forestry

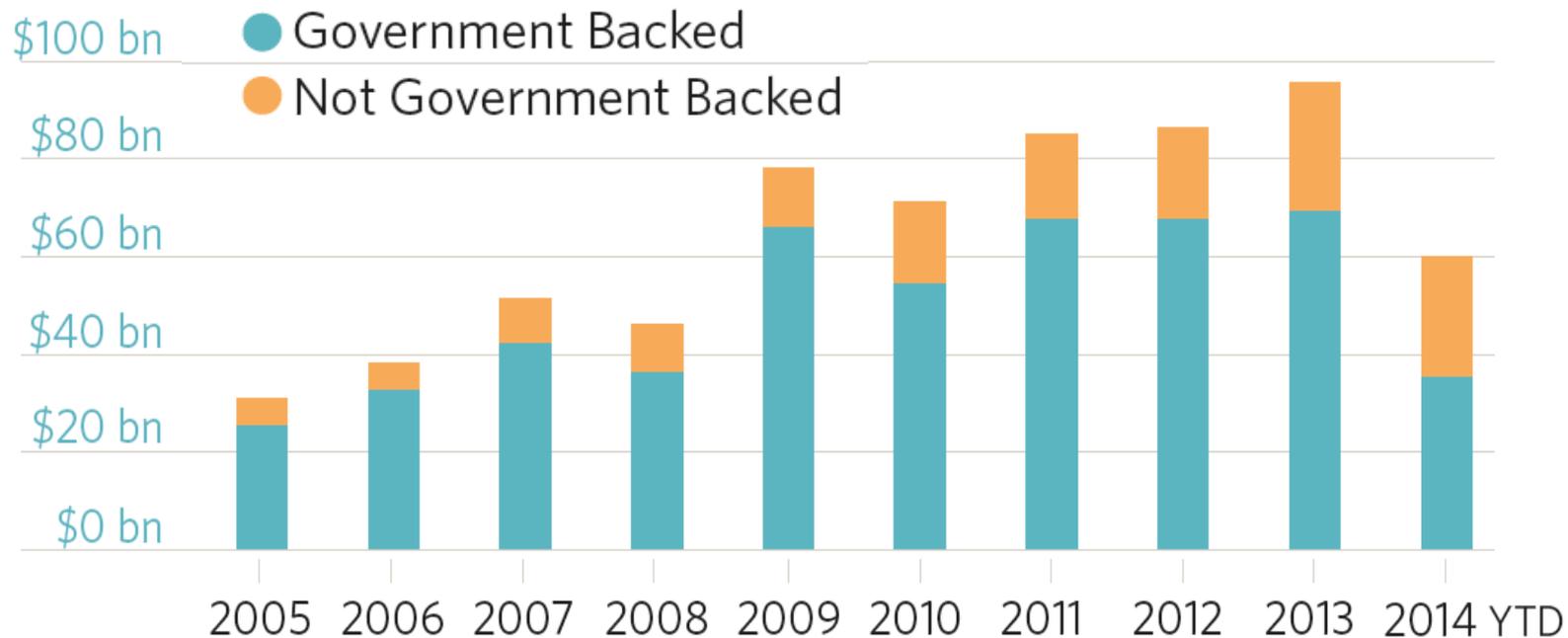
- \$4.2bn(1%)
- 95% sustainable paper and pulp
- Swedish SCA 1st labelled bond
- Bonds rare in sector

Waste & Pollution Control

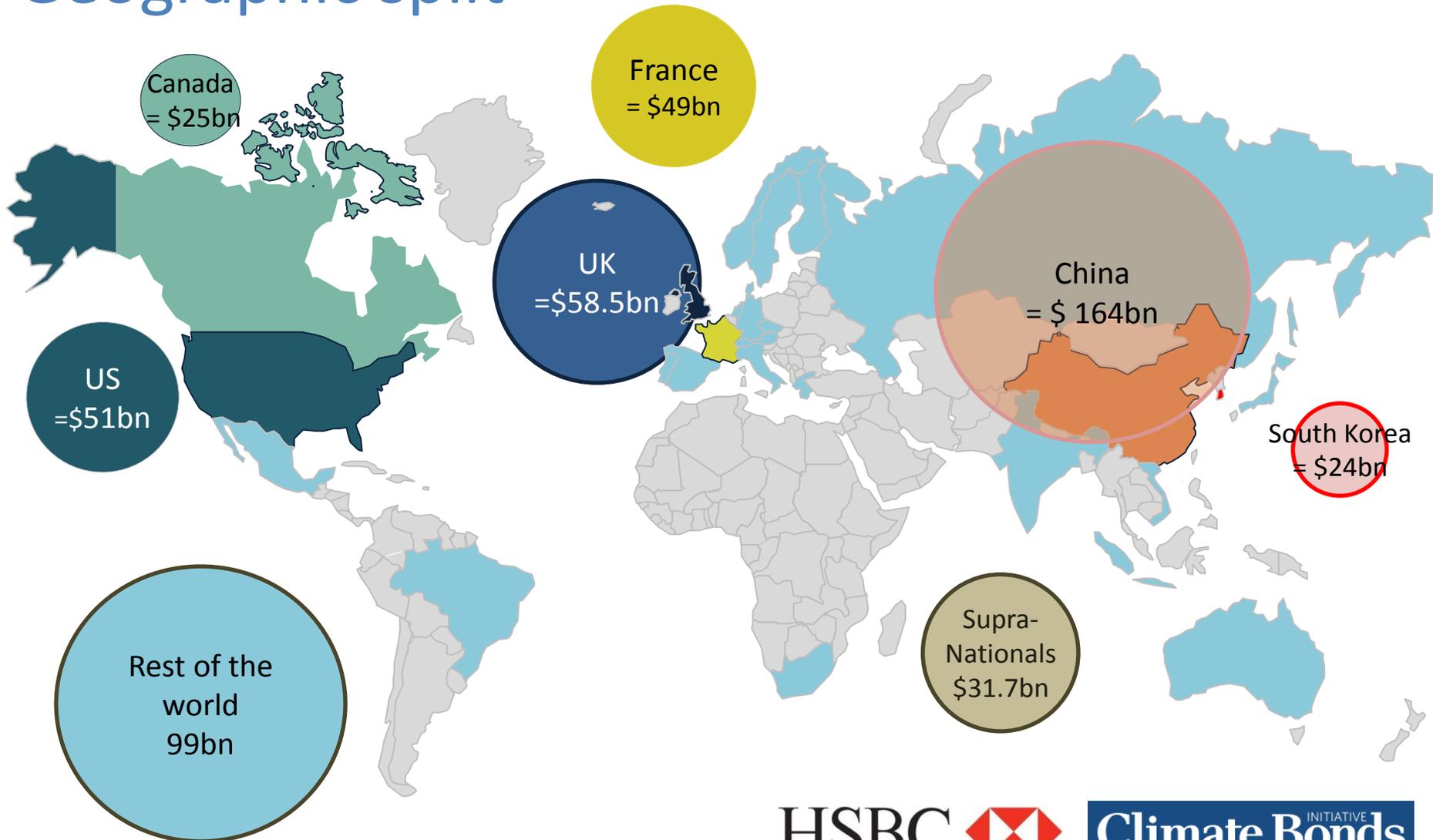
- \$1.4bn (0.3%)
- Recycling /recycled products.
- No labelled bonds

Continued Growth

- \$96bn issuance in 2013
- \$60bn in 2014 to date
- Majority has implicit/explicit backing from government, growth from private



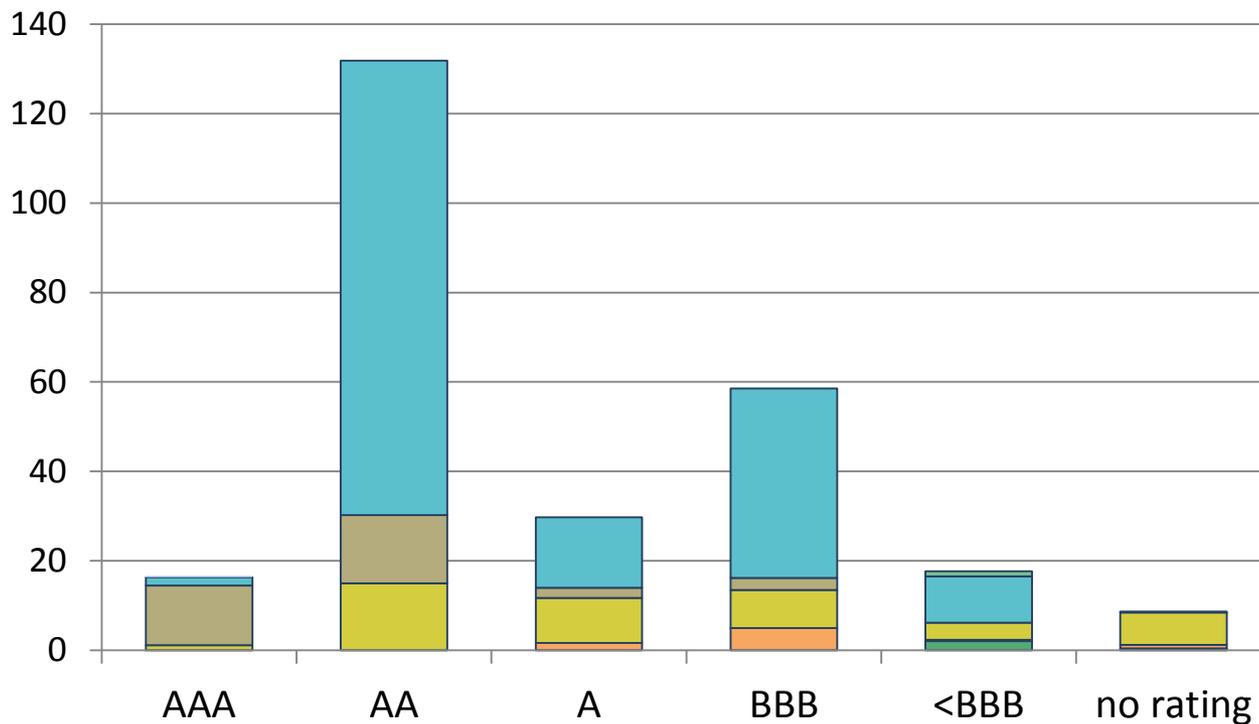
Geographic split



Core investable universe

Filters:

- Size: + 200m issuance
- Rating: investment grade (BBB and higher)
- Eligible currencies on benchmark indices



Transport

Large state-backed rail in AA categories

Climate Finance

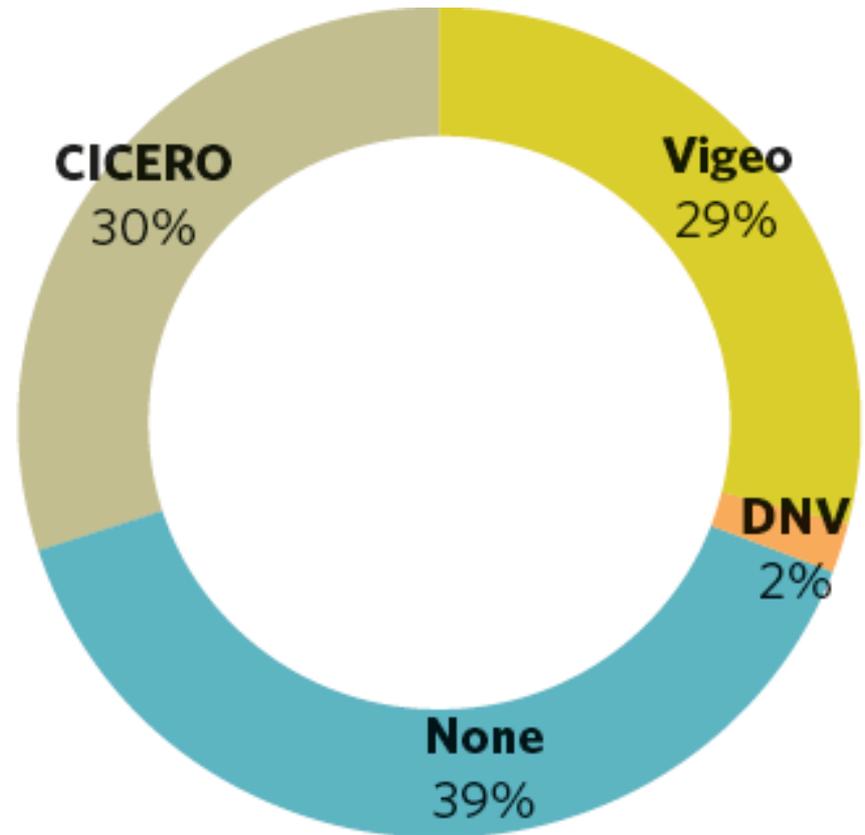
AAA bonds from MDBs

Energy

- Even ratings spread:
- A and AA utilities
- high yield solar

Independent reviews

- Bespoke review
- Divergent methodologies / no common
- Verification the norm in EU not yet US
- Green Bonds principle pushes for indep
- Especially important with corporates



Working together on Standards and Market Development



\$22tn Climate Bond Standards Board



Numerous Technical Working Groups: Green Property, Low-Carbon Transport, Bio-energy, Agriculture, Water



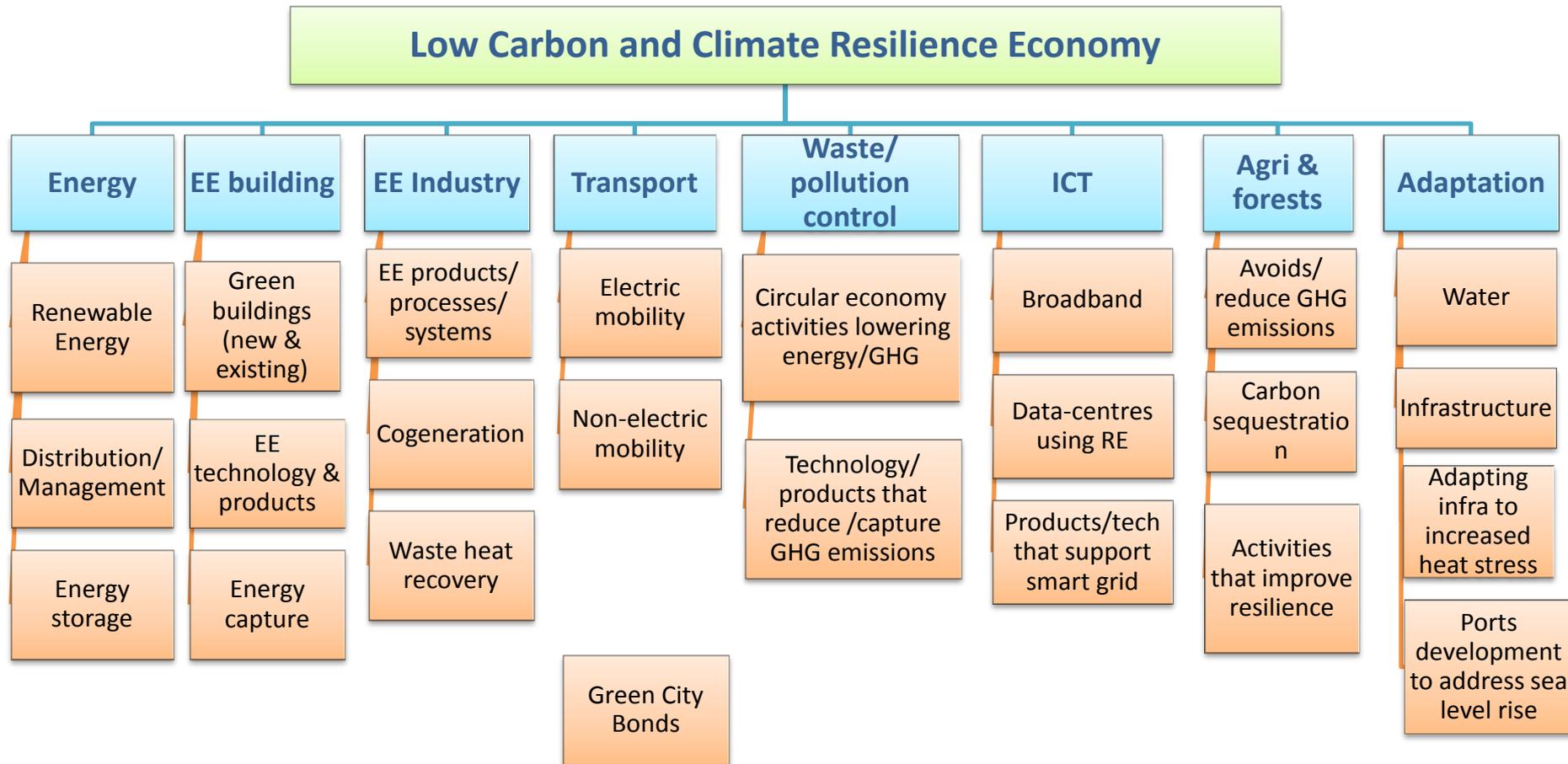
Industry Advisory Group



Climate Bond Partners and Advisory Panel Members



Expert-led definitions



Universe indicates where future labelled bonds

Market drivers:

- Improved discoverability
- Scale and liquidity
- Re-packaging and kickstarting
- Positive investment narrative



Predictions for 2015

1. Labelled market = \$100bn issued in 2015
2. Improved steps to validate green
3. The role of the public sector becomes sharper
4. Green securitization grows
5. Green City bonds take root



Green City Bonds

North
American
Green
Munis

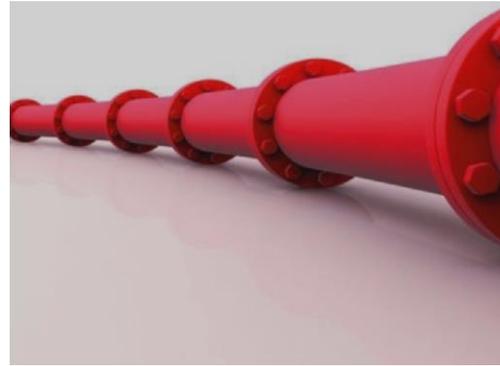
China
Green
City Bonds

EU Green
City Bonds

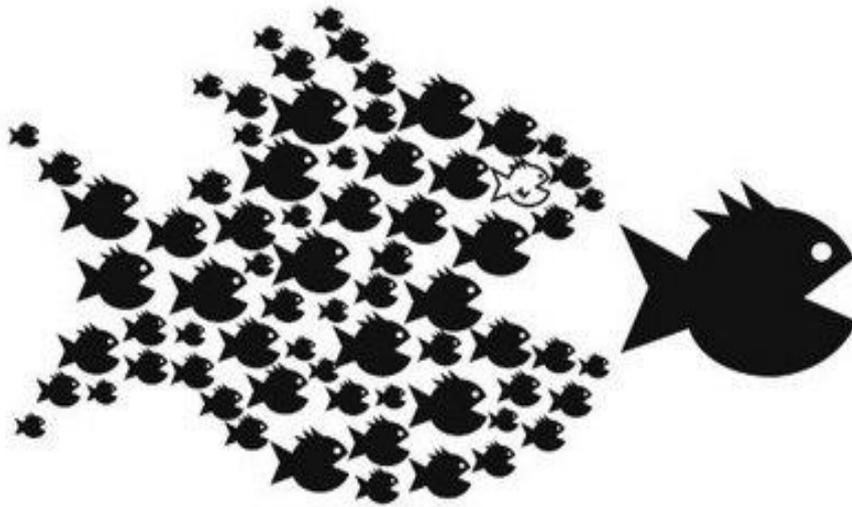
Emerging
Market
Green City
Bonds

Building a global bond market that will finance the development of low-carbon and climate resilient cities.

Next



- EM deal flow generation
- Financial skills, etc
- Project packaging
- Creditworthiness academy



- Aggregation platforms
- EIB / IBD



- Risk-bridging:
- Policy change and PPA insurance
- Partial guarantees
- Policy settings
- Tweaks to the financial system

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