LEDS GLOBAL PARTNERSHIP

Advancing climate-resilient low emission development around the world

LoCARNet 3rd Annual Meeting, Bogor Indonesia

Climate Bonds – a growing source of climate finance

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Green Bonds

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Why Green Bonds?

What are they?

How can they benefit LoCARNet?

How to access them?

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What is a Green Bond?

1. A green bond is a bond whose proceeds are used to fund low emissions projects.

2. A bond is a debt finance mechanism that is “asset backed” to fund a project.
    1. This is very different to voluntary or regulated carbon finance projects.
    2. The key difference is that a project is asset backed and aims to achieve a profit return plus low emission outcomes (which could equate to carbon units or lower emissions from a business as usual case).

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History

1. Bonds have been around for hundreds of years
2. They were used in Renaissance Italy about 800 years ago
3. There are claims that the Romans invented them a couple of thousand years ago during the time of the Roman Republic

4. In 2008, the World Bank launched the **"Strategic Framework for Development and Climate Change"**. Which resulted in building the foundation of the current Green Bond Market.
    1. Since 2008, the World Bank has now raised **USD $6.4 billion equivalent in Green Bonds through 67 transactions and 17 currencies**.

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Why are Green Bonds important?

- Estimate $700bn / annum of green growth projects to reduce climate change impacts.
- cumulative voluntary AFOLU markets is projected to grow another $2.3bn by 2020.
- Agriculture needs $83bn / annum to feed the population and Forestry needs $100bn by $2030 to fund needs
- There is a massive shortfall in voluntary funds in AFOLU and the private sector and institutional finance must be mobilised – Green Bonds could strongly contribute tho this.

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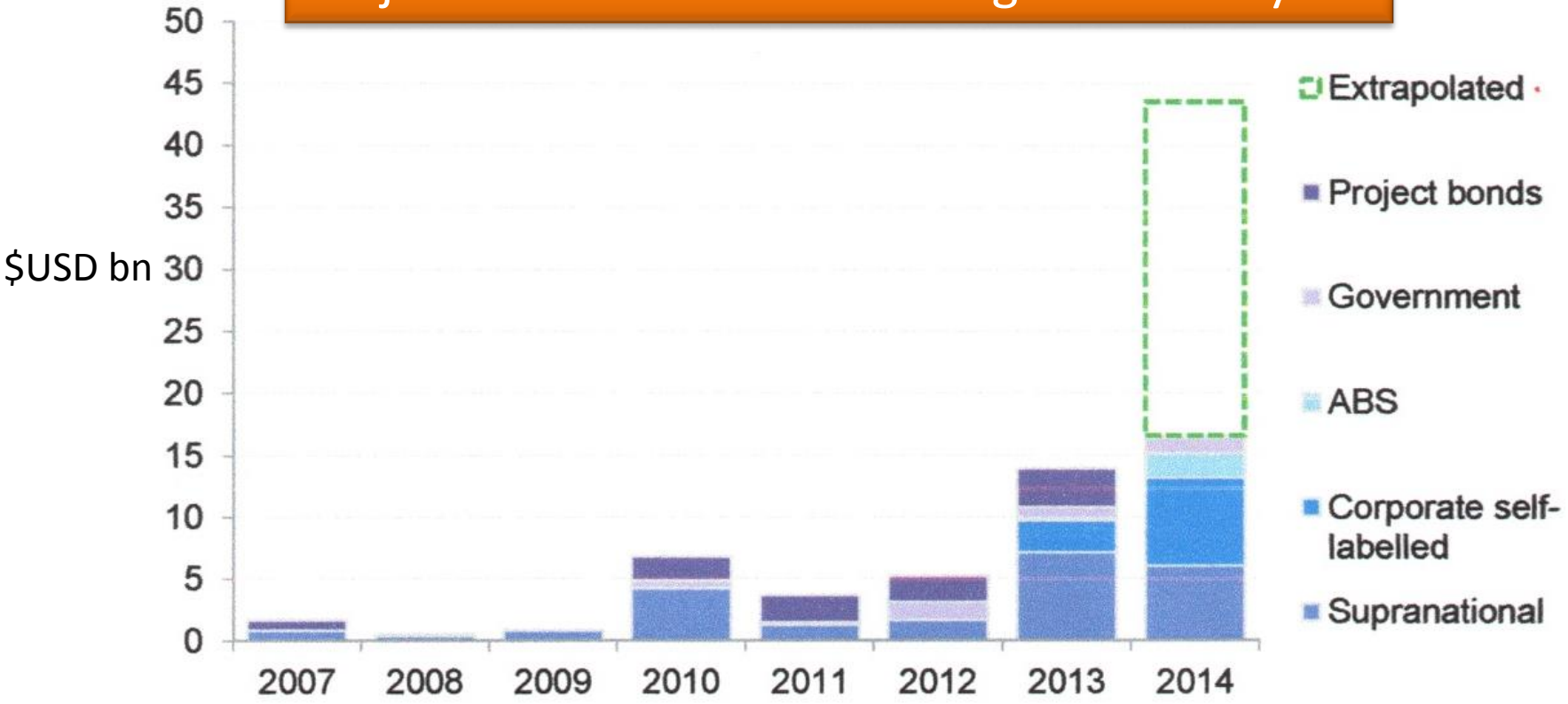
Green Bonds recent history

Projected more than 2.5 time growth this year



Source: Bloomberg New Energy Finance Note: 'Extrapolated' assumes continuation of current pace.

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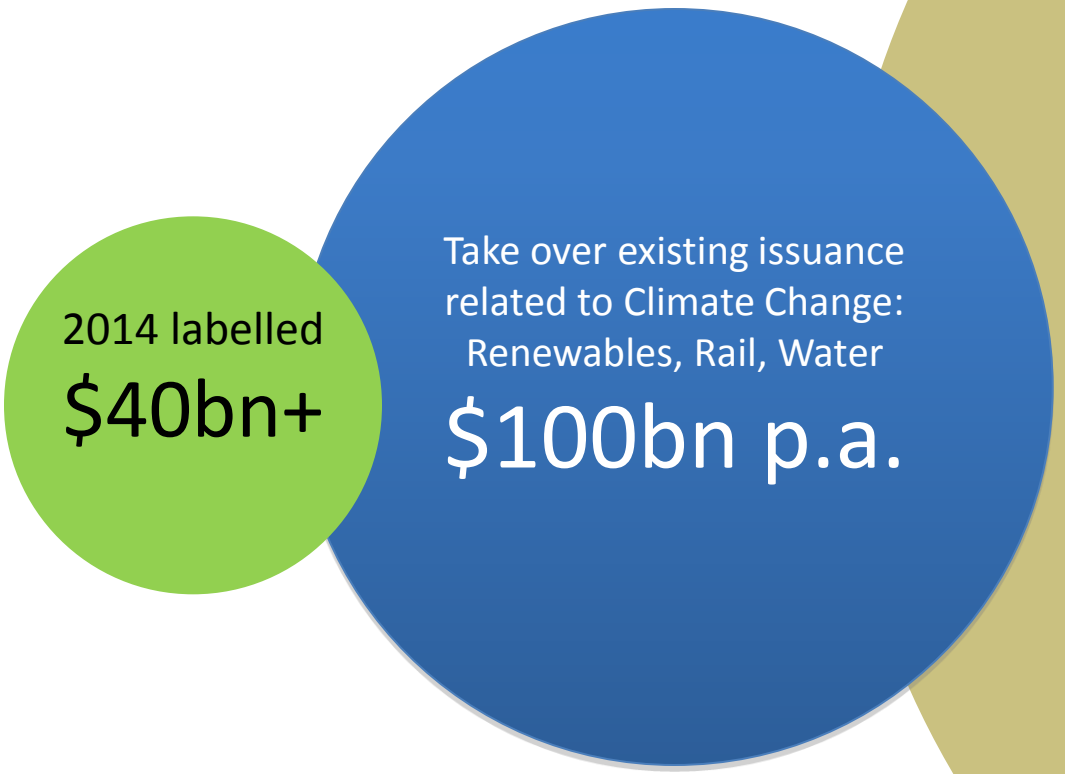
Green Bonds Growth Projection



Target market

$500bn+ p.a.

by 2018

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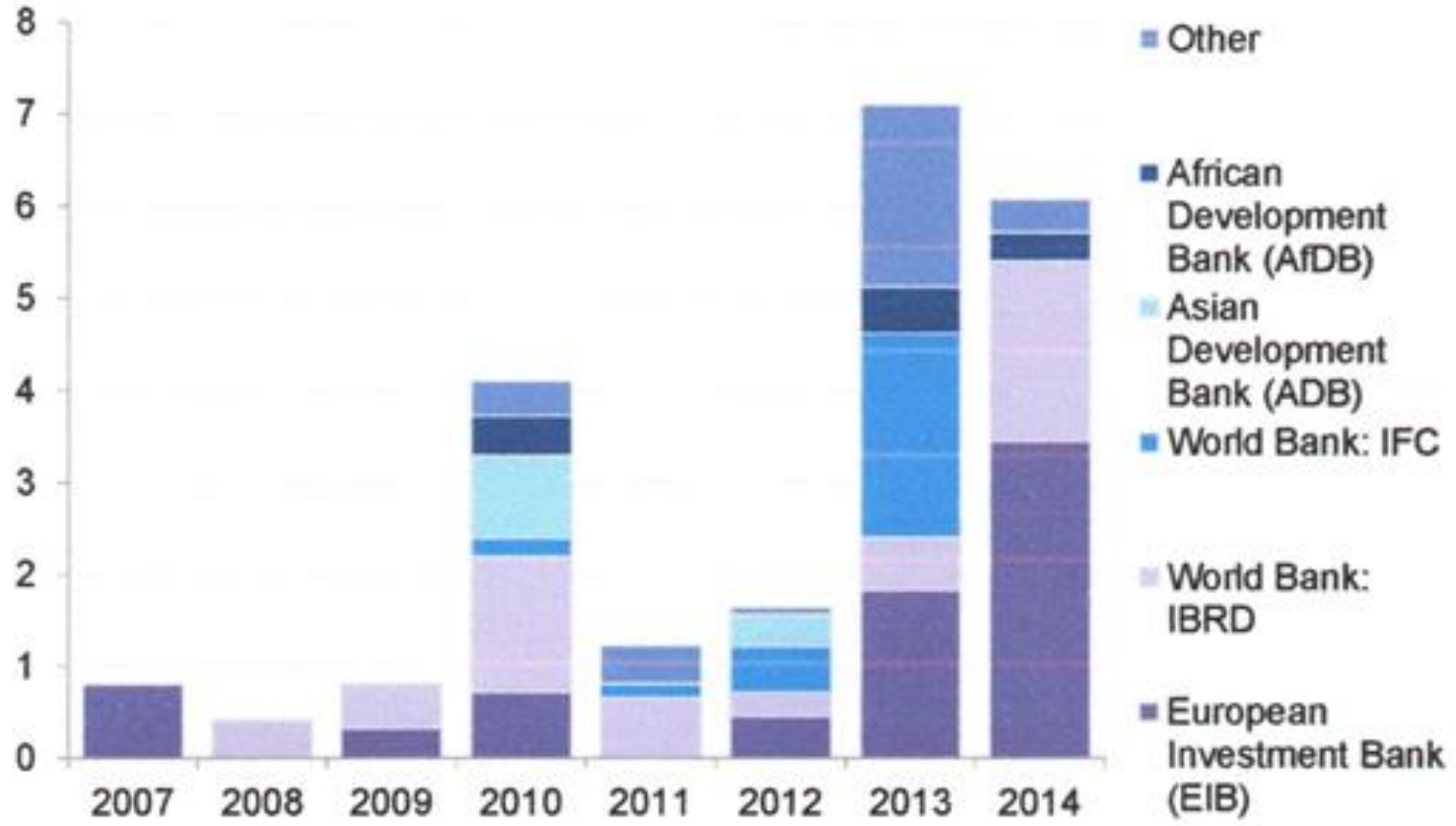
Development Banks and Green Bonds

$USD bn



Source: Source: Bloomberg New Energy Finance

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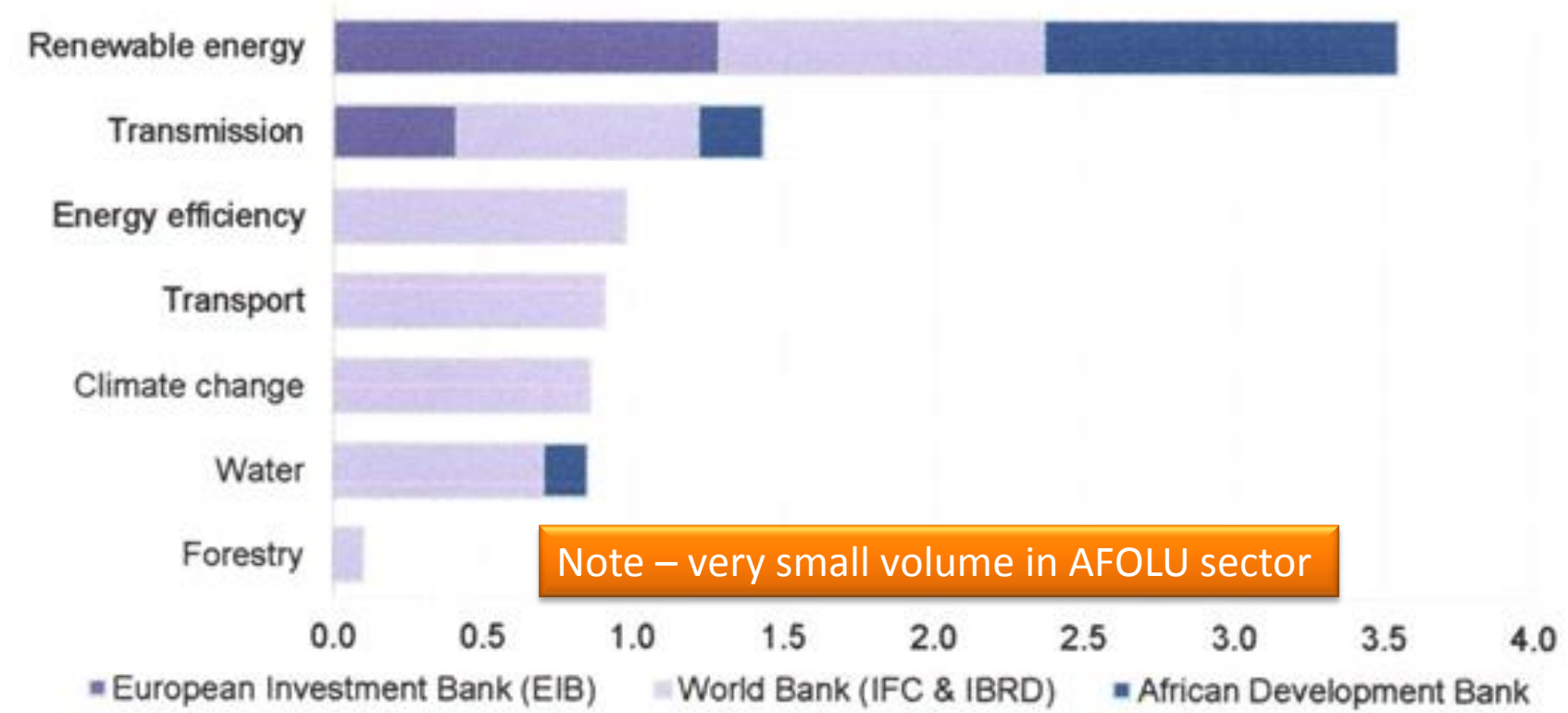
Where does it go?



Source:: Bloomberg New Energy Finance, bank reports

Disclosed use of proceeds from World Bank projects

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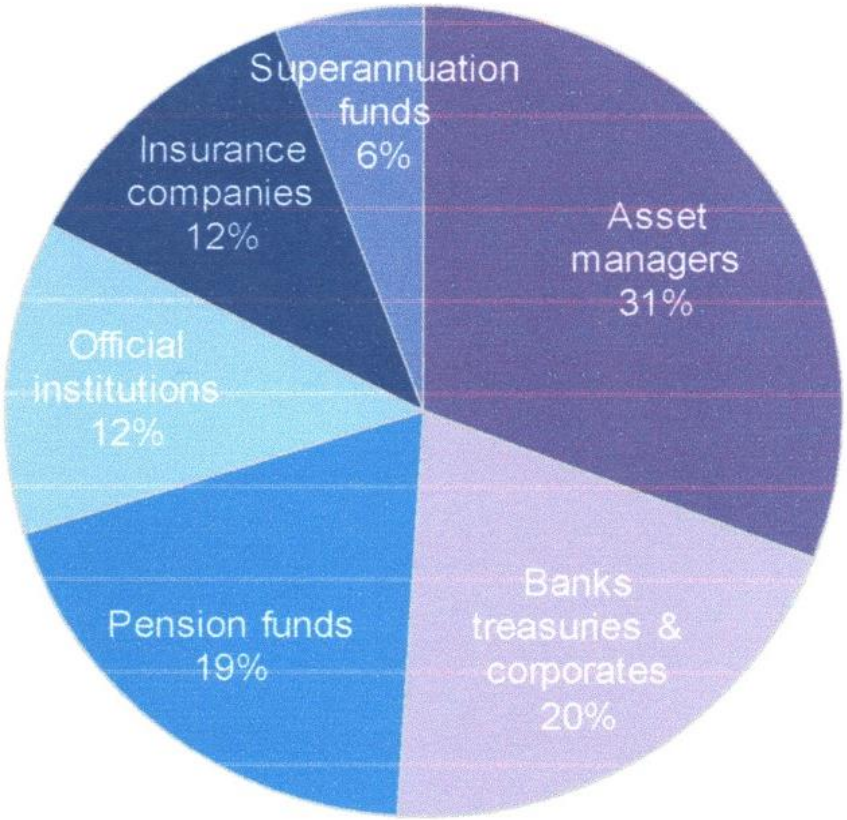
Who is buying Green Bonds?



Source: Bloomberg New Energy Finance, World Bank. Note: data accounts for 73% of the total value issued by the IBRD during this time; data was not disclosed for the remaining 27% of issues.

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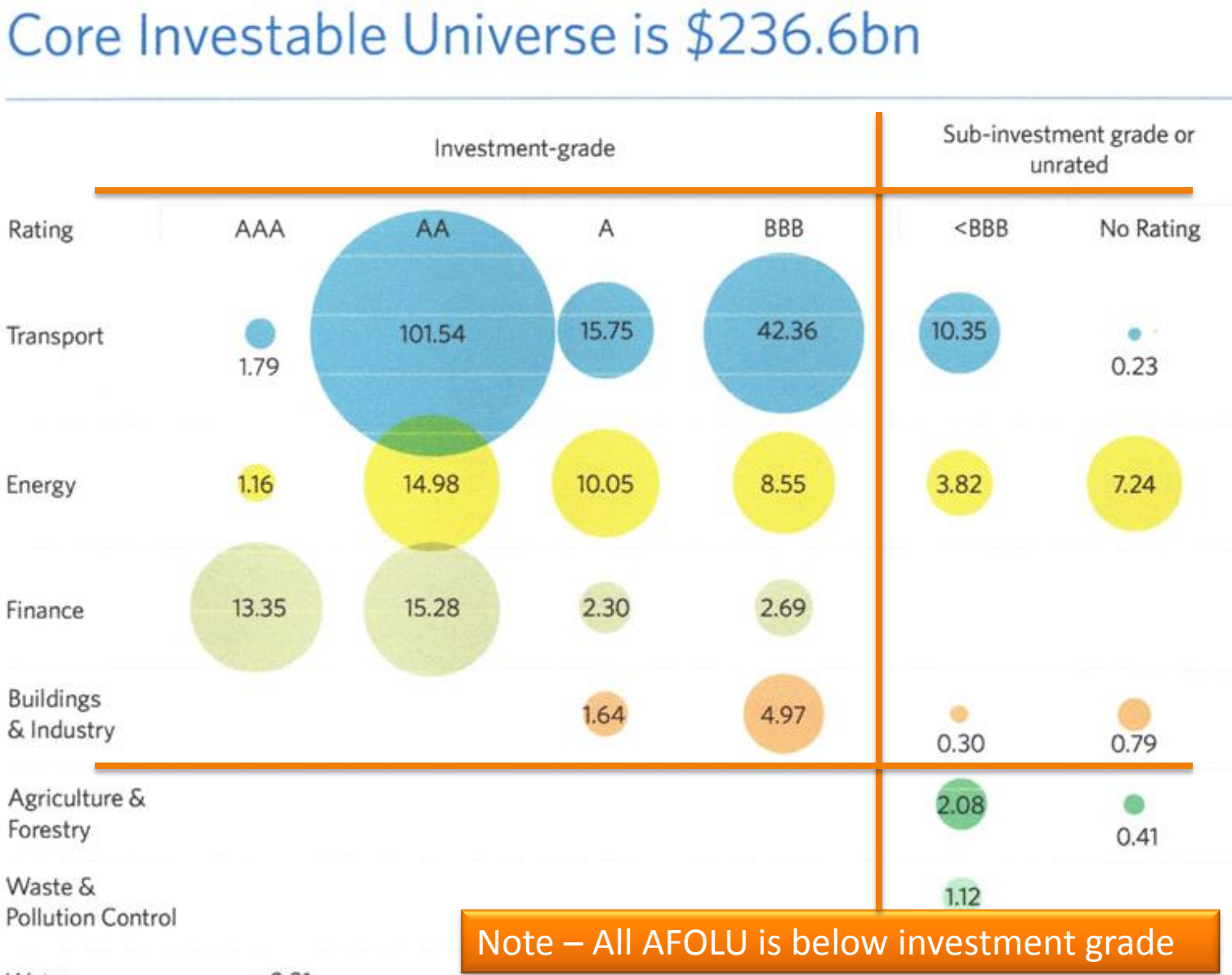
Greens Bonds Market 2013-2014

AFOLU investments are very small and all below investment grade.

This will translate into lower desirability and lower investor uptake



Note – All AFOLU is below investment grade

Date	Country	Participants	Value	Sector
August 2014	UK	UK Govt and Private sector	£ 48.5 M	Biomass Energy
August 2014	Peru	IFC and Peruvian Insurance	USD $15 M	Not specified
August	USA	NRG (private investment)	USD $500 M	Wind Energy
August	USA	Los Angeles Country + Structured Finance Associates (private investment)	USD $6.9 M	Buildings Energy Efficiency
August	India	Greenko (private investment)	USD $550 M (3x oversubscribed)	Wind Energy
July	Taiwan	Advanced Semiconductor Engineering (Private)	USD $300 M (6x oversubscribed)	Energy Efficiency
July	Taiwan	Neo Solar Power Corp (Private)	USD $120 M	Energy Efficiency
July	Germany	KfW	€ 1.5 B (2x oversubscribed)	Infrastructure
July	USA	District of Columbia Water	USD $350 M	Water efficiency
2 month total			Nearly $4 Billion USD	

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Project Example in China

Project Summary:

Purpose: To increase forest cover

Timeframe: 2010 - 2016

IBRD Financing: US$100 million

Project ID: P105872

Adaptation: Forest management

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Integrated Forestry Development

Recognizing the important role of forests in supporting rural livelihoods and environmental services, China has increased its forest cover over the past two decades to 38% of the country's territory. These forests are insufficient to protect the country from increasing soil and water erosion, prevent desertification, reduce atmospheric pollution, or provide for animal and plant habitats, however. Climatic extremes will exacerbate the impacts on vulnerable areas without protective forest and vegetation cover leading to limited recharge of aquifers, wind-damaged farmland and villages, greater siltation of reservoirs, and ecosystem habitat loss.

The project supports the development of additional forest cover and shelter belts in areas prone to wind and/or water erosion and in diversifying species and resilience in existing forest plantations. Benefiting 5 provinces, the project is expected to supplement the incomes of forest dependent rural communities, reduce vulnerability to climate impacts, expand 93,000 hectares of multifunction forests to create wind breaks, soil and water conservation schemes, and farmland shelter belts; increase 10% of vegetative cover and 39,000 hectares in degraded forests. In addition, the Project will train 216,000 farmers and staff to improve the management of forests (new and existing), and enhance environmental conditions in the project areas.

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Project Example in Tunisia

Project Summary:

Purpose: To promote better protection and management of natural resources

Timeline: 2010 - 2017

IBRD Financing: US$41.60 million

Project ID: P119140

Adaptation: Watershed management

Fourth Northwest Mountainous and Forested Areas Development

Tunisia's mountainous and forested areas of the Northwest cover 1.2 million hectares and support watersheds supplying 75% of the water consumed in the country. It hosts half of the forests remaining in Tunisia. Land pressure from inadequate agriculture and livestock practices, naturally poor soils, and heavy winter precipitation combine to make soil erosion and forest degradation serious threats to these vital natural resources. Climate change is adding pressure as flash floods and drought exacerbate these problems.

The Fourth Northwest Mountainous and Forested Areas Development Project is designed to improve the socio-economic conditions of rural populations in the Northwest region (about 318,000 people) through access to potable water, conservation of soil and water by improving agriculture and pasture practices, and better management of forest resources. In addition, climate change awareness-building activities and the dissemination of climate-appropriate practices reinforce livelihood and agro-ecosystem resilience.

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Climate Bond Standards

Climate Bond Certified

Who Is the Climate Bonds Initiative

Process for Technical Working Group

Expert Technical Working convened for each focus area: e.g. low-carbon transport, green property, water and now AFOLU.

Technical Working Group

- Develop brief.
- Reviews options and draft criteria
- Multiple iterations.
- Makes recommendation to Board

Industry/investors/experts

Industry Working Group

Invited comment on draft criteria.

Public consultation, webinars

Climate Bond Standards Board

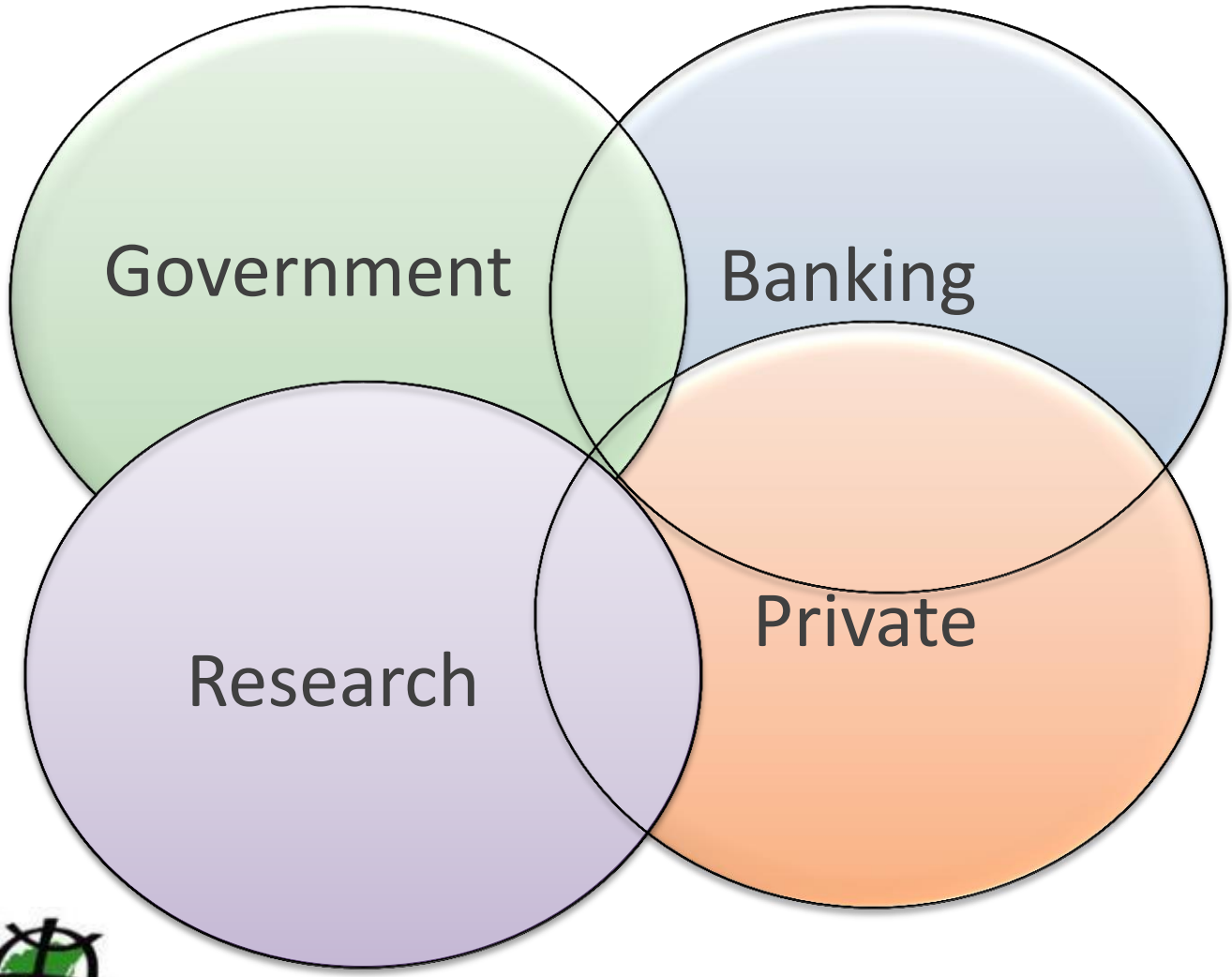
- Signs off on criteria
- Signs of on bonds to be certified

Green Bond Principles – who is supporting

Global capability and support

- *Assets* not companies
- Transparency & reporting

Preparing for Green Bonds



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Government Preparation

- Policy changes toward investment
- Landuse / land tenure reform and security
- Low Emission Land Use Planning (LELUP)
- Tax incentives toward investment
- Co-partnering on projects (with research team as well as development teams)
- Does the Govt raise bonds now? If so can it raise a green bond, National and Municipal.

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Banking Preparation

- Do the national banking regulations open opportunity to participate?
  - can an MDB participate as guarantor?
  - Is there enough scale within the bank?
- Look toward insurance companies as bond raise entities
- Gauge local interest to buy a bond from a local bank or insurance body.

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Private Preparation

- Strengthen private companies to facilitate design and management
- Build companies up via standards support, FSC and similar
- Use audit companies as gauge

Research Preparation

- Strengthen links to field projects as a tam member to secure additional finance
  - May need to establish commercial arms of the research institution to increase commercial mind
- Research finance can come through project delivery

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Thank you

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