

°CICERO

Raising the bar for external reviews and impact reporting

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CICERO's approach to Second Opinions

CICERO takes a dynamic and flexible approach in dialogue with issuers to enhance a climate-friendly and sustainable future. Our approach is developing as science and the market evolves. We are an independent research institution, and our second opinions are issued independently of other stakeholders' influence. This integrity has been valued by the market. Our second opinions are desk reviews and are not verifications of environmental impact.

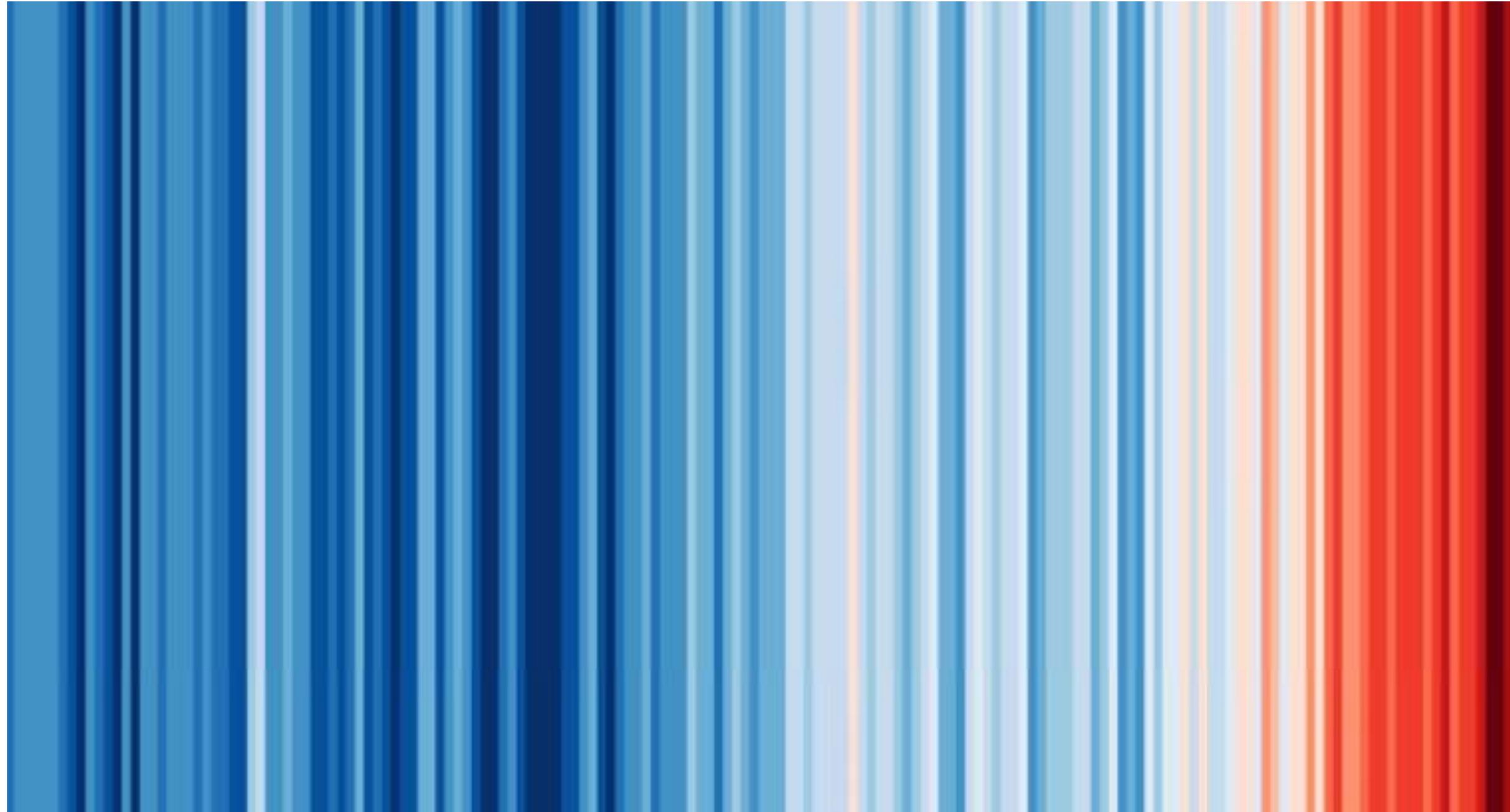


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Shades of
Green

- ✓ the first green bond (World Bank)
- ✓ the first municipal green bond (Gothenburg)
- ✓ the first corporate green bond (Vasakronan)
- ✓ the first green sukuk (Tadau Energy)

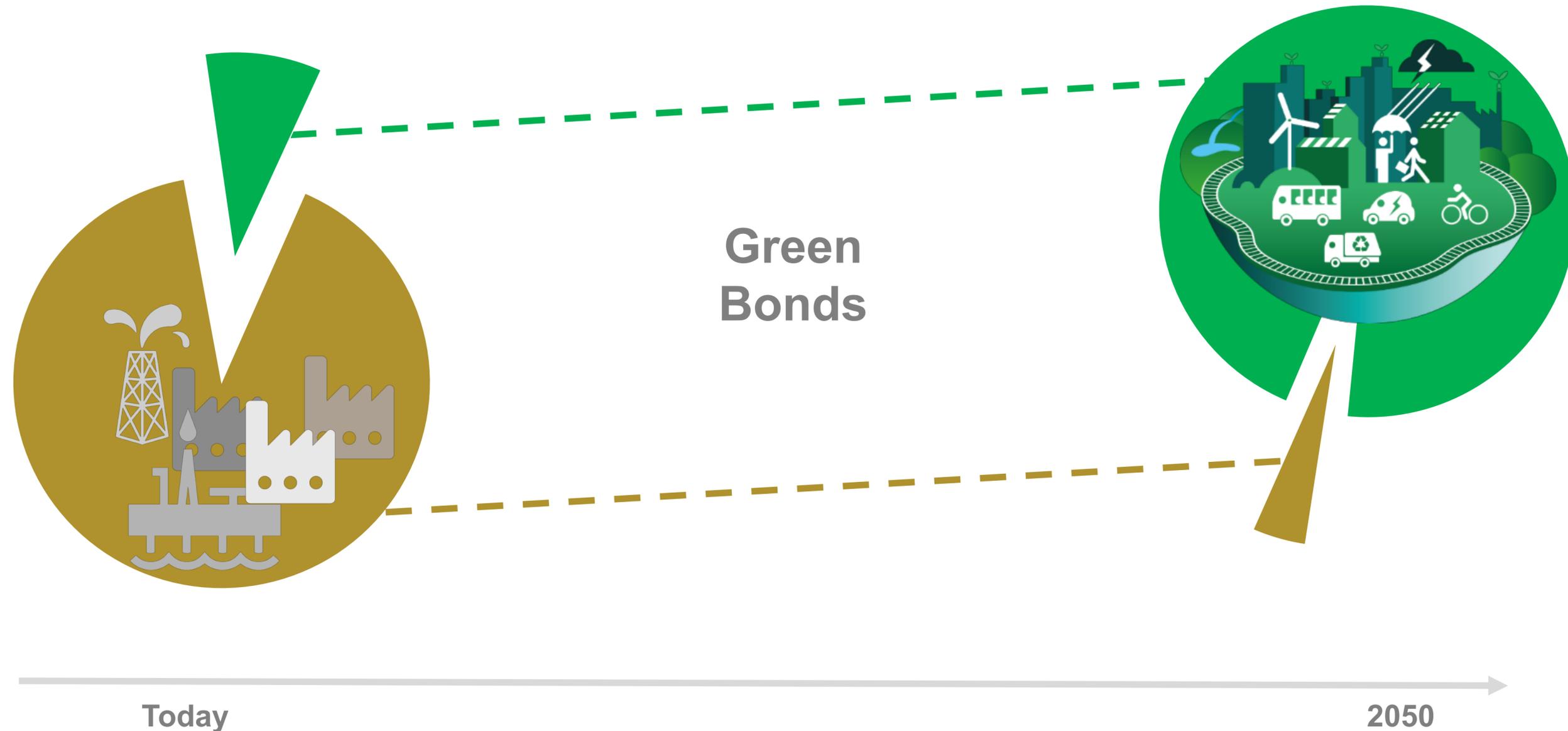


Why green bonds?

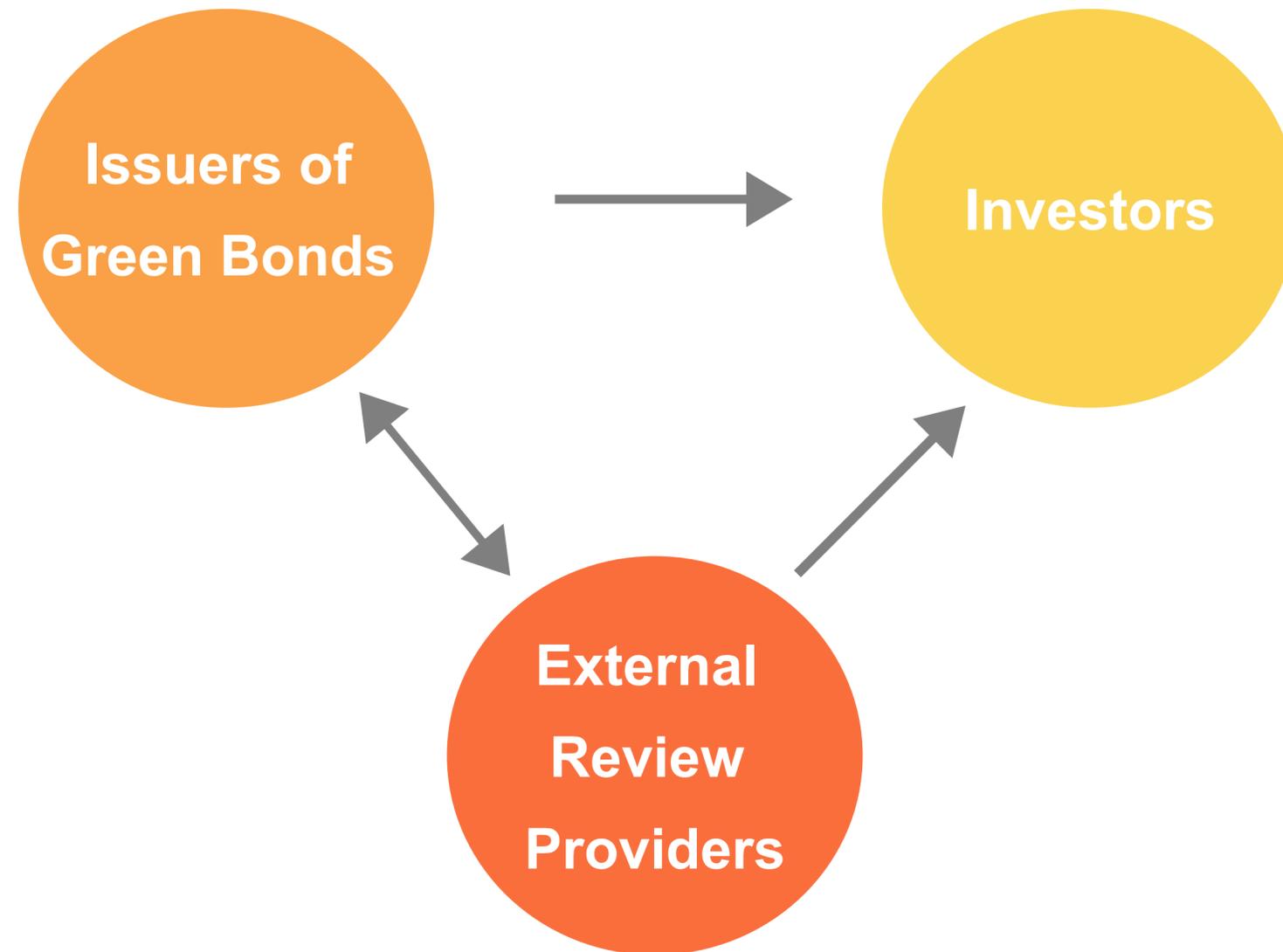


Source: Ed Hawkins, Climate Lab

Transition to sustainable economies provides investment opportunities



Green bonds open a communication channel to investors



- The green bond market builds capacity among market actors on what is green.
- Creating a common language for investors, scientist and companies is key
- GBP recommend that issuers appoint an external review

New guidelines for external reviews of green bonds

1. Integrity
2. Objectivity
3. Professional Competence and Due Care
4. Confidentiality
5. Professional Behaviour



Guidelines for Green, Social and Sustainability Bonds External Reviews
June 2018



Source: <https://www.icmagroup.org/green-social-and-sustainability-bonds/external-reviews/>

Our approach: Green Rating on Climate Risk

SHADES OF GREEN

EXAMPLES



Dark green is allocated to projects and solutions that correspond to the long-term vision of a low carbon and climate resilient future.



Wind energy projects with a governance structure that integrates environmental concerns



Medium green is allocated to projects and solutions that represent steps towards the long-term vision, but are not quite there yet.



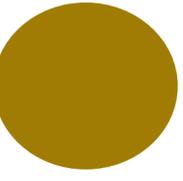
Plug-in hybrid busses



Light green is allocated to projects and solutions that are environmentally friendly but do not by themselves represent or contribute to the long-term vision.



Efficiency in fossil fuel infrastructure that decreases cumulative emissions

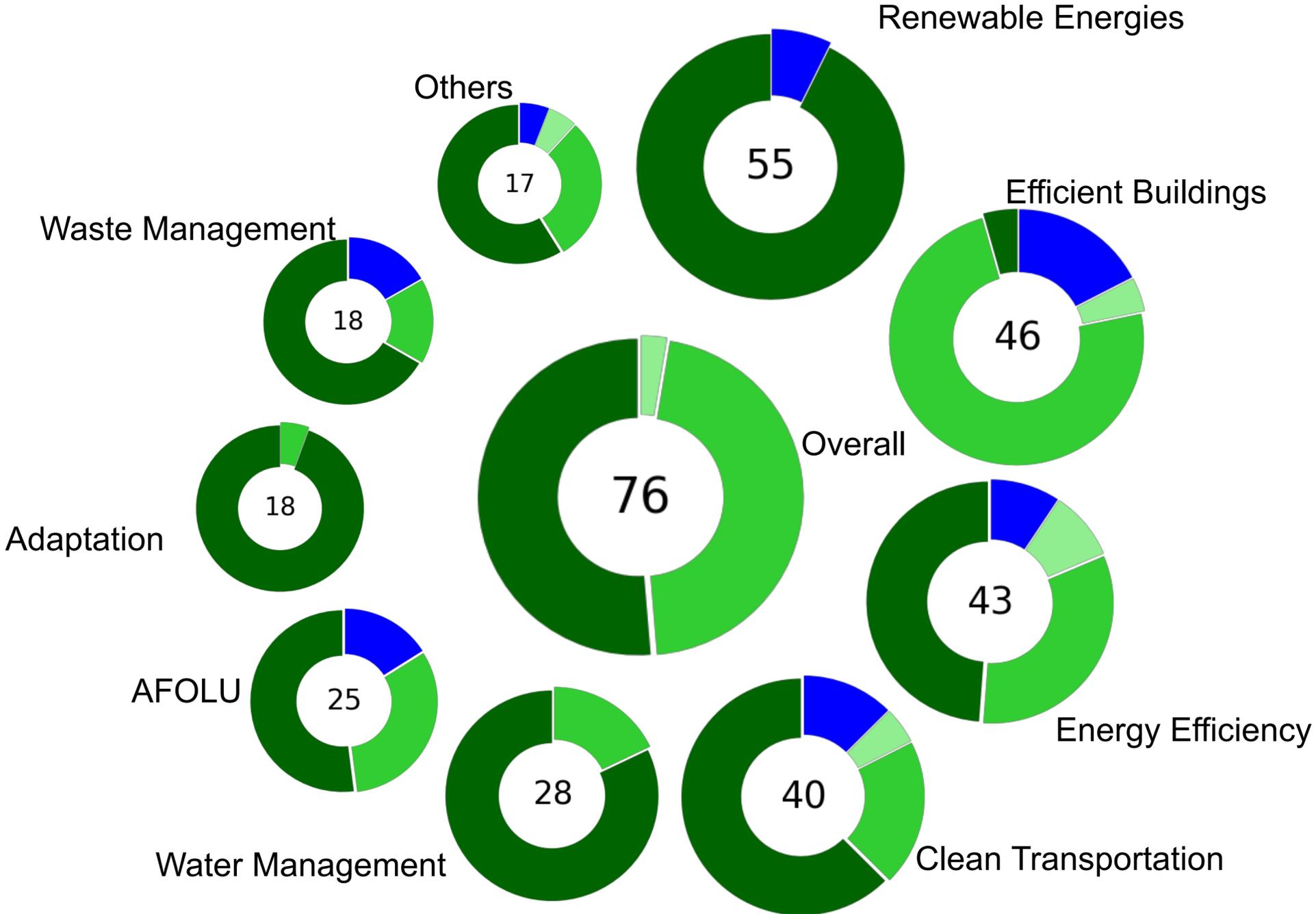


Brown for projects that are in opposition to the long-term vision of a low carbon and climate resilient future.



New infrastructure for coal

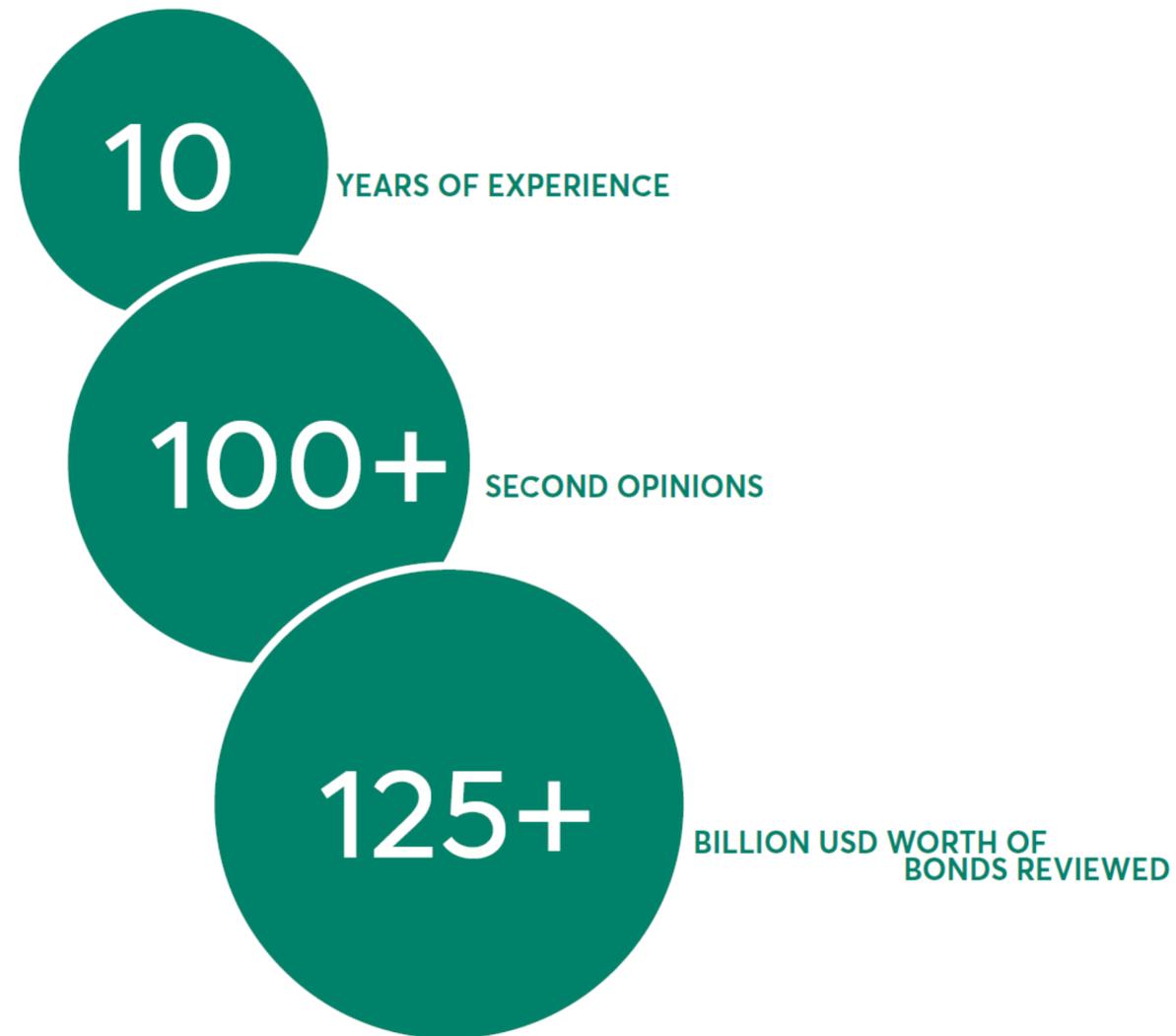
Shading by project category



- Green projects come in all shades, but clear trends by sector
- Fewer light green projects so far, these projects are essential to a successful transition



Perspectives on 10 years in the green bond market



- The green bond market has contributed to building environmental capacity within the financial sector. Investors have different mandates and views on green bonds.
- Transparency on environmental attributes can facilitate an environmental “race to the top”.
- Climate science tells us that we need to move towards carbon neutral technologies. What qualifies as a bridging technologies depends on the regional context.

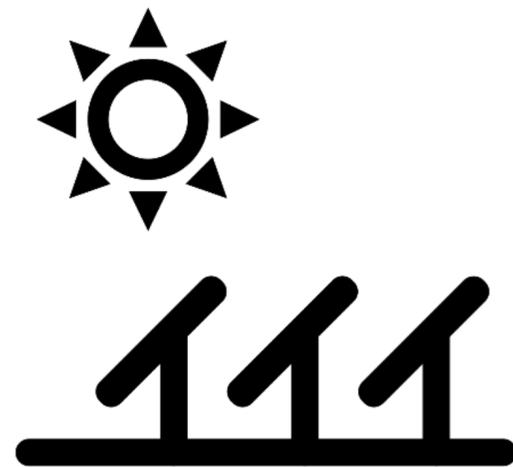
The importance of impact reporting

- Transparency is key to the integrity of the green bond market
- Pre-issuance external review provides insights on framework, post-issuance reporting on implementation and actual environmental impact
- Investors increasingly expect impact reporting for green bonds

Impact metrics

Numeric measurements of expected/actual impact.
Issuer is encouraged to include "green metrics" in addition to emissions.

Examples:



Mwh of
electricity
produced



Reduction of
CO₂-equivalents
emissions

Example impact reporting: ICBC

Summary of impacts

Disclosure of methodology

Environmental Impacts

The green bonds issued helped to reduce a total CO2 emission of **4,186,135 tons** per year, including **2,720,437 tons** per year for renewable energy assets and **1,465,998 tons** per year for low-carbon and low-emission transportation.

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Note: The impacts of renewable energy projects have applied the EIB Carbon Footprint Methodology⁶ http://www.eib.org/attachments/strategies/eib_project_carbon_footprint_methodologies_en.pdf

Renewable energy

Category	Ref.	Installed Capacity (MW)	Power Generation per year (MWh)	GHG Emission Avoided per year (ton)
 Wind power	Project 1	400	920,000	752,100
	Project 2	300	740,000	604,950
	Project 3	200	478,800	391,419
	Project 4	200	400,000	327,000
 Solar power	Project 5	80	92,800	75,864
	Project 6	100	116,500	95,239
	Project 7	200	730,000	450,045
	Project 8	9.5	15,842	8,563
	Project 9	9.8	16,100	8,718
	Project 10	7.2	12,099	6,540
Total		1,506.3	3,522,171	2,720,437

Green metrics

Impact by project

Source: ICBC 2017 Green Bond Reporting http://v.icbc.com.cn/userfiles/Resources/ICBCLTD/download/2018/2017lvzhainiandubaogao_en.pdf

Key take-aways

- Green Bonds open a ***communication channel to investors***, external reviews help facilitate this communication. Creating a common language for investors, scientist and companies is key.
- ***All shades of green are necessary*** for the transition. The key is to avoid locking in obsolete infrastructure.
- ***Investors expect impact reporting*** from green bonds. It is key to be transparent on methodologies and assumptions. Several technology enabled platforms are emerging to enable efficient and transparent reporting.

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