



Webinar

Green bonds – an innovative and efficient way of financing green investments

GIZ & SEB Strategic Alliance on Green Bond Market Development

The Strategic Alliance on Green Bond Market Development

Objective

Support the development of prosperous and sustainable green bond markets in G20 emerging economies

Approach

- 25+ technical workshops, roundtables & conferences
- Dedicated bilateral advisory support
- Knowledge products: Green Bond publication, webinars & online learning videos, global SF e-learning platform

Stakeholders

- Issuers
- Financial intermediaries
- Investors
- Policymakers & regulators
- External reviewers

Partners

Regional
implementation
partners



Technical partner

°CICERO



The partners



- Swedish bank is one of the leading underwriters & thought leader in the green bond market
- co-developed the GB concept for institutional investors and supported the inaugural World Bank Green Bond.
- One of the 14 founding banks that set up **The Green Bond Principles** (GBP)
- Member of **GBP Executive Committee** and External Reviews Working Group



- German public-benefit federal enterprise providing international cooperation services for sustainable development
- Works with governments, int'l organizations, businesses, research institutions & civil society in 120 countries
- Implements the develoPPP.de partnership on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ)



- CICERO is one of the world's foremost institutes for interdisciplinary climate research
- First and leading provider of second opinions for green bonds
- Provided second opinions for the 1st green bond, 1st green muni bond, 1st corporate green bond, 1st green sukuk

Content and learning objectives

- Background: Why green bonds matter
- What is a green bond
- Global green bond market development
- Green bonds in Mexico
- Why issue and invest in green bonds
- The Green Bond Principles & other standards
- How to set up a green bond framework
- External reviews
- Impact reporting

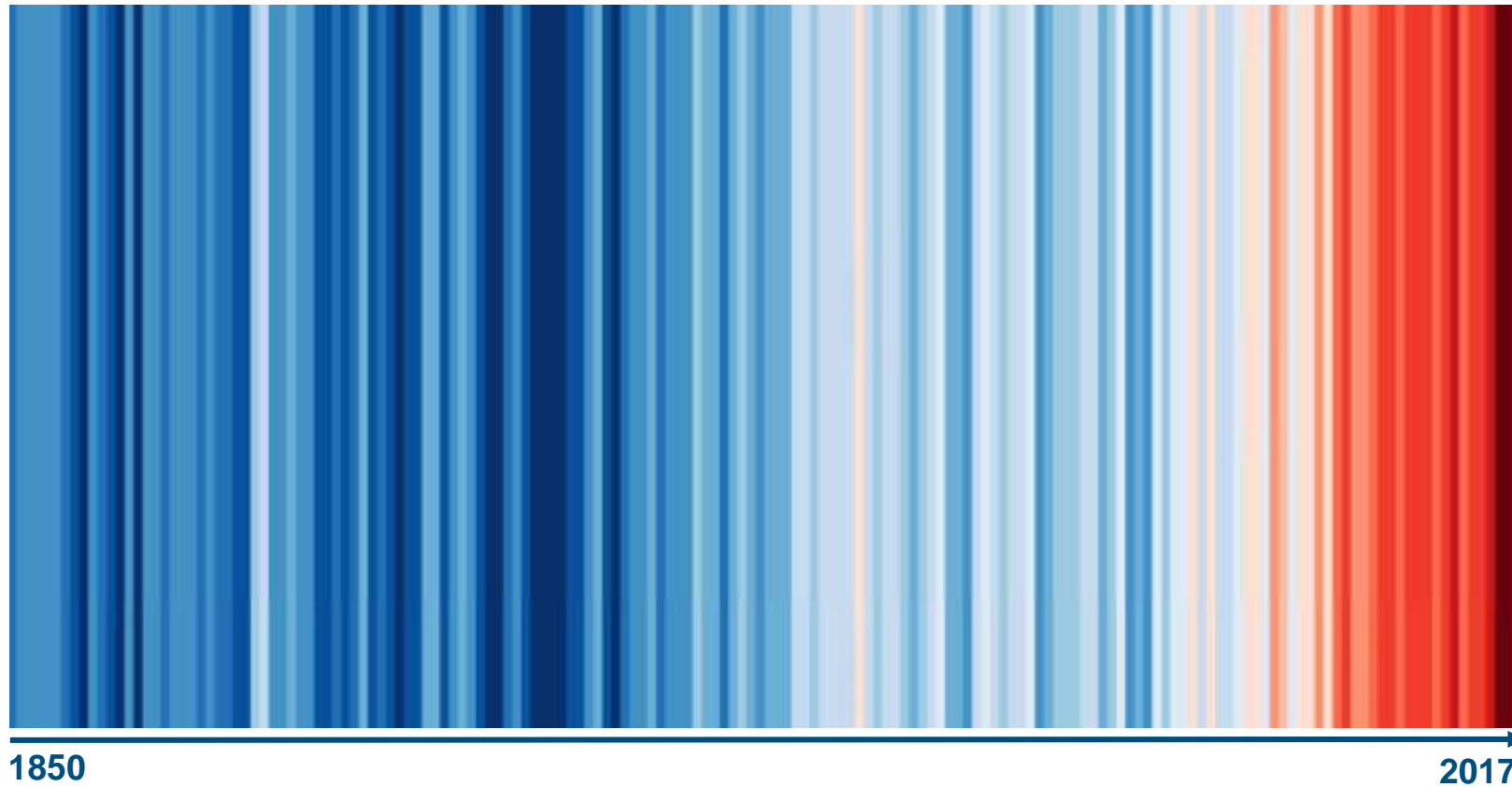
Part 1:

Why green bonds?



Global annual temperatures from 1850-2017

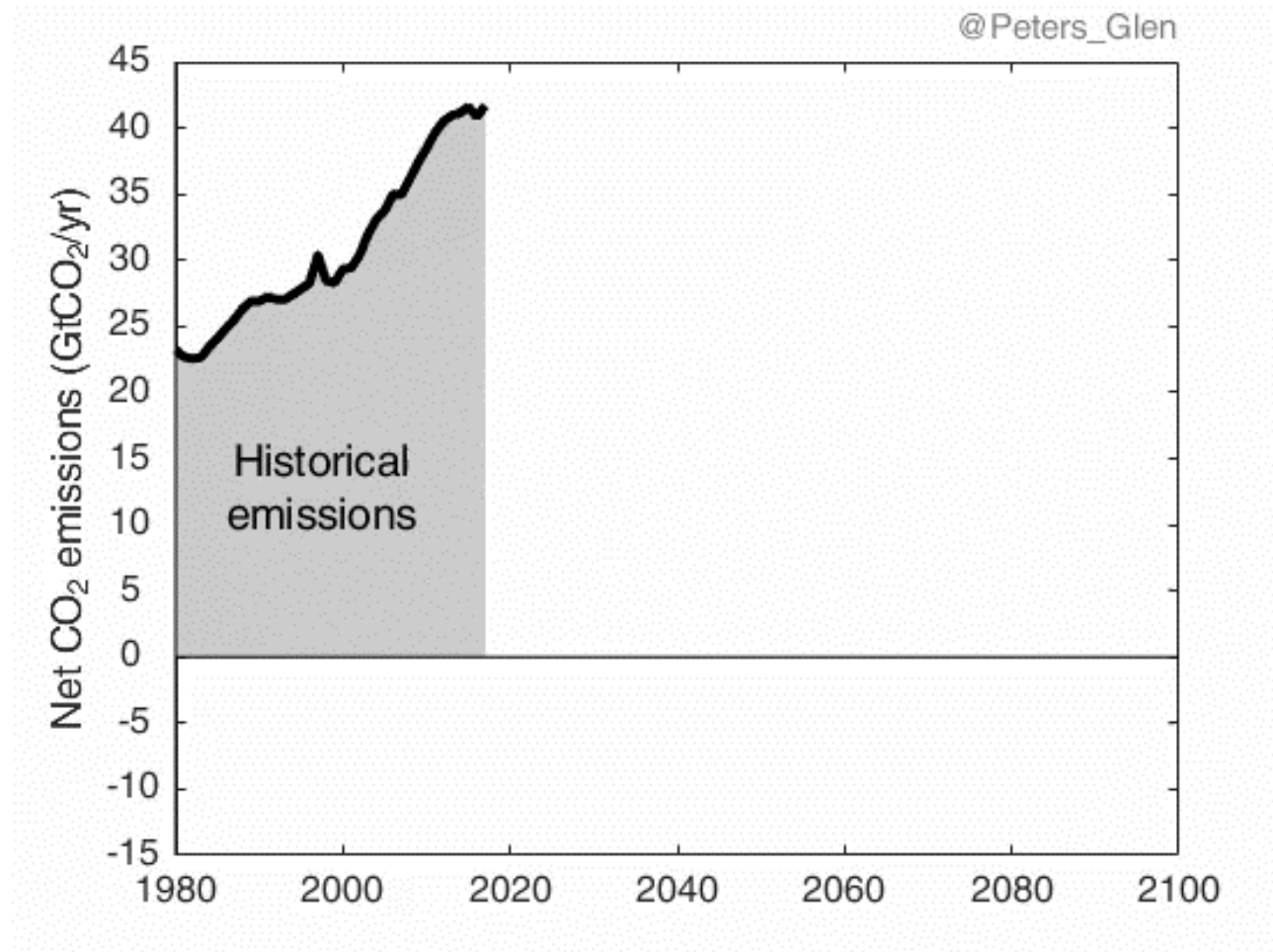
Colour-Code Global Annual Temperatures



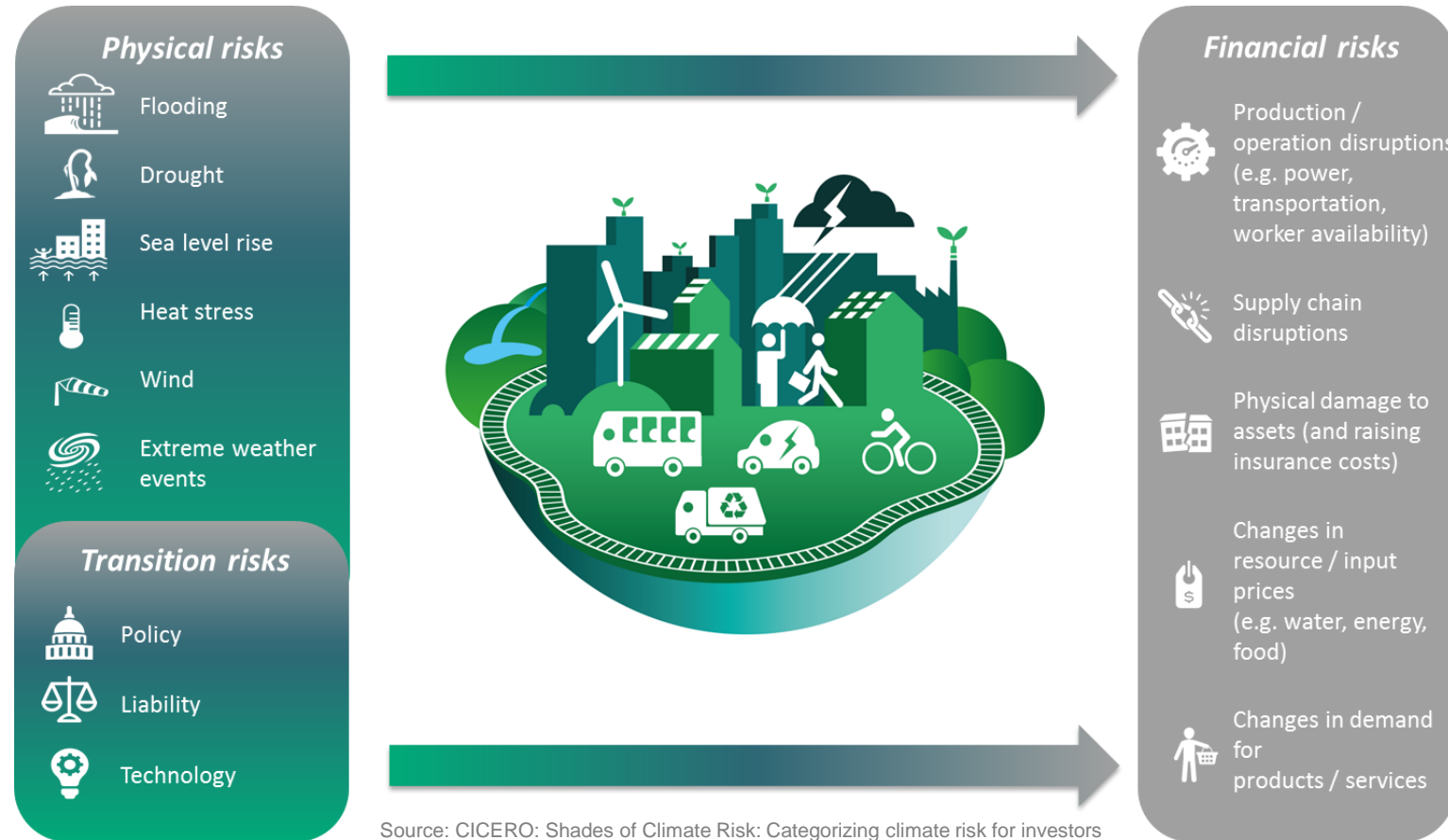
Source: Ed Hawkins, Climate Lab

To stay well below 2°C, science tells us that...

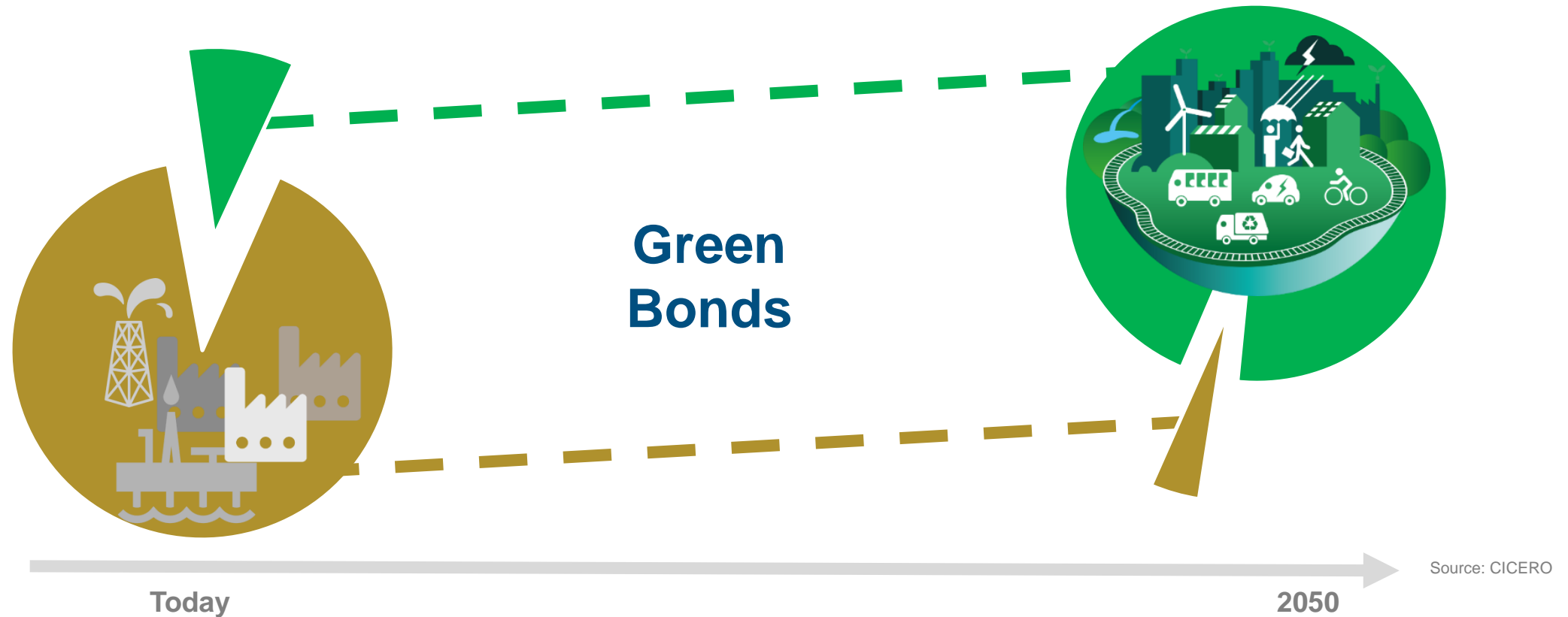
...emissions must go to zero within a few decades, or we need large-scale negative emissions (with the associated risks) to compensate.



Climate risks are financial risks



Transition to sustainable economies provides investment opportunities



Green solutions are scalable



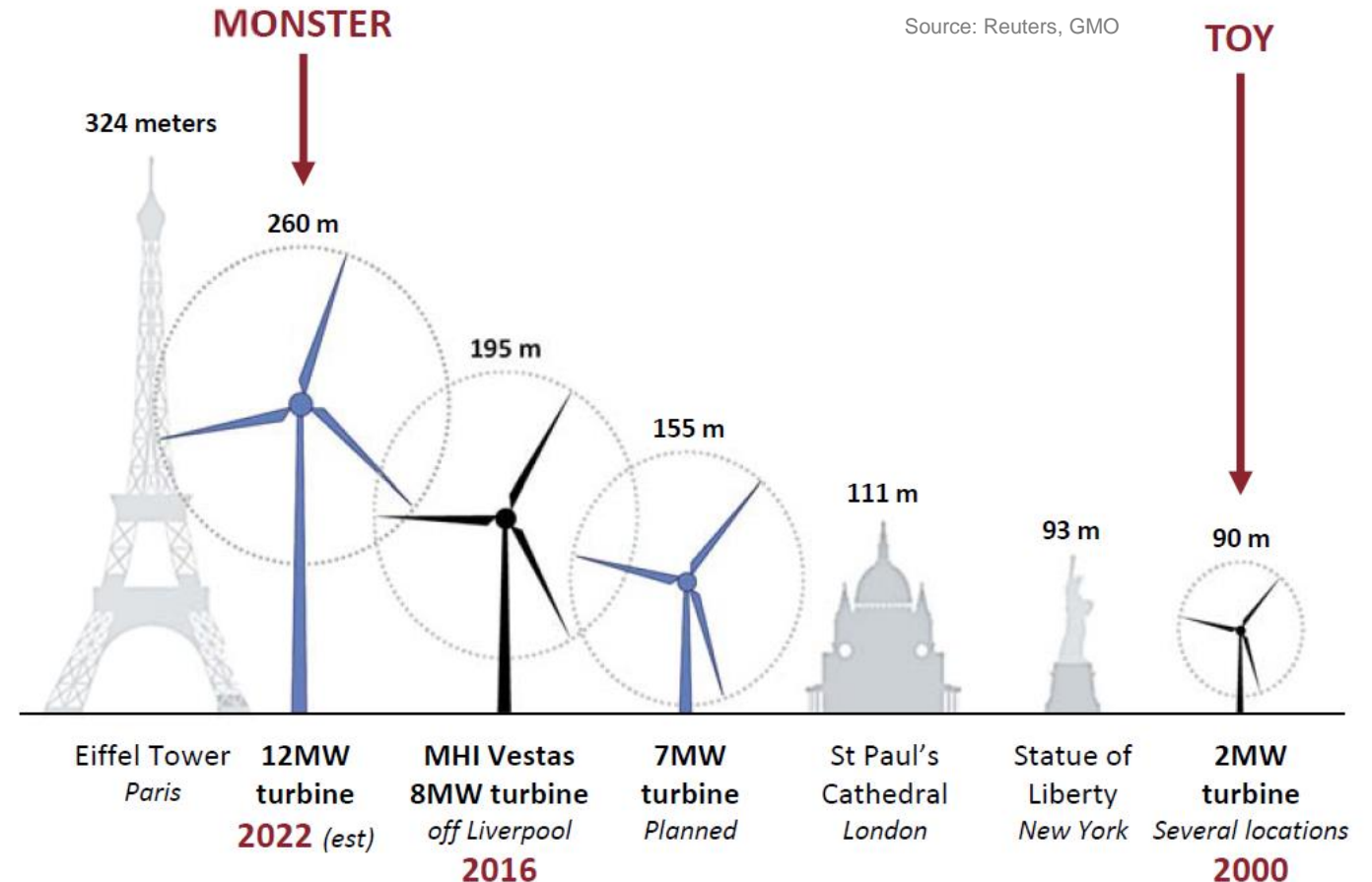
New rail lines
ADIF-Alta
Velocidad



**Electric and
hybrid cars**
Volvofinans



Flood defenses
Nederlandse
Waterschapsbank



Part 2:

What is a green bond?



What is a green bond?

Green Bond Definition



Green bonds are any type of **bond instrument**

Same underlying mechanisms as regular bonds

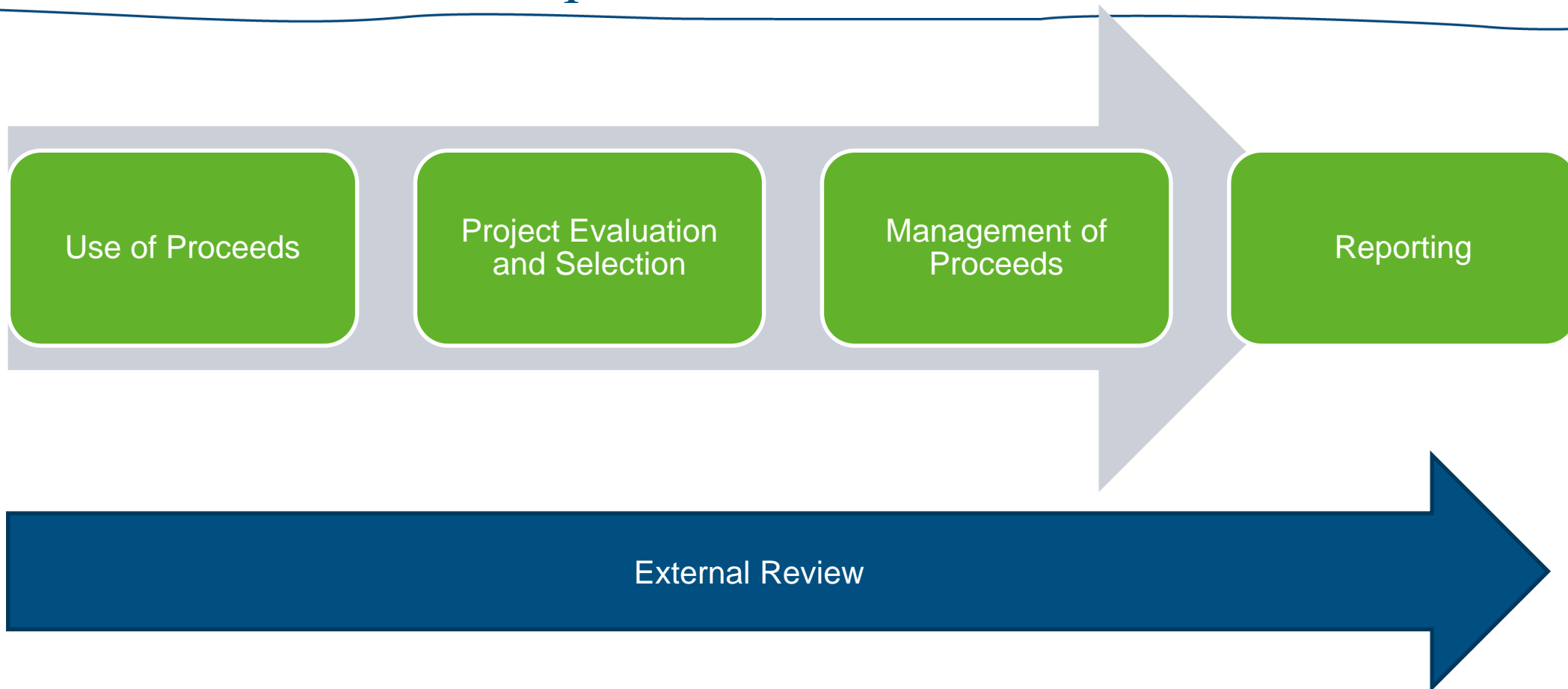
where the **proceeds** will be **exclusively** applied to finance or re-finance, in part or in full, new and/or existing **eligible Green Projects**

Main difference is that only pre-defined projects can be financed

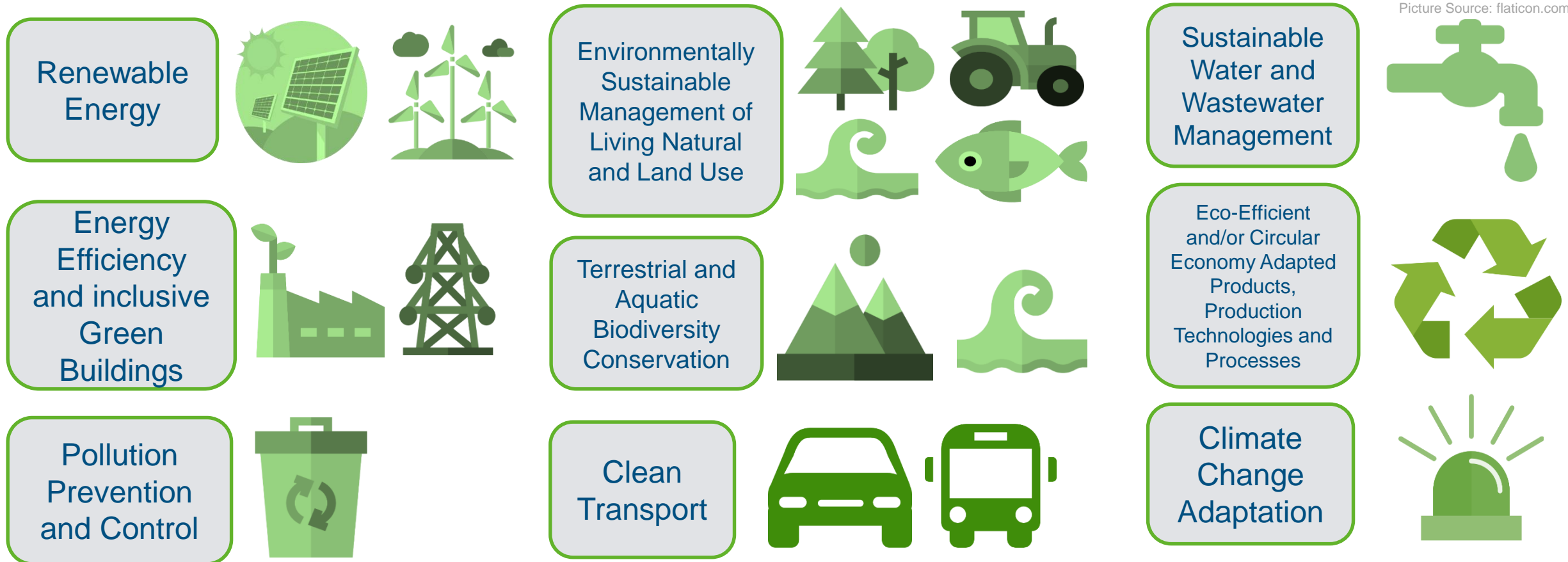
and which are aligned with the **four core components** of the **Green Bond Principles**

Green Bond Frameworks ensure that green projects are defined and that the issuers deliver on their promise

The Green Bond Principles



What do green bonds finance according to the GBPs?*



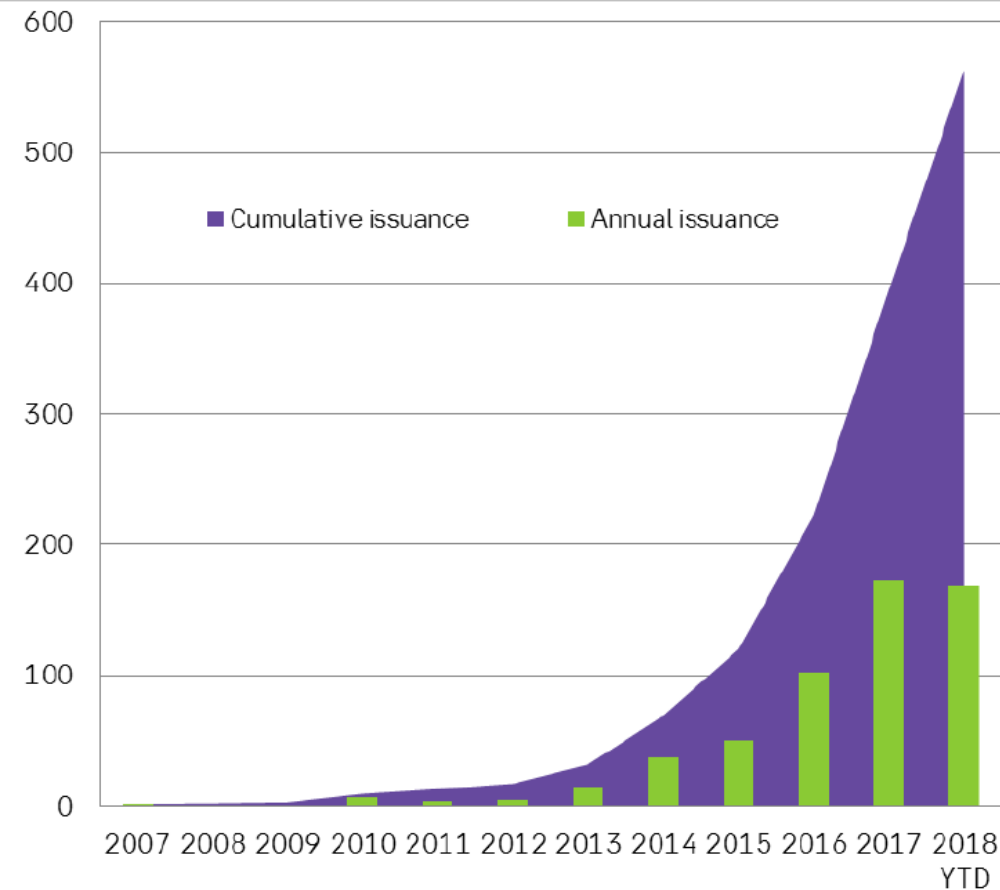
Part 3:

Green bond market development

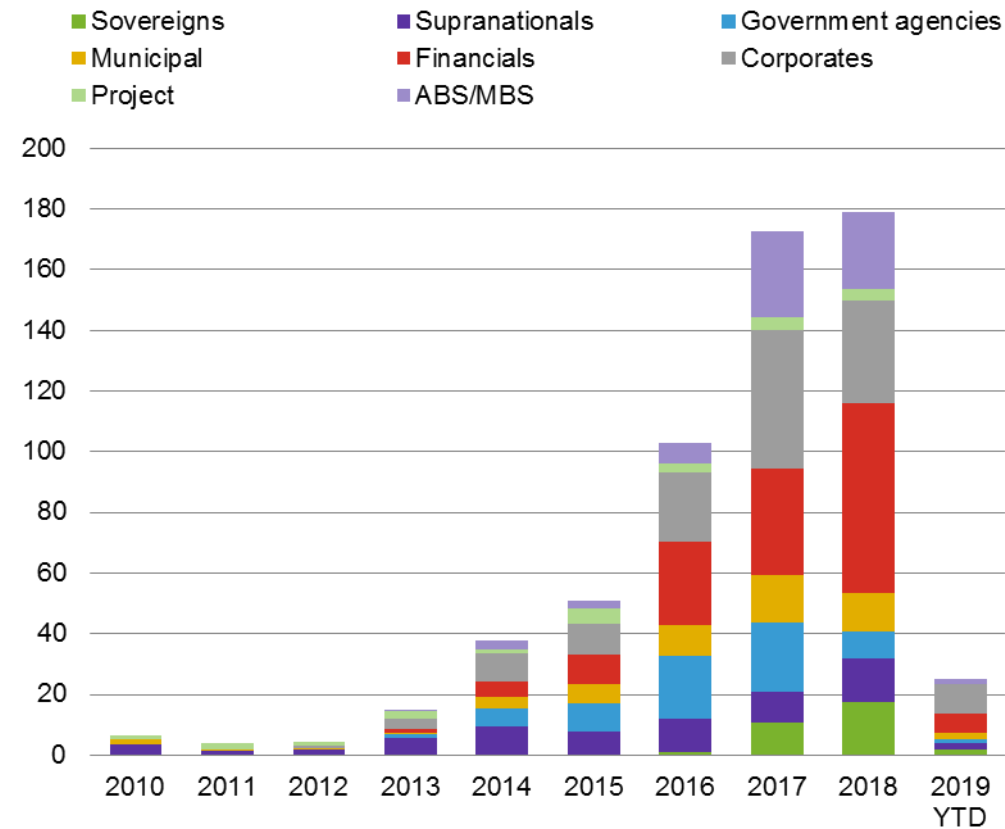


Green Bond market surging – annual and cumulative issuance

Figure 1. Total Cumulative Issuance (USD Bn)



Green Bond market growth and sectors of the market shifting



Part 4:

Why issue and invest in green bonds?



Incorporating sustainability in financial systems

Investment Principles

- **Principles for Responsible Investments (PRI)**
- Montreal Carbon Pledge
- Equator Principles

Sustainable Financial Products

- **Green/social bonds**
- **Green/social loans**
- Securitization
- Microfinancing
- Indices & ETFs
- **Green funds**
- **Green listings**
- YieldCos
- Venture Capital
- Crowdsourcing

Policies & Regulation

- **European Commission's Action Plan on Financing Sustainable Growth**
- China's Green Bond Guidelines and Catalogue (2015)
- Vietnam's Directive on Promoting Green Credit Growth and E&S Risk Management (2015)
- Brazil's Resolution of E&S Responsibility for FIs (2014)

Disclosure

- Task Force on Climate-related Financial Disclosures (TCFD)

Value proposition of green and sustainable bonds

Investors

- Risk-adjusted return with environmental Impact
- Achieve intelligence on climate related issues inside existing management structure
- Risk management
- Climate stress
- Regulations
- Technology transition
- Live your values → competitiveness

Issuers

- Strengthen the financial position:
- Investor diversification
- Deepened dialogue
- Enhanced issuance flexibility
- Targeted internal dialogue between operations (projects), Finance and Management, extended to Investors
- Financial articulation of a sustainability strategy
- Live your values → competitiveness

Society

- Mobilize human capital inside finance for society goals

Value proposition of green and sustainable bonds

"We've partnered on other sustainability projects in the past, but integrating our corporate sustainability strategy with a core part of our capital structure has raised our level of integration and cooperation."

Drew Wolff,
Vice President of Treasury at Starbucks

"Markets are short-term, so they are pricing the likelihood of polluting companies being penalised at almost zero. People are beginning to ask if they can really make that bet... If you misprice those risks, then you've failed your fiduciary responsibility"

Frederic Samama, Amundi

"Local governments wield significant influence and authority that can drive environmental sustainability within their jurisdictions."

The California Sustainability Alliance

Part 5:

The five pillars of a green bond framework



The Green Bond Principles

Use of proceeds	Process for project evaluation and selection	Management of proceeds	Reporting	External review
<ul style="list-style-type: none">• Definitions of eligible projects• Mitigation• Adaption• Environmental	<ul style="list-style-type: none">• Key to obtain sufficient knowledge	<ul style="list-style-type: none">• Traceability and monitoring	<ul style="list-style-type: none">• Transparency• Impact reporting• At least annually	<ul style="list-style-type: none">• Evaluation through an independent external assessment
Green Bond Framework – definitions & procedures				

Example of a green bond - Volvofinans Bank



Volvofinans Bank AB (publ)

Green Bonds Framework

Final version

17 March 2017

1. EARMARKED ACCOUNT

An amount equal to the net proceeds of the green bonds ("Green Bonds") issued by Volvofinans Bank AB (publ) ("Volvofinans Bank") will be credited to a special account ("Special Account") that will support Volvofinans Bank's Eligible Projects (as defined below). As long as the Green Bonds are outstanding and the Special Account has a positive balance, at the end of every fiscal quarter, funds will be deducted from the Special Account and added to Volvofinans Bank's lending pool in an amount equal to all disbursements from that pool made during such quarter in respect of Eligible Projects. Until disbursement to Eligible Projects, the Special Account balance will be placed in Volvofinans Bank's liquidity reserve. The vast majority of the reserve consists of covered bonds and municipal bonds.

2. ELIGIBLE PROJECTS

"Eligible Projects" means a selected pool of loans and leases to vehicles that are funded, in whole or in part, by Volvofinans Bank and that promote the transition to low carbon and climate resilient growth, as determined by Volvofinans Bank.

Such vehicles shall represent sustainable transportation defined as passenger vehicles which:

- meet the criteria as specified by Paragraph 11 a of Chapter 2 of the Swedish Road Traffic Tax Act (Sw. *Vägförskrift 2002:27*) ("Environmental Friendly Cars") (Sw. *Agenda*); and,
- can be powered entirely or partially by non-fossil fuels, i.e.:
 - o electric vehicles
 - o fuel cells vehicles
 - o electric/petrol hybrid vehicles
 - o electric/diesel hybrid vehicles
 - o ethanol/petrol hybrid vehicles
 - o biogas/natural gas vehicles
 - o biogas/natural gas/petrol vehicles

¹ If criteria develop over time or if the referenced legislation is amended or superseded with respect to Environmental Friendly Cars, the definition of Environmental Friendly Cars for the purpose of Eligible Projects shall be amended accordingly.



Eligible Projects must meet the criteria which are valid at the time of approval of the loan or lease for inclusion in Volvofinans Bank's Green Loan Portfolio (as defined below).

Volvofinans Bank's Green Bonds can be used to finance new Eligible Projects and to refinance Eligible Projects in accordance with the Green Bonds Framework.

3. SELECTION OF ELIGIBLE PROJECTS

Eligible Projects will be selected in consensus by the Head of Treasury and the Head of Sustainability Departments (i.e. both departments have a veto). Approved loans and leases will be included in Volvofinans Bank's green loan portfolio ("Green Loan Portfolio"). The ambition is that the Green Loan Portfolio at all times will be larger than the amount of outstanding Green Bonds from Volvofinans Bank. The share of Green Bond financing of the Green Loan Portfolio will be specified in the annual Green Bonds investor letter, see section 4 (*Transparency*).

4. TRANSPARENCY

To enable investors to follow the development and provide insight to prioritised areas, Volvofinans Bank will provide an annual Green Bonds investor letter which will include the following items.

1. A description of the Green Loan Portfolio including:
 - (a) impact reporting at portfolio level;
 - (b) information about the maturity profile of the Green Loan Portfolio;
 - (c) information about the average share of the total value of the vehicles in the Green Loan Portfolio that has been financed by Volvofinans Bank; and
 - (d) information about the share of Green Bond financing of the Green Loan Portfolio.
2. A selection of Eligible Project examples. A summary of Volvofinans Bank's Green Bond development.

Volvofinans Bank recognises the importance of impact reporting. Volvofinans Bank undertakes to include information in the Green Bonds investor letter about the reduced carbon footprint of the funded Eligible Projects at portfolio level in relation to relevant reference values.

The Green Bonds investor letter as well as the use of proceeds, tracking and management of funds will be assured by Volvofinans Bank's designated compliance functions. The Green Bonds investor letter and the opinion of the compliance function will be made publically available on Volvofinans Bank's web page, www.volvofinans.se.

Example of a green bond - Volvofinans Bank

Use of Proceeds


ELIGIBLE PROJECTS

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Process for project evaluation and selection

SELECTION OF ELIGIBLE PROJECTS

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Example of a green bond - Volvofinans Bank

Management of Proceeds

earmarked account

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Impact Reporting

TRANSPARENCY

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Part 6:

External review



Who defines green?



Voluntary principles for issuing a green bond
that the vast majority of issuers align with *across all markets*



Country level guidelines in *some markets*



Stock exchanges with green bond lists set *criteria for listing*

BLACKROCK®



Green bond indices and funds *have criteria for inclusion*

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/>

Range of external review approaches – pre-issuance

Type	Pre-Framework	Pre-issuance		
	Framework consulting	Second Opinions	Green Scoring/ Ratings	Certification against standard
Approaches	Help issuer develop green bond framework	Most follow the GBP. Some follow accounting for proceeds only, some look into environmental criteria and governance	Some ratings allow only a portion of proceeds used for green projects, some take a broader climate risk approach	Current standards available only for carbon emissions in certain project types in energy, transport, utilities and buildings sectors
Potential challenges	Conflict of interest with fully independent second opinions	Wide range of approaches and quality	Wide range of approaches and quality	Possibility that standard locks out best practices (e.g. resiliency in mitigation projects), or new technology development necessary for transition (e.g. electric car battery development)

Adapted from: Clapp, Christa, "What is Green and the Developing Green Bond Standards", Green Bond Evolution, Environmental Finance.

Notes: Table reflects author's opinion based on: CICERO Second Opinion Framework, GBP 2017, and available methodology descriptions for CBI, Moodys, Oekom, Sustainalytics, S&P, and Vigeo.

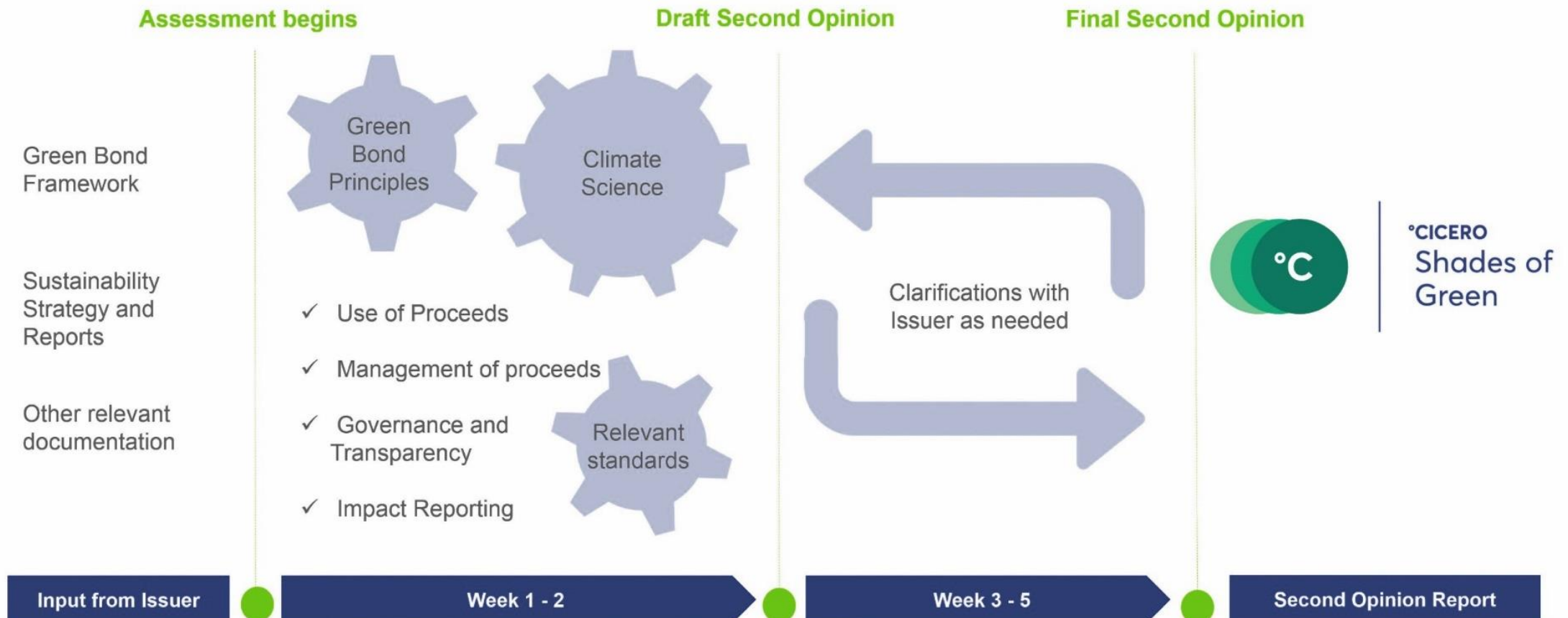
Range of external review approaches – post-issuance

Type	Verification of use of proceeds	Verification of environmental impacts	Updates of ratings and second opinions
Approaches	Follow accounting of financial flows for green projects	Measure realized carbon emissions or other environmental metrics of projects	Annual renewals can result in upgrades or downgrades of ratings or opinions
Potential challenges	Does not consider how green projects are	Can be overly focused on emission reduction accounting	Unclear if scope of updates includes realized impacts

Source: Clapp, Christa, "What is Green and the Developing Green Bond Standards", Green Bond Evolution, Environmental Finance.

Notes: Table reflects author's opinion based on: CICERO Second Opinion Framework, GBP 2017, and available methodology descriptions for CBI, Moody's, Oekom, Sustainalytics, S&P, and Vigeo.

The second opinion process



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



°CICERO
Shades of
Green



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

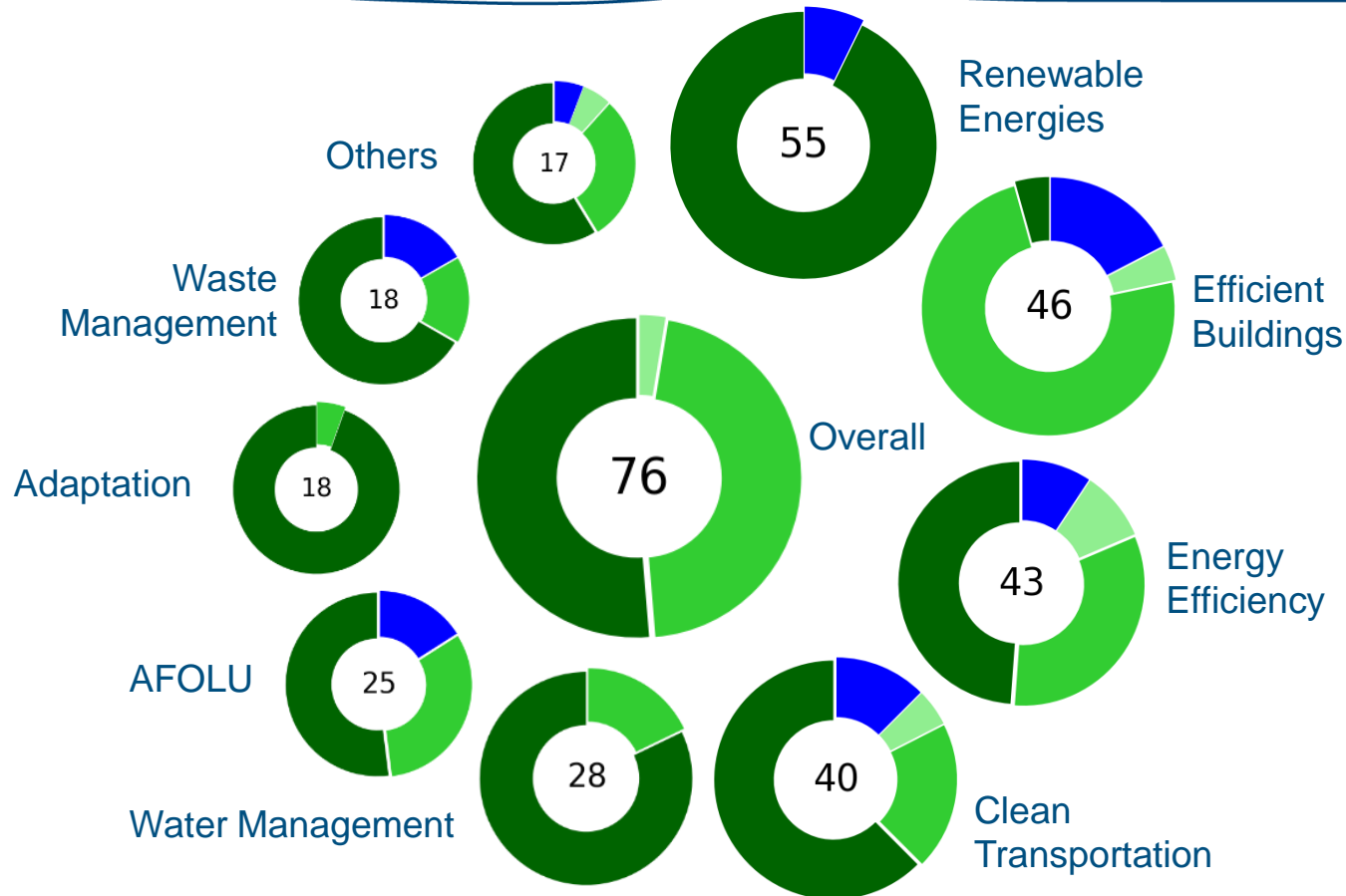


Brown for projects that are in opposition to the long-term vision of a low carbon and climate resilient future.

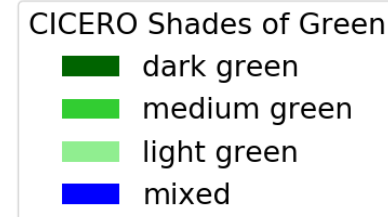


New infrastructure for coal

Rating by project categories



- 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



Note that the mixed category includes all shades of green

CICERO's Absolute Number of Assigned Shades of Green (2013-2018) per Involved GBP Project Category

Part 7:

Impact reporting



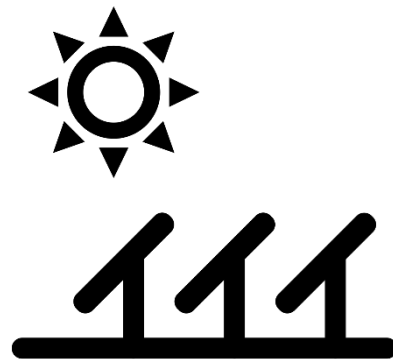
Why report on environmental impacts?

- 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

Guidelines for impact reporting



ICMA working groups have suggested metrics for some sectors



MDBs Harmonized Framework for Impact Reporting from 2015



Nordic Public Sector issuers 2017 Position Paper

Part 8: Wrap-up



Further information

- UNEP Inquiry: [The Financial System We Need](#) (2015) & [Annual Overview 2017](#)
- [Task Force on Climate-related Financial Disclosures \(TCFD\)](#): Final Report & 2018 Status Report
- [High Level Expert Group's Final Report](#) & [EU Action Plan on Financing Sustainable Growth](#)
- [ICMA: The Green Bond Principles 2018](#)
- [SEB's latest Green Bond research](#)
- [CICERO's climate finance work](#)
- ICMA: The Green Bond Principles 2018
- Green Bonds – Working towards a Harmonized Framework for Impact Reporting (Dec 2015)
- Nordic Public Sector Issuers: Position Paper on Green Bonds Impact Reporting (Oct 2017)
- ICMA: Guidelines for Green, Social and Sustainability Bonds External Reviews
- Climate Bonds Initiative: Green Bond Pricing in the Primary Market (Q4 2017)
- [ICMA: Guidelines for Green, Social and Sustainability Bonds External Reviews](#)

How to contact us

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Part 9: Questions?

