
Transition Finance

Climate Bonds framework & CDPQ application

09 February 2023

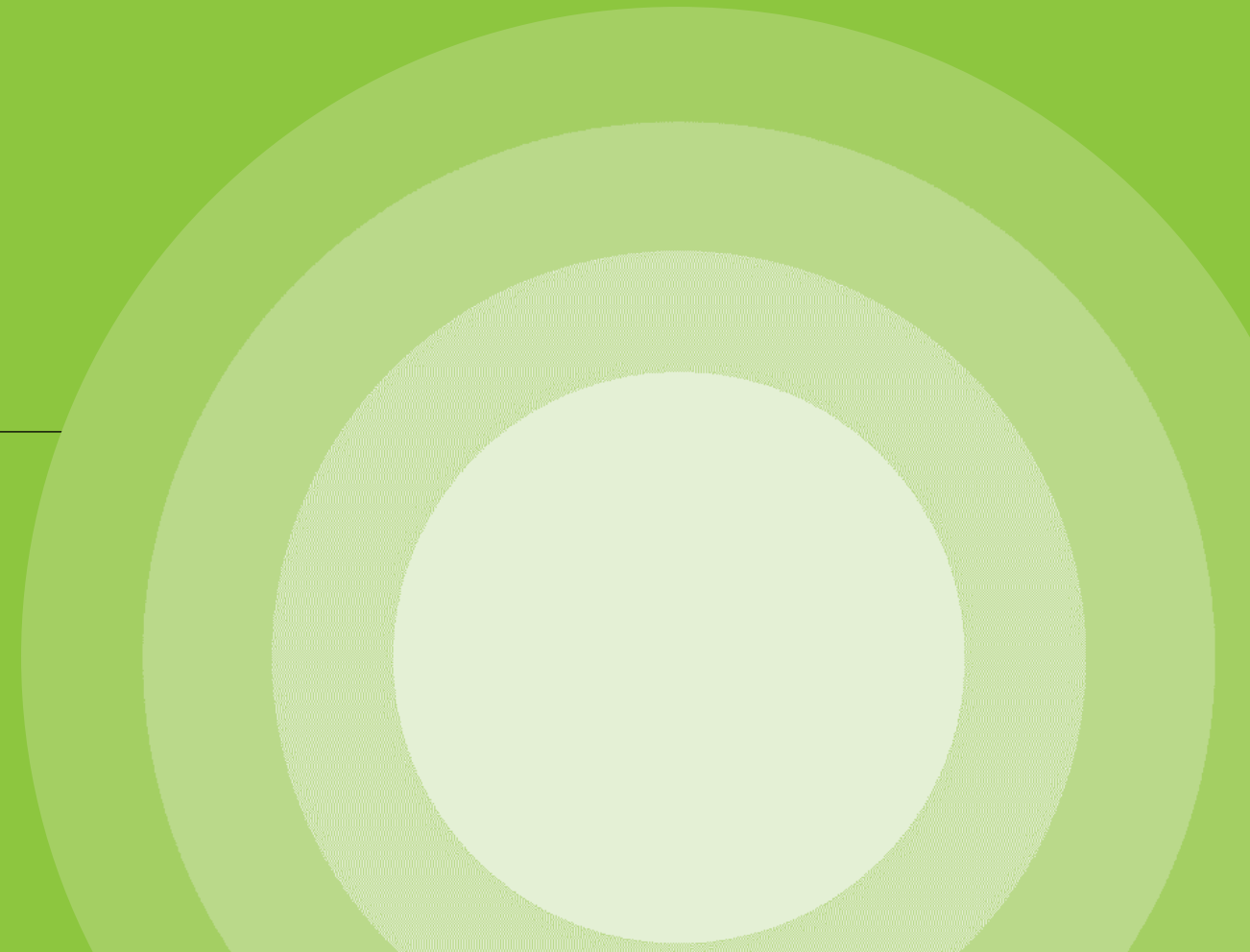
A decorative graphic consisting of several concentric circles in various shades of green, centered on the right side of the slide.

Agenda

1. Transition Finance, CBI framework and extension of taxonomies,
Sean Kidney, Climate Bonds Initiative
2. How asset owners are using taxonomies and the work of Climate Bonds Initiative
Bertrand Millot, CDPQ
3. Asset owner working group and bond databases
Fabrizio Palmucci, Climate Bonds Initiative

CBI framework and extension of taxonomies

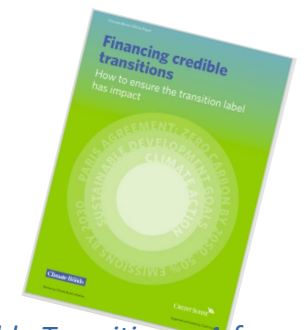
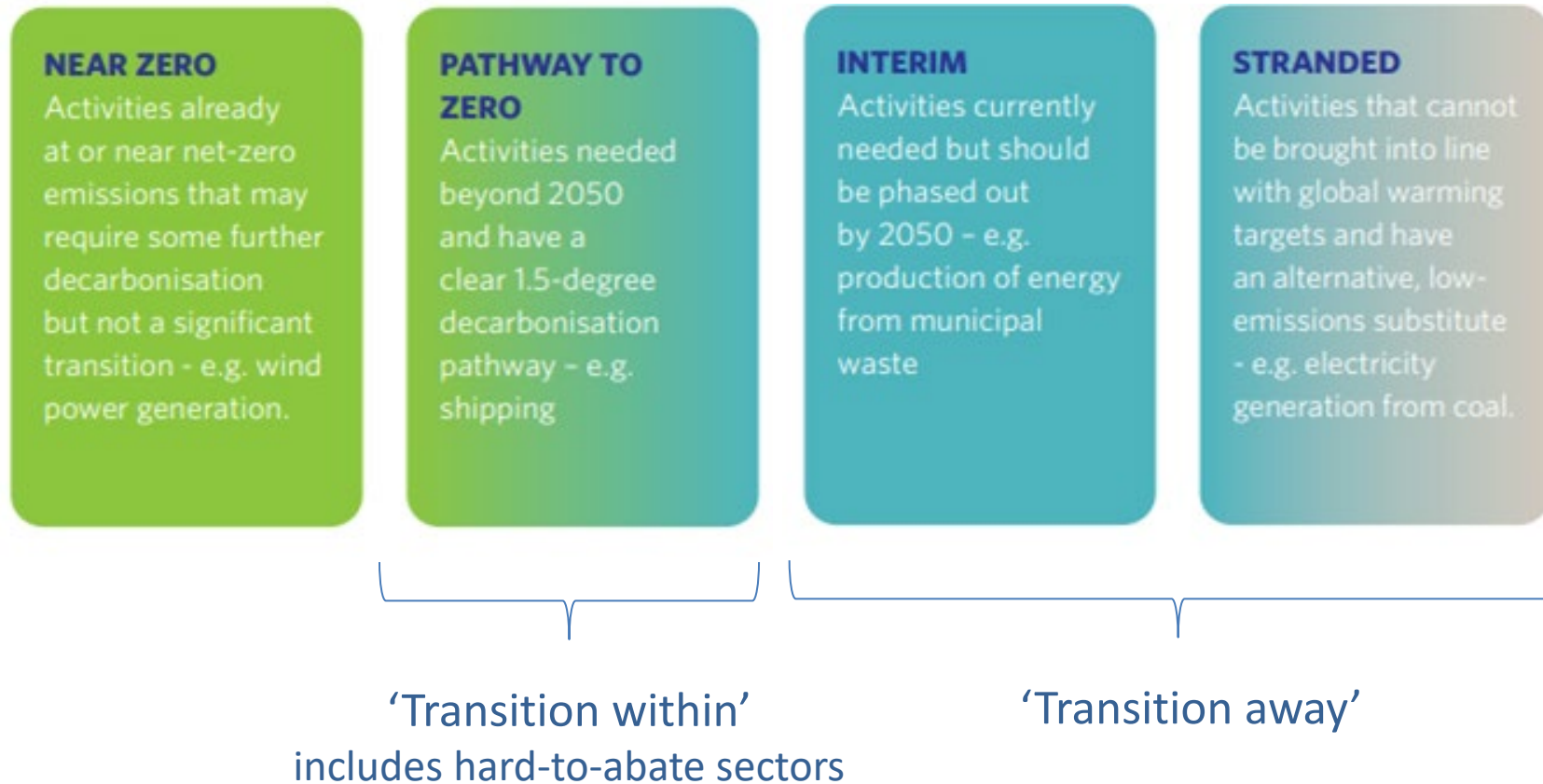
Sean Kidney



Two key words about transition

Credible & plausible

Transition is inclusive



Diving deeper: The framework is our Five Hallmarks of a Credible Transition



Paris-aligned targets

- Select sector-specific transition pathway aligned with Paris Agreement goals
- Company-specific KPIs that align as early as possible with that pathway
- Science based, address scope 1, 2 & 3 emissions and address short, medium and long term



Robust Plans

- Set the strategy and plan to deliver on those KPIs
- Prepare associated financing plan detailed cost estimates and expected sources of funding
- Put in place necessary governance frameworks to enact change



Implementation action

- Capital expenditure, operating expenditure
- Other actions detailed in the strategy



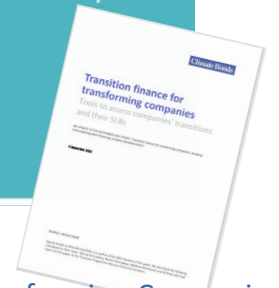
Internal reporting

- Track performance
- Re-evaluate and recalibrate KPIs as needed



External reporting

- a. External reporting and independent verification on the KPIs and strategy to deliver (per Hallmarks 1 and 2)
- b. Annual reporting of independently verified progress in terms of action taken and performance against targets (per Hallmarks 3 and 4)



The taxonomy

ENERGY	
Solar	
Wind	
Geothermal	
Hydropower	
Marine Renewables	
Electrical Grids & Storage	
Fossil gas	
Bioenergy	
Early coal phase out	

TRANSPORT	
Private transport	
Public passenger transport	
Freight rail	
Aviation	
Water-borne	
Biofuels for transport	

WATER	
Water monitoring	
Water storage	
Water treatment	
Water distribution	
Flood defence	
Nature-based solutions	

BUILDINGS	
Residential	
Commercial	
Products & systems for efficiency	
Urban development	

INDUSTRY	
Cement production	
Steel production	
Basic Chemicals production	
Hydrogen production	
Mining of metals and minerals	
Carbon Capture and Storage	

LAND USE & MARINE RESOURCES	
Crop production	
Livestock production	
Commodity supply chains	
Commercial forestry	
Ecosystem conservation & restoration	

WASTE	
Preparation	
Reuse	
Recycling	
Biological treatment	
Waste to energy	
Landfill	
Radioactive waste management	



Key to UoP certification

- Certification Criteria approved
- Criteria under development
- Due to commence

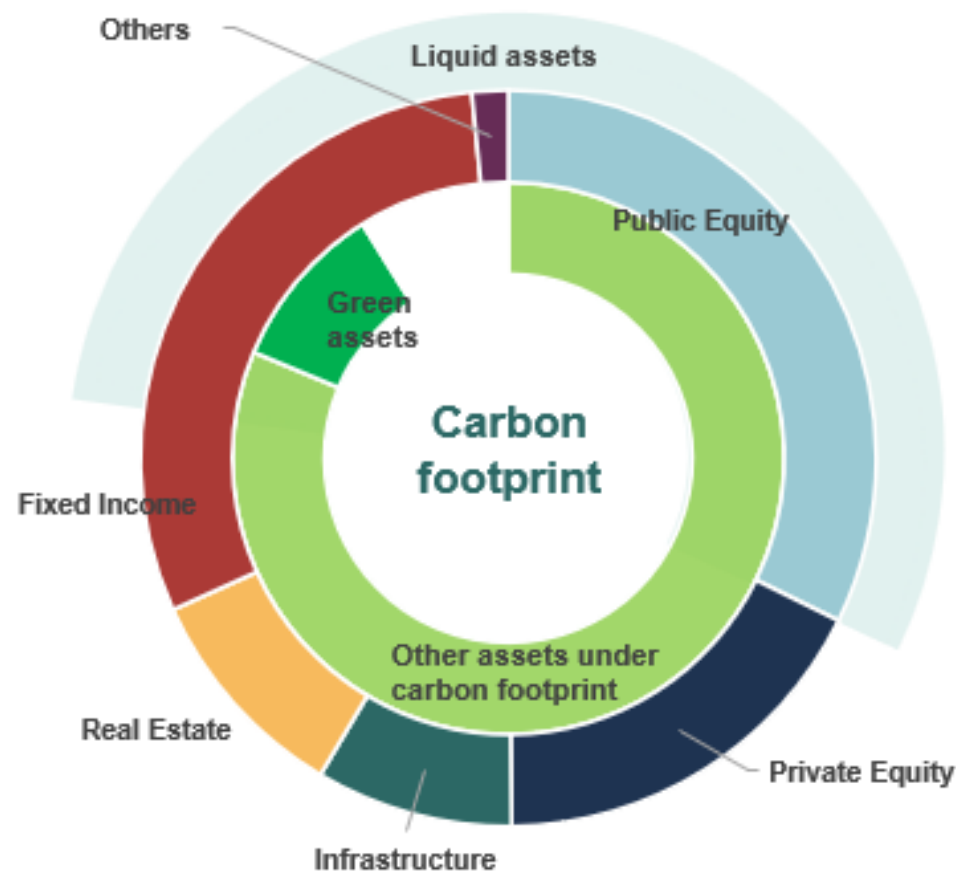
CDPQ Application

Bertrand Millot

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CDPQ at a glance



6 million + Quebecers
contribute to or receive benefits from
45+ major pension and insurance plans

Global Investor

Canada: 32%, USA: 35%, Europe: 14%
Asia-Pacific: 12%, Latin-Am.: 4%

\$400 B

As at 30 June 2022

Investment on the
basis of detailed
bottom-up
analysis

80%+

Internally managed

~90%

Of the portfolio
covered under the
carbon footprint



Evolution of CDPQ's climate strategy



	Factor climate change into every investment decision	Increase green investments <i>(2017 basis)</i>	Prioritize our portfolio's climate quality / finance the transition <i>(New in 2021)</i>	Decrease the portfolio's carbon intensity t CO ₂ /M\$ <i>(2017 basis)</i>	Leadership through commitment and influence
2017-2020	Included in due diligence review Carbon budget	\$39 B (x2.2) (2020 target: \$34 B) Renewables Green real estate Sustainable mobility		- 49% (2025 target: -25%)	Corporate commitment Participation in collaborative forums – Climate Action 100+ – Investors Leadership Network – NZ-Asset Owner Alliance
New 2021	Deep dives on: <i>Physical risk</i> <i>Transition risk</i>	\$54 B (x3) Existing sectors + Green fuels, H ₂ , batteries, etc.	\$10 B Transition envelope 2022 Exit of oil production	-60% 2030 Net-Zero Alignment	Peer engagement Participation in government brainstorming



Our low-carbon investments

LOW-CARBON INVESTMENTS

(in billions of dollars)



* Includes the new sectors from CBI's taxonomy.

3X
 more low-carbon investments
 by 2025 compared
 to 2017

We use the CBI taxonomy to define what is green. Main reasons include:

- Clarity and user friendliness
- Rigour
- Independence from CDPQ

Low-carbon investments in the portfolio

\$18 B

2017 STARTING POINT

\$39 B

2021 VALUE

\$54 B

2025 TARGET



Our envelope dedicated to the transition

- The magnitude of the climate challenge requires us to innovate and to address the highest-emitting industries in a constructive way.
- This envelope will reduce GHGs in the real economy by targeting sectors essential to the transition.
- We will help companies deploy measurable plans to decarbonate their operations.
- The selected companies must meet several specific criteria:
 - Be a new investment for CDPQ
 - Hold a robust decarbonization plan aligned with the Paris Agreement goals or a net-zero target
 - SBTi, or
 - Aligned with the CBI Transition Taxonomy
 - Obtain independent expert certification for this plan
- Transition envelope emissions are disclosed separately and follow decarbonation targets that are the sum of the targets of included companies.

\$10 B

ENVELOPE AIMED AT
DECARBONATING THE
HEAVIEST CARBON-EMITTING
SECTORS

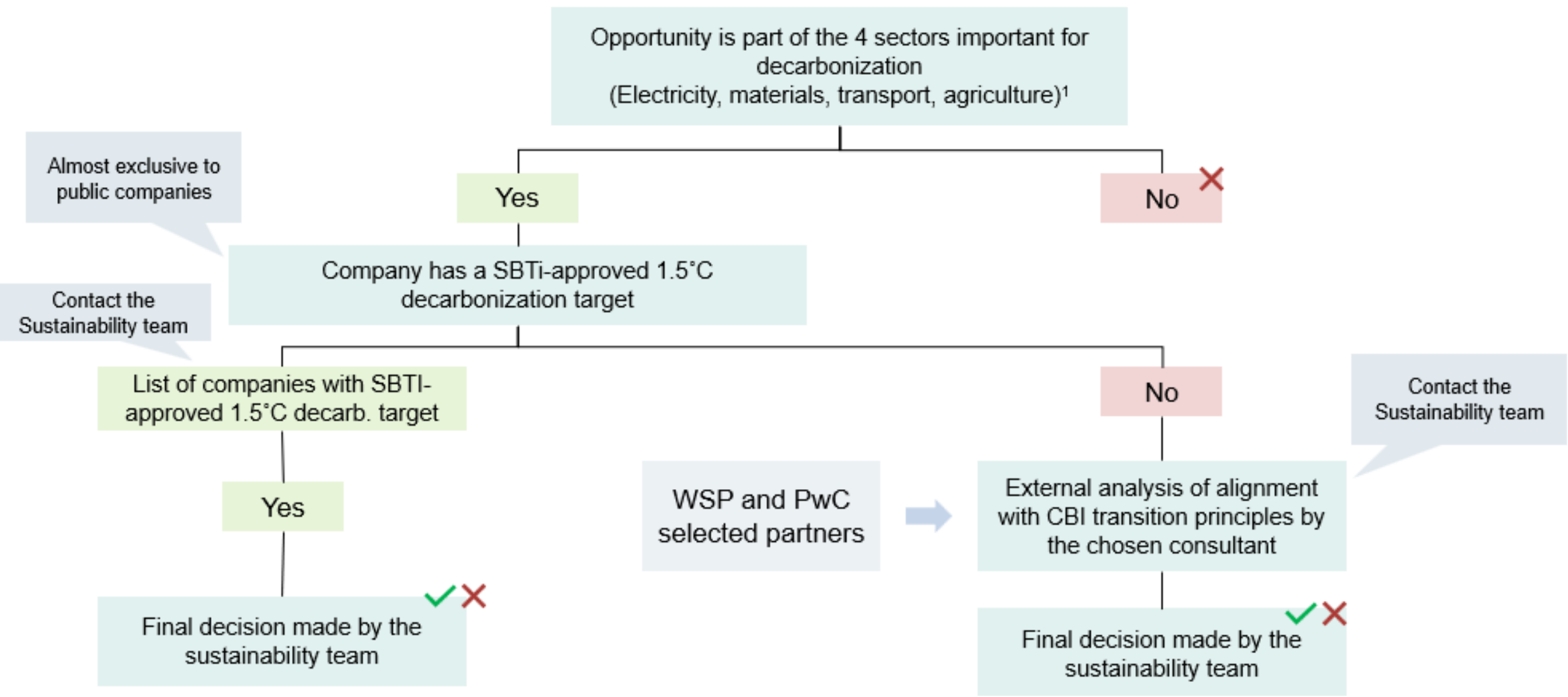
Examples of sectors:

- Raw materials production
 - Transportation
 - Agriculture
 - Electricity
-



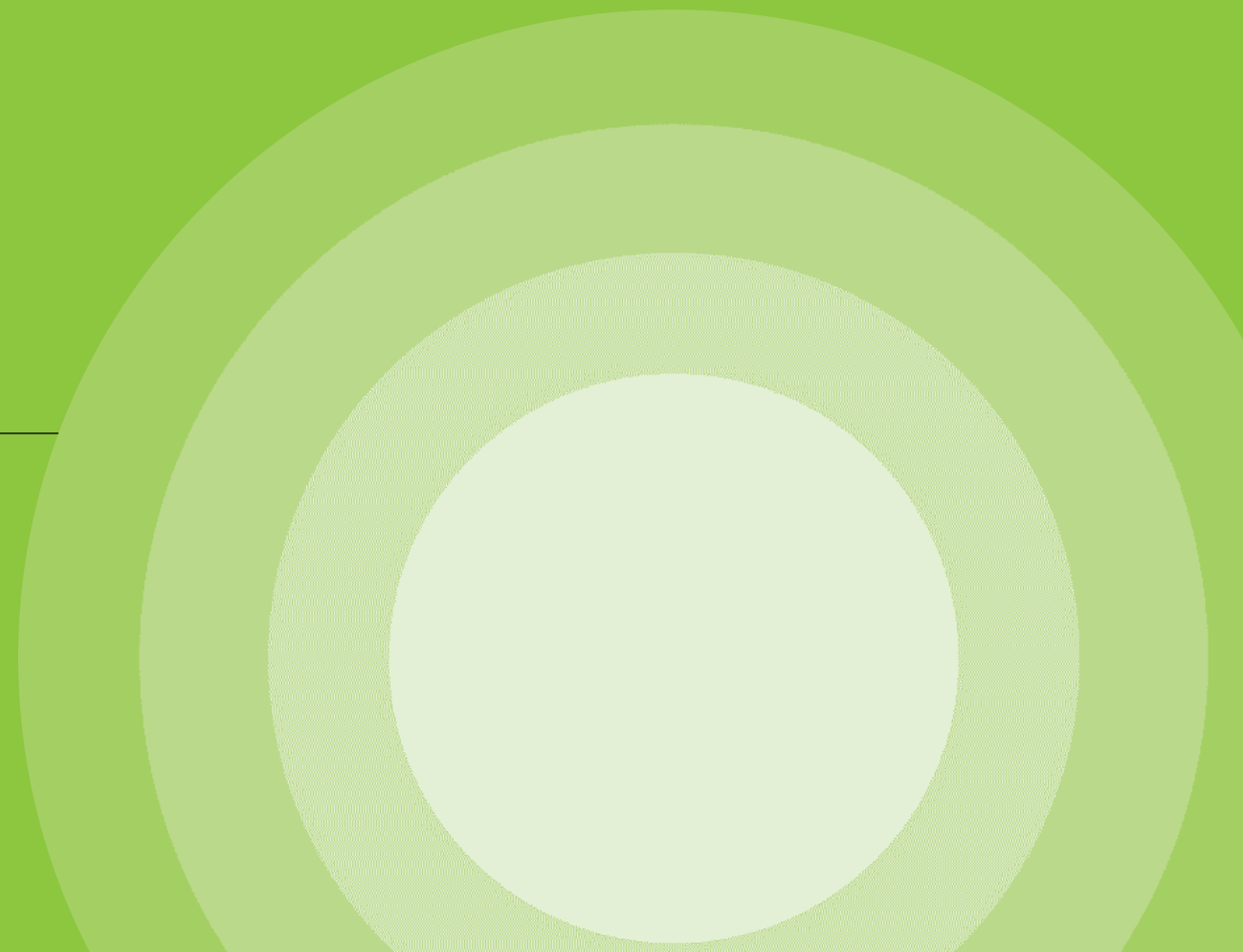
Transition envelope decision tree

For new opportunities



Working group, Tools & bond databases

Fabrizio Palmucci



How we work with asset owners?

<p>Thought-leadership & training</p>	<ul style="list-style-type: none"> • Transition. What is a credible transition? How to select investments? • Formal trainings on green bond, taxonomy, transition. <p><u>Example of topics:</u></p> <ul style="list-style-type: none"> • Criteria for Agri-food businesses (livestock, crops, etc.) • Coal decommissioning • Criteria for resilient investments • Social & sustainability screening • Hydrogen production and transportation
<p>Our green Taxonomy</p>	<p>Criteria for credible climate investing in 50 different activities. Especially helpful for project-based investments</p>
<p>Green bond, social, sustainability and other databases</p> <p>\$ 4.5 Trillion</p>	<ul style="list-style-type: none"> • Lists and qualitative analysis of thematic bonds. • Used to by A.O for themselves and as a criteria for mandates.

Asset Owner working group invitation Q1 2023

First meeting, Q1- 8th of March 3pm London

- Defining a credible transitions and avoid greenwashing. Case studies of green bonds and Sustainability-linked bonds

Other meetings

- Green bond training
- Taxonomy training
- Transition in Asia

Our bond databases

Activity/project analysis

GREEN BONDS

- Checks for alignment of Use of Proceeds of all bonds labelled as Green (using CBI Taxonomy)
- Global, all currencies, jurisdictions and instrument sizes

Entity-level analysis

CLIMATE ALIGNED DATABASE

- Analysis of Vanilla bonds (not labelled as green) from corporates whose activities are de facto green

Coming soon: Sustainability Linked Bonds

- Issuer level analysis
- Analysis of Vanilla bonds (not labelled as green) from corporates whose activities are de facto green

Other

SOCIAL AND SUSTAINABILITY

- Bond level analysis
- Comprehensive list of all labelled bonds with proceeds going to social or sustainable categories
- Global, all currencies, jurisdictions and instrument sizes

C. 30% of green bonds are not climate-aligned today

- The CBI database used by most index providers and asset managers to verify the quality of the use-of-proceeds (JP Morgan, S&P, Solactive, etc.)

CBI_Alignment	Date	Entity Name	ISIN	USD Issued	Theme	Non_Alignment_Reason
No	07/07/21	Visa	US92826CAP77	500mn		<ul style="list-style-type: none"> Efficiency gain only 15% Clean mass transportation. Are these electric? Education and awareness to new technological implementations of Visas offerings?
Yes	17/09/21	KFW	XS2384732090	20mn	Energy, Buildings	

Case study: non-aligned green bond

Visa Corporation

- First consumer finance company to issue green bond in 2020, USD3.25bn (three-part transaction, one green tranche)
- Financing e.g.:
 - Green buildings
 - Renewable energy
 - Sustainable water and wastewater management
 - Projects supporting sustainable behaviours
- Bonds **excluded** for lack of information relating to building energy efficiency improvements, clean transport criteria, proposed training, and hydropower (power density) metrics.

Visa, Con Edison Green Bonds Fail to Meet Standards, CBI Says

- Debt sold by Boston Properties, municipalities also fall short
- CBI says excluded dollar-denominated bonds aren't good enough

By Caleb Mutua

(Bloomberg) -- Visa Inc. and Consolidated Edison Inc. are among a growing list of blue-chip US companies to be told their green bond offerings aren't up to snuff.

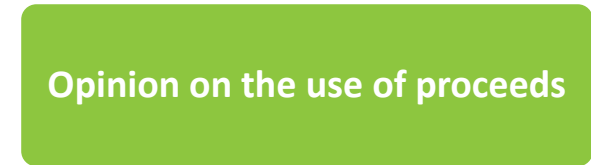
For the first time in its 13-year history, the Climate Bonds Initiative, an influential London-based research organization focused on the \$4 trillion ethical debt market, is publicly identifying more issuers that fail to meet its standards for environmental impact or transparency.

Along with Visa and Con Edison, bonds from Boston Properties Inc. also fell short. So did a handful of dollar-denominated bonds issued by foreign companies and municipalities.

It's a consequential snub. Many of the world's green bond indexes, including those designed by Solactive AG, S&P Global Inc., FTSE Russell and JPMorgan Chase & Co., rely on CBI's list of approved green bonds as a preliminary filter for investment decisions.

The Green Bond Database and its Methodology

Use of proceeds screening for all bonds regardless of external review (e.g. SPO) or ICMA GBP alignment statement



We identify labelled bonds for example via:

- Proprietary web scraping
- Data vendors (Bloomberg, Refinitiv, Wind)
- News releases
- GSS listing segments on exchanges
- Financial regulator platforms
- CBI network (underwriters, issuers, external review providers..)

100% net proceeds need to be used for eligible activities, assets, projects, etc. (Climate Bonds Taxonomy, Social & Sustainability Bond Methodology)

Climate Bonds Taxonomy

The Climate Bonds Taxonomy identifies the assets and projects needed to deliver a low carbon economy and gives GHG emissions screening criteria consistent with the 2-degree global warming target set by the COP 21 Paris Agreement. More information is available at <https://www.climatebonds.net/standard/taxonomy>.

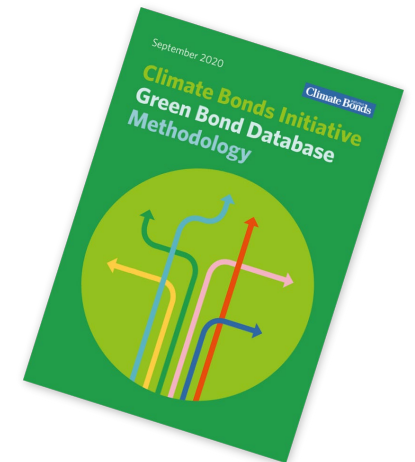
ENERGY	TRANSPORT	WATER	BUILDINGS	LAND USE & MARINE RESOURCES	INDUSTRY	WASTE	ICT
Solar	Private transport	Water monitoring	Residential	Agriculture	Cement production	Preparation	Broadband networks
Wind	Public passenger transport	Water storage	Commercial	Commercial Forestry	Steel, iron & aluminum production	Reuse	Telecommunicating software and service
Geothermal	Freight rail	Water treatment	Products & systems for efficiency	Ecosystem conservation & restoration	Glass production	Recycling	Data hubs
Bioenergy	Aviation	Water distribution	Urban development	Fisheries & aquaculture	Chemical production	Biological treatment	Power management
Hydropower	Water-borne	Flood defence		Supply chain management	Fuel production	Waste to energy	
Marine Renewables		Nature-based solutions				Landfill	
Transmission & distribution						Radioactive waste management	
Storage							
Nuclear							

● Certification Criteria approved
● Criteria under development
● Due to commence

10/2020

Classify bonds as:

- Aligned with CBI green definitions
- Non-aligned (Excluded), or
- Pending



Join the conversation...

A.O. dedicated workshops

- First meeting, 8th of March. Defining a credible transitions and avoid greenwashing. Case studies of green bonds and Sustainability-linked bonds

Other activities

- Invitation to join our monthly roundtables
- Deep-dives on new sector criteria (ex. coal-decommissioning, agriculture, hydrogen, etc.)
- 2 free tickets to our hybrid annual conference
- Access to Bond Databases subject to cost

Fabrizio.Palmucci@climatebonds.net

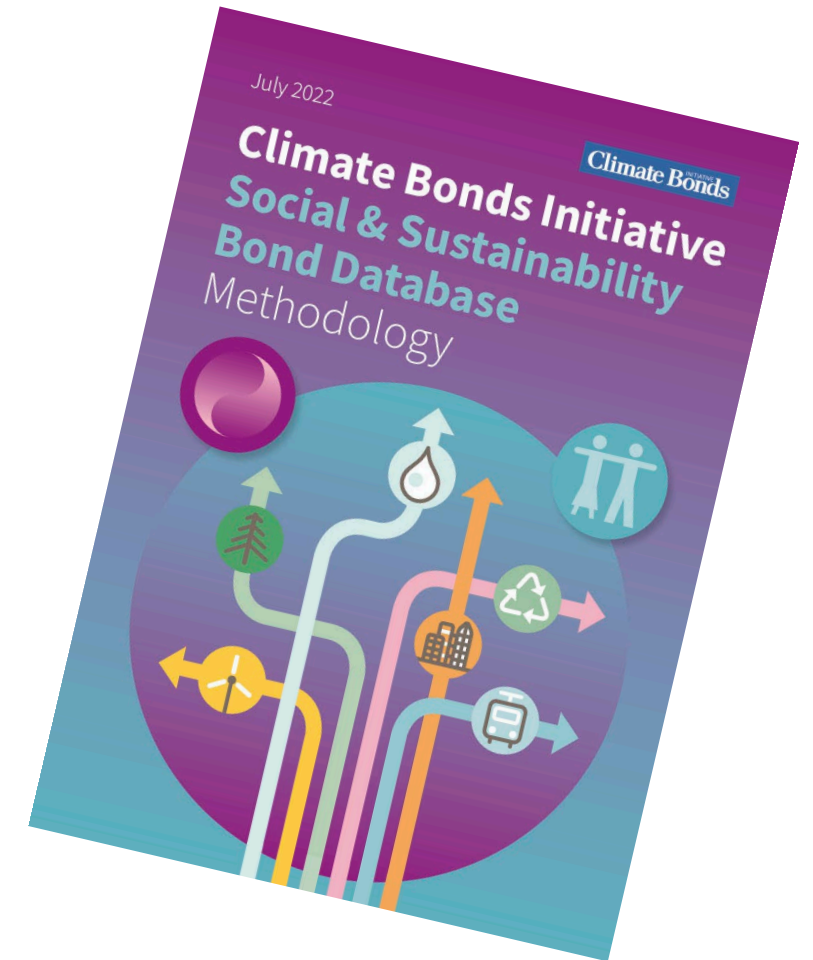
Partnerships@climatebonds.net

Thank you - Q&A

Social & Sustainability Bond Database Methodology

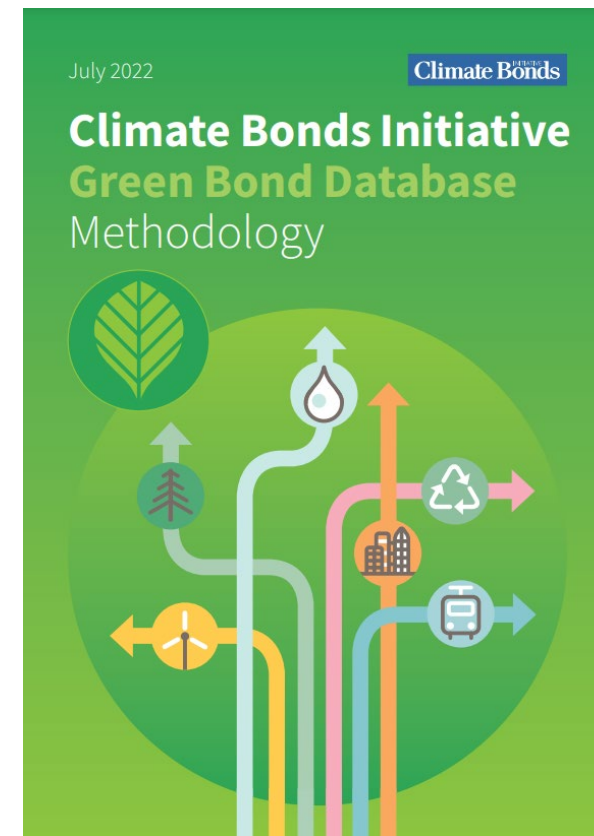
Ensuring credibility in a dynamic market

- Methodology available to Partners and online (August)
- Tracking, classification, and screening:
 1. Use of proceeds – green and social categories
 2. SDG mapping at bond level
 3. **Minimum climate safeguards**
- Biannual update frequency in line with green bonds
- Expert consultation
- SLBs – further development underway



Climate Bonds' Green Bond Database Methodology update

- Tighter criteria for more established sectors
- Closer alignment with the EU Taxonomy
- More disclosure
- Eligibility changes
- Clarity on R&D and pureplay entities
- Biannual updates via expert consultation
- Link to latest [methodology document](#)



Case study: non-aligned green bond

China Petrochemical Corporation

- CNY1.1bn, 2021
- Green Bond Second party opinion: Lianhe EQ
- Use of proceeds: Solar panels, geothermal, etc. that are built on oilfields

Classified as not in line with Climate Bonds' green definitions, bond **excluded** from database

5/26/2021

China's 'Green Bonds' Often Look More Like Regular Bonds - WSJ

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<https://www.wsj.com/articles/chinas-green-bonds-often-look-more-like-regular-bonds-11622027904>

MARKETS

China's 'Green Bonds' Often Look More Like Regular Bonds

In some cases, up to half the proceeds go to financing companies' day-to-day operations



Chinese companies have issued more than \$20 billion worth of green bonds this year.

PHOTO: QILAI SHEN/BLOOMBERG NEWS

By [Frances Yoon](#)

May 26, 2021 7:18 am ET



Listen to this article
7 minutes

Chinese companies are issuing green bonds at a record pace, though some analysts say the securities don't always meet the environmental requirements common in other parts of the world.

China, the world's largest producer of carbon dioxide, has committed to reducing its emissions. To fund the transition, its companies have embraced green bonds, which are typically designed to fund climate-friendly initiatives like switching to alternative energy from fossil fuels.

The guidelines for green investments are squishy in many places, and in China's domestic bond market they are more so. The Chinese market is regulated by several agencies, which apply different rules on the uses of the cash and disclosure. In some cases, up to half of the

