







Breakfast Inspiration Session - Green Bonds

16 March 2023











Welcome

a.s.r. asset management, Jack Julicher, CEO











NAB, Laure Wessemius-Chibrac, Managing Director











Impact Profile of Green Bonds

Impact Institute, Roland van Keeken, Manager Sustainable Finance & Adrien Gruson, Senior Associate

Practical examples of impact frameworks:

- a.s.r. asset management, Raquel Criado Larrea, Head of Sustainable Investing & Daniel van Dierendonck, Head of Fixed **Income Rates**
- ACTIAM, Mehdi Abdi, Head of Fixed Income
- PGB, Erwin Houbrechts, Manager Sustainable Investments

Q&A









Impact Institute, Roland van Keeken, Manager Sustainable Finance & Adrien Gruson, Senior Associate



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AGENDA



Introduction to Impact Institute

What is Impact? Theory & Practice

Impact Measurement and investment lifecycle

The impact profile of Green Bonds

Conclusions



IMPACT INSTITUTE | INTRODUCTION

Company overview





Amsterdam-based social enterprise



80+ employees: data, software, consulting, training...



10+ years of existence and active R&D



Diverse ecosystem, cross-industry foundations and working groups



Empowering organizations to realize the Impact Economy



Practical approach to Impact Measurement and Valuation



Two expertise levels: proprietary data tools and bespoke advisory services



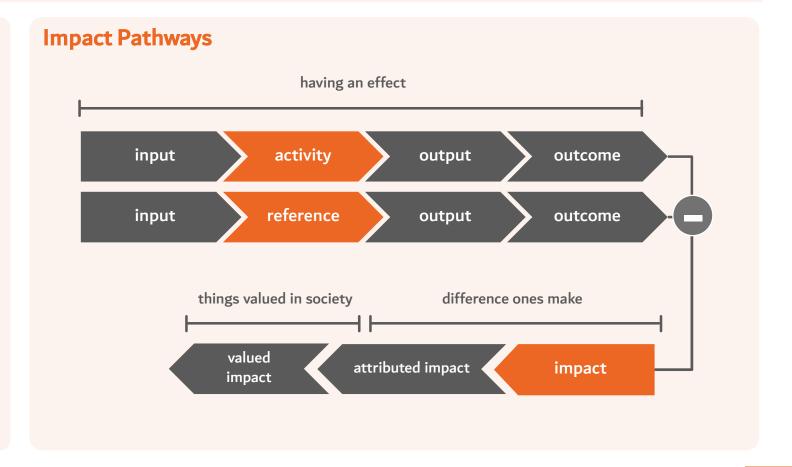
Focus on professional capital providers to the world economy

WHAT IS IMPACT? | THE THEORY



Impact is the difference one makes in the world by having an effect on the things valued in society







WHAT IS IMPACT? | IMPACT INVESTING

Definition



Investments made with the intention to generate positive, measurable social and environmental impact alongside a financial return (link).



Intentionality



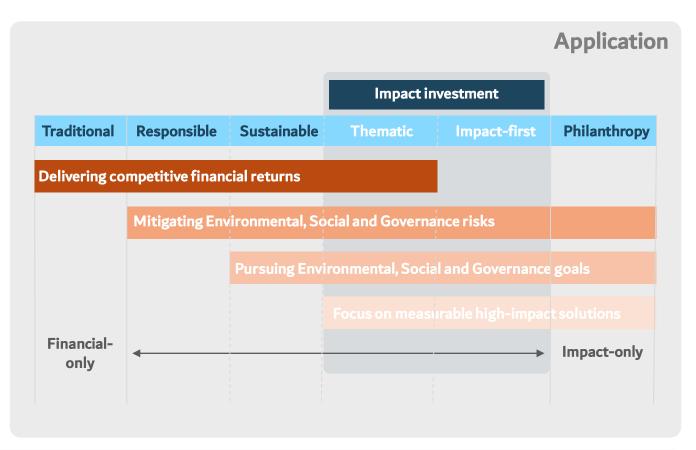
Use evidence and Impact Data in Investment Design



Manage Impact Performance



Contribute to the growth of the industry







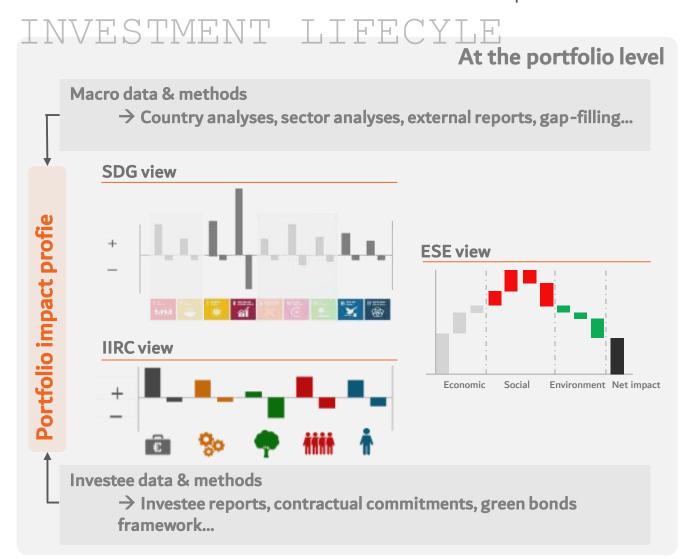




Examples



IMPACT MEASUREMENT | PORTFOLIOS PROFILE AND







GREEN BONDS

Green bonds requirements

Market Standards & Regulatory requirements







Investor-specific standards (non-exhaustive)



Focus specific topics / proceeds Benchmark and performance of money



measurement





Engagement with debtors

Benefits to impact measurement



Tailored bottom-up measurement



Enhanced visibility on impact



Integration into existing impact frameworks



Virtuous cycle for a strengthened reporting

Impact Institute approach



Method: Tailored consulting that combines green-bonds bottom-up data with top-down proprietary impact datasets





Applications: Investment Due Diligence; Investment Selection; Portfolio Construction; Investee engagement and recommendations; High-level impact strategy



CONCLUSIONS



Roland van Keeken
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Adrien GRUSON
Senior Associate
adrien@impactinstitute.com











a.s.r. asset management, Raquel Criado Larrea, Head of Sustainable Investing & Daniel van Dierendonck, Head of Fixed **Income Rates**







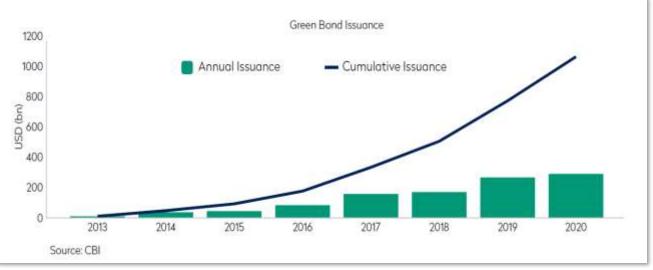
ASR Vermogensbeheer

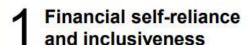
Green Bonds

Because we don't own the planet but we may pass it on to future generations

Green bonds, why?









2 Vitality and sustainable employment



3 Climate change and energy transition



- <u>Societal challenge</u>: action is needed to mitigate and adapt to climate change and foster the energy transition
- Our added value: helping clients with the prevention or reduction of climate risks and enable the energy transition by our investments and products and services
- Examples of products & services:
 Sustainability covers in home insurances, sustainable repair service, the 'Verduurzamingshypotheek' (to make your home more sustainable), impact investments

a.s.r.

a.s.r. Responsible Investing



governance / policy

- Policy based on international standards (OECD, UNGP's, etc)
- Applied on all asset categories
- Applied on all assets managed by AVB
- International Corporate Social Responsibility (ICSR) agreement for insurers
- ESG committee on quarterly basis



Companies

Weapons

Gambling

Tobacco

>20%

exclusions

Controversial activities:

Thermal coal mining

Nuclear energy: >50%

Controversial behaviour:

UN Global Compact

Worst performers on

environment, democratic freedom and corruption

violations

Countries

Fossil exit-strategy

Unconv. oil & gas: >5%

Coal fired power production:

esg integrationpositive selection

Companies

- · Above average ESG scores
- Positive selection of companies performing well on ESG categories such as labour rights, environment, forward looking carbon data, corporate governance, human rights
- Optimalisation op kwaliteitsbedrijven

Countries

 Positive selection of countries with high score -1st quartile - in SDG-index

Companies

 Engagement for monitoring: continuous dialogue with management of companies

active ownership

- Engagement for influencing on topics such as global compact violations, living income, climate, biodiversity and deforestation, sound social management
- Voting at AGMs (~ 97%)

Countries

 Engagement with governments on for example new legislation

🗞 im

impact investing

- Investments in sustainable sectors and companies aligned to the SDG mapping from the UN
- For all asset classes: private debt, structure credits, private equity, listed fixed income, listed equity, mortgages, real estate
- Targeting at for example clean energy, clean tech, health, social enterprises, infrastructure projects
- Impact investing year-end 2022: € 2.7 billion

meten & rapporteren

- Focus op transparantie and accountability in various ways and platforms: corporate website, (kwartaal-)rapportages, annual report including 'limited en/of reasonable assurance' on ESG policies and implementation
- Compliance with sector or regulatory standards such as TCFD, Klimaatakkoord, IMVO or SFDR

a.s.r. Responsible Investing since 2007



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#Q#

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a.s.r. & Green Bonds: 3 perspectives



a.s.r. & Green Bonds, as Asset Owner



- ✓ Set targets at Executive Level
 - Include **all asset classes**: 'intrinsically' and 'embedded'. E.g. As insurance company the vast majority of the balance sheet is exposed to listed fixed income (both credits and government bonds).
- ✓ Use the NL-NAB guidance to determine the impact investing ambition
 - "Dutch institutional investors should immediately make a public commitment to at least double their impact investing allocations to a minimum of 10% of their assets under management by 2025."
- ✓ Adhere to recognised definition
 - **GIIN:** "Impact investments are investments made with the **intention** to generate positive, **measurable** social and environmental impact alongside a financial return.
 - Aligned and agreed with external accountant / auditor (EY + KPMG)
- ✓ Publish progress and results
 - Highest level: Reasonable assurance

a.s.r. & Green Bonds, as Asset Owner



- Implementation in the systems to ensure objectivity and consistency:
 - Bloomberg / SimCorp Dimension / GAIN
 - Green bonds must comply with ICMA Green-, Social- or Sustanable Bond Principles or with the Climate Bond Initiative Green Bond Methodology and/or with the EU Green Bond Standard (as much as known)
 - Four minimum criteria (cumulative):
 - 1. Process for projects evaluation and selection in lijn with GB framework
 - 2. Management of the proceeds
 - 3. Periodic reporting
 - 4. Assurance via Second Party Opinion (SPO)

Intentionality:

The issuance of a Green Bond bring along an environmental 'intention'
 where potential 'greenwashing' is avoided by objective SPO

Measurement:

- AUM target at executive level
- Impact measurement via external provider (tbc): aantal selected criteria:

Unit of Measurement

GHG Emissions Avoided (Tonnes CO2)

No. of people benefitted

Renewable Energy Generated (Mwh)

Energy Capacity Added (MW)

Energy Savings (Mwh)

GHG Emissions Savings (Tonnes CO2)

Annual Volume of Wastewater Treated or Avoided (M3)

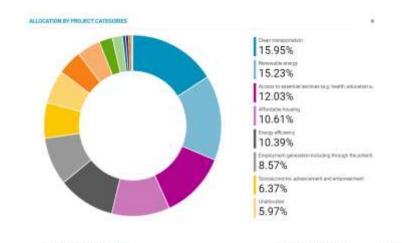
GHG Emissions Reduced (Tonnes CO2)

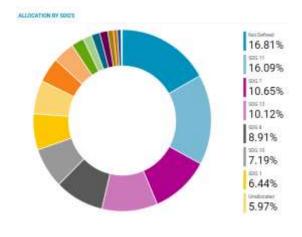
a.s.r. & Green Bonds, as Asset Manager

SFDR



- Built op Asset Owner ervaring
 - Compliance met SRI policy (exclusions and best in class) and GB requirements (objective externe data)
- New Green Bond Fund structure for a.s.r.
 Affiliated business (a.s.r insurance products) in progress
- Focus on (Quasi-) Sovereign Green
 Bonds, and qualified as art. 9 according to
 SFDR EU regulatory framework





	UNIT OF MEASUREMENT	AGGREGATED VALUE	#ISSUER TYPE	#SECURITIES	#ISSUERS	#COUNTRIES
٠	Renewable Energy Generated (Mwh)	82.485,33	5	71	19	5
*	Energy Avoided (Mwh)	253,53	2	5	2	2
٠	GHG Emissions Avoided (Tonnes CO2)	24.282,6	6	88	26	6
٠	Biodiversity other (tonnes)	346,83	1	4	1	1
٠	Energy Savings (Mwh)	7.215,95	7	56	13	7

Dilemma's: Issuer vs. Issues?

Possibilities on impact measurement Carve out of investment universe. For illustrative purposes

a.s.r. & Green Bonds, as Issuer



Green Finance Framework

 a.s.r. created a Green Finance Framework under which it can issue debt in alignment with ICMA Green Bond Principles (GBP) and UN Sustainable Development Goals





- Debt will be used to invest in projects related to; Renewable Energy, Green Buildings, Energy Efficiency and Clean Transportation
- Unique feature in the a.s.r. framework is the so called 'maximum refinance period and look forward period':



Investors have certainty that a.s.r. invest in future and recently purchased green eligible assets.

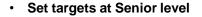
- Second-Party Opinion from Sustainalytics on the alignment of the framework with the Green Bond Principles
- Furthermore, the Project categories can be mapped to 17 EU-taxonomy activities, from which 15 fully align and 2 partial align with the Technical Screening ("TSC") and the Do No Significant Harm ("DNSH") Criteria.



Sustainability-linked Revolving Credit Facility ("Green RCF")

• The Green RCF enables a.s.r. to borrow cash if necessary, and it is linked to a.s.r. achieving it's non-financial KPI's: If a.s.r. achieves the target values set on the KPI's, a.s.r receives an interest discount (or penalty if KPI targets are not met)

a.s.r. & Green Bonds: take-aways



 Ensure objective and external measurement to avoid conflict of interest

- · SPO to avoid greenwashig
- Clarify ambition (see dilemma Issuer/Issue)

- Set targets at Senior level
- Consider the 10% target (Include all asset classes, maximize your impact)
- Report publicly on the progress External 'Reasonable assurance' (highest level)



- Set targets at Senior level
- If Green bond ≠ Green Issuer, don't issue (or invest)
- ESG is developing, so review your Green framework (update frequently)
- It's not just regulation, talk to investors and try to accomodate their wishes









ACTIAM, Mehdi Abdi, Head of Fixed Income





Actiam Green Bond Investing

Ccardano

actam

Content

- ACTIAM mission
- Sustainability Framework
- Green bond assessment
- Examples
- ESG dashboard
- Outlook

ACTIAM: sustainability integrated into ACTIAM's core values and solutions



Deliver investment solutions that maximise longer-term financial, environmental and social returns



The financial sector has a duty to lead the transition towards a sustainable society.



Focusing on risk, resilience and growth delivers better pension and investment solutions that benefit everyone

>25 years

sustainable investment experience

A+ scores

in all PRI sustainability categories



25+ SRI industry awards



under management

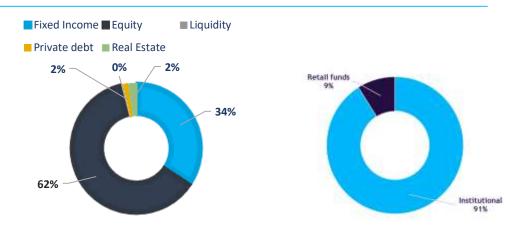


SRI manager by size

Part of Cardano Group



AuM breakdowns





ACTIAM: pioneer in responsible and impact investment

"specialised in socially responsible asset management with solid returns"

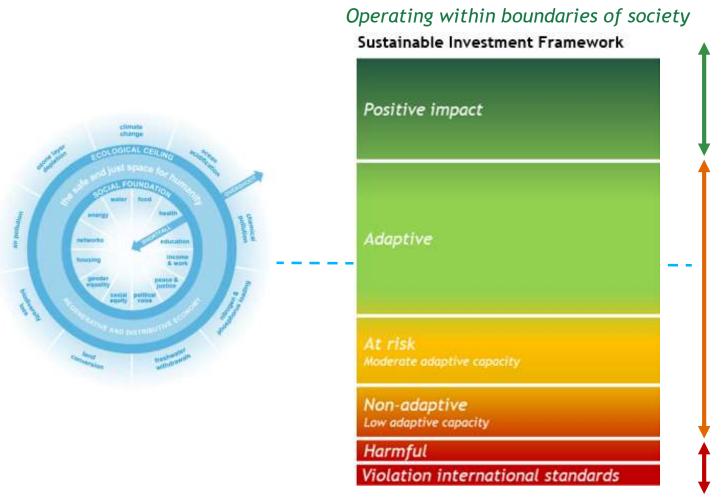
"taking into account the future, the environment and clean production methods, with living, working and living conditions"

"we are convinced that becoming aware of the quantitative limits of the environment around the world and the tragic consequences of chaos is essential for initiating new ways of thinking"





Framework: combining ethics, ESG integration and positive impact



Step 3 - Positive impact: Investing in solutions to make a positive and intentional contribution to the SDGs





Step 2 - ESG integration: Extent to which investments are exposed to material physical and transition risks







Step 1 - Exclusion: Do not invest in entities that violate our ethical principles





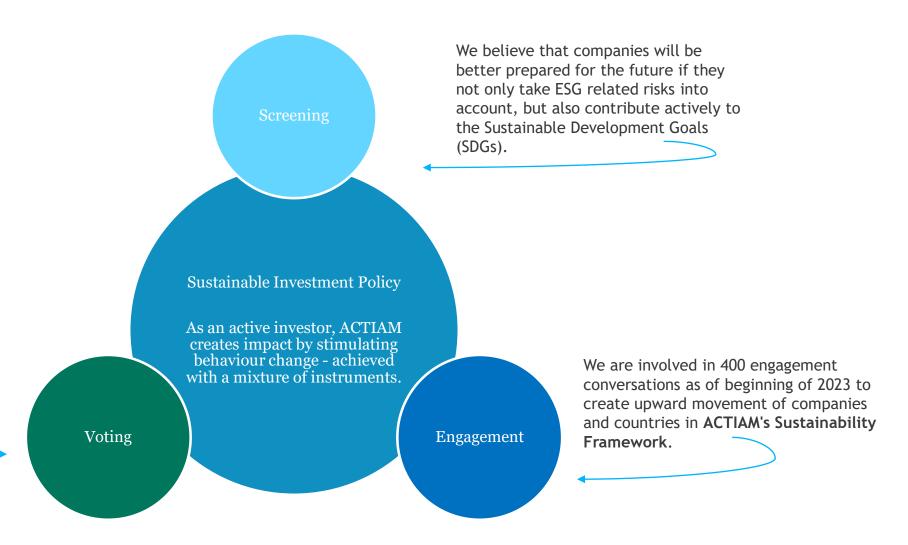
Operating outside boundaries of society



Active ownership: implementing our Sustainable Investment Policy



We vote in principle at all shareholders' meetings. When necessary, we submit our own resolutions, which can be on specific ESG-related subjects, such as remuneration based on a sustainability performance.





Sustainable Bonds: fundamental impact analysis

The use of proceeds or KPIs of sustainable bonds can directly be linked to the SDGs

Return, risk and liquidity comparable with other (grey) credits

Inhouse knowledge (involved since start in 2012 & member of GBP)

Assessed & approved sustainable bonds marked as Internal

Sustainable bonds in BM not approved marked as No Stamp

Green bonds: use of proceeds are used for climate, environmental and comparable projects

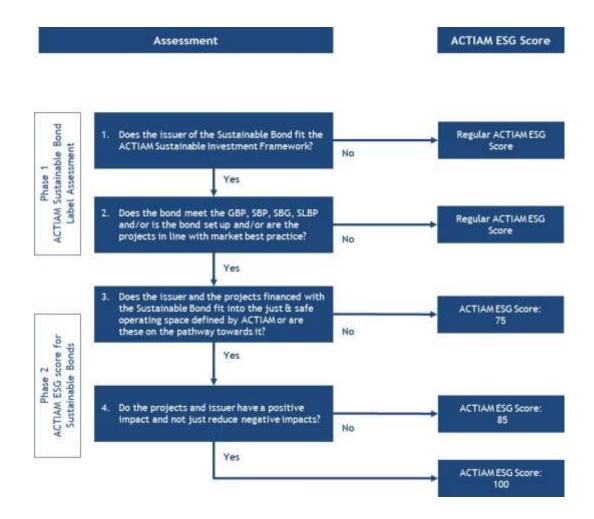
Social bonds: use of proceeds are for social projects

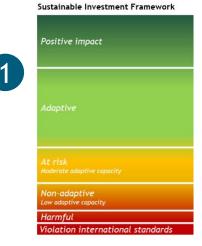
Sustainability bonds: use of proceeds combination of green & social projects

Sustainability linked bonds: general purpose bonds whereby ESG KPIs are linked to the coupon rate



Green Bond Assessment





Is the issuer not categorized as 'unacceptable behaviour' or 'non-adaptive'?

If the issuer is categorized as 'atrisk', are the proceeds then used to solve the risks identified?





Do the proceeds create positive value on at least one of the sustainability themes, without compromising other sustainability themes?

Are the proceeds used for topics material to the issuer?
Are the targets and projects sufficiently ambitious?

Is the issuer a transformational sustainability leader and do the projects make a significant contribution to this?



Example- Natwest Bank Green Bond

Investment summary

NatWest Group is the holding company of a leading banking group that provides retail, private and commercial banking mostly in the UK and Ireland. The majority shareholder of NWG is the UK government as a result of the government's bailout of the group in 2008. The government's ownership stake has declined to 52% and the government intends to exit the stake fully by 2026.

NatWest is prioritizing the following SDGs















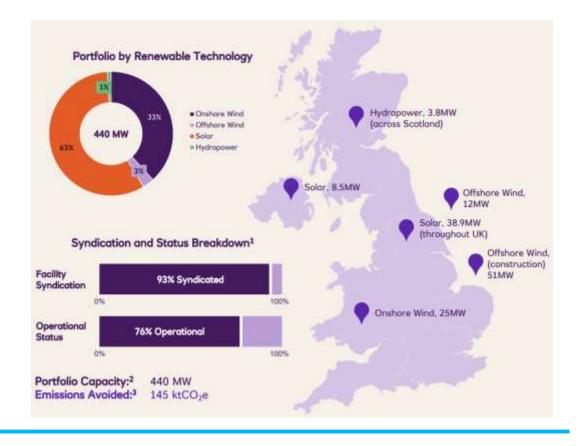


SDG 7 ICMA Category: Renewable Energy

Loans for the equipment, development, manufacturing, construction, operation, distribution and maintenance of renewable energy generation sources:

- Wind projects, including onshore and offshore wind energy projects
- Solar projects or photovoltaic energy projects
- Small-scale hydropower projects up to 20MW capacity as well as wave and tidal facilities

NatWest has selected SDG 7 for their Green bond





Example - Orsted Green Bond

Investment summary

Orsted A/S provides utility services. The Company engages in the development, construction, and operation of offshore wind farms, as well as generates power and heat from power stations. Orsted serves customers worldwide. Orsted is one of the worlds largest Green electricity producers.

Orsted is prioritizing the following SDGs



Orsted has selected SDG 7 for their Green bond

Green Financing

- The May 2022 update of Ørsted's green finance framework¹ included onshore wind projects and solar power projects as eligible projects, in addition to offshore wind projects.
- The May 2022 updated green finance framework also received the highest possible grading – a dark green shading – from CICERO Shades of Green¹.
- Ørsted has issued 18 green senior bonds and green hybrid bonds, totaling net proceeds of approx. 60 DKKbn, of which approx. 25 DKKbn were issued in 2022.
- 30.8 DKKbn has been allocated to 6 different eligible projects as of end 2021.
- Since 2017, all new Ørsted bonds have been issued in a green format.
- The full overview of use of proceeds can be found in Ørsted's annual green bond impact report



Project	Greatur Changhua 1 & 2a	Hornseg 2	Hormool	Walney Extension	Rose Bonk	Borkum Riffgrund 2
Country	TW	UK	UK	OR	UK	DE
Year of FID	2019	2017	2016	2015	2015	2016
No. of turbines	111	165	174	87	91	56
Orsted ownership	CHW0150% CHW02a100%	100%	50%	50%	50 %	50 %
Capacity(MW)	900	1,320	1,218	659	546	450
Energy generation 2021 (CWh)	+	-	4,612	2,168	2,038	1,348
Project status	Under construction	Under construction	Inoperation	in operation	Inoperation	In operation
Total allocated proceeds (DHOOn)	7,577	5,544	10,274	1,250	400	2,649
-						

Note: Ørsted's green finance framework and SPO can be found on our website: https://orsted.com/en/investors/debt/green-financing

Orsted



Example - Orsted Green Bond Impact

Green Bond Impact Report

Industry-leading sustainability ambition

2040

Net-zero emissions (scope 1-3)



2030

No later than 2030, all projects commissioned must have a net-positive biodiversity impact

Today

Ban on landfilling of wind turbine blades



Calculated avoided emissions

4.2 million tonnes CO2

Assuming annual power generation replaces fossil-fuel-based generation 1:1, the avoided emissions potential is 4.2 million tonnes carbon emissions from green bond allocations to projects in operation and under construction.



Calculated people powered

4.5 million people

The annual power generation from green bond proceeds allocated to projects in operation and under construction is equivalent to the power consumption of 4.5 million people.



Insights: ESG risks and (non-) financial performance made tangible

Indicative



The dashboard shows the (1) underlying risks due to climate-related damage storm, hail and flooding, and (2) transition risks as a result of the transition process to a climate-neutral economy.

Tracks progress over time regarding: active ownership, SDG alignment, financial and non-financial performance.

Show how portfolios complies with the recommendations from the Taskforce on Climate Related Financial Disclosure (TCFD), SFDR and Taxonomy.

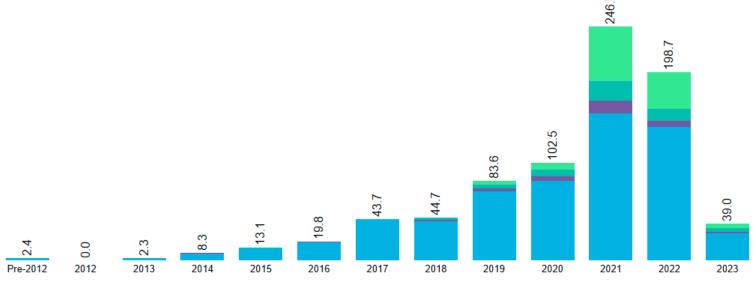
Positive and negative impact indicators are embedded.



Sustainable bonds: trends

Sustainable Debt Issued (\$bn) by Instrument Type

Click on any date or box below to filter all the charts



Trends EUR Sustainable debt Corporates

- Euro is the dominant currency; circa 50% of global market
- Sustainable bonds increasing part of corporate indices: circa 13% of Euro IG year end 2022
- Social is, and will stay, a small segment in the Corporate Sustainable bond market (larger in SSA market)
- Use of proceeds still concentrated in Utilities, Banks and Real Estate
- Sustainability-linked bonds break or make
 - from a diversification perspective important addition to the corporate market
 - Selected KPI's are lacking ambition
 - The step up is small but headline risk, spread widening potential is a risk when targets are not met



Green bond

Sustainability bondSocial bond

Sustainability-linked bond









PGB, Erwin Houbrechts, Manager Sustainable Investments



Asset owner perspective* - Background

Context¹

- Top 10 pension fund (approx. EUR 30B²), representing 16 sectors
- Mainly a DB-plan
- Risk-based capital requirements (FTK)

Investment objectives, beliefs & approach³

- "Offer participants a good pension, both financially as regarding the world in which they can enjoy their pension"
- Manage risks, incl. downside risks of having to cut pensions ('korten') or loosing buying power ('koopkracht'), by dynamic ALM, diversification, integrating sustainability factors in the investment process, etc.
- Balance performance, risks, costs and sustainability factors when making investment decisions
- Sustainability factors present risks and opportunities

*the views expressed during the session are personal and do not represent a formal view of Pensioenfonds PGB or PGB Pensioendiensten









- 1. https://www.pensioenfondspgb.nl/over-pensioenfonds-pgb/beleggen/
- 2. Indicative figures (January 2023)
- . Description is not exhaustive. Please see Home NL Pensioenfonds PGB | Pensioenfonds PGB for more details.

Matching

Mortgages

Return

Equity

Total

High yield

Cash & other

Investment grade credits

Real estate, infra & PE

Government, supranationals, IR overlay & cash

35%

13%

17%

5% 65%

44%

100%

Climate change: risks & opportunities

Manage physical risks & transition risks

- Human, capital and environmental costs resulting from floods, droughts, hurricanes, heat waves, etc.
- Stranded assets and other costs resulting from regulation

Climate action plan

- Plan in line with industry guidelines²
- Climate goals:
 - Exclude companies based on specific products (e.g. % thermic coal revenues or usage)
 - Reduce carbon footprint of investments in listed securities with 50% between 2020 and 2030
 - Invest in climate solutions (e.g. 9% matching portfolio invested in green bonds)

Green bonds definition

- Bloomberg methodology currently followed³
 - GBP guidelines regarding proceeds⁴, which are largely climate-driven
 - No proceeds tracking, reporting or external assurance requirements













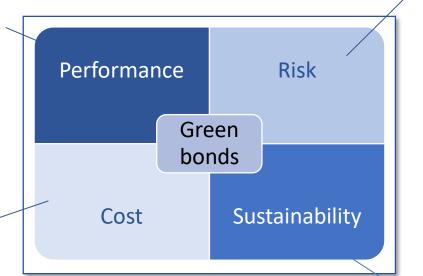
EU taxonomy – Sustainable activities¹

- https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/eu-taxonomy-sustainable-activities en
- 2. https://www.pensioenfondspgb.nl/globalassets/pdfs/duurzaamheid/klimaatplan-pensioenfonds-pgb_2022.pdf
- . Bloomberg (2021), Guide to green bonds on the terminal
- Green bond principles established by ICMA (https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/green-bond-principles-gbp/)

Green bond assessment: not perfect, but got to start somewhere

- No significant yield difference (greenium)¹
- Contributes to reaching climate objectives

• Identical as 'grey bonds'



- Credit risk (same issuers as 'grey' bonds, but solid governance required → avoid green washing and minimize reputational risk)
- Liquidity (growing market, stimulated by demand and regulation)
- Regulatory risks (e.g. EU green deal to stimulate sustainable investing & curtail green washing², ECB policy³) → need for solid, international standard for green bonds⁴
- Capital requirements
- Risk of not meeting pension fund climate targets? Growing market, stimulated by participants, regulators and central banks.
- Use of proceeds are formally earmarked
 ⇔ other types of sustainability-linked' bonds
- Does it deliver real impact (create additional capacity vs. replace non-sustainable activities), are the targets SMART and how material is the impact?









- 1. https://blogs.cfainstitute.org/investor/2019/10/08/green-bonds-vs-traditional-bonds/
- 2. https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/eu-taxonomy-sustainable-activities_en
 - . https://www.ecb.europa.eu/press/pr/date/2022/html/ecb.pr220704~4f48a72462.en.html
- Sustainable finance: Provisional agreement reached on European green bonds Consilium (europa.eu). Solid would imply
 up-front intention, SMART objectives, standardized impact-categories, standardized reporting, assurance on reported
 targets and results.



















Thank you!



Next Breakfast Inspiration Session:

Focus on Biodiversity

25 May, 8.00 am