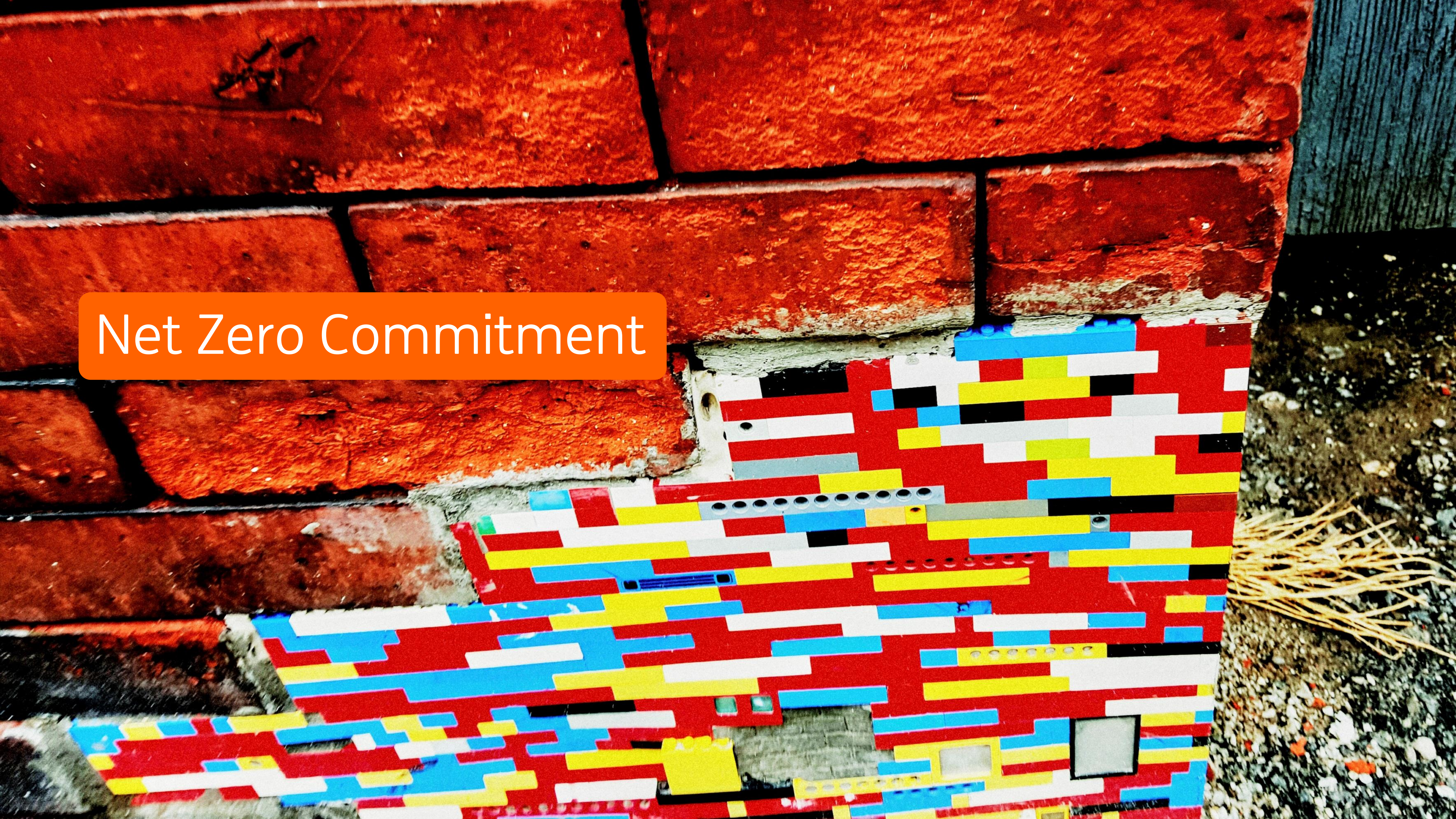
Sustainable Finance

The role of a bank in the transition


Net Zero Commitment

Terra: INGs pathway to net zero

Key principles behind Terra, our climate alignment strategy

Ambition: Steer our loan book towards net-zero by 2050 or sooner

Impact based

- Focus on most carbon intensive **sectors**
- Focus on changes needed in the sector by addressing the part of the **value chain** that will have the biggest effect

Science based

- Toolbox approach to apply best-fit methodology per sector
- Use of most up-to-date **climate science** from recognized and reputable authorities
  - IEA, ISF, GHG Protocol, PCAF
- Participate in and lead partnerships and working groups to **commit to guidelines** based on recent developments in each sector
  - NZBA, RMI
  - Sustainable Steel Principles, Poseidon Principles

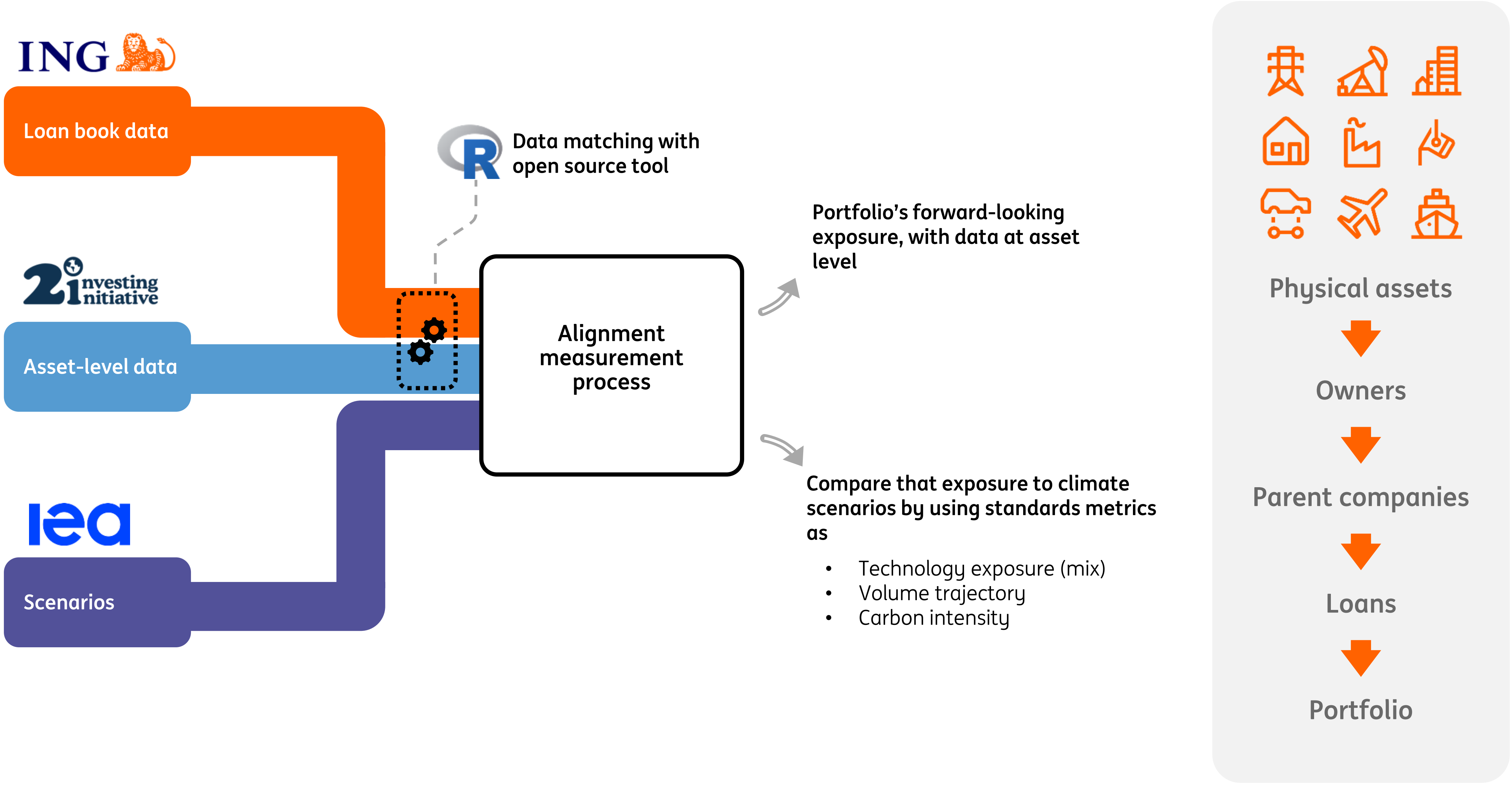
Engagement driven

- **Finance and support** clients who have ambitions to decarbonise their activities
- **Engage** with new ones that will allow us to further steer our portfolio towards net zero targets by 2050
- Terra to provide **insights** on current and forecasted performance of clients

Focus on the main drivers of emissions in the Sector value chains...

Power	**Power generation**	Distribution	Electricity off takers		
Oil & gas	**Upstream**	Trading	Midstream	Storage	Downstream
Commercial real estate	Suppliers	Construction	**Building owner**	Maintenance	Recycling
Residential real estate	Suppliers	Construction	**Home owner**	Maintenance	Recycling
Cement	Suppliers	**Production**	Recycling		
Steel	Mining iron	Transport	**Production**	End users	Recycling
Automotive	Suppliers	**Car producers**	Dealers	Maintenance	Recycling
Aviation	Suppliers	Airplane manufacturers	**Airliners (incl. leased aircraft)**		
Shipping	Suppliers	Ship builders	**Ship operator / owner**	Recycling	

Loan data is compared to externally verifiable science based data...



Sector specific benchmarks are used…

Scenarios

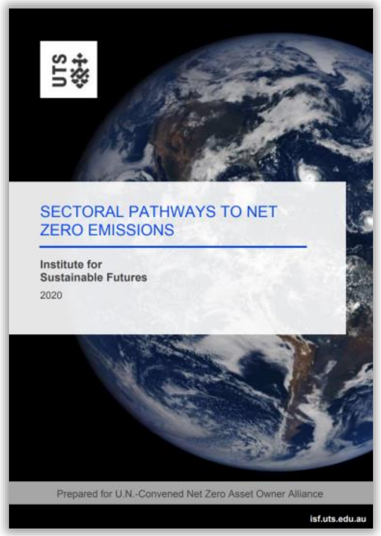
ISF-NZ
(Extends SDS for net-zero targets)

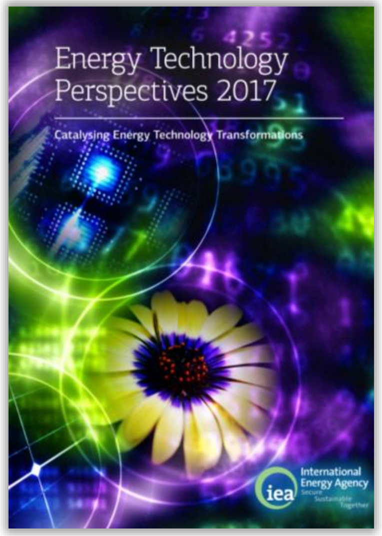
RTS, 2DS, B2DS
(B2DS: 50% chance to limit temp. rise below 1.75C)

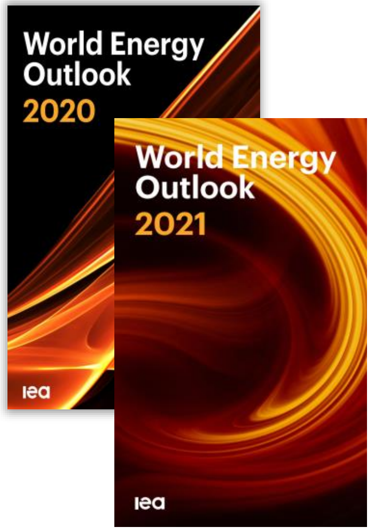
CPS, STEPS, SDS
(SDS: 50% chance to limit temp. rise below 2C)

IEA NZE2050
(Extends SDS for net-zero targets)

Documentation







Institute for Sustainable Futures (ISF NZ) 2020

Energy Technology Perspective (ETP) 2017

World Energy Outlook 2020 & 2021

IEA Net Zero by 2050 (2021)

Annex A (xlsx)

PACTA Methodology and Supporting Materials

PACTA Scenarios Supporting Document

A sector-based approach: methodology per sector

Sector	Outstanding in scope	Methodology used to measure portfolio	Scopes covered	Metric	Scenario / Pathway	Baseline		2021YE		Alignment score	Target vs. baseline	
						Year	Portfolio value	Convergence pathway value	Portfolio value		2030	2050
Power generation	€ 8.9 billion	PACTA	Scopes 1, 2	kg CO_2e / MWh	IEA NZE 2050	2018	335	289	223	-23.0%	-53%	-100%
Upstream oil and gas	€ 3.1 billion	PACTA Credit Application Paper	N/A	Outstanding amount in EUR million	IEA NZE 2050	2019	3,986	3,701	3,138	-15.2%	-19%	-69%
Commercial real estate	€ 10.9 billion	PCAF	Scopes 1, 2	kg CO_2 / m^2	Deltaplan DGBC	2019	51.4	48.1	43.7	-9.2%	-35%	-100%
Residential real estate	€ 297.0 billion	PCAF	Scopes 1, 2	kg CO_2 / m^2	CRREM 1.5° pathways/ IEA NZE 2050	2021	45.7	44.3	45.7	3.2%	-57%	-99%
Cement	€ 337 million	PACTA	Scopes 1, 2	t CO_2 / t cement	ISF-NZ	2020	0.704	0.681	0.709	4.2%	-31%	-69%
Steel	€ 2.9 billion	Sustainable Steel Principles	Scopes 1, 2	t CO_2 / t steel	IEA NZE 2050	2021	2.10	1.99	2.10	5.4%	0 * (~28%)	0 * (~94%)
Automotive	€ 2.4 billion	PACTA	Scope 3	kg CO_2 / km	IEA NZE 2050	2020	0.199	0.189	0.187	-0.8%	-49%	-98%
Aviation	€ 3.1 billion	PACTA	Scope 1	g CO_2 / passenger km	IEA NZE 2050	2019	88.2	82.9	130.4	57.3%	-33%	-87%
Shipping	€ 6.5 billion	Poseidon Principles	Scope 1	Alignment delta	Poseidon Principles	2020	-0.4%	0%	-6.0%	-6.0%	0% *	0% *

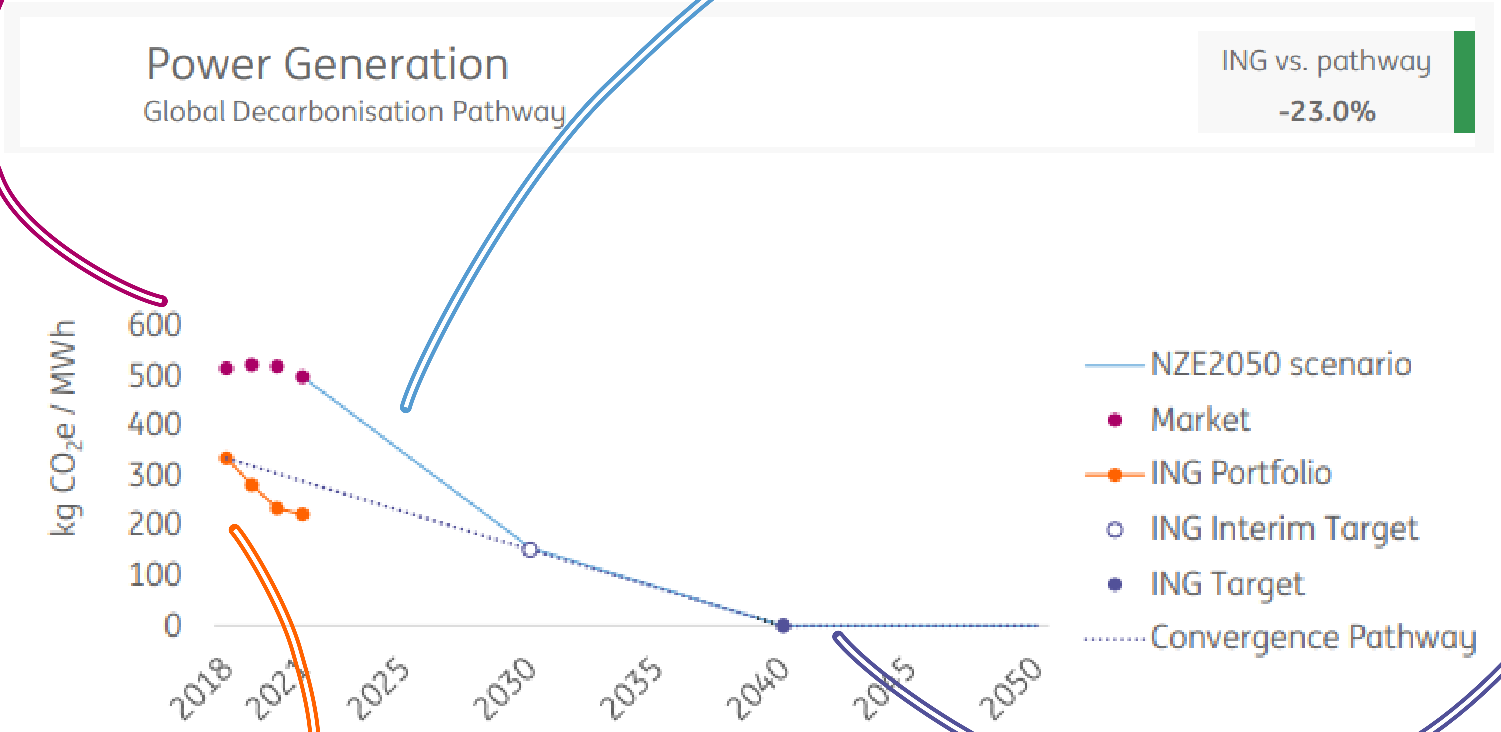
* Target for alignment score

Example: Alignment dashboard- Power generation

IEA net zero scenario: how the global market should develop to reach net-zero by 2050 (1.5°C)

Market portfolio: global peers' average portfolio

- On track: Under or equal to pathway or scenario
- Above pathway by up to 5%
- Not on track: Above pathway by more than 5%



ING target: where ING's portfolio needs be in 2040 to be aligned with net-zero by 2050

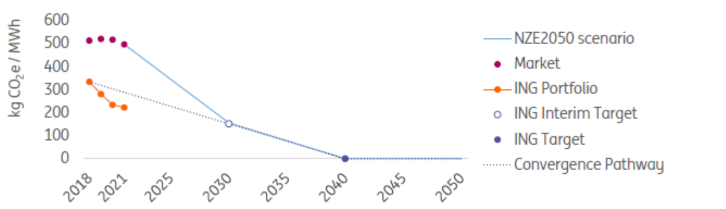
ING's lending portfolio

Climate Alignment Dashboard: Results YE2021

- On track: Under or equal to benchmark
- Above benchmark by up to 5%
- Not on track: Above benchmark by more than 5%

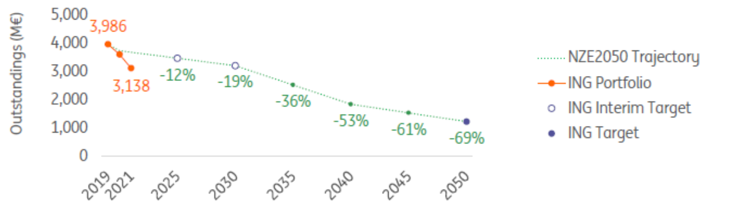
Power Generation
Global Decarbonisation Pathway

ING vs. pathway
-23.0%



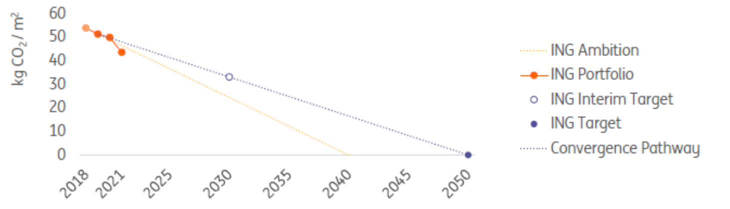
Upstream Oil & Gas
Absolute Financing Trend Reduction Pathway

ING vs. NZE2050
-15.2%



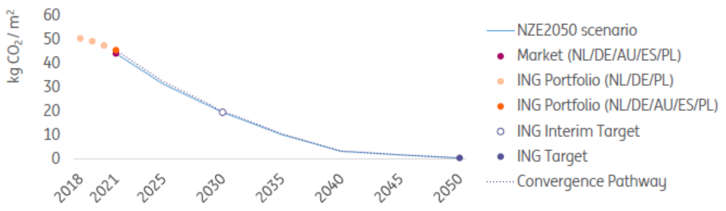
Commercial Real Estate
NL Decarbonisation Pathway

ING vs. pathway
-9.2%



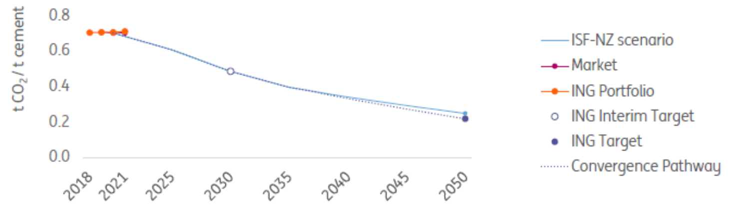
Residential Real Estate
Global Decarbonisation Pathway

ING vs. scenario
+3.2%



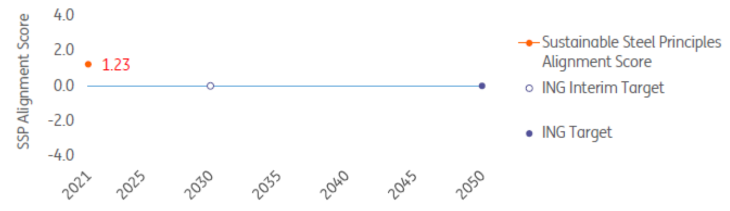
Cement
Global Decarbonisation Pathway

ING vs. pathway
+4.2%



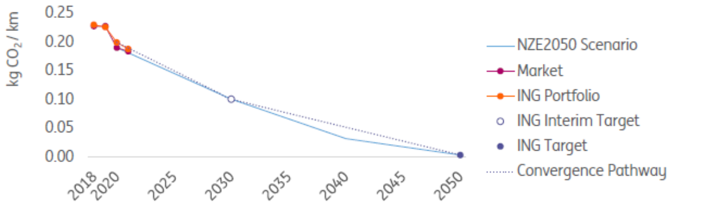
Steel
Sustainable Steel Principles 2021YE

Alignment delta
+5.4%



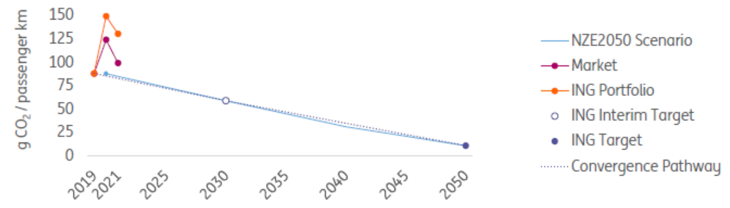
Automotive
Global Pathway to Zero Tailpipe Emissions

ING vs. pathway
-0.8%



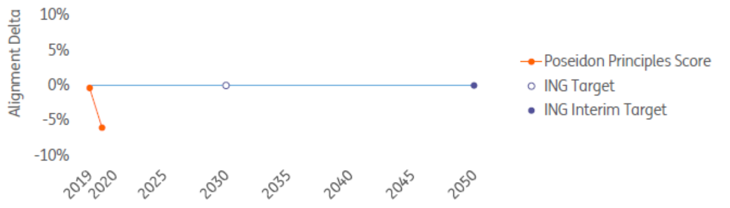
Aviation *
Global Decarbonisation Pathway

ING vs. pathway
+57.3%



Shipping
Poseidon Principles 2020YE

PP score
-6.0%



* Despite a significant reduction in absolute emissions in 2020 and 2021, the aviation sector experienced a severe fluctuation in CO_2 intensity due to COVID. Please refer to the sector deep-dive for further information.

Net-Zero Banking Alliance (NZBA)

What does it mean for signatories?

1. **Transition** the operational and attributable GHG emissions from their lending and investment portfolios to align with pathways to **net-zero by 2050 or sooner**.

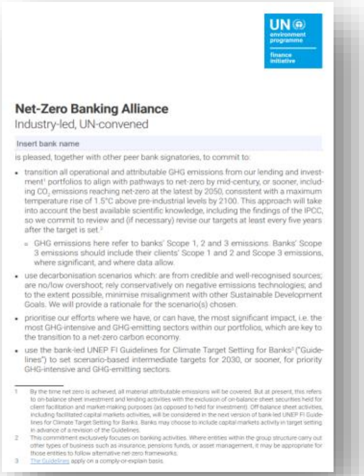
   Scope:
   - Scope I and II GHG emissions
   - Scope III emissions from on-balance sheet lending and investment activities
   - Underwriting activities, securities for market-making purposes excluded
   - Off-balance sheet activities (incl. facilitated capital markets activities) excluded
   - Excluded activities will be covered by the time net-zero is achieved

2. **Within 18 months** of joining, set 2030 targets (or sooner) and a 2050 target, with intermediary targets to be set every 5 years from 2030 onwards

3. **Banks' first 2030 targets** will focus on priority sectors where the bank can have the most significant impact, i.e. the most GHG-intensive sectors within their portfolios, with further sector targets to be set within 36 months

4. **Annual publish** absolute emissions and emission intensity in line with best practice and within a year of setting targets, disclose progress against a board- level reviewed transition strategy setting out proposed actions and climate- related sectoral policies

5. **Take a robust approach** to the role of offsets in transition plans



UN environment programme finance initiative

Net-Zero Banking Alliance

Industry-led, UN-convened

Insert bank name

is pleased, together with other peer bank signatories, to commit to:

- transition all operational and attributable GHG emissions from our lending and investment[1] portfolios to align with pathways to net-zero by mid-century, or sooner, including CO_2 emissions reaching net-zero at the latest by 2050, consistent with a maximum temperature rise of 1.5°C above pre-industrial levels by 2100. This approach will take into account the best available scientific knowledge, including the findings of the IPCC, so we commit to review and (if necessary) revise our targets at least every five years after the target is set.[2]
  - GHG emissions here refer to banks' Scope 1, 2 and 3 emissions. Banks' Scope 3 emissions should include their clients' Scope 1 and 2 and Scope 3 emissions, where significant, and where data allow.
- use decarbonisation scenarios which: are from credible and well-recognised sources; are no/low overshoot; rely conservatively on negative emissions technologies; and to the extent possible, minimise misalignment with other Sustainable Development Goals. We will provide a rationale for the scenario(s) chosen.
- prioritise our efforts where we have, or can have, the most significant impact, i.e. the most GHG-intensive and GHG-emitting sectors within our portfolios, which are key to the transition to a net-zero carbon economy.
- use the bank-led UNEP FI Guidelines for Climate Target Setting for Banks[3] ("Guidelines") to set scenario-based intermediate targets for 2030, or sooner, for priority GHG-intensive and GHG-emitting sectors.

1 By the time net zero is achieved, all material attributable emissions will be covered. But at present, this refers to on-balance sheet investment and lending activities with the exclusion of on-balance sheet securities held for client facilitation and market-making purposes (as opposed to held for investment). Off-balance sheet activities, including facilitated capital markets activities, will be considered in the next version of bank-led UNEP FI Guidelines for Climate Target Setting for Banks. Banks may choose to include capital markets activity in target setting in advance of a revision of the Guidelines.

2 This commitment exclusively focuses on banking activities. Where entities within the group structure carry out other types of business such as insurance, pensions funds, or asset management, it may be appropriate for those entities to follow alternative net-zero frameworks.

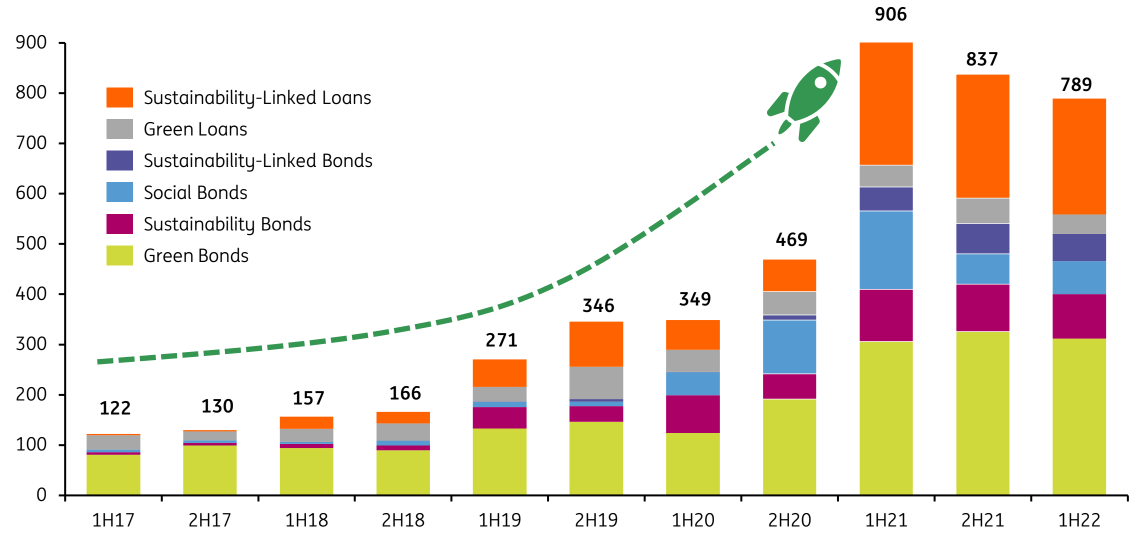
3 The Guidelines apply on a comply-or-explain basis.

Source: Net-Zero Banking Alliance (NZBA)

Supporting the transition through financing

The sustainable finance market showed a massive growth over the last years…

Semi-annual Sustainable Finance Activity (by instrument in $ bln):



Cumulative Sustainable Debt issued up until 1H22:

$1.47 tln
Green & Sustainability-Linked **Loans**

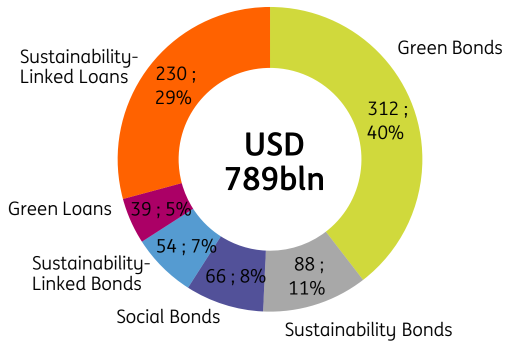
+

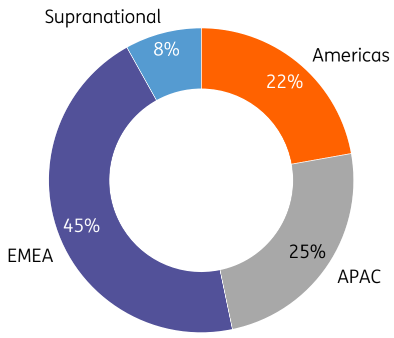
$3.07 tln
Green, Social, Sustainability & Sustainability-Linked **Bonds**

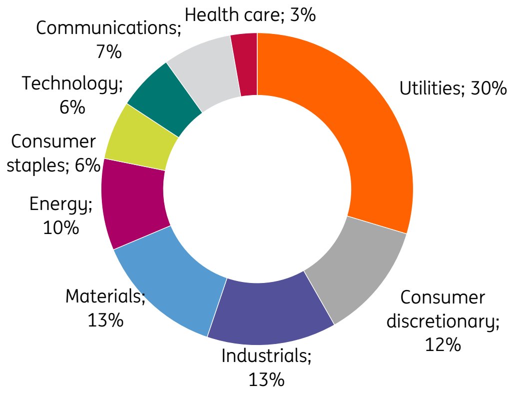
=

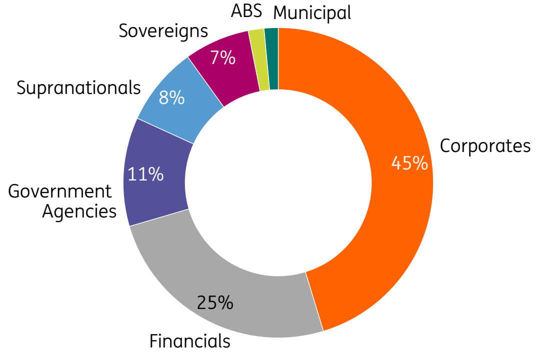
$4.5 tln
Sustainable Debt

Data as at 1H22 – Activity by Instrument Type, Region of Risk, Industry** and Issuer / Borrower Type:









ING offers several finance solutions to support sustainability ambitions

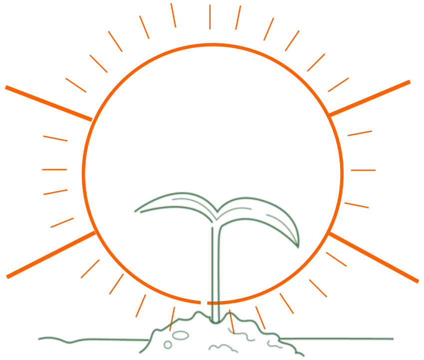
With a constant focus on innovation and product development

Sustainability Linked Loan
Loans that can be used for general corporate purposes, which link the interest margin to the improvement of the client's external ESG score or tailored KPIs

ESG Rating Advisory
Gap-analysis & review of client's sustainability performance and support in engaging with the ESG rating provider(s) to ensure investors' and lending banks' understanding of client's sustainability strategies

Green Guarantee Facility
A green guarantee facility is a type of financial backstop offered by a lending institution that ensures the liabilities of a debtor for its green projects. Equally, a Sustainability Improvement Guarantee can be structured.

Green Financing
Green Finance Instruments (loans, bonds, Schuldschein, private placement) of which the proceeds are specifically used to finance green (social/ sustainable) projects



Sustainable Supply Chain Finance (SSCF)
Linking SCF discount rates or payment terms to sustainability performance of suppliers to strengthen the supplier base of our clients

Transition Financing
Transition Finance Instruments (loans, bonds, Schuldschein, private placement) of which the proceeds are specifically used to finance (energy) transition projects

Sustainability Improvement Derivatives (SID)
Financial market derivatives, such as an interest rate swap, where a part of the pricing is linked to the company's (existing) sustainable finance KPIs

Sustainability Linked Bond ("SLB")
Bonds that can be used for general corporate purposes, whose financial and/ or structural characteristics are linked to one or more KPI(s)

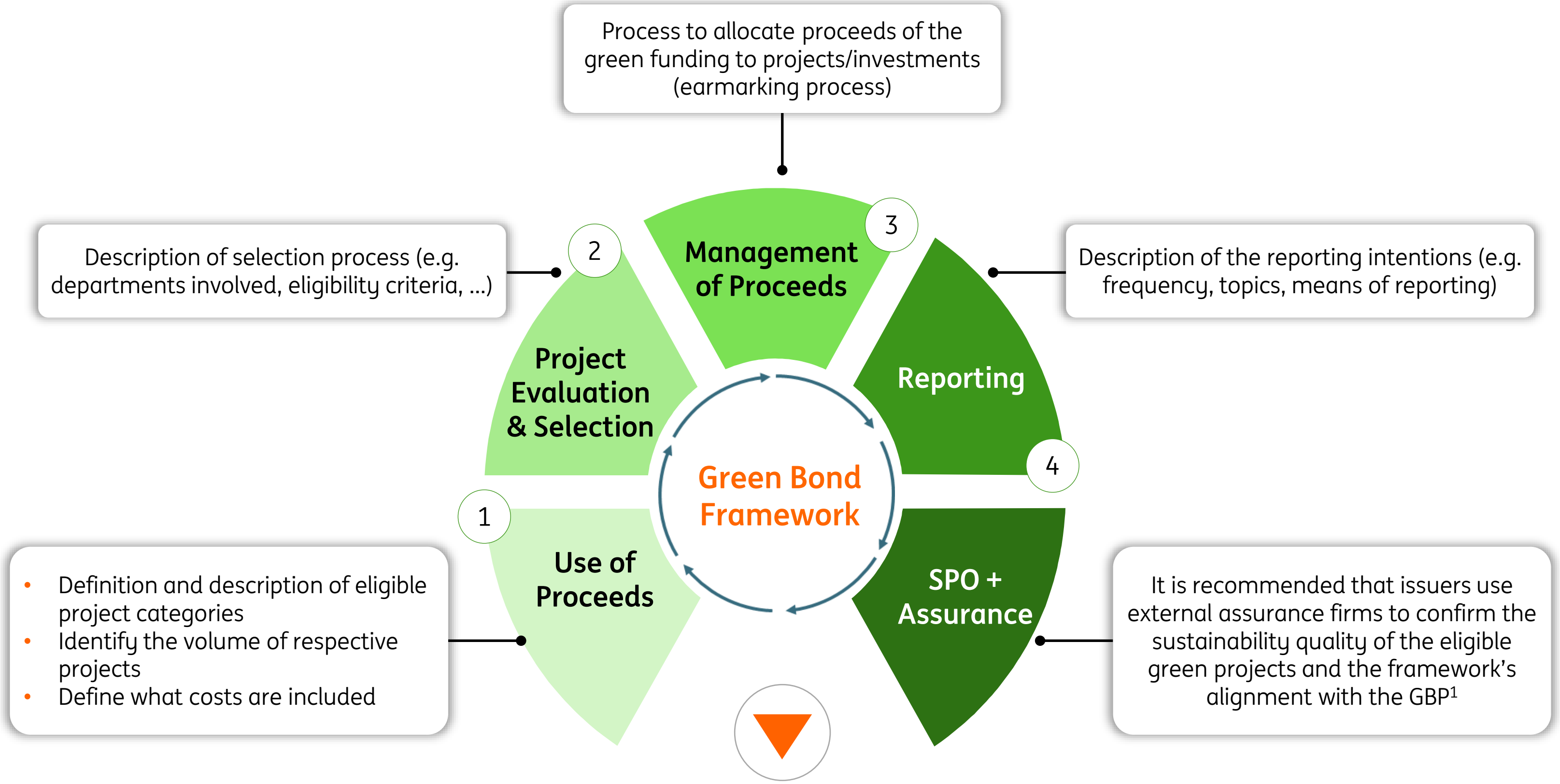
Sustainable Structured Finance
Structured lending for new business models, technologies and sectors such as circular economy, water and energy transition

Sustainable Investments
Range of equity, mezzanine instruments for scale-ups in new business models and technologies like circular economy, water and energy transition areas

A number of sustainable financing options exist, broadly distinguished between Green Financing & Sustainability-linked financing

Structuring a Green Finance framework

The cornerstone of a 'Green' issue



The EU Taxonomy

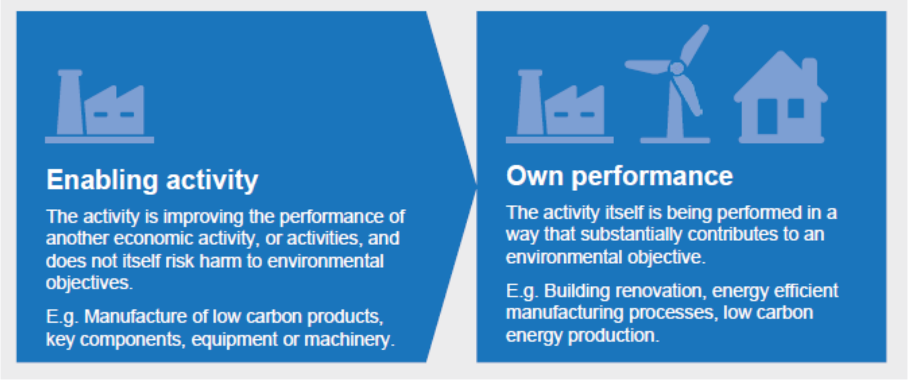
How the taxonomy is sculpted

Sustainable activity under EU Taxonomy	=	Contributes to one of EU environmental objectives 1. Climate change mitigation 2. Climate change adaptation 3. Sustainable use and protection of water and marine resources 4. Transition to a circular economy 5. Pollution prevention and control 6. Protection of and restoration of biodiversity and ecosystems	+	Meet **technical screening criteria** to be established by the European Commission through its **delegated acts** (as of 1 January 2022 and 1 January 2023)	+	**Do no significant harm** to all other environmental objectives	+	Meet **minimum (social) safeguard** compliance

Economic activities covered

The TEG identified **macro-sectors** based on their large contribution to total GHG emissions, via their **own performance** OR by **enabling others**

- D Electricity, gas, steam and air conditioning supply
- C Manufacturing
- H Transportation and storage
- A Agriculture, forestry and fishing
- E Water, sewerage, waste and remediation
- B Mining and quarrying
- F Construction / Buildings
- M Professional, scientific and technical activities
- J Information and communication
- L Real estate activities
- J Information and communication



Who needs to use it?

Financial market participants offering financial products in the EU, including occupational pension providers

Large companies who are already required to provide a non-financial statement under the Non-Financial Reporting Directive

The EU and Member States, when setting public measures, standards or labels for green financial products or green (corporate) bonds

Sustainability Linked bank financing

They key criteria

General requirements for the KPI approach

- S – Specific, 3-5 quantifiable KPIs, limited assurance by external auditor;
- M – Measurable, with ideally 3-5 years of historical data;
- A – Ambitious, stretched, all encompassing for **E, S, and G**; no cherry picking;
- R – Realistic, motivational, in line with the clients' operations, strategic commitment;
- T – Time dependent, target for 202[x], covering tenor of the instrument

Select KPIs that:

- Have current status and / or target value;
- Have not yet been reached / surpassed;
- Have clear connection to the sustainability concept;
- Are not sufficiently covered by laws or regulations;
- Are backed up by a clear methodology;
- Are auditable

Environment

- Reduction GHG emissions
- Reduction other air emissions
- Increase renewables consumption
- Reduction energy consumption / energy efficiency
- Water consumption / recycling
- Waste reduction / recycling
- Reduction of water pollutants
- Improvement of Biodiversity

Social

- Number of worker accidents
- Improvements personnel safety
- Near misses
- Overdue operating instructions
- Complaints from the community
- Employee engagement score
- Social issues – external (i.e. community-relevant) ·
- Social issues - internal (i.e. labour-relevant)

Governance

- Publicly disclose corporate sustainability report on an annual basis based on GRI/SASB, verified by the company's auditor (limited assurance)
- Commitment/ disclosure in line with EITI / TCFD
- Commitment to any sector leading initiatives/frameworks
- (ISO) Certification of management systems
  - ISO 14001 environmental certification
  - ISO 45001 health & safety certification
  - ISO 9001 quality certification

Selection of KPIs: **should be:**

(i) relevant, core and material to the borrow sustainability and business strategy,

(ii) measurable or quantifiable

(iii) able to be benchmarked against an industry standard where feasible.

Calibration of SPTs: **SPTs should be:**

(i) suitably robust, ambitious and meaningful and relevant **throughout the life of the loan**.

(ii) Targets should be based on recent performance levels and be based on peers comparison and/or science-based scenarios.

Loan Characteristics: economic outcome is linked to whether the selected predefined SPT(s) are met.

Reporting: **KPIs/SPTs are reported at least once per annum**

Verification: **independent and external verification** of the borrower's performance level against each SPT for each KPI, at least once a year

Anheuser-Busch InBev SA/NV announces 10.1 Billion USD Sustainability-Linked Revolving Credit Facility

Inaugural Participation in the Sustainable Finance Market with Largest Ever Sustainability Linked Revolving Credit Facility and first among Publicly Listed Alcohol Beverage Companies (at closing date)

AB InBev Sustainability Strategy

- **Anheuser-Busch InBev SA/NV** ("AB InBev" or "ABI") is the world's largest brewing company**.** ABI operates in 50 countries and sells its products in over 150 countries. ABI holds market leading positions in North America, Brazil, Mexico, Africa and China.
- Through the **2025 Sustainability Goals**, ABI's most ambitious set of public commitments yet, ABI aims to create measurable positive impact, drive growth and improve lives across their entire value chain — from growers and retailers to consumers and their communities.

Pricing & KPIs

- AB InBev successfully signed a new **10.1 billion USD Sustainability-Linked Revolving Credit Facility** ("SLL"), replacing the existing 9.0 billion USD Revolving Credit Facility. This facility is the largest SLL RCF and the first of its kind in the publicly listed alcohol beverage companies at its closing date. The facility incorporates a pricing mechanism that incentivizes performance against the following four key performance areas:

1. **Further improving water efficiency in our breweries globally, supporting the Water Stewardship Goal;**
2. **Increasing PET recycled content in PET primary packaging, contributing to the Circular Packaging Goal;**
3. **Sourcing purchased electricity from renewable sources as outlined in the RE100 commitment; and**
4. **Reducing GHG emissions as a part of the science-based Climate Action Goal**

ING's Role

- ING acted as **joint Sustainability Coordinator**
- The transaction **closed in February 2021**

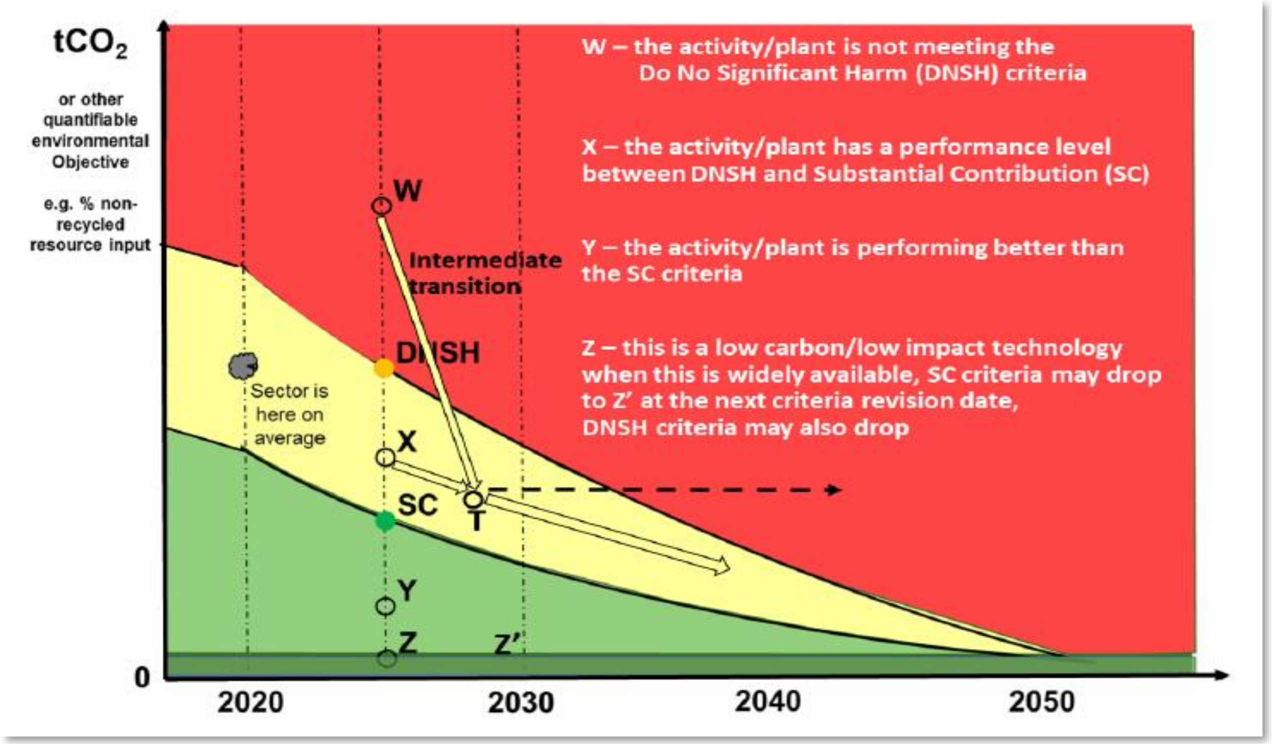
> Belgium 02/21
>
> **AB InBev**
> **USD 10.1bn**
> Sustainability-Linked Revolving Credit Facility
>
> **Sustainability Coordinator**

"*We are excited by the further integration of sustainable finance principles into the capital markets and welcome the opportunity to embed these practices deeper into both our finance organization and the broader company. Our business is closely tied to the natural environment, and it is imperative that we continue to strengthen our leadership in addressing the increasing threats of climate change. Our business and our communities depend on it.*"

Fernando Tennenbaum, CFO, AB InBev

Transition Finance

Extended Taxonomy should support companies



Transition Finance

New Guidelines are required to support the transition

Summary NZBA Transition Finance Guide

1. Clients must have a **credible, feasible, and sufficiently ambitious transition plan**. This includes:
   a. **Ambitious targets** and implementation strategy
   b. **Net-zero-aligned** KPIs to monitor progress
   c. Comprehensive and **transparent disclosure**, and
   d. **Clear governance** mechanisms and accountability processes

2. Transition finance must meaningfully advance a client's net-zero journey. **Transition finance can take the form of:**
   a. **Use of proceeds instruments** – where activities financed are in line with established Taxonomies or the bank's own transition finance framework
   b. **General corporate purpose instruments** – where banks assess a client's transition plan and set monitoring KPIs

ING assisted PKN ORLEN in structuring its Green Finance Framework

1
Use of Proceeds

PKN ORLEN has selected **Dark Green assets** within Renewable Energy, Clean Transportation and Pollution Prevention & Control. The criteria for Renewable Energy and Clean Transportation are aligned with the **Technical Screening Criteria** of the EU Delegated Acts. In addition, PKN ORLEN's inaugural Green Bond is **CBI certified**, aligning with all the relevant sector-specific criteria

2.
Project Selection and Evaluation

The Green Finance Framework is established through a collaboration between PKN ORLEN's **Investment Committee** as well as **Strategy Committee.** In addition, PKN ORLEN has an **Integrated Management System** in place which addresses **Environmental, Social and Governance (ESG) risks**

3.
Management of Proceeds

The net proceeds of the Green Finance Instruments in a **portfolio approach**. A look-back period of 3 years apply for eligible green capital and/or operational expenditures. Eligible green assets qualify for refinancing without a specific look-back period. At the date of issuance, approximately **90% of ORLEN's portfolio will be for financing purposes (high additionality)**, with an **allocation window until end of 2023**

4.
Reporting / External Review

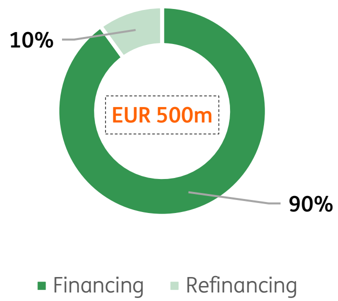
PKN ORLEN commits to publish **annually an Allocation report and an Impact report**, until maturity. Both Allocation and Impact Reports will be **externally verified**

The **Framework has been reviewed by V.E**, who has issued a Second Party Opinion

PKN ORLEN's inaugural Green Bond is **CBI certified**

High additionality of Green Bond proceeds

Refinancing/Financing split



2018
2019
2020

Look-back period of 3 years

2021
2022
2023

Full allocation in 2023

Positive SPO from V.E and CBI certification for inaugural Green Bond

- V.E is of the opinion that **PKN Orlen's Framework is aligned** with the four core components of the **Green Bond Principles** 2018 ("GBP") and **Green Loan Principles** 2021 ("GLP"). In addition, PKN Orlen's climate change strategy has **adopted a majority of the four key elements** of recommended disclosures of the **Climate Transition Finance Handbook** (December 2020)
- The **eligibility criteria** of the three Eligible Categories **is in line with CBI's screening indicators**, and the **Renewable Energy and Clean Transportation Categories follow the screening criteria of the EU Taxonomy**

CBI Certification for the first non-FI issuer in CEE with a benchmark size