

SBTs for Financial Institutions

Road Testing Launch Webinar

April 25, 2019



SCIENCE BASED TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

PARTNER ORGANIZATIONS



IN COLLABORATION WITH

**WE MEAN
BUSINESS**

Today's Speakers



Cynthia Cummis

Director of Private Sector
Mitigation
World Resources Institute



Giel Linthorst

Director
Navigant



Stanislas Dupré

Founder & CEO
**2 Degrees Investing
Initiative**



Nate Aden

Senior Fellow
World Resources Institute

Today's Discussion

Topic	Time
Overview of SBTi and method road testing process	15 min
Draft method descriptions and instructions	
• Emissions based approaches:	30 min
• Real Estate, Electricity Generation Project Finance and Corporate Instruments	
• Technology based approaches:	30 min
• Corporate Instruments	
Data access and summary	10 min
Next Steps	5 min

Science Based Targets Initiative



The Science Based Targets initiative mobilizes companies to set science-based targets and boost their competitive advantage in the transition to the low-carbon economy.

PARTNER ORGANIZATIONS

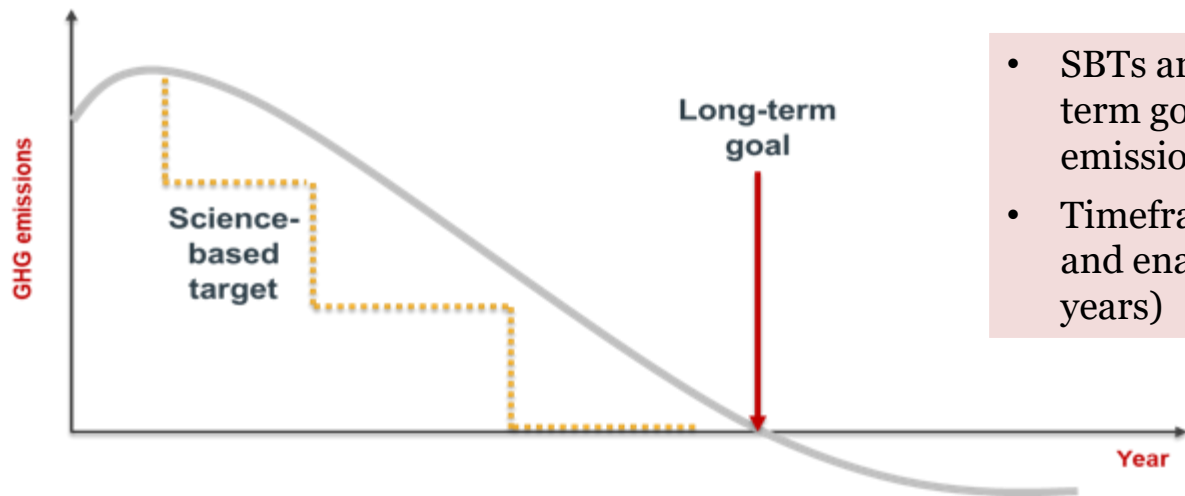


IN COLLABORATION WITH



What are Science Based Targets?

“GHG emissions reduction targets that are consistent with the level of decarbonization that, according to climate science, is required to keep global temperature increase within 1.5 to 2°C compared to pre-industrial temperature levels.”



- SBTs are consistent with the long-term goal of reaching net-zero emissions in 2nd half of century
- Timeframe drives short-term action and enables accountability (5-15 years)

Science Based Targets for Financial Institutions

Almost **40** financial institutions have publicly committed to setting emissions reduction targets through the Science Based Targets initiative (SBTi) and an additional 70 reported to CDP in 2017 that they intend to set a science-based target within the next two years.

To help them align with the ambition of the Paris Agreement, the SBTi is developing a framework for financial institutions to set science-based targets for their investing and lending portfolios.

The project audience includes universal banks, pension funds, insurance companies and public financial institutions.

Building Momentum

Since officially launching in June 2015

864

**Companies have
reported to CDP
that their intention
to set a SBT by 2019**

550

**Companies have
formally joined
the SBTi**

200

**Companies have
approved targets**

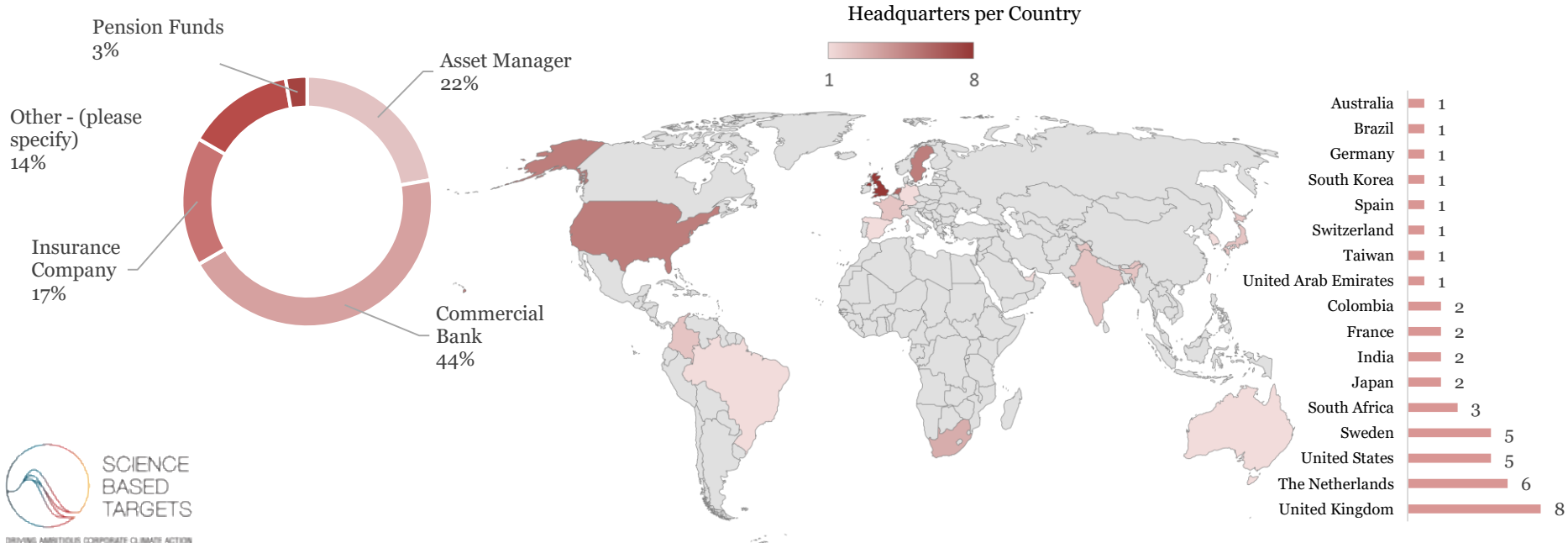
~5

**Companies join
the initiative on
average every
week**

Welcome road testers!

The road testing process is intended to gather feedback from the project audience to ensure **target-setting method practicality** and **credibility** for financial institutions. Feedback from road testers will inform method revisions and the final framework.

43 financial institutions are road testing the methods, representing **5** institutional types and **17** countries



Road Testing Process and Resources

Launch webinar
April 25

10-week road test period
April - July

Workshops to discuss feedback
September

**SBTi
Resources**

Recording and slides

- *Road testing instruction and methods*
- *Data provider support*
- *Method developer support*

Summary of road tester feedback

**Road
testers
Input**

Method assessment survey, including:

- *Modelling results*
- *Feedback on method validity*
- *Optional additional comments*

Prepare criteria
for consultation

Distribute 2nd draft of
methods and 1st draft of
framework for consultation

Incorporate feedback and
finalize the framework

Launch target setting
methods and guidance

Summer

Fall

Winter

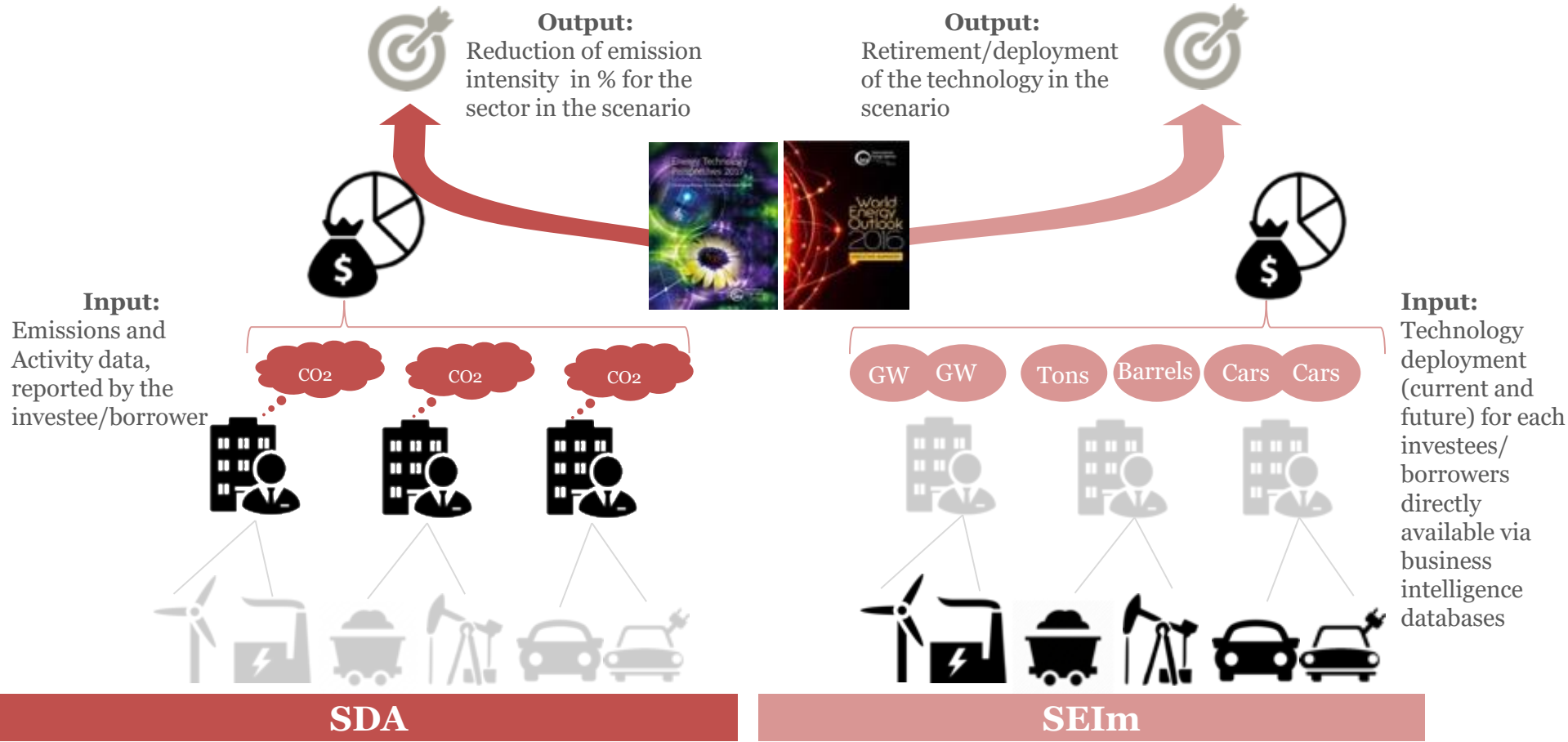
Early 2020

Next phase of the project



In addition, we will launch a **stakeholder process** for non-financial institutions (consultancies, academia, NGOs, etc.) to provide feedback. Draft methods will be shared with stakeholders and a separate survey will be distributed to collect feedback.

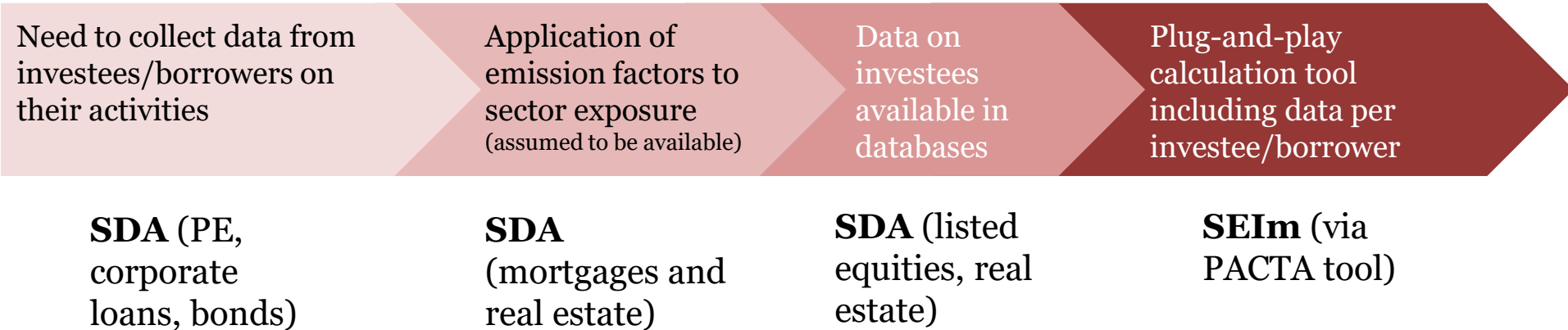
Overview of the two approaches



Application of the methods by asset class

Asset class	SDA	SEIm
Project finance (equity or debt)	✓	✓ Requires the ad hoc creation of custom '2D benchmarks'
Private equity	⚠ Assuming reporting on the assets	✓
Listed equities	✓ Only if reporting by the investee or provided by data provider	✓ Online and automated
Corporate bonds (and energy-related sovereigns)	⚠ Only if reporting by the investee or provided by data provider	✓ Online and automated
Corporate loans	⚠ Only if reporting by the investee or provided by data provider	✓
Real estate loans and equity	✓	✗
Mortgage	✓	✗

Spectrum of data collection requirements



Road Tester Commitments and SBTi Support

Road testers are expected to:

- Successfully complete road testing within ten (10) weeks. Road testing is estimated to take 8 to 40 hours per method.
- Submit target modeling results for each asset class. These will be held in confidence. Road testers may share only as much information about their modeling results as they wish and are not required to publicly state their participation.
- Provide detailed feedback on practicality and robustness of methods.
- Participate in a workshop or webinar to discuss the practicality of the methods.
- Consider developing examples or brief case studies for inclusion in the final framework.

We will provide the following support:

- Road testing instructions and assessment survey
- Recorded launch webinar and slides
- Ad hoc support throughout road testing process, including written responses via emails and one on one calls with method developers
- List of data providers
- Summary of road testing feedback.

Method developers (Navigant and 2°ii) will be available to answer method-specific questions.

Road testing instruction and assessment survey

- The road testing instruction includes instructions for completing the road testing process and questions on methods' validity and practicality that we'd like road testers to answer.
- [The methods assessment survey](#) will be distributed to collect modelling results and feedback on the methods. It includes questions we listed in the instruction for each method, as well as fields to upload target modelling results and comment sheets (optional).

1st page of assessment report

2. What asset class method(s) would you like to test? *

*Road testers are welcomed to test **multiple** asset-class methods.*

On the first page, road testers can select methods they want to test and will be directed to pages with methods instructions and questions for the selected methods.

Asset class method page

11. Please upload target modeling results here. *

These will be held in confidence. Road testers may share only as much information about their modeling results as they wish and are not required to publicly state their participation. Please contact Chendan Yan, chendan.yan@wri.org if an NDA needs to be signed.

Browse...

Method page will contain questions on methods' practicality and validity and fields to **upload modeling result** and detailed comments to the drafts(optional). Modeling results will be held in confidence. NDA can be signed upon request.



Please review the road testing instruction and fill out the [assessment report](#) before **Friday, July 5th** for your feedback to be considered.

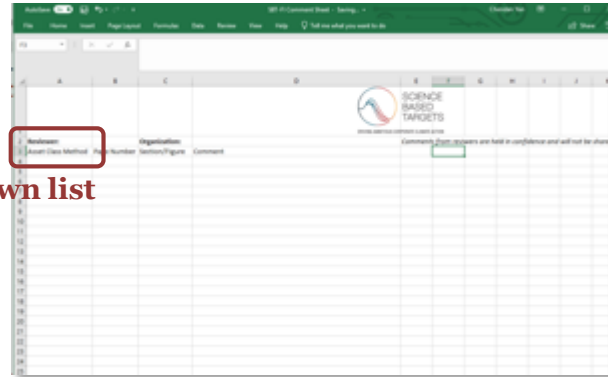
Please use excel sheet to log detailed comments

If you would like to provide detailed comments to the methods, please use the [“SBT-FI Method Comment Sheet”](#) to log detailed feedback and upload in the **final page of the survey**. Besides the link here, The sheet has also been emailed to road testers and attached in the survey.

4. If you would like to submit **detailed comments** to the method drafts, please log your comments to this [SBT-FI Method Comment Sheet](#) and upload it here. In this sheet, you can select the asset class methods you would like to comment on from a drop-down list.

Browse...

drop-down list



In this sheet, you can select the asset class methods you would like to comment on from a **drop-down list**.

Method Feedback Questions for Road Testers

Method assessment reports will include **overarching questions for all methods** and asset-class-specific questions. Here are overarching questions:

- Is the draft method practical to apply?
- Is it useful for target setting and decision making to drive institutional alignment with a Paris-aligned climate stabilization pathway?
- Which data sources did you use for the method (e.g., primary data or secondary data)?
- What challenges did you encounter while applying the method?
- Do you think setting absolute emissions targets could be meaningful for this asset class? Examples of absolute target setting are provided for relevant asset class methods.
- To support the SBT for this asset class, would it be useful to have additional targets related to actions?
- Can you suggest alternative target setting methods for this asset class?

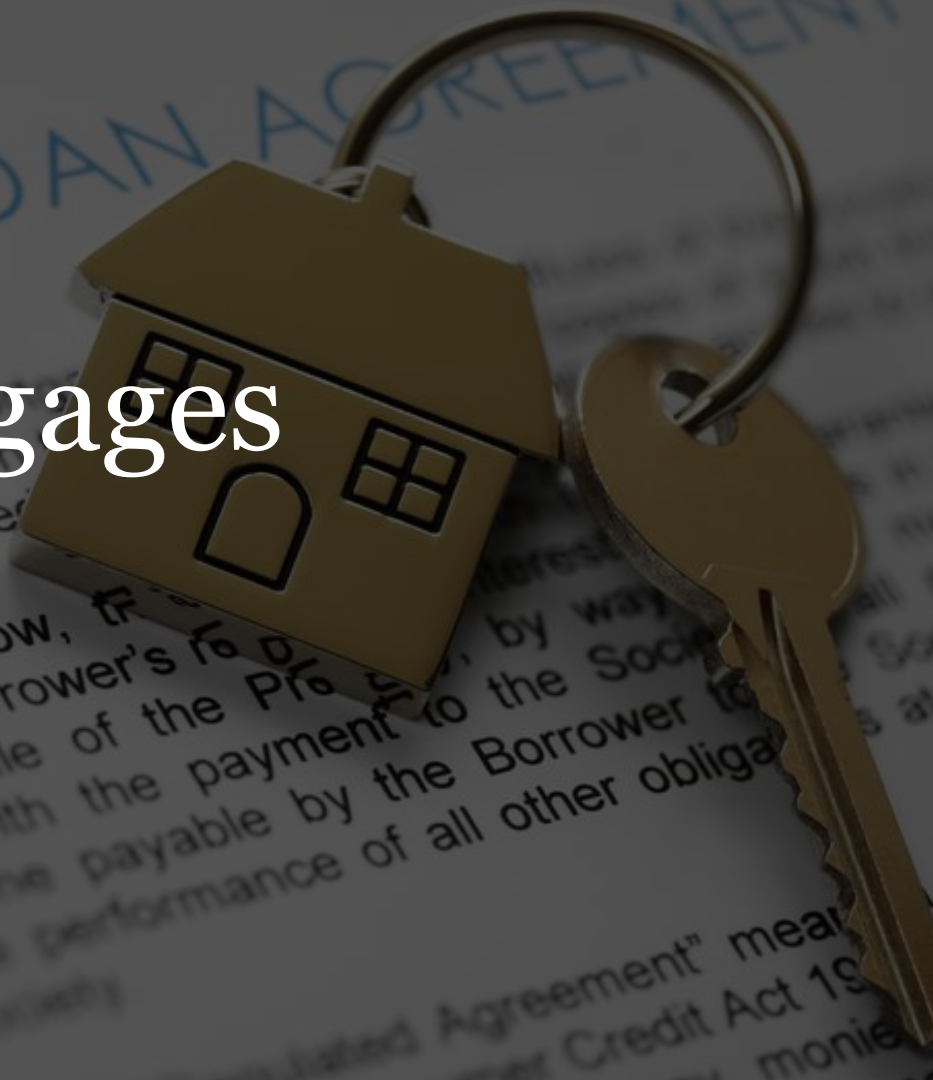
Emissions-Based *Approaches*



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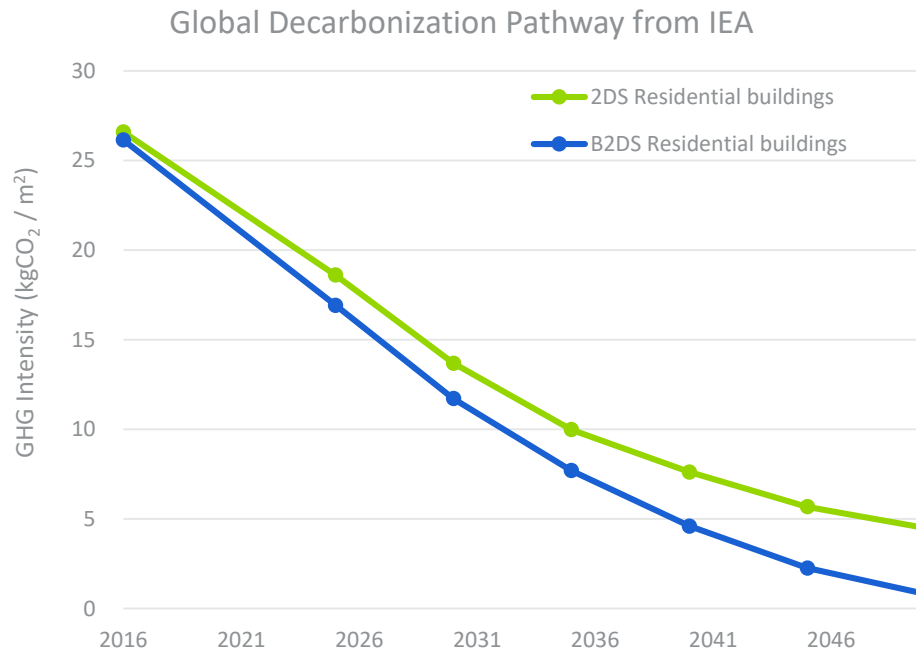
SDA for Mortgages



Method Overview

A financial institution can align its mortgage portfolio with the Paris Agreement and set an emissions reduction target using the Sectoral Decarbonization Approach (SDA):

Emissions intensity ($\text{kgCO}_2 / \text{m}^2$) of mortgage portfolio of financial institutions converges to same emissions intensity as global pathway for residential buildings in 2050.



Source: IEA ETP 2017

SDA for Mortgage

Inputs¹

- Scope 1 & 2 emissions of buildings (or energy performance to calculate emissions)
- Gross floor area (m²)
- Portfolio growth rate (%) in target year

Input Data source

- Actual energy performance data of buildings; or
- [EU Buildings Database](#)
- [EIA Residential Buildings Energy Consumption Survey 2015](#)
- More on data support at the end

Key Assumptions²

- All buildings will do its fair share of emission reduction towards 2°C or below
- Global pathways assume converging of the same emission intensity for buildings across regions in 2050
- SDA relies on pathways' assumptions on cost, technology, market and demographic

¹ The PCAF report 2018 provides guidance on emission attribution by asset class: <http://carbonaccountingfinancials.com/wp-content/uploads/2018/11/PCAF-report-2018.pdf>

² See all other assumptions of SDA here: <https://sciencebasedtargets.org/wp-content/uploads/2015/05/Sectoral-Decarbonization-Approach-Report.pdf>

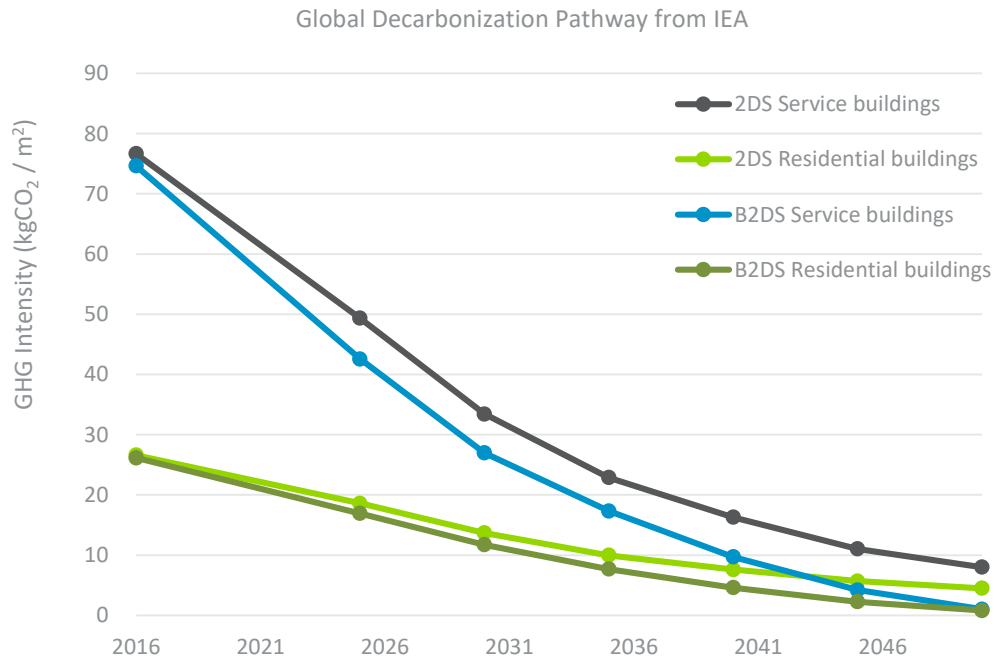
SDA for Real Estate

A low-angle, upward-looking photograph of several modern skyscrapers. The buildings feature curved facades and extensive glass windows that reflect the sky. The sky is a deep blue with some light, wispy clouds. The perspective creates a sense of height and architectural grandeur.

Method Overview

A financial institution can align its real estate portfolio with the Paris Agreement and set an emissions reduction target using the Sectoral Decarbonization Approach (SDA):

Emissions intensity ($\text{kgCO}_2 / \text{m}^2$) of real estate portfolio of financial institutions converges to same emissions intensity as global pathway for residential and service buildings in 2050.



Source: IEA ETP 2017

SDA for Real Estate

Inputs¹

- Scope 1 & 2 emissions of buildings (or energy performance to calculate emissions)
- Gross floor area (m²)
- Portfolio growth rate in target year

Input Data source

- Actual energy performance data of buildings; or
- [GRESB](#)
- [EU Buildings Database](#)
- [EIA Commercial Buildings Energy Consumption Survey 2012](#)
- [EIA Residential Buildings Energy Consumption Survey 2015](#)
- More on data support at the end

Key Assumptions²

- All buildings will achieve fair share of emission reduction towards 2°C or below
- Global pathways assume converging to the same emission intensity for buildings across regions in 2050
- SDA relies on pathways' assumptions on cost, technology, market and demography.

¹ The PCAF report 2018 provides guidance on emission attribution by asset class: <http://carbonaccountingfinancials.com/wp-content/uploads/2018/11/PCAF-report-2018.pdf>

² See all other assumptions of SDA here: <https://sciencebasedtargets.org/wp-content/uploads/2015/05/Sectoral-Decarbonization-Approach-Report.pdf>

SDA for Mortgage & Real Estate – an example

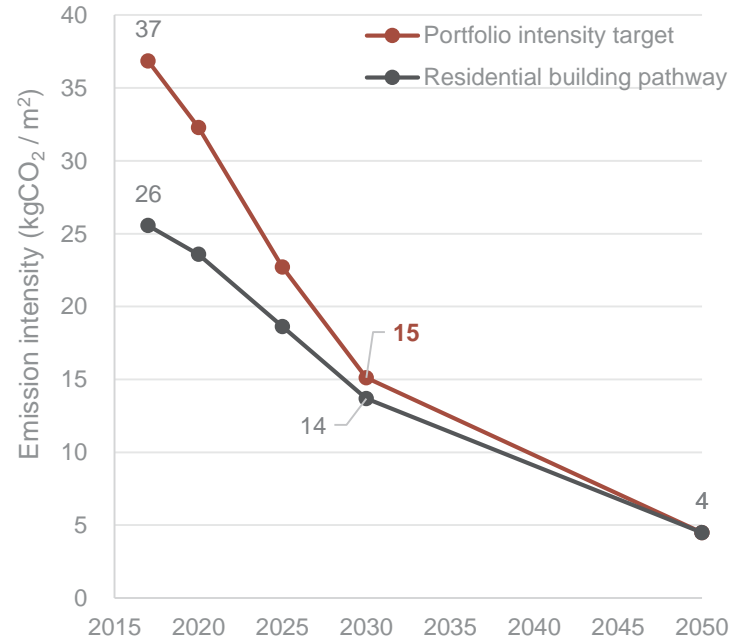
Assume a financial institution has a global mortgage portfolio of residential buildings. Based on energy consumption, building certificates or other data the emissions of these buildings are assessed for 2017 and for the target year of 2030.

Portfolio intensity target

$$= (PI_{2017,i} - SI_{2050,i}) \times \frac{(SI_{2030,i} - SI_{2050,i})}{(SI_{2017,i} - SI_{2050,i})} \times \frac{(PA_{2017,i} - SA_{2017,i})}{(PA_{2030,i} - SA_{2030,i})} + SI_{2050,i}$$

The expected growth rate (11%) from 2017 to 2030 is used to estimate floor area in target year.

See detailed calculations in the methodology document.



Method Specific Questions: SDA for Mortgage and Real Estate

- To support the SBT for this asset class, would it be useful to have additional targets related to actions?
- Should the area denominator data cover total built space or usable (rented) space?
- What actions could be helpful to reduce your asset class level emissions?
 - Engage and support clients to improve buildings' emission data transparency (e.g. encourage energy or emission data disclosure, encourage clients to set a science-based target, etc.)
 - Engage and support clients to improve energy performance (e.g. provide financial instruments to support abatement measures, incentivize improvement through preferential assessment, etc.)
 - Divert new investment towards low-carbon buildings (e.g. set mandate for maximum carbon intensity for new investment)
 - Discontinue investment in buildings that are inconsistent with decarbonization pathway at the end of the investment maturity
 - Shift existing portfolio away from carbon-intensive buildings: divesting from high-carbon buildings does not necessarily lead to decarbonization in the real economy since these buildings may still exist and continue to emit high carbon emissions. Therefore, financial institutions are encouraged to prioritize the first three actions

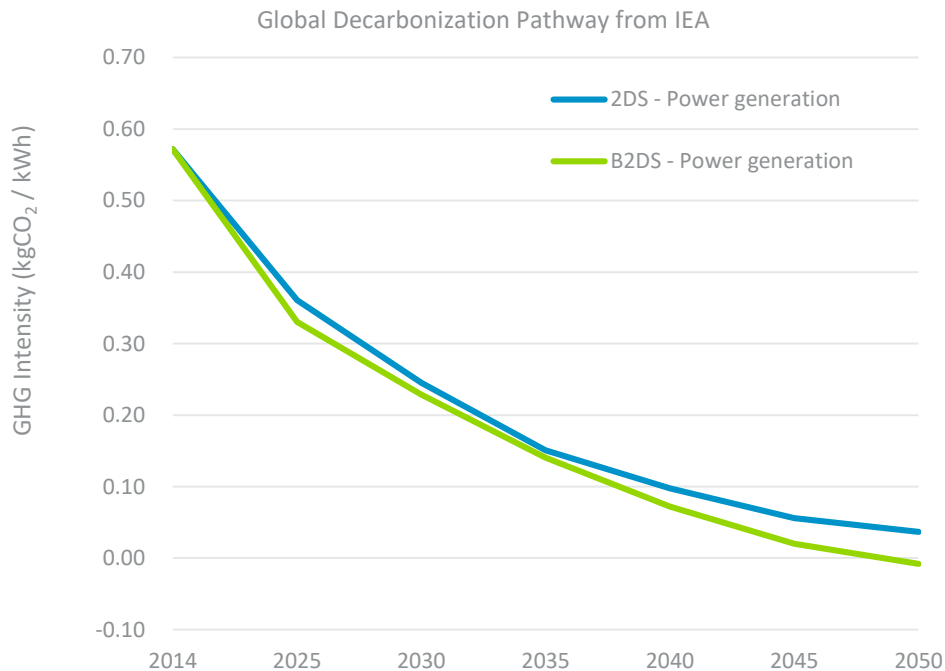


SDA for Electricity Generation Project Finance

Method Overview

A financial institution can align its electricity generation project finance portfolio with the Paris Agreement and set an emissions reduction target using the Sectoral Decarbonization Approach (SDA):

Emissions intensity ($\text{kgCO}_2 / \text{kWh}$) of real estate portfolio of financial institutions converges to same emissions intensity as global pathway for the power generation sector in 2050.



Source: IEA ETP 2017

SDA for Electricity Generation Finance

Inputs¹

- Outstanding loans or equity in projects
- Total investment amount of projects/ project value at time of investment
- Current energy production (kWh)
- Future energy production (kWh) or portfolio growth target (%)
- Scope 1 emissions from projects

Input Data source

- No other data source are needed
- If Scope 1 emissions is unknown, emissions factors translating the fossil fuel used to emissions can be derived from IEA

Key Assumptions²

- All power generation projects will do their fair share of emission reduction towards 2°C or below
- Global pathways assume converging to the same emission intensity across regions in 2050
- SDA relies on pathways' assumptions on cost, technology, market and demography

¹ The PCAF report 2018 provides guidance on emission attribution by asset class: <http://carbonaccountingfinancials.com/wp-content/uploads/2018/11/PCAF-report-2018.pdf>

² See all other assumptions of SDA here: <https://sciencebasedtargets.org/wp-content/uploads/2015/05/Sectoral-Decarbonization-Approach-Report.pdf>

SDA for Electricity Generation Finance– an example

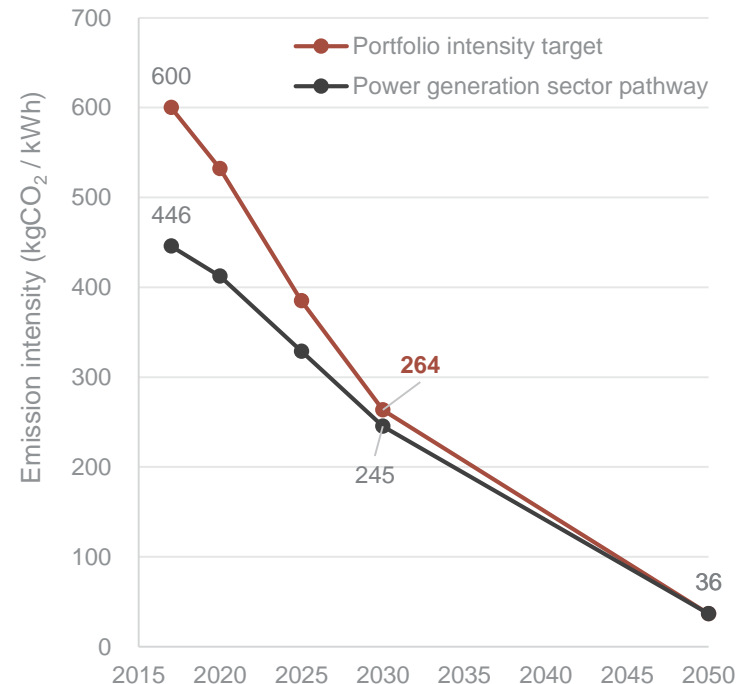
Assume a financial institution has a project finance portfolio of various power generation projects. Based on power output and fuel type, the emissions of these projects are assessed for 2017 and for the target year of 2030.

Portfolio intensity target

$$= (PI_{2017,i} - SI_{2050,i}) \times \frac{(SI_{2030,i} - SI_{2050,i})}{(SI_{2017,i} - SI_{2050,i})} \times \frac{(PA_{2017,i} - SA_{2017,i})}{(PA_{2030,i} - SA_{2030,i})} + SI_{2050,i}$$

The expected growth rate (12%) from 2017 to 2030 is used to estimate power generation (kWh) in target year.

See detailed calculations in the methodology document.



Method Specific Questions: SDA for Electricity Generation Finance

- To support the SBT for this asset class, would it be useful to have additional targets related to actions?
- What actions could be helpful to reduce your asset class level emissions?
 - Engage and support clients in pre-project phase (e.g. encourage adoption of low-carbon technologies in due diligence phase)
 - Engage and support clients to improve projects' emission data transparency (e.g. encourage energy or emission data disclosure, encourage clients to set a science-based target, etc.)
 - Engage and support clients to improve performance (e.g. provide financial instruments to support abatement measures, incentivize improvement through preferential assessment, etc.)
 - Divert new investment towards low-carbon projects (e.g. set mandate for maximum carbon intensity for new investment)
 - Shift existing portfolio away from carbon-intensive projects; divesting from high-carbon projects does not necessarily lead to decarbonization in the real economy since these projects may still exist and continue to emit high carbon emissions. Therefore, financial institutions are encouraged to prioritize the first three actions

SDA for Corporate Instruments

A stylized globe with a network of lines and dots, symbolizing global connectivity and corporate instruments. The globe is centered in the background, with a grid of white lines and dots overlaid on it. The background is a dark, blurred image of a city skyline at night.

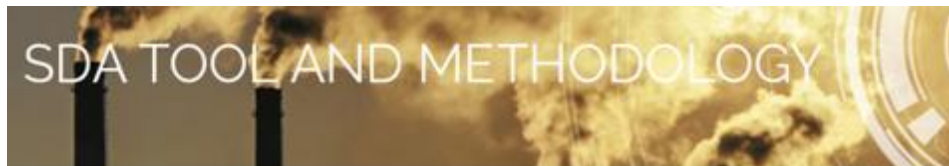
SDA for Corporate Instruments Method Overview

A financial institution can align its corporate debt and equities finance portfolio with the Paris Agreement and set an emissions reduction target using the Sectoral Decarbonization Approach (SDA):

An emission intensity target (e.g. kgCO₂ / tonne production) should be set at the portfolio level for sectors covered by SDA.*

- Power generation
- Cement
- Iron & steel
- Aluminium
- Pulp & paper
- Transport
- Buildings

Sector targets shall converge to the same emissions intensity as global pathway for the sector in 2050.



SDA Tool Version 8 now available

We are happy to announce that the SDA tool V8 was made publicly available starting on February 27th 2017. We strongly recommend companies use this new version (date of revision: 02/27/2017) instead of V7 because it uses the most up-to-date IEA ETP data (2016). Note that targets modeled using previous versions of the SDA tool can only be submitted to the SBTi for an official validation within six months of the revision date (see *SBTi Criteria Cg on Method Validity*).

Download the Excel 2013 version [here](#)

Download the Excel 97-2003 version [here](#)

- The back-end data has been locked as it contains proprietary information from the International Energy Agency ETP 2016 v2.5.
- The user needs to enable Macros to use the tool.
- If the Excel of the user is in a different language that is not English, the Excel might not recognize some parameters in the tool and it might not work. The recommendation is to use a version in English.

**An Excel-based tool is available for setting sectoral emission intensity targets:*

<https://sciencebasedtargets.org/sda-tool/>

**SBTi recently released a new [Science-based Target Setting Tool](#). This new integrated target-setting tool for companies includes the Sectoral Decarbonization Approach with updated temperature pathways.*

SDA for Corporate instruments

Inputs¹

- Enterprise value & total investment amount; or share of market cap (equity only)
- Current production volume (e.g. tonnes)
- Future production volume (e.g. tonnes) or portfolio growth target (%)
- Companies' scope 1 and 2 emissions

Input Data source

- Public disclosure of emissions data of companies
- Asset-level data (via PACTA-tool)
- More on data support at the end

Key Assumptions²

- All sectors will do their fair share of emission reduction towards 2°C or below
- Global pathways assume converging to the same sectoral emission intensity across regions in 2050
- SDA relies on pathways' assumptions on cost, technology, market and demographic, as modelled by IEA

¹ The PCAF report 2018 provides guidance on emission attribution by asset class: <http://carbonaccountingfinancials.com/wp-content/uploads/2018/11/PCAF-report-2018.pdf>

² See all other assumptions of SDA here: <https://sciencebasedtargets.org/wp-content/uploads/2015/05/Sectoral-Decarbonization-Approach-Report.pdf>

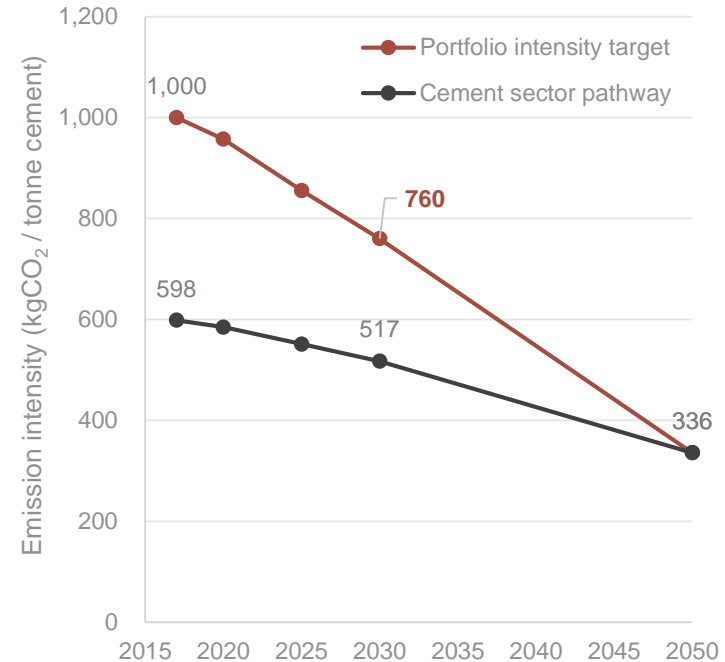
SDA for Corporate instruments – an example

Assume a financial institution has a corporate instrument portfolio of 10 cement companies. Based on company disclosed emissions and production data, the emissions intensity of the portfolio is calculated for 2017 and for the target year of 2030.

Portfolio intensity target

$$= (PI_{2017,i} - SI_{2050,i}) \times \frac{(SI_{2030,i} - SI_{2050,i})}{(SI_{2017,i} - SI_{2050,i})} \times \frac{(PA_{2017,i} - SA_{2017,i})}{(PA_{2030,i} - SA_{2030,i})} + SI_{2050,i}$$

The expected growth rate (15%) from 2017 to 2030 is used to estimate portfolio cement production in target year.



Method-Specific Questions: SDA for Corporate Instruments

- How does SDA compare with PACTA and investee engagement for corporate instruments? Could these methods be usefully combined?
- To support SBTs for this asset class, would it be useful to have additional targets related to actions?
- SDA requires physical activity data for denominators—are these data sufficiently available? What secondary data are available for institutions that don't have primary data?
- Is the SDA's sector-level approach useful and appropriate for corporate instruments?

A close-up photograph of two hands shaking in a firm grip. The hand on the left is wearing a dark leather strap watch with a white face and black numerals. The background is blurred, showing what appears to be a desk with papers and a laptop. The entire image is overlaid with a dark, semi-transparent filter.

SBT Portfolio Coverage

SBT Portfolio Coverage for Corporate Instruments

- A method whereby financial institutions have a minimum percentage of their investees (in monetary or GHG emissions terms) to have *their own science-based targets*.
- The method is a financial sector analogue to supplier engagement targets for ‘real economy’ companies’ scope 3 emissions.
- Examples of approved supplier engagement targets:
 - Japanese multinational chemical company Sumitomo Chemical commits that 90% of its suppliers by product weight will institute science-based GHG reduction targets by 2024.
 - Multinational enterprise information technology company Hewlett Packard Enterprise commits that its manufacturing suppliers covering 80% of spend will set science-based targets by 2025.

SBT Portfolio Coverage Method Overview

Potential target requirements for validation by the initiative:

- **Boundary:** FIs may set SBT Portfolio Coverage targets covering a minimum 30% of their investees by GHG emissions, assets under management or market capitalization.
- **Timeframe:** targets must be fulfilled within a maximum of 5 years from the date the FI's target is submitted to the SBTi for an official validation.
- **Level of ambition:** The FIs investees shall have science-based emission reduction targets on their scope 1 and 2 emissions.

Potential recommendations

- Investees in sectors with high scope 3 emissions are encouraged to set scope 3 targets as well
- Investees can use SBTi resources to set targets but validations by SBTi would not be required.
- Investors can track whether investees have SBTs through their reporting to CDP or annual sustainability reports.

SBT Portfolio Coverage Method Inputs and Examples

Inputs

- Scope 1 and 2 emissions per investee. Scope 3 emissions are optional to include, OR
- Current assets under management by investee and projected percentage increase in investment

Output

An illustrative example of a target:

- Investment firm A commits that 30% of its equity portfolio by market capitalization will have science-based targets by 2024.

Method Specific Questions: SBT Portfolio Coverage

- Is the 30% SBT coverage threshold appropriate? If not, what threshold would you recommend?
- Is assets under management (AUM) a meaningful economic metric for target setting? If not, what alternative metric would you recommend?
- Would the investee engagement method be best applied to corporate debt and equity asset classes? How about pairing with other methods?
- How should an FI determine if an investee have an SBT?

Technology-Based *Approaches*



SCIENCE
BASED
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

A night-time photograph of the Eiffel Tower in Paris, France. The tower is illuminated with golden lights and stands prominently against a dark blue sky with scattered clouds. The city lights of Paris are visible in the background, and the tower's reflection is seen in the water in the foreground.

PACTA tool

SEIM application to

Project finance

Private & listed equities

Corporate and sovereign energy-related bonds

Corporate lending

Methods, tools, data...

Disentangling the different layers

Developing management system
for Fis target setting



Framework under development in
the context of the [INVECAT] project

Automating the analysis of
investment and lending portfolios



Scenario analysis **software**
[PACTA] based on SEIM
and SDA

Applying climate scenario
analysis to companies & portfolios



Creation of the first
methodological framework
[SEI Metrics] on the topic

Use of physical asset level data
from business intelligence



Creation of a database
[PAM] now managed by
our spin off ADP

SCENARIO ANALYSIS IN THE FINANCE SECTOR

Comparing deployment of energy technologies with 2D roadmaps

Data on physical asset
& CAPEX / production

ASSET-LEVEL DATA AND CLIMATE-RELATED FINANCIAL ANALYSIS:
A MARKET SURVEY



Compared with

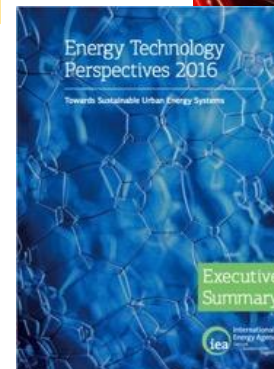
For renewable power capacity additions in

— Global stock market
— Global economy



2018 2019 2020 2021 2022 2023

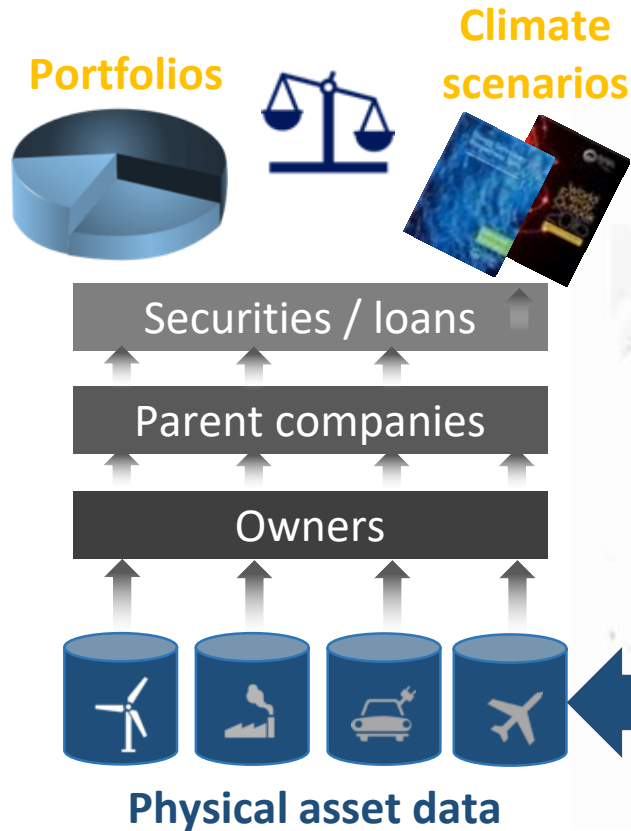
Technology roadmaps
(aka climate scenarios)



DATA PROCESSING

Step 1: Business intelligence data

*Real estate &
land use not covered*



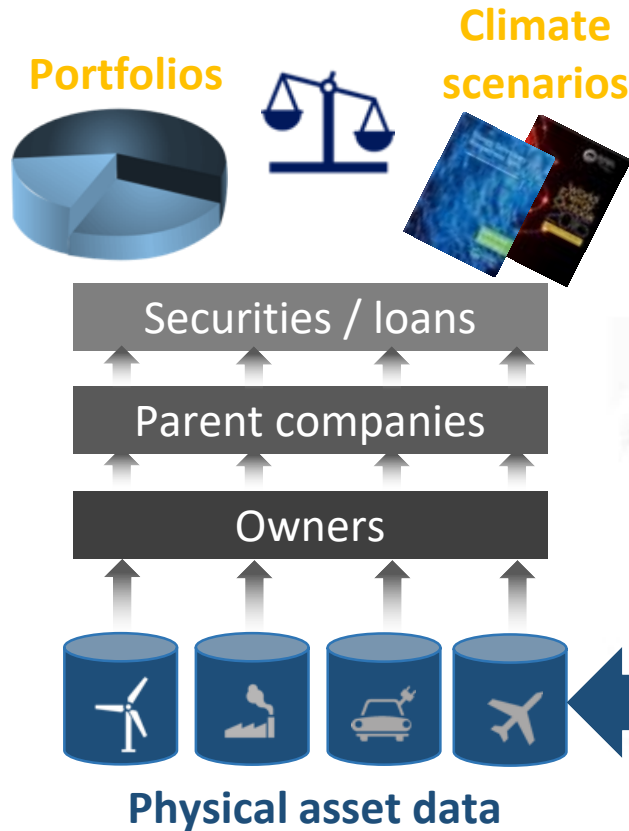
230,000+ assets covering 75% of CO2 emissions



22k oil and gas fields, 2k coal mines, >100k power plants,
95M produced cars, 36k airplanes, 10k ships,
2,200 cement factories, 13k steel plants

DATA PROCESSING

Step 1: Business intelligence data



230,000+ assets covering 75% of CO2 emissions

ASSET CAPACITY AND ACTIVITY LEVELS

Potential and actual activity levels for the asset
(MW/MWh, cars produced, etc.)

ASSET AGE

Initial age of operation,
expected lifetime, retrofits

ASSET ECONOMICS

Production cost, capex, or valuation

FUTURE ASSETS

Announced/under
construction/permitted/order
books as well as existing assets

ASSET EMISSIONS/ESG INFORMATION

CO₂ emissions,
water use/stress, etc.

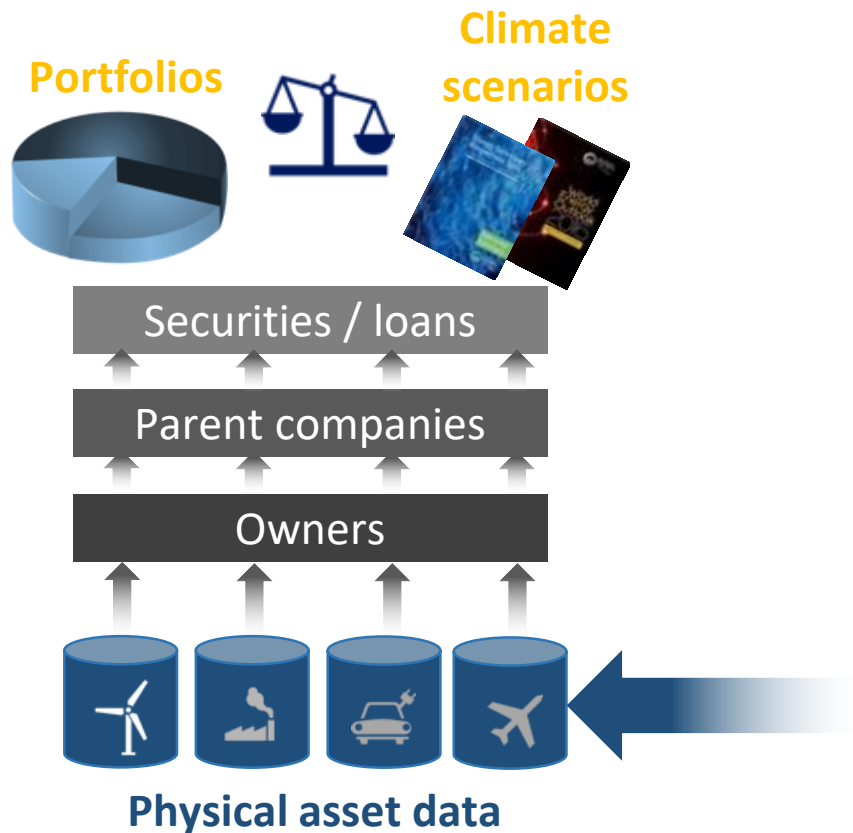
ASSET LOCATION

Geolocation (lat/long; stationary
assets)
or country



DATA PROCESSING

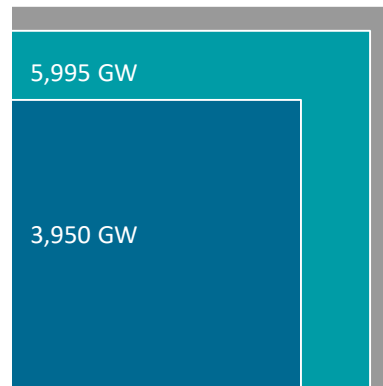
Step 1: Business intelligence data



Close to 100% coverage globally

POWER GENERATION (capacity)

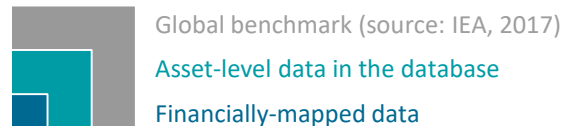
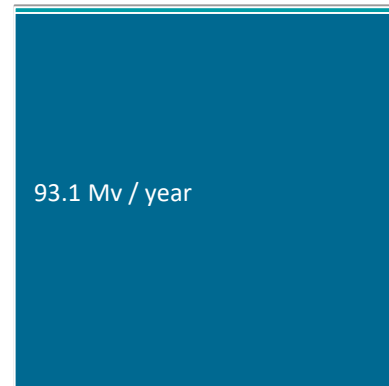
6,887 GW



AUTOMOTIVE (annual production)

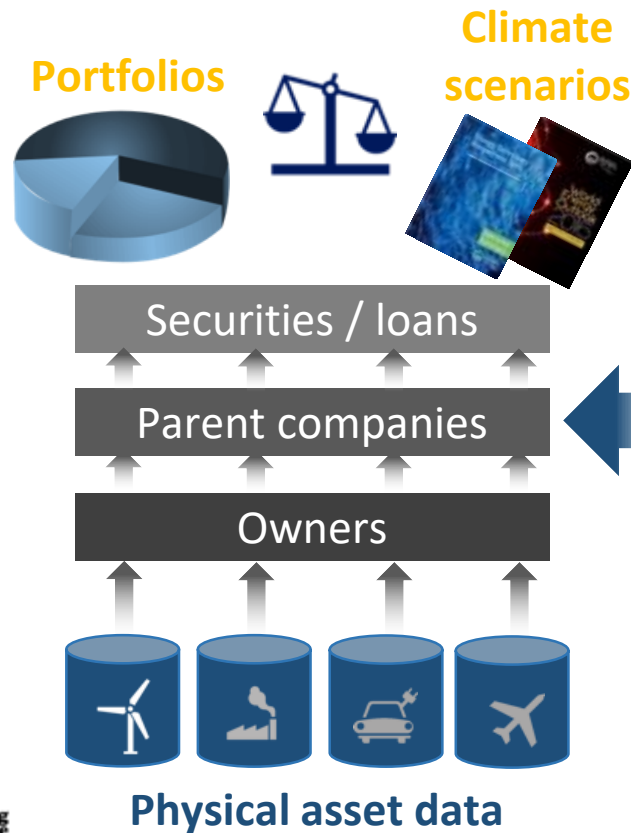
97.3 million vehicles / year

95.9 Mv / year

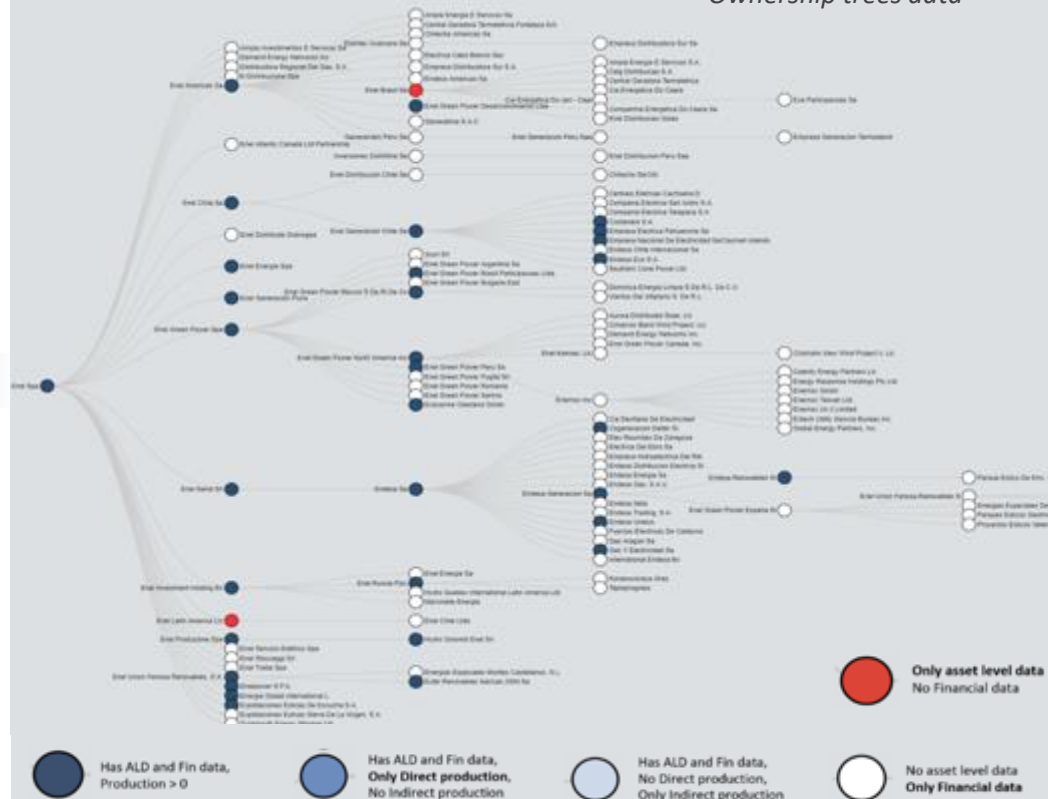


DATA PROCESSING

Step 2: Matching assets with 35,000+ companies



Sources: Asset level databases,
Ownership trees data

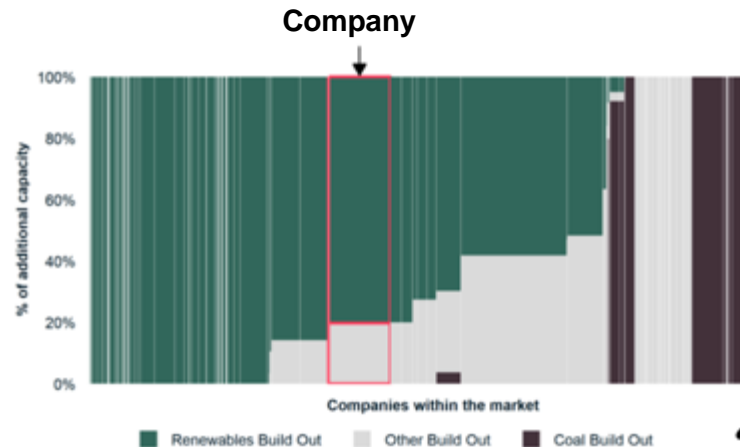
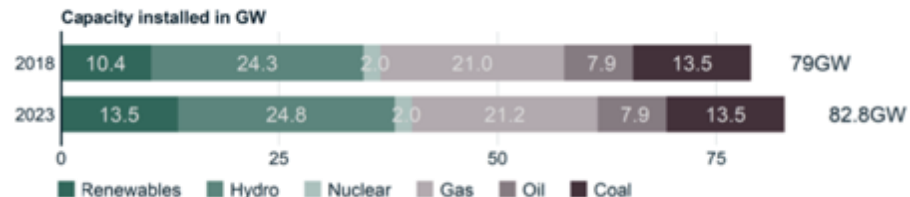


DATA PROCESSING

Step 3: Energy transition profiles of all equities, corp bonds & loans...

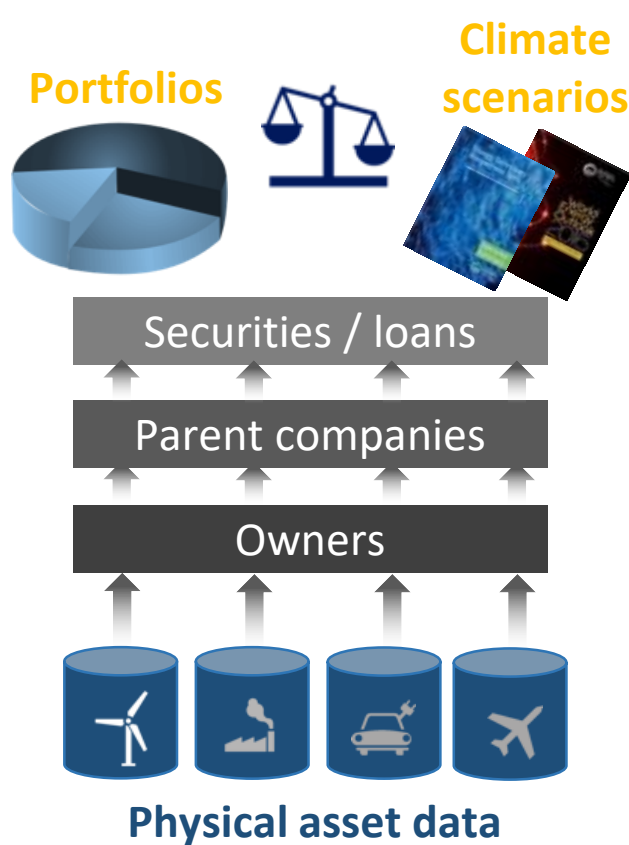


Automated matching based on ISIN for securities
Fuzzy matching algorithm for bank loans and PE

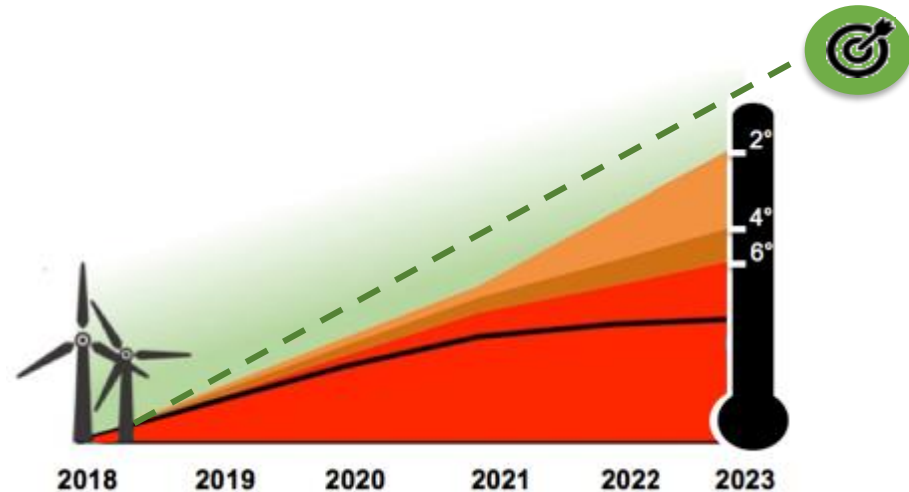


DATA PROCESSING

Step 4: Aggregation at portfolio level



Comparison with the 1.5°C, 2°C, 4°C... scenarios from the IEA, BNEF, Greenpeace...



Suggested 'alignment' target by technology



OUTPUTS

Indicators to calculate the starting point and calibrate the target



Power



Coal
mining



Oil & gas
upstream



Auto
manufacturing



Cement



Steel



Aviation



Shipping

Capacity
(GW)

Production
(Tons)

Capacity
(Barrels, M²)

Production
(Vehicles)

Production
(Tons)

Production
(Tons)

Fleet
(planes)

Fleet
(vessels)

By
primary
energy

By type

By type
and cost

By engine
type and
model

By carbon
intensity

By carbon
intensity

By carbon
intensity

By carbon
intensity

We directly compare technology deployment with the 2D scenario

Locked-in carbon emissions are estimated and provided on demand
They can be compared to sectorial carbon budget (same results)

The company profile is compared to the
scenario based on carbon intensity (similar to
SDA approach but only for the technology)

TOOL FOR INVESTORS

600 direct users • 2,000 via insurance & pension funds supervisors

1

Equity Bonds

www.transitionmonitor.com

2

Assessed Sector (\$) Current Exposure Future Exposure 5 Year Growth Trend

CO₂-Intensity Trend Company Information Regional Exposure Peer Comparison

3

Sector
Coal Mining

Technology
Not available

4

Scenario
IEA: SDS


Accounting Principle
Ownership

Scenario Geography
Global

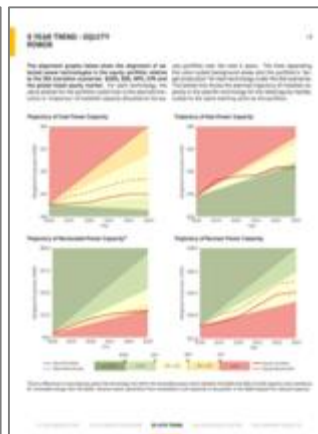
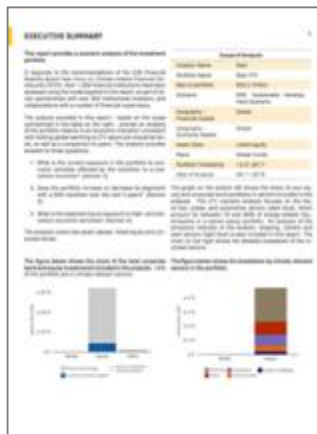
Equity Market
Global

Benchmark Portfolio
Your Aligned Portfolio

Peer Group
Global Funds







TCFD REPORT AUTOMATICALLY GENERATED FOR EACH PORTFOLIO

The analysis takes < 1 min,

Only requires ISIN codes and amounts,

Free of charge and confidential

TOOL FOR BANKS

20 banks + 1 supervisor

3 month waiting list



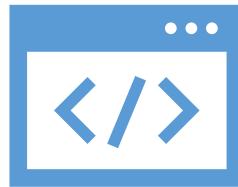
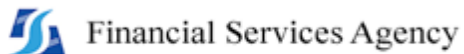
KATOWICE GROUP



RESPONSIBLE BANKING PRINCIPLES

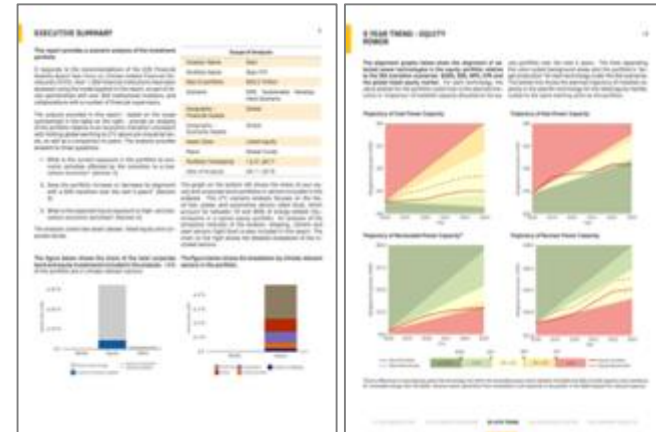


JAPANESE BANKING SUPERVISOR



Software installation

	NDA	1
	Onboarding	1
	Loan book data cleaning	1
	Matching with our data	4
	Calibration & calculation	2
	Results analysis	1



TCFD report (similar as for investors)



PACTA tool

Module for target-setting and related engagement

RESPONSIBLE MARKETING PRINCIPLES

The target setting tool is based on the application of these principles

REALITY-BASED - Financial institutions are expected to avoid ambiguous statements equating the deployment of any approach (the means) with a reduction of environmental impacts in the real economy (the end). In particular:

- Refraining from equating an evolution of the boundaries of its portfolio of assets (e.g. divestment from an entity owning a coal-fired power plant) with a reduction of environmental impacts in the real economy (e.g. closure of a coal-fired power plant replaced by renewables);
- Refraining from equating an increase in its allocation to certain financial assets (e.g. increase in green bond exposure, or assets under management in green funds) with an increase of investments in the real economy (e.g. increase in capital expenditures in the green projects).

EVIDENCE-BASED – An institution that believes the deployment of an investment/lending approach (such as divestment from certain assets, the increase in allocation to other assets or the deployment of a certain tools) will lead indirectly to a reduction of environmental impacts in the real economy shall refrain from making unsubstantiated claims by equating assumptions with facts. The institution should lay out its thesis and discuss the existence of scientific evidence associated with each assumption made (ex-ante) for the specific case. As part of its monitoring and reporting activities, the organisation should collect further evidence (ex-post) and report how they support - or contradict - its thesis. This evidence-building process should also be used to support ex-ante assessment, and the continuous improvement of the approaches.

RESPONSIBLE MARKETING PRINCIPLES

The target setting tool is based on the application of these principles

ADDITIONAL - An institution should refrain from making statements suggesting that the environmental impacts of its investees and borrowers can automatically be credited to its investment/lending strategy and / or report these impacts as if the financial institution itself was delivering them. This involves refraining from suggesting that:

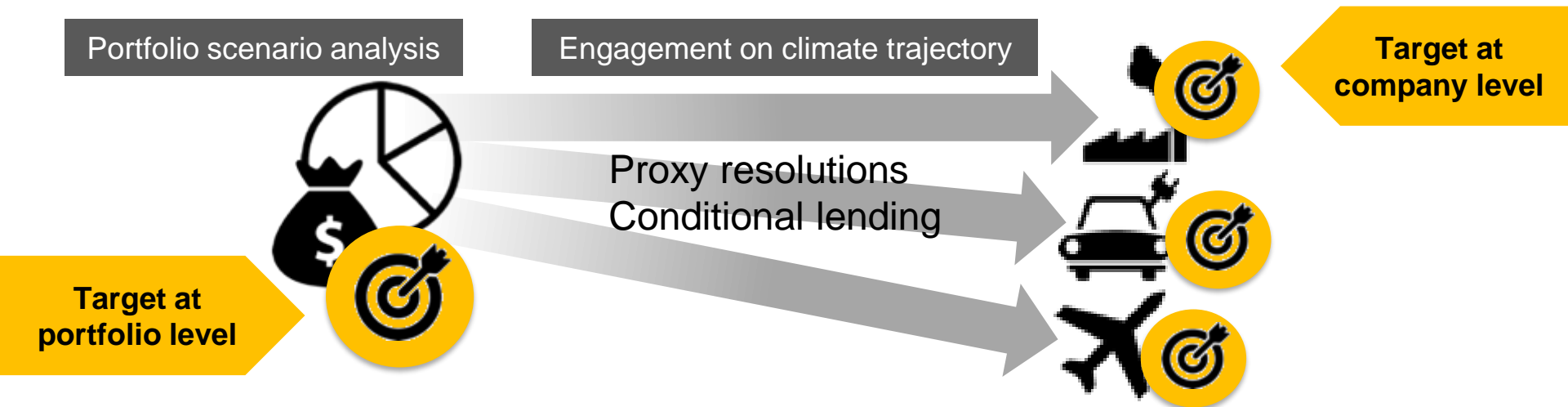
- The provision of financing to green activities brings a critical contribution to their development, if these activities do not face difficulties to access finance in the first place;
- Its refusal to finance brown activities prevents their access to finance, if the evidence suggests that the effect is fully offset by other financial sector players;
- Its strategy triggered the environmentally-friendly practices of investees/borrowers if their decision were already made or have been primarily driven by other factors.

MANAGED- — Claims regarding an objective to ‘contribute’ to the achievement of environmental goals or the setting of a target require a management system to deliver on these objectives. A management system aiming specifically at this objective must include:

- An unambiguous statement of the objective endorsed by the governance body,
- The planning and deployment of investment/lending techniques consistent with this objective,
- A monitoring system for assessing the effectiveness of these means in achieving the objective, and iv) a mechanism to ensure continuous improvement.

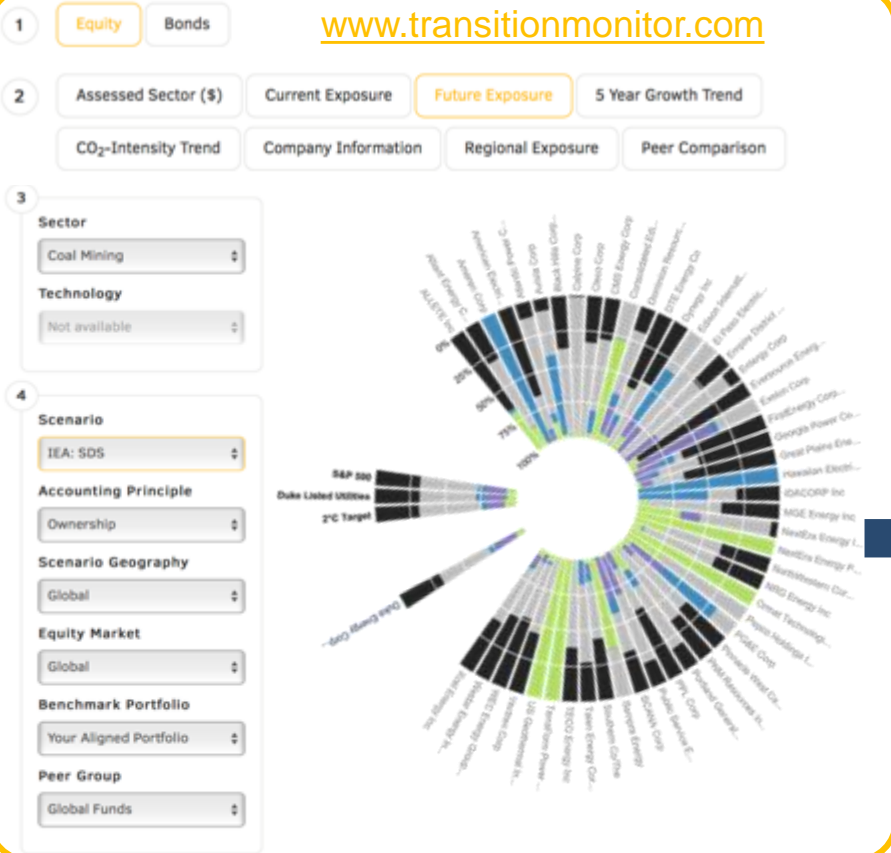
MAIN FOCUS OF PACTA APPROACH: ENGAGEMENT

Cascading a portfolio target to investees/clients targets



New 2019 module: investee profile & suggested target

New 2019 module: investee profile & suggested target



**TCFD REPORT AUTOMATICALLY GENERATED
FOR EACH COMPANY IN THE PORTFOLIO**

Analysis based on asset level data

+ sent to all companies targeted by engagement activities for review & comments

PACTA TOOL

New 2019 module: target-setting

1

Equity

Bonds

www.transitionmonitor.com

2

Assessed Sector (\$)

Current Exposure

Future Exposure

5 Year Growth Trend

CO₂-Intensity Trend

Company Information

Regional Exposure

Peer Comparison

3

Sector

Coal Mining

Technology

Not available

4

Scenario

IEA: SDS

Accounting Principle

Ownership

Scenario Geography

Global

Equity Market

Global

Benchmark Portfolio

Your Aligned Portfolio

Peer Group

Global Funds

Set your regional scope

Global

Step 1: Compare your portfolio's vehicle production to the market's vehicle production in 2018

	ICE	Hybrid	Electric
Enter your portfolio's 2018 production in # vehicles	9000	120	130
Your portfolio's production in 2018 by % share	97%	1%	1%
The market's production in 2018 by % share	88%	11%	1%
How does your portfolio compare to the market?	Slightly Behind	Behind	Ahead

Step 2: Discover your portfolio's scenario-aligned vehicle production

Select your preferred scenario

IEA SDS

Select a target year

2030

Your portfolio's 2030 scenario-aligned production in # vehicles	6823	3757	789
Your portfolio's 2030 scenario-aligned production by % share	60%	33%	7%
12-year change in production required for scenario alignment	-2177	3637	659

Step 3: Set growth or reduction targets for each technology to see how they compare to scenario trajectories.

Select a vehicle technology

ICE

Select your desired % change

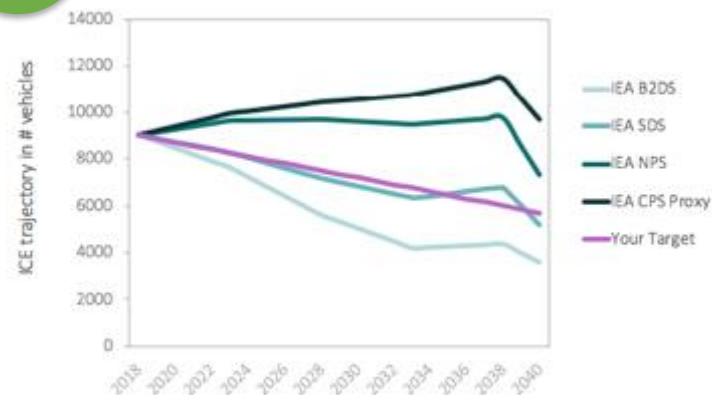
-20%

Select a target year

2030



Your target compared to the scenarios



TARGETS AUTOMATICALLY CALCULATED
FOR EACH PORTFOLIO AND INVESTEE/CLIENT

Selection of climate actions (voting, conditional lending...) in a pre-established list to build the related action plan

PACTA TOOL

New 2019 module: target-setting

Scenario analysis

Selection of actions

Investee targeting

Impact monitoring

'Gross' science-based trajectory by technology

Cascaded into a generic suggested trajectory by investee (starting point of the conversation)

**Company report
(to be sent for review)**

List of climate actions to be implemented (engagement, divestment, etc.)

Description of expected results
(in the real economy)

Ex-ante evidence available to support the analysis

Priorization of companies based on multiple criteria (e.g. target of shareholder action campaign)

Suggested requests (based on asset base, capex plans and economic analysis)

Company report v2 integrating feedback

Tracking the evolutions of the physical assets and production (to identify impacts)

Documentation of actions undertaken

Analysis of the results and effectiveness of the approach

Potential target output examples per draft method

Mortgages/SDA: Financial institution A commits to reduce its mortgage portfolio GHG emissions ____% per square meter by 2030 from a 2017 base-year.

Real estate/SDA: Financial institution A commits to reduce its real estate portfolio GHG emissions ____% per square meter by 2030 from a 2017 base-year.

Electric generation project finance/SDA: Financial institution A commits to reduce its electricity generation project finance portfolio GHG emissions ____% per kWh by 2030 from a 2017 base-year.

Corporate instruments/SDA: Financial institution A commits to reduce GHG emissions from the steel sector within its corporate lending portfolio X% per ton of cement by 2030 from a 2017 base-year.

Corporate instruments/PACTA: Financial institution A commits to increase installed capacity in renewable electricity by ____ MW by _[year]_ across the _[asset class]_ portfolio companies that we are specifically targeting in the context of our climate actions.

Corporate instruments/SBT Portfolio Coverage: Investment firm A commits that 30% of its equity portfolio by market capitalization will have science-based targets by 2024.

No-cost default data option

**If you need data support, please
directly contact:**

Joseph Ben Salem

ISS

+44 (0) 203 192 5755

joseph.bensalem@issgovernance.com

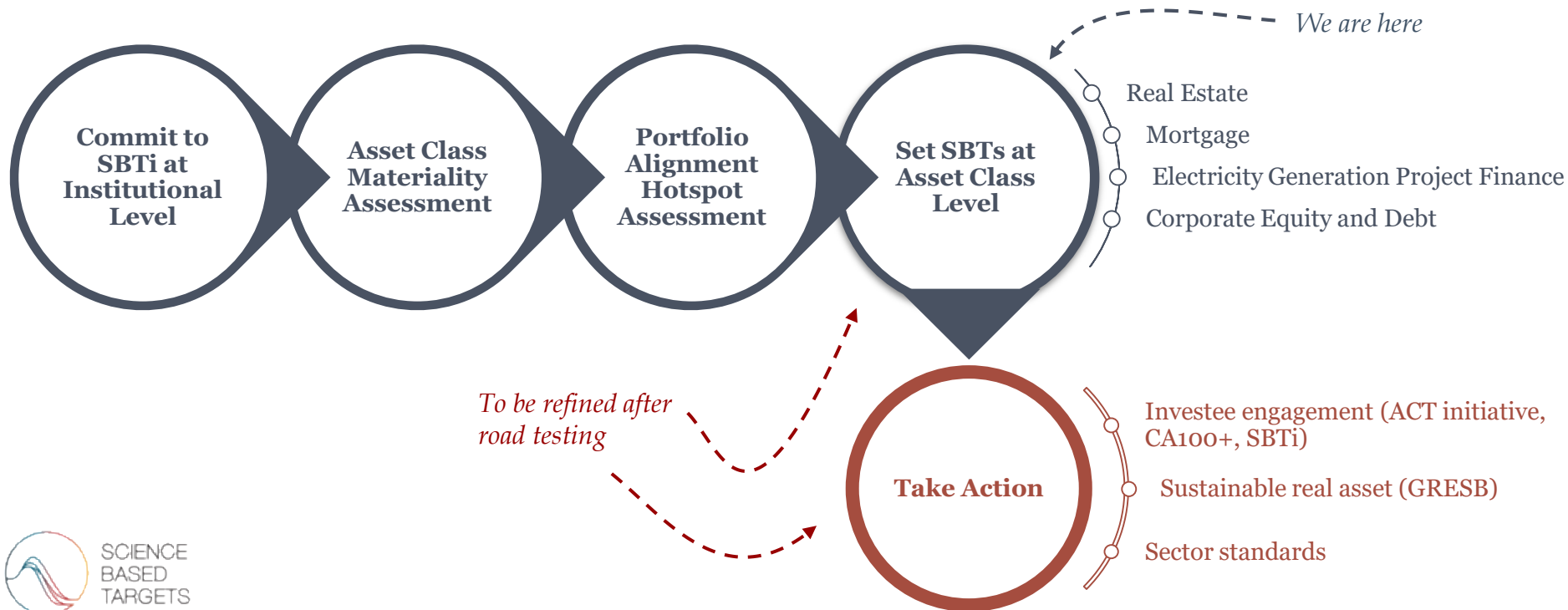


- We thank ISS ESG, who generously offered to provide off-the-shelf datapoints to interested road testers free of charge. Certain limitations might be applied.
- Data can only be used internally, for a limited time and for road testing only. Users need to sign a respective agreement.
- Free data comes “as is” - advice or bespoke research can be added on a ‘for pay’ basis.
- Other data providers can provide data and assistance for a fee.

Next steps: criteria discussion and consultation



While the road test focuses on target setting methods for portfolio alignment, we will address the **role of action targets and divestment** when we prepare the target validation criteria document for consultation.



Thank you! Here are the key contacts for questions.

For questions related to the SBT Portfolio Coverage method for corporate instrument, the road testing process, and the Science Based Targets initiative, please contact Nate Aden, Senior Fellow, World Resources Institute, nate.aden@wri.org or Chendan Yan, Research Analyst, World Resources Institute, chendan.yan@wri.org.

For questions related to the other emissions based approaches, please contact Giel Linthorst, Director, Navigant giel.linthorst@navigant.com or Kaboo Leung, Senior Consultant, Navigant, kaboo.leung@navigant.com

If you need ISS data support, please contact Joseph Ben Salem, ISS at +44 (0) 203 192 5755, joseph.bensalem@issgovernance.com.

For questions related to the technology based approaches, please contact Florence Palandri, Analyst, 2° Investing Initiative, florence@2degrees-investing.org, +44 77 08 32 90 90

- *2° Investing Initiative also provides free, online, fully automated equity and bond portfolio analysis (www.transitionmonitor.com)*
- *The team provides a desktop software version for assessing loan books and PE. The software and related support service are provided free of charge.*
- *The underlying data covering about 52,000 legal entities (issuers and their subsidiaries) is provided as part as the analysis of the portfolio*