

Impact Klimaanalyse eines typischen österreichischen Portfolios

CLARITY DRIVES ACTION



The Countdown Clock to 1.5°C is Ticking Louder Than Ever



Remaining 2°C budget of MSCI ACWI IMI companies: 205 Gt of CO₂e

Remaining 1.5°C budget of MSCI ACWI IMI companies: 33.4 Gt of CO₂e

Projected annual emissions of MSCI ACWI IMI companies in 2023: 12.4 Gt of CO₂e

Companies in the MSCI ACWI IMI have emitted a combined 85.6 Gt of CO₂e since the Paris Agreement in December 2015

32

Months left to limit warming to 1.5°C

Time remaining until listed companies deplete the emissions budget for limiting global temperature rise this century to 1.5°C above preindustrial levels

198

Months left to keep warming well below 2°C

Time remaining until listed companies deplete the emissions budget for keeping global temperature rise this century well below 2°C above preindustrial levels

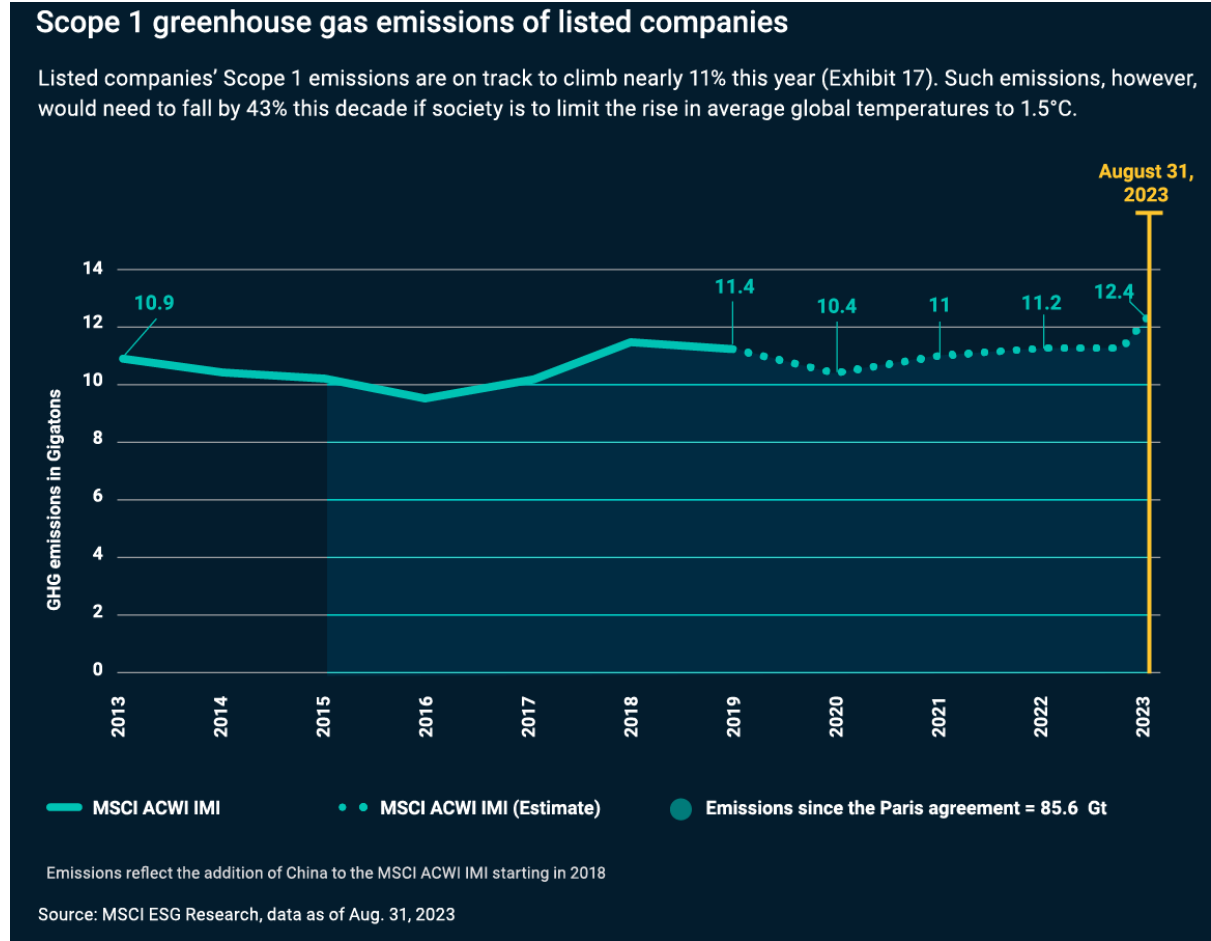
Progress investment world ⇔ progress real economy

Asset Managers, Asset Owners, Banks & Insurers

- The Net Zero Asset Manager Alliances: boasts over 315 signatories with a combined \$57 trillion AUM.¹
- The Net Zero Asset Owner Alliance: boasts over 88 signatories with \$9.5 trillion AUM²



History of scope 1 emissions of MSCI ACWI IMI* companies



*MSCI ACWI Investable Markets Index (IMI). Emissions reflect the addition of China to the MSCI ACWI IMI starting in 2018. Chart shows Scope 1 greenhouse gas emissions of listed companies.
 Source: [The MSCI Net-Zero Tracker – MSCI](https://www.netzeroassetmanagers.org/)
¹ <https://www.netzeroassetmanagers.org/>



As an Asset Manager, Your Objective is to See the Future of Investment Management

Engage & Advocate

- Promote climate leadership with clients and stakeholders
- Advocate for climate policy
- Develop systematic approach for engagement (MSCI target scorecard, CA100+, NZIF)

Scenario Analysis & Stress Testing

Evaluate forward looking company exposure for 1.5°C, 2°C and 3°C, 4°C & 5°C scenarios.

Report & Disclose

- Develop climate reporting KPIs
- Report on progress and actions
- Adhere to regulatory reporting requirements

Construct

Win climate-focused mandates and construct portfolios that advance client's climate strategies and benchmark performance

Measure

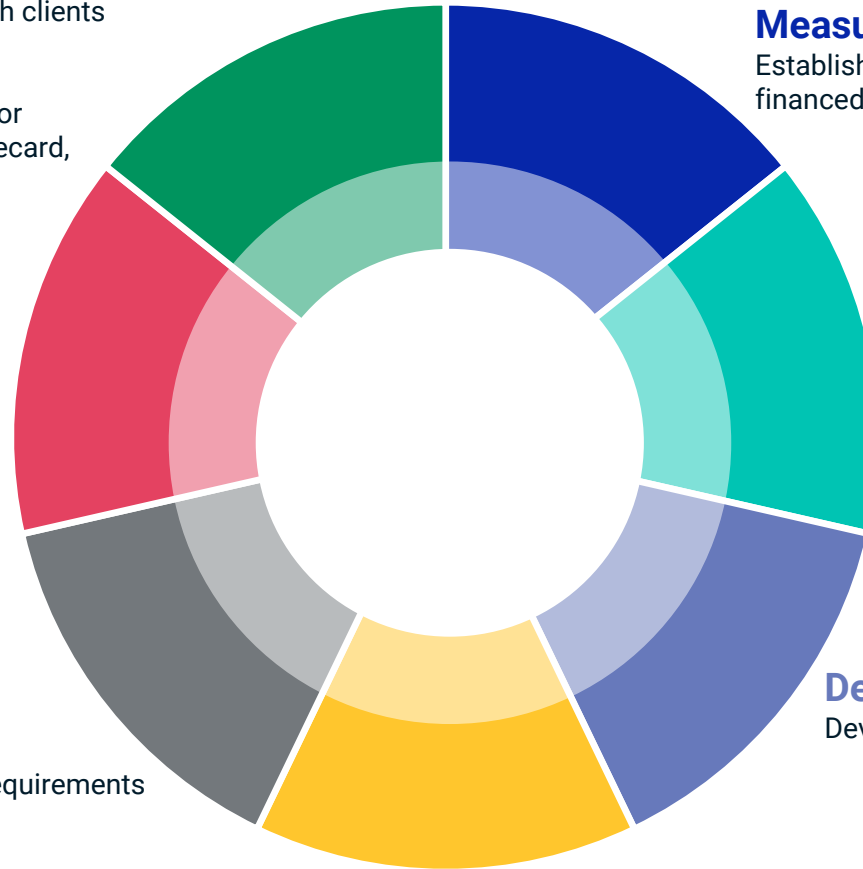
Establish emissions baseline by measuring financed scope 1, 2 & 3 emissions

Set targets

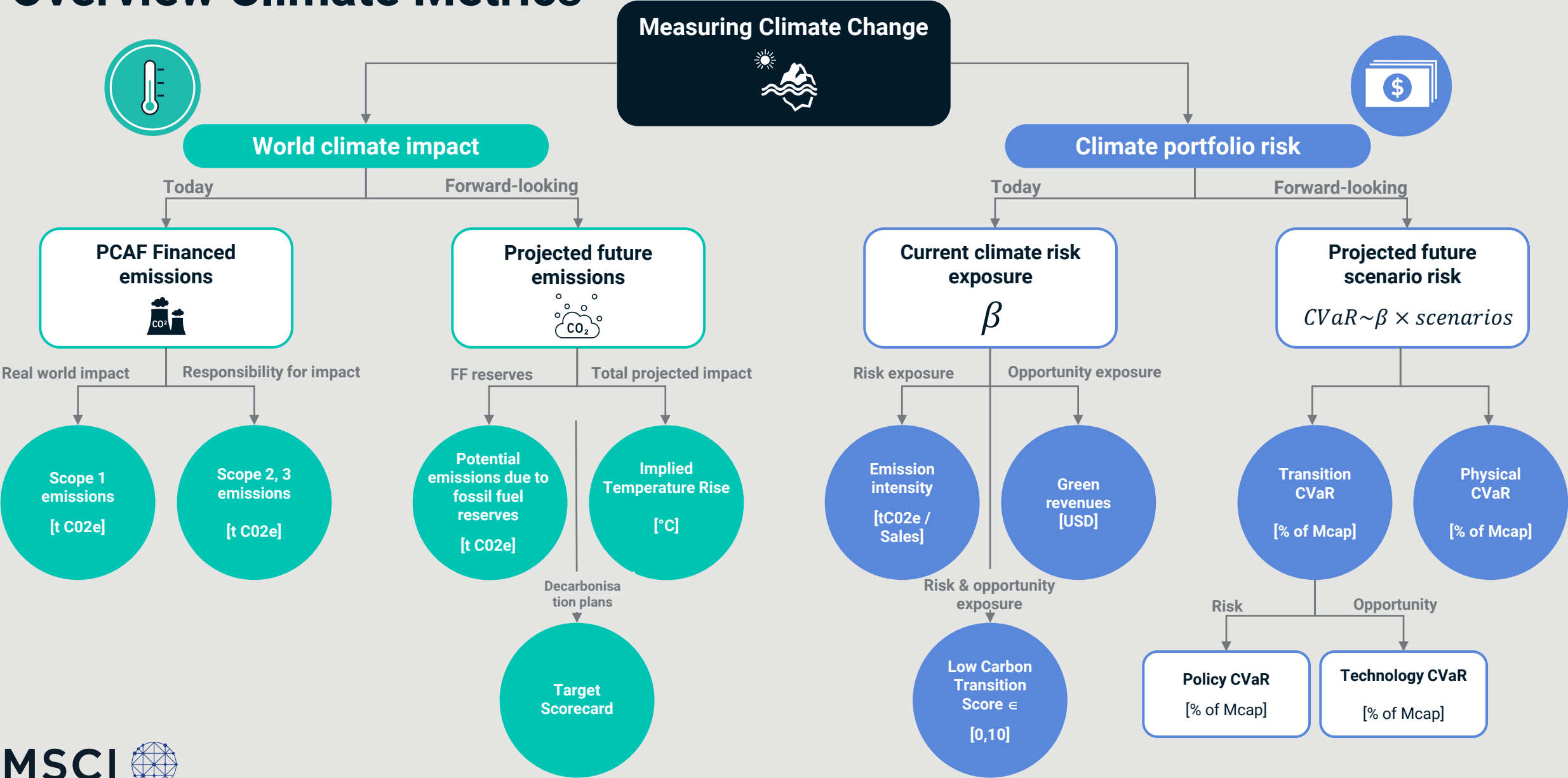
Set climate targets across entire portfolio & identify exposure to transition and physical risks and opportunities

Develop

Develop climate-focused products

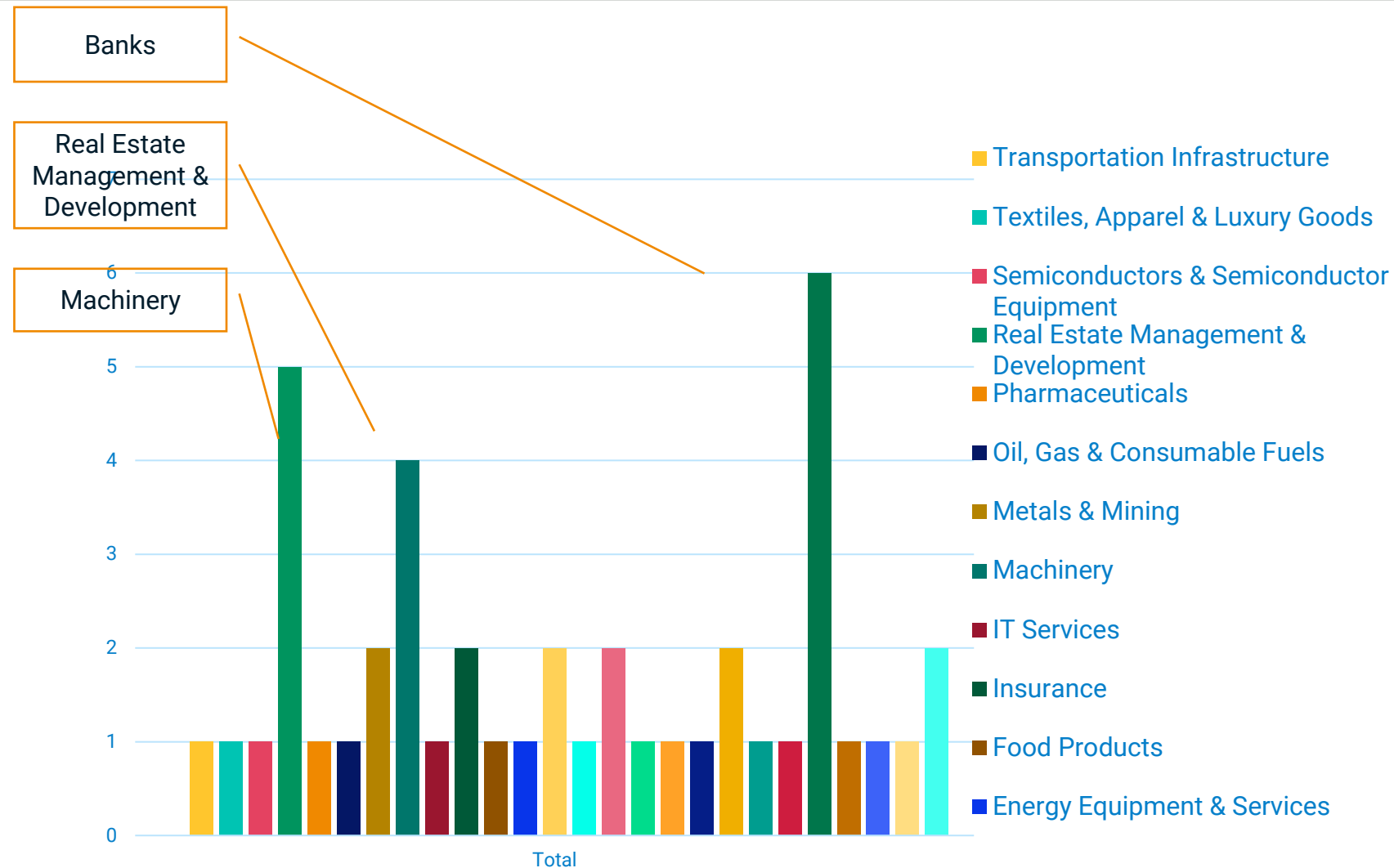


Overview Climate Metrics



Austrian Equity Portfolio Example

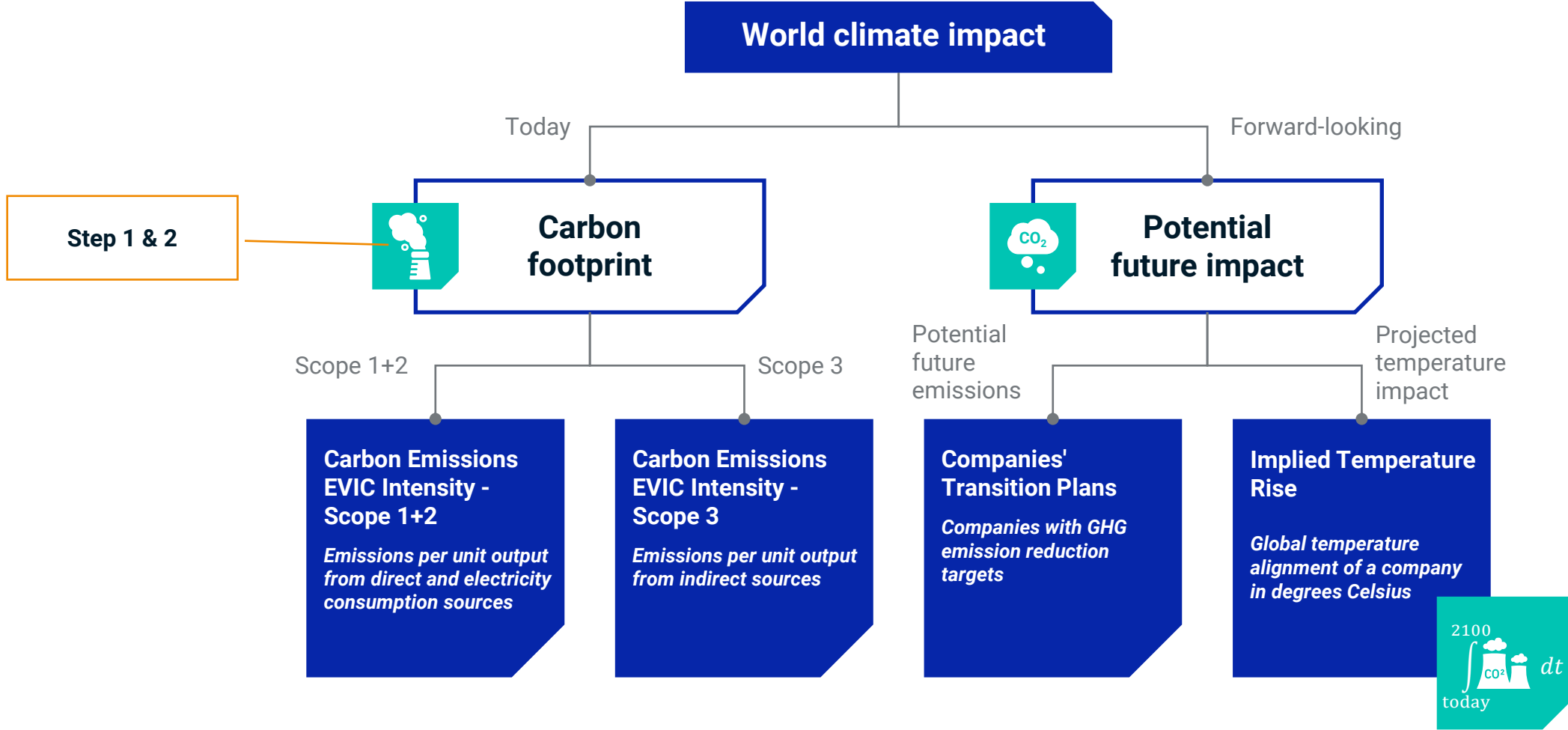
- 44 positions
- Equally weighted
- Value: 1.000.000 EUR
- Country Exposure: AT, Additionally: DE & CH



X: sector distribution
Y: number of companies



Where to Begin: Measuring a Portfolio's Carbon Footprint to Set a Baseline



What climate metrics shall I use to track my carbon footprint?

Measure

Each climate metric answers a slightly different question:

Financed emissions = emissions “owned” by the portfolio:
 How much GHG emissions am I financing? [t CO2e]

Financed emissions intensity (FEI) = weighted emissions / EVIC: How much GHG emissions am I financing per dollar invested? [t CO2e / USD]

Weighted average carbon intensity (WACI) = weighted emissions / Sales: How carbon intense are the business models of the companies that I am invested in? [t CO2e / USD]

Carbon Footprint		Portfolio	Benchmark	Active
Allocation Base	EVIC			
Financed Carbon Emissions tons CO2e / USD M invested Investor Allocation: EVIC	Scope 1+2	161.7	70.6	129.1%
	Scope 3 – upstream	348.4	150.7	131.3%
	Scope 3 – downstream	514.8	344.6	49.4%
Total Financed Carbon Emissions tons CO2e Investor Allocation: EVIC	Scope 1+2	161,698.9	70,568.6	129.1%
	Scope 3 – upstream	348,390.5	150,654.4	131.3%
	Scope 3 – downstream	514,807.6	344,584.2	49.4%
Financed Carbon Intensity tons CO2e / USD M sales Investor Allocation: EVIC	Scope 1+2	151.9	134.5	12.9%
	Scope 3 – upstream	327.2	287.0	14.0%
	Scope 3 – downstream	483.5	656.4	-26.3%
Weighted Average Carbon Intensity				
Corporate constituents tons CO2e / USD M sales	Scope 1+2	146.8	95.0	54.5%
	Scope 3 – upstream	309.8	276.4	12.1%
	Scope 3 – downstream	453.0	465.5	-2.7%



As of January 24, 2024
 Source: [MSCI Climate Risk Report](#)

MSCI Solution: Tracking the Austrian Portfolio Emissions Reduction Progress (Example)

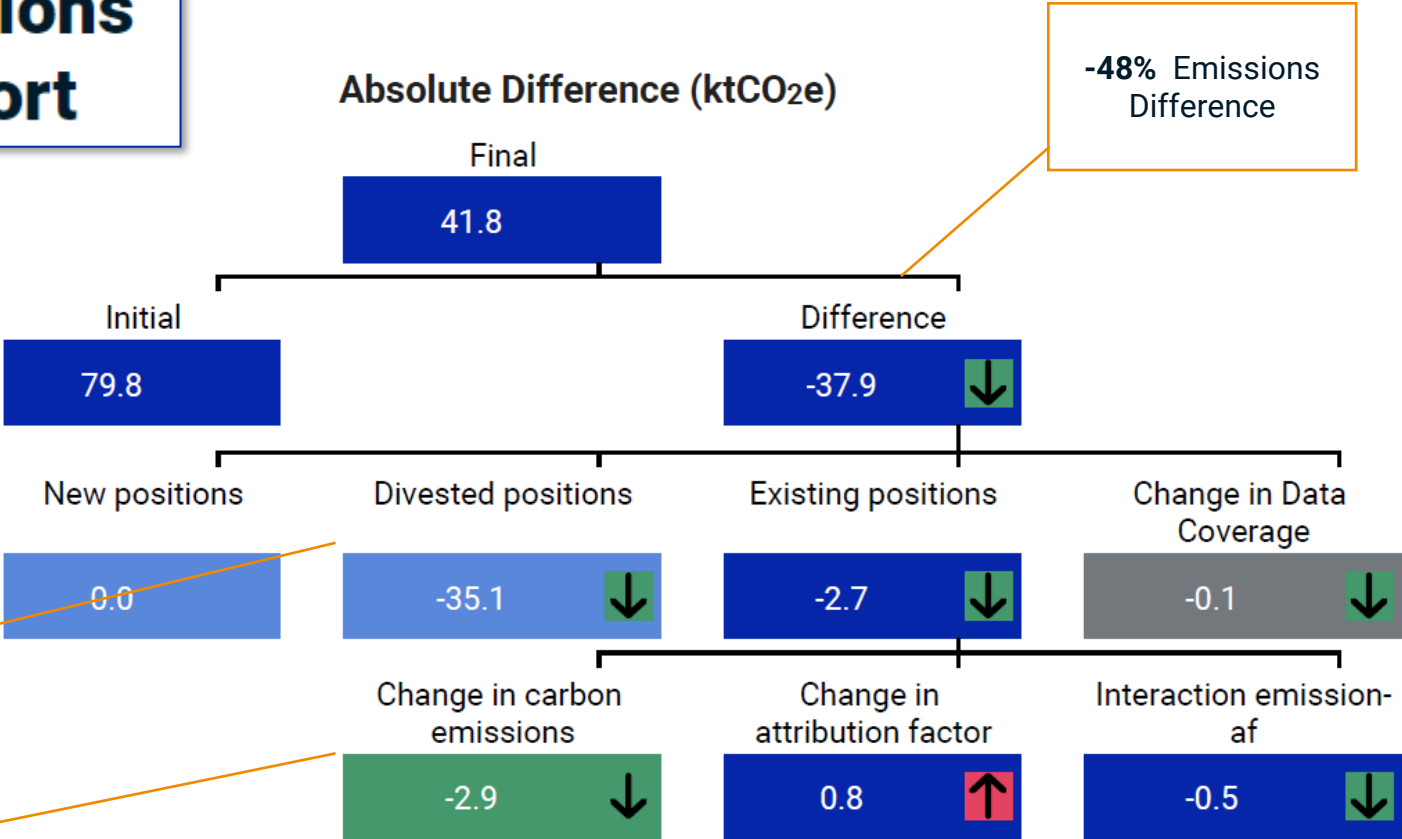
Absolute Difference (ktCO₂e)

Financed Emissions Attribution Report

100% of the portfolio emissions

-44% Change in Divested Positions

-3.7% Change in "real world" carbon reduction



-48% Emissions Difference

- Portfolio Manager
- Company Data
- Company Emissions
- Composite

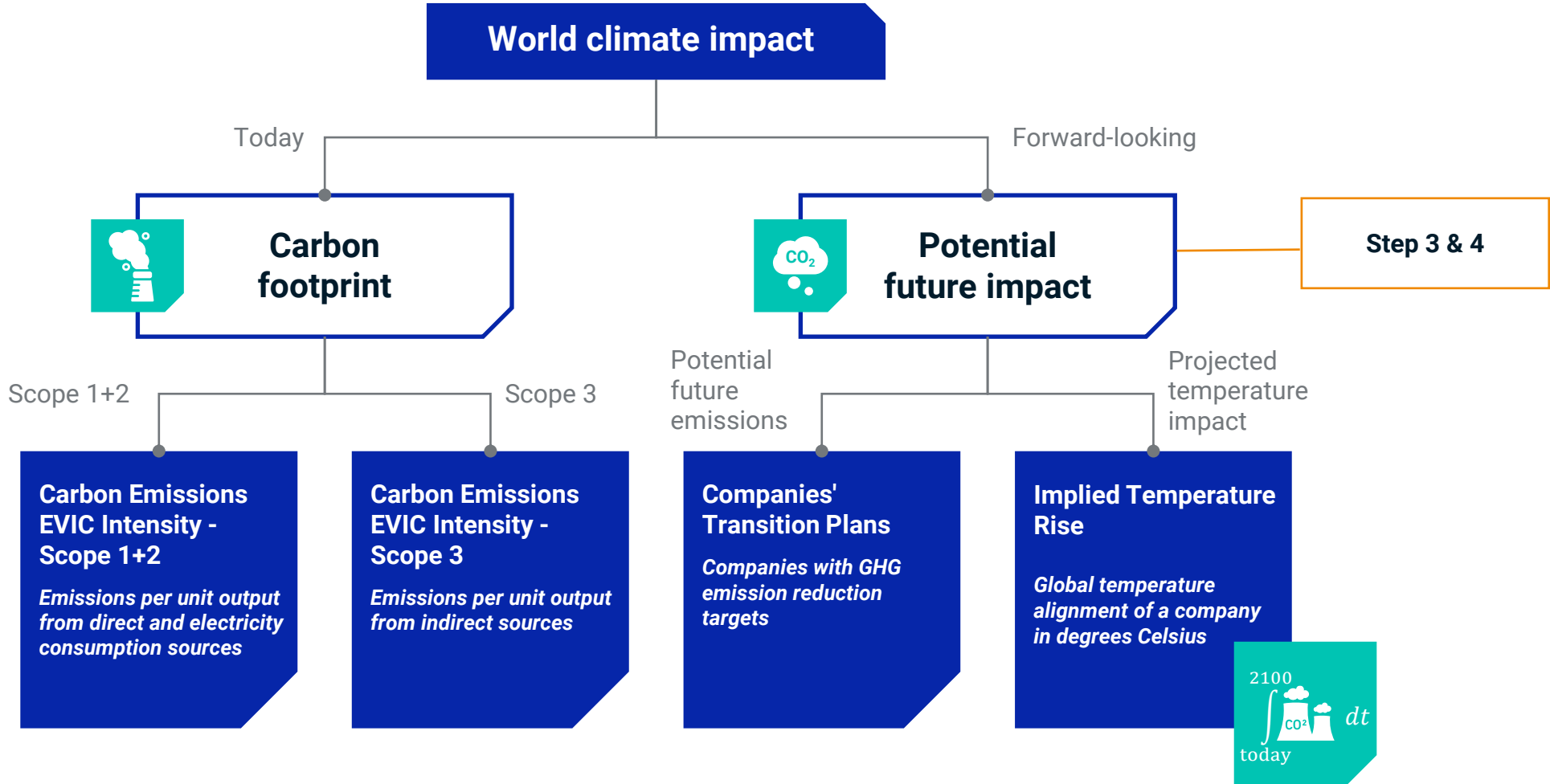
1st Layer
2nd Layer

Measure



As of January 24, 2024
Example between 2022 – 2023
Source: [MSCI Financed Emission Attribution Report](#)

Where to continue: Measuring a Portfolio's Potential future impact



Climate Target Scorecard

Set targets

- **Normalize** and **compare** corporate climate targets
- Assess the **credibility** of companies' **transition plans to net-zero** across the various emission scopes

Austrian Portfolio Example:

Portfolio : Equity Portfolio Example
 Benchmark : MSCI ACWI IMI Europe

* Companies' Transition Plans			
	Portfolio	Benchmark	Active
Companies with GHG emission reduction targets	54.5%	94.4%	-39.8%
Companies with targets across all scopes	27.3%	80.6%	-53.3%
Companies with SBTi approved targets	20.5%	58.3%	-37.9%
Companies with top quartile carbon management score	18.2%	69.2%	-51.0%

Drivers of Carbon Emissions

Mega tons of CO2e	
Scope 1 (Reported, 2020)	63.00
Scope 2 (Reported, 2020)	9.00
Scope 3 (Estimated, 2020)	656.58
Scope 3 (Reported, 2020)	1.34K
Est. Ratio of Reported vs Total Estimated Emissions*	194%

Target Scorecard	
COMPREHENSIVENESS	AMBITION
100.00%	-3.23% p.a.
% of company footprint covered by target	Projected reduction per year to meet stated target**

Comprehensiveness	
Type	ABSOLUTE, INTENSITY
Unit	tCO2e, tCO2e/megajoules (MJ)
Target Scopes	1 2 3
Scope 3 upstream categories	1 2 3 4 5 6 7 8
Scope 3 downstream categories	9 10 11 12 13 14 15
% of Company footprint covered by target	100%

Ambition	
Target Calculation date (YYYYMMDD)	20220815
Intention to use carbon offsets	Yes
Projected change per year to meet stated target**	-3.23% p.a.
Target Year	2050

Feasibility	
Track record of meeting historical targets	Met some targets
Progress towards active targets	On track with some targets

SBTi Commitments	
Does the company have at least one SBTi Target approved	
Has the company committed to setting a SBTi target	



MSCI Implied Temperature Rise



What does it measure?

- Estimates how companies and investment portfolios align with international goals to limit global warming
- The measure, expressed in °C, estimates the global rise in average temperature by 2100 and later if the global economy were to overshoot (or undershoot) its remaining carbon budget to the same extent as the company or portfolio in question
- Designed to align with the GFANZ Portfolio Alignment Best Practice Report

Measure

COMPANY A

MSCI IMPLIED TEMPERATURE RISE

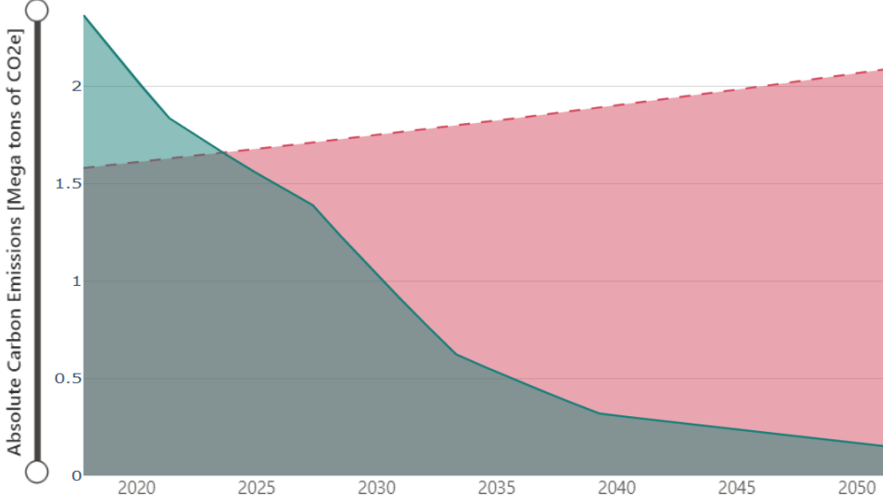
3.4°C



STRONGLY MISALIGNED MISALIGNED 2°C ALIGNED 1.5°C ALIGNED

NGFS 2050 NZ Trajectory

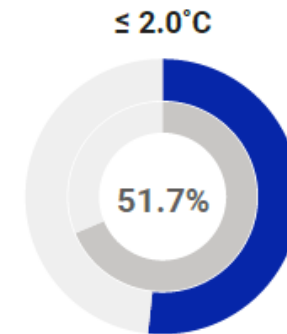
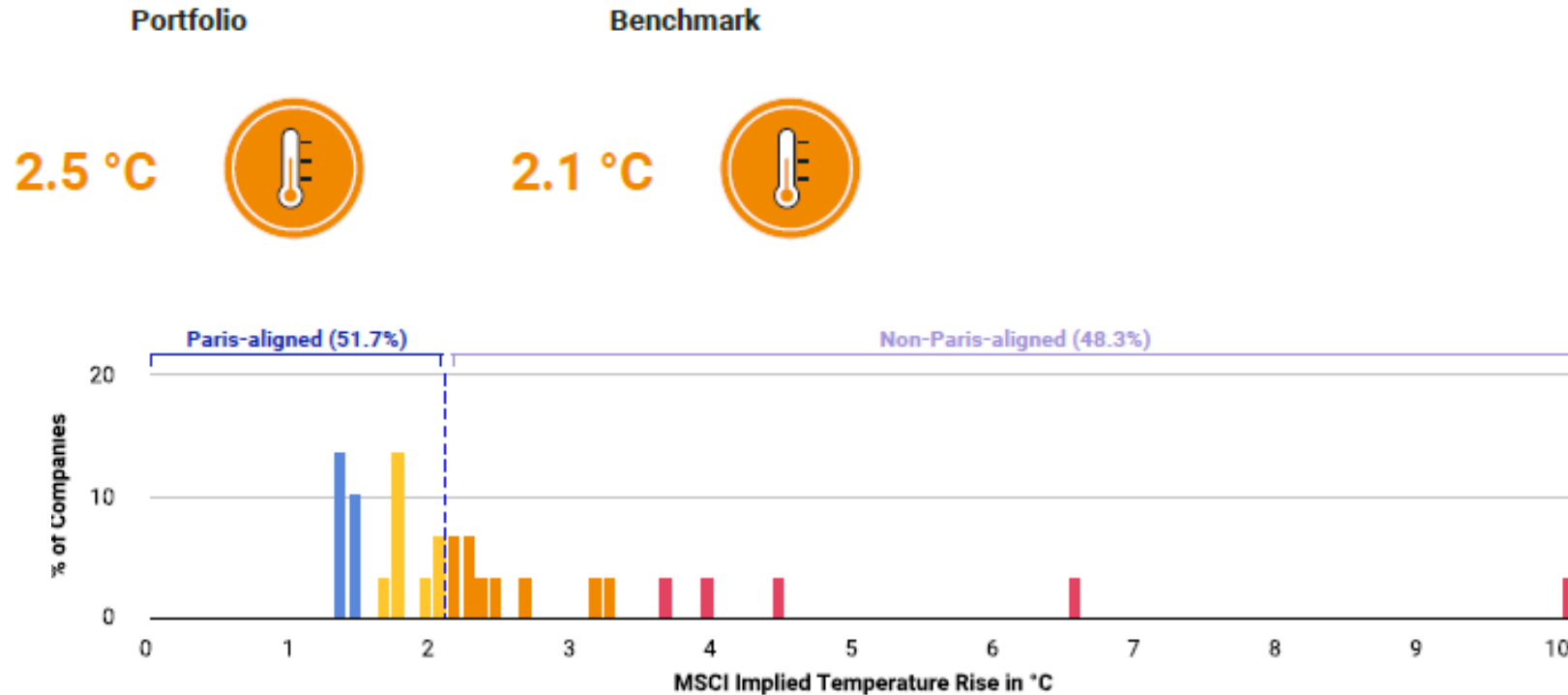
Type 1.5C Trajectory Projected Carbon Emissions (Scope 1, 2 and 3)



Implied Temperature Rise Calculation date (YYYYMMDD) 20230130

Austrian Portfolio Analysis: MSCI Implied Temperature Rise

Measure



51.7% of companies within the portfolio (vs. 68.7% for the benchmark) align with the goal of limiting temperature increase to below 2°C.

Implied Temperature Rise Categories		% of companies in category
1.5°C Aligned	<= 1.5°C	24.1%
2°C Aligned	> 1.5°C - 2 °C	27.6%
Misaligned	>2.0 - 3.2°C	31.0%
Strongly Misaligned	>3.2°C	17.2%

Portfolio : Equity Portfolio Example

Benchmark : MSCI ACWI IMI Europe



Calculation Date: As of January 24, 2024

Information Classification: GENERAL

Example: Implied Temperature Rise at the company level: High Output

Engage & Advocate

Company Example

Industry: Integrated Oil & Gas
Country/Region: Austria



MSCI IMPLIED TEMPERATURE RISE

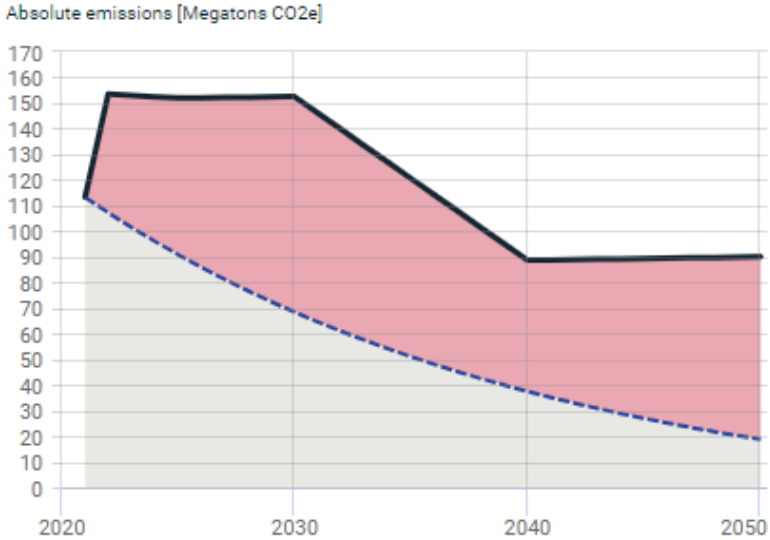
3.6°C

STRONGLY MISALIGNED

- Annual Projected Carbon Emissions
- - - MSCI 2°C Trajectory (Annual Budget)
- Absolute Carbon Budget Overshoot
- ▨ Absolute Carbon Budget Undershoot

An Implied Temperature Rise of **above 3.2°C** indicates that the company is strongly misaligned with global climate goals. Its contribution to catastrophic climate change is higher than most.

2°C Trajectory



Decarbonization Target

Does the company have a decarbonization target? YES

Does the company have a decarbonization target that is considered in the calculation of Implied Temperature Rise? YES

Target Year 2040

Comprehensiveness % of company footprint covered by target 92.7%

Ambition Projected reduction per year to meet stated target** -2.35% p.a.

Decarbonization data as of January 15, 2024*

Target data as of January 15, 2024*



Example: MSCI Implied Temperature Rise Company Analysis: Low Output

Engage & Advocate

Company Example

Industry: Utilities

Country/Region: Austria

MSCI IMPLIED TEMPERATURE RISE



1.7°C

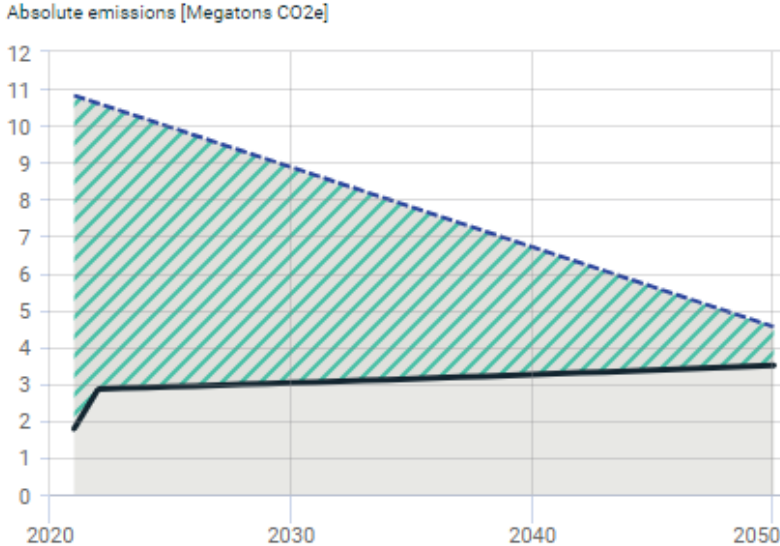
2°C ALIGNED

- Annual Projected Carbon Emissions
- - - MSCI 2°C Trajectory (Annual Budget)
- █ Absolute Carbon Budget Overshoot
- █ Absolute Carbon Budget Undershoot

Decarbonization data as of January 15, 2024*

An Implied Temperature Rise of **between 1.5 and 2.0°C** indicates the company is in line with the Paris agreement's minimal goal of limiting global mean temperature to below 2°C.

2°C Trajectory



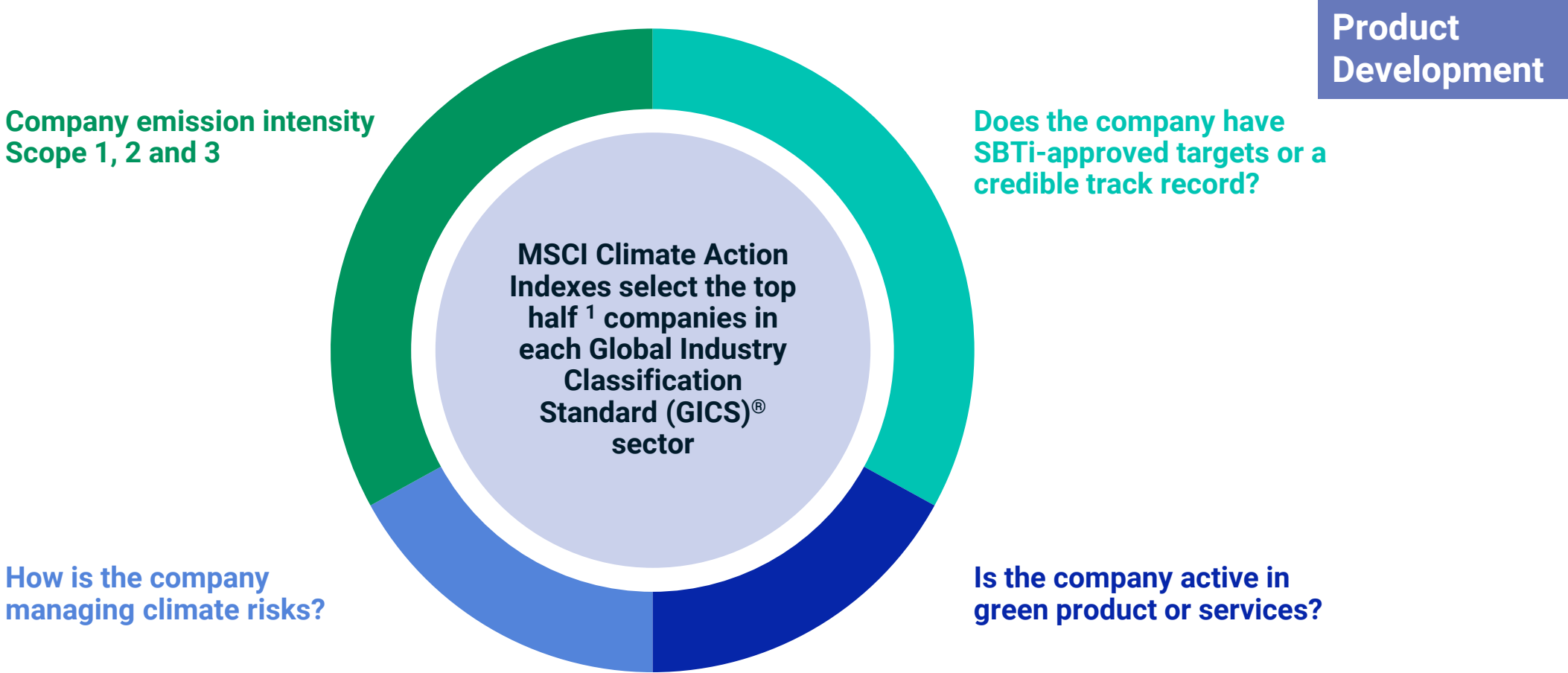
Decarbonization Target

Does the company have a decarbonization target?	YES
Does the company have a decarbonization target that is considered in the calculation of Implied Temperature Rise?	YES
Target Year	2050
Comprehensiveness % of company footprint covered by target	30.63%
Ambition Projected reduction per year to meet stated target**	0.8% p.a.

Target data as of January 15, 2024*



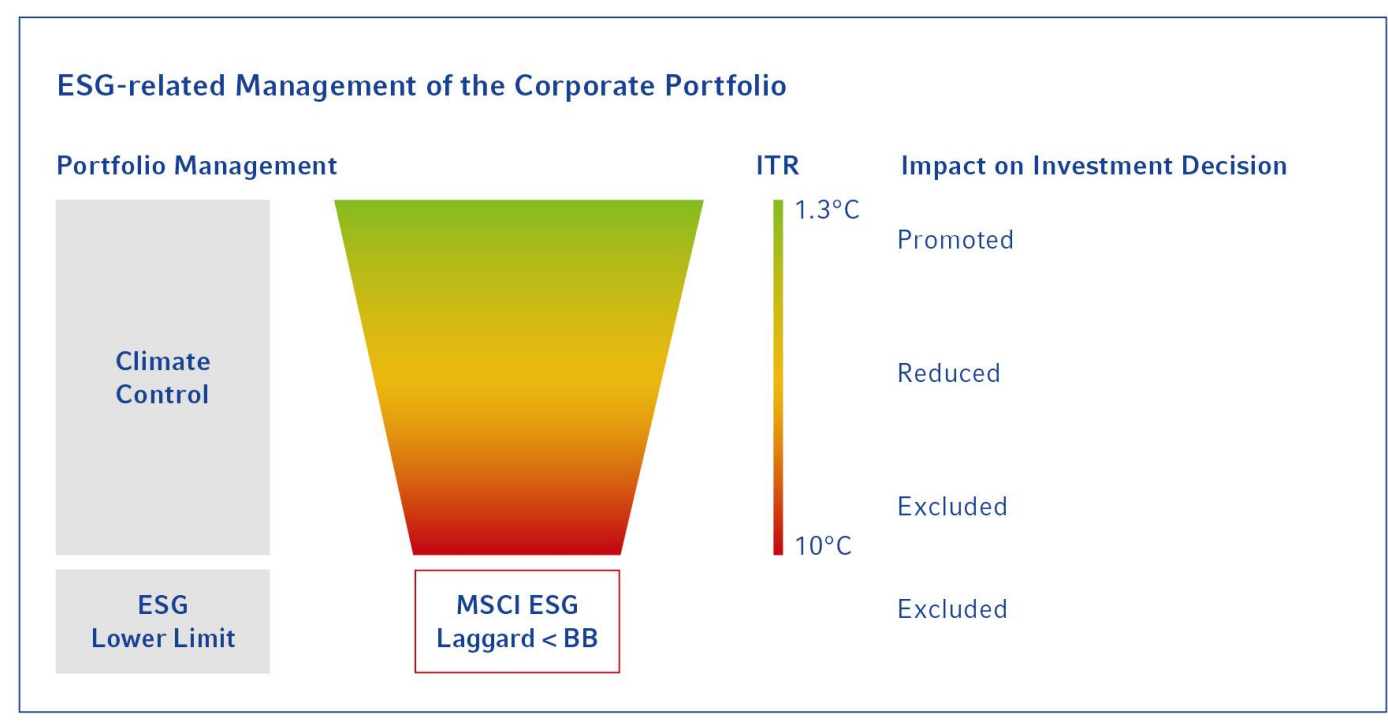
Example: How to identify climate transition leaders/laggards?



(MSCI Climate Action index methodology)
¹ The MSCI Climate Action Indexes select 50% of companies by count, not by market cap.
GICS is the global industry classification standard jointly developed by MSCI and S&P Global Market Intelligence

Portfolio Managers taking into account the Implied Temperature Rise (ITR)

Construct



- The Implied Temperature Rise (ITR) is a key component in the consideration of transformation opportunities/risks
- Measures the alignment to Paris climate goals:
 - The overarching objective is the achievement of a climate-neutral investment portfolio by no later than 2045 to support the limitation of the temperature rise to 1.5°C.

MSCI ESG Research: Scenario Analysis / Temperature Alignment Coverage

	Coverage	Transition Risk	Technology Opportunity	Physical Risk	Implied Temperature Rise
Listed Equity & Corporate bonds	<ul style="list-style-type: none"> 12,500 entities directly covered 19,000 with inheritance 100% of ACWI IMI 95% of BBG Barclays Global Agg Corpor. 	✓	✓	✓	✓
Sovereign Bonds	<ul style="list-style-type: none"> +9,000 securities 46 markets 	✓			✓
Commercial Real Estate	<ul style="list-style-type: none"> 1 million private assets 	✓		✓	✓
Private Equity & Debt	<ul style="list-style-type: none"> Private companies: proxies forthcoming 7,000 private equity and private-debt funds (Private Capital Solution) ** Private Data Company Connect (PCDC) 	✓	✓	✓	✓



*As of January 2024

** Burgiss

✓ Available today

✓ Forthcoming 2024

MSCI  MSCI ESG RESEARCH LLC


The Climate Transition Is Increasingly About Opportunity

The cost competitiveness of green technologies adds to reasons for investors to act

May 2023




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MSCI  May 2023

Spotlight on unlisted assets

The MSCI Net-Zero Tracker

A periodic report on progress by the world's listed companies toward curbing climate risk



MSCI  RESEARCH INSIGHT

A Framework for Attributing Changes in Portfolio Carbon Footprint

May 2023



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