Decision support for reaching Net-Zero: corporate approach

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Our presenters today

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PwC Finland's Advisory

> Advisory has more than 200 M&A and consulting professionals in Finland

Corporate Finance

- +30 professionals
- Provides services in acquisition and disposal advisory, joint ventures, buy-outs and buy-ins, real estate, debt and valuation advisory
- Part of international network of ~1,300 corporate finance professionals

Transaction Services

- ~65 professionals
- Supports M&A & capital market transactions with
  - Financial DD
  - Operational DD, carve-out preparation and post-merger integration
- International network of 3,000 dedicated specialists

Consulting

- ~90 professionals
- Operations Consulting
- Finance Consulting
- Digital Consulting
- Part of international network of 33,000+ consultants in over 80 countries

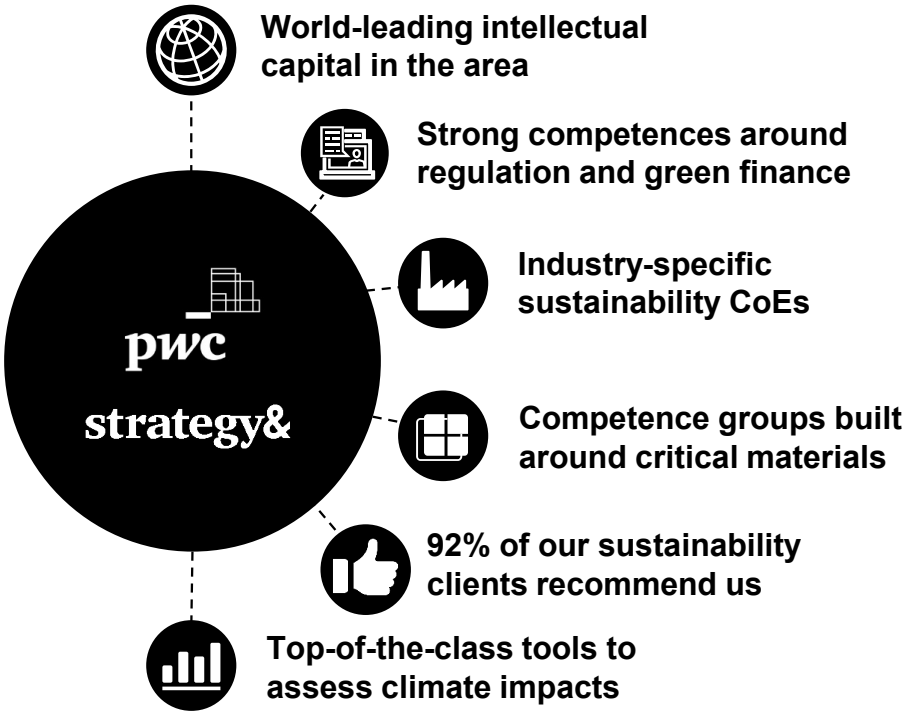
Strategy&

- +20 professionals
- Strategy consultants serving corporate and PE clients
- Strategy, Deals, and Transformation engagements
- Global network of 3,000+ strategy experts, primarily consisting of legacy Booz & Company

#1 mid-market M&A advisor by number of deals in 2013-2020 (Merger market)	# 1 choice of large deal makers in Finland	One of the leading Finnish consultancies in Operations and Finance Consulting	One of the leading Finnish advisors in corporate and BU strategy

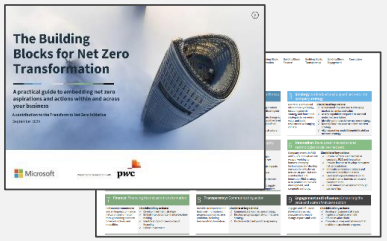
PwC has built a world-class ESG advisory practice to help our clients create value from sustainability and climate

Overview of our capabilities



Example of our publications

In our role as knowledge advisor to Microsoft, we created a blueprint to help guide companies as they move from Net Zero ambition to action.

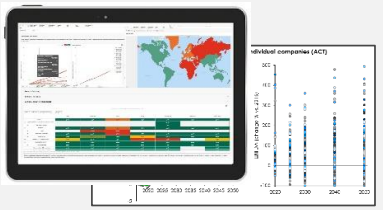


Low carbon economy transition

We guide our clients to evaluate and disclose business risks and opportunities related to climate change and to assess green financing options related to EU Green Deal and EU Taxonomy.

Climate Excellence Tool

Our Climate Excellence Tool enables asset managers and asset owners to make the **financial impact of climate risks** and **opportunities tangible for their portfolios.**

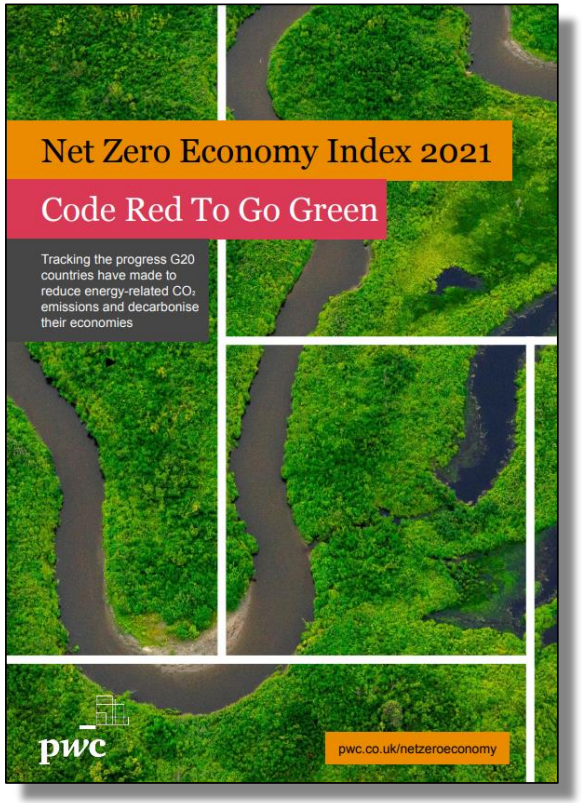


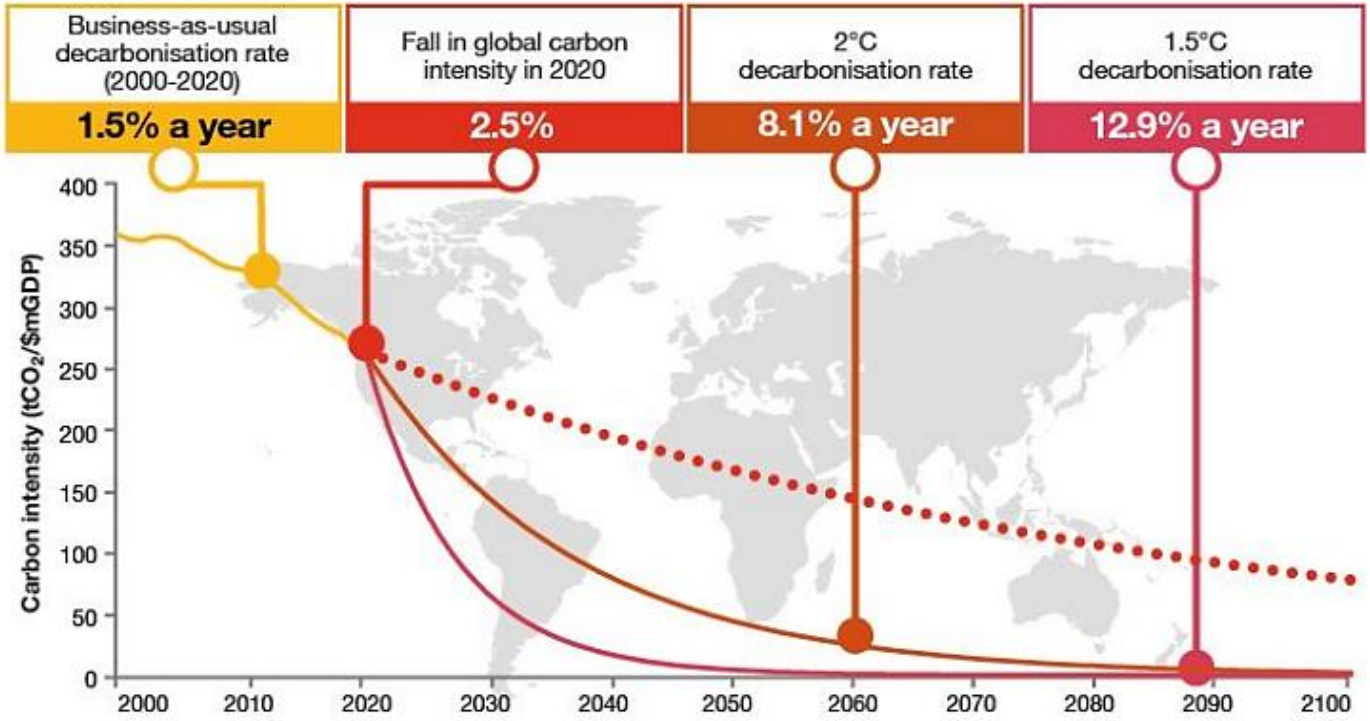
Agenda

1. Changing market expectations on Net-Zero
2. Engaging on Net-Zero topics with companies
3. Energy transition and its impact on transactions

Changing market expectations on Net-Zero

The global rate of decarbonisation needs to increase five-fold to keep the 1.5°C target within reach

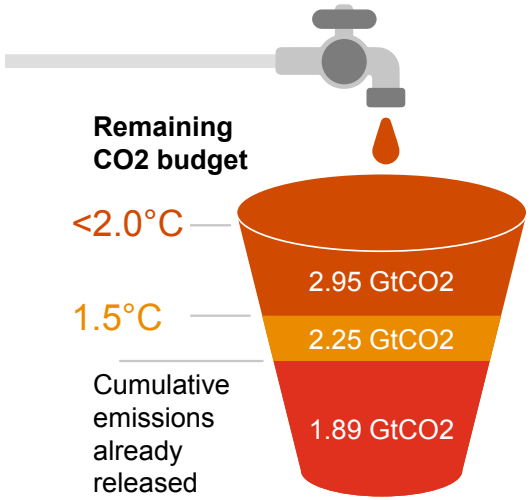




Source: Net-Zero Economy Index – PwC.

1.5°C Science-Based Targets are the leading international practice for corporate climate targets and a preferred choice for investors

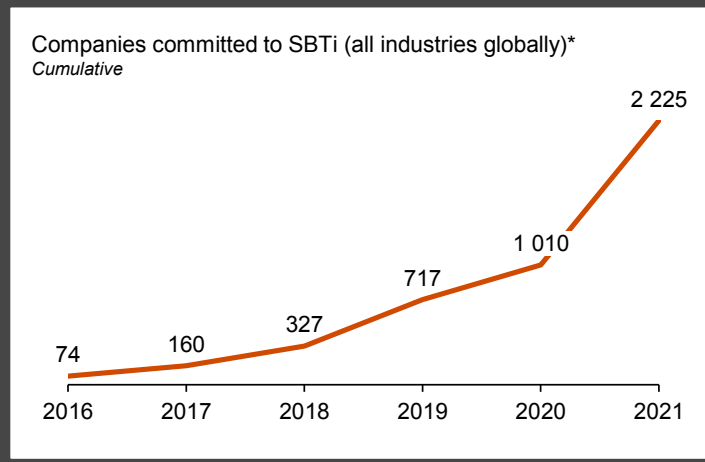
The aim of the SBTi is to limit the most adverse effects of climate change, as per the Paris Agreement



1. Halving the emissions by 2030
2. Achieving Net Zero by 2050

Net Zero refers to a state in which a company's value chain does not cause net accumulation of carbon dioxide in the atmosphere or net-impact from other greenhouse gas emissions. **SBTi launched Net Zero guidance on 28.10.2021** (building upon current 1.5˚C criteria).

The number of companies committed to SBTi has grown exponentially over the past years

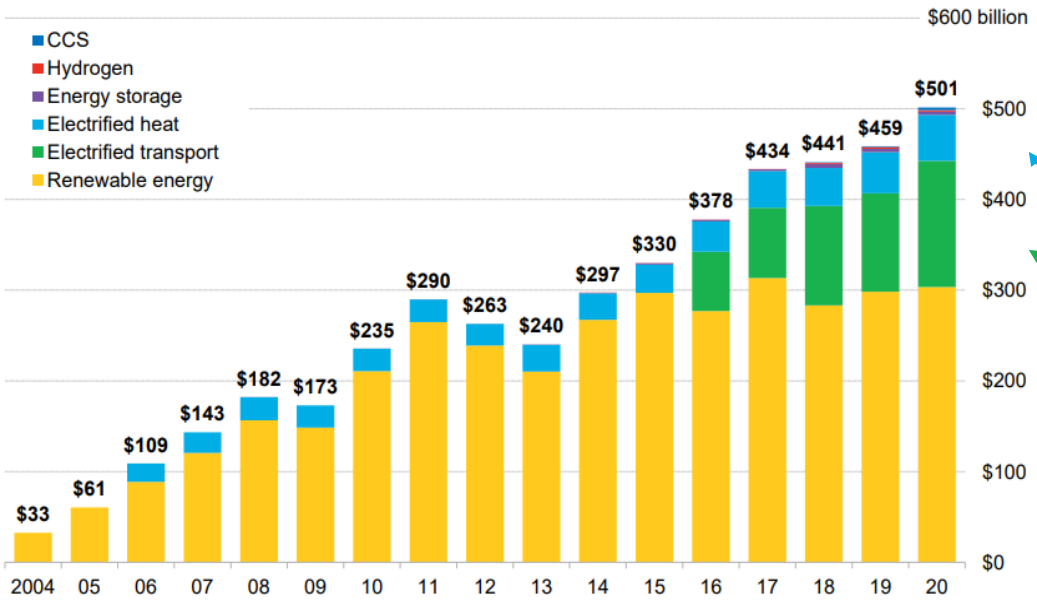


*Data retrieved on 10.12.2021.

Source: PwC based on IPCC and SBTi.

Large investments are needed to achieve the global climate targets aided by the energy transition

Global energy transition investments reached half a trillion USD in 2020



- **Estimated required investment in energy supply and infrastructure is between $92 trillion and $173 trillion over the next three decades**; annual investment will need to more than double from around $1.7 trillion per year to somewhere between $3.1 trillion and $5.8 trillion per year
- Energy transition investments includes renewable energy, nuclear energy, electrified transport, electrified heat, energy storage, hydrogen, and carbon capture and storage (CCS)

Electrification of transport and heat received almost $200 billion in 2020: electrified transport received $139 billion in 2020 and electrified heat $50 billion

Renewable energy investment has been flat since 2015, however, with equipment costs falling, the amount of capacity built has increased more than 13 times since 2004

Source: BNEF Executive Factbook, BNEF New Energy Outlook (NEO) 2021.

Investors expect to see a sustainable, low-carbon economy transition and a seismic shift is taking place in the capital markets

Societal demand for sustainable, low carbon economy

Increasing number of investors are implementing climate integration in their investment strategy

Growing interest to green financing – In 2019, there were issued USD 260 billion worth of green bonds

Customers are committing to net zero ambition and Science-Based Targets

Regulatory action to mitigate climate change such as regulations on CO_2 emissions

In our latest report we outline the key catalysts for ESG growth:

1. Complete Regulatory Overhaul
2. ESG's outperformance
3. Increasing investor demand
4. Fundamental societal shifts

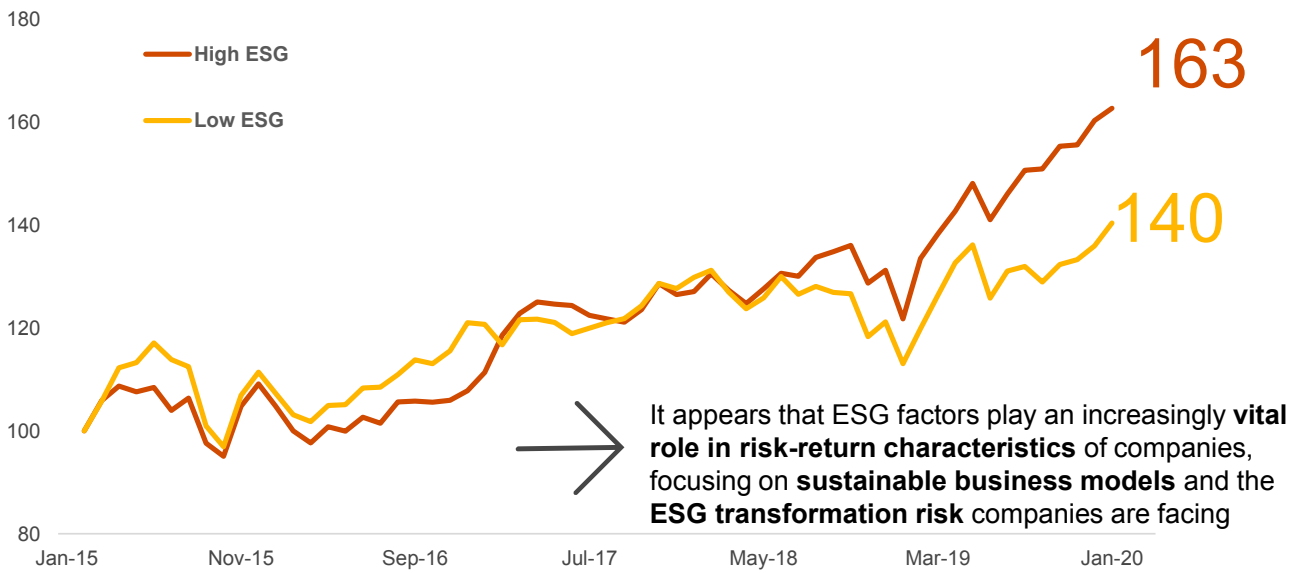
There is already strong support for the claim that ESG aspects matter in company valuation

Overview of ESG rating impact on cumulative portfolio performance

"As more and more **investors choose to tilt their investment towards sustainability-focused companies**, the tectonic shift we are seeing will accelerate further. And because this will have such a **dramatic impact on how capital is allocated**, every management team and board will need to consider how this will impact their company's stock."

Larry Fink I CEO, BlackRock
Annual Letter to CEOs, 26 January 2021

Cumulative portfolio performance: Gross Returns, MEUR (2015-19)



It appears that ESG factors play an increasingly **vital role in risk-return characteristics** of companies, focusing on **sustainable business models** and the **ESG transformation risk** companies are facing

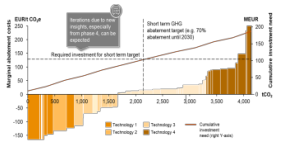
Source: PwC Analysis, Capital IQ, Bloomberg, MSCI ESG.

Engaging on Net-Zero topics with companies

GHG Protocol, SBTi, and GHG abatement analysis form the basis for corporate Net-Zero commitments

GREENHOUSE GAS PROTOCOL

SCIENCE BASED TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION



Greenhouse Gas Protocol (GHGP)

GHGP is globally the most recognised standard for carbon accounting

It provides an established framework to cover corporate emissions across the whole value chain

Scope 1 – Direct: All direct emissions from the activities of an organisation or under their control

Scope 2 – Indirect: Indirect emissions from energy purchased and used by the organisation

Scope 3 – Indirect: All other indirect emissions from upstream and downstream activities

Science-Based Targets initiative (SBTi)

SBTi is a partnership between CDP, the United Nations Global Compact, World Resources Institute (WRI) and the World Wide Fund for Nature (WWF)

Defines and promotes best practices in emission reductions and raises the level of ambition of corporate climate strategies in line with climate science

In addition to decarbonising own operations (Scope 1&2), SBTi expects companies to understand and reduce their entire carbon footprint including value chain emissions (Scope 3)

Greenhouse gas abatement (MACC)

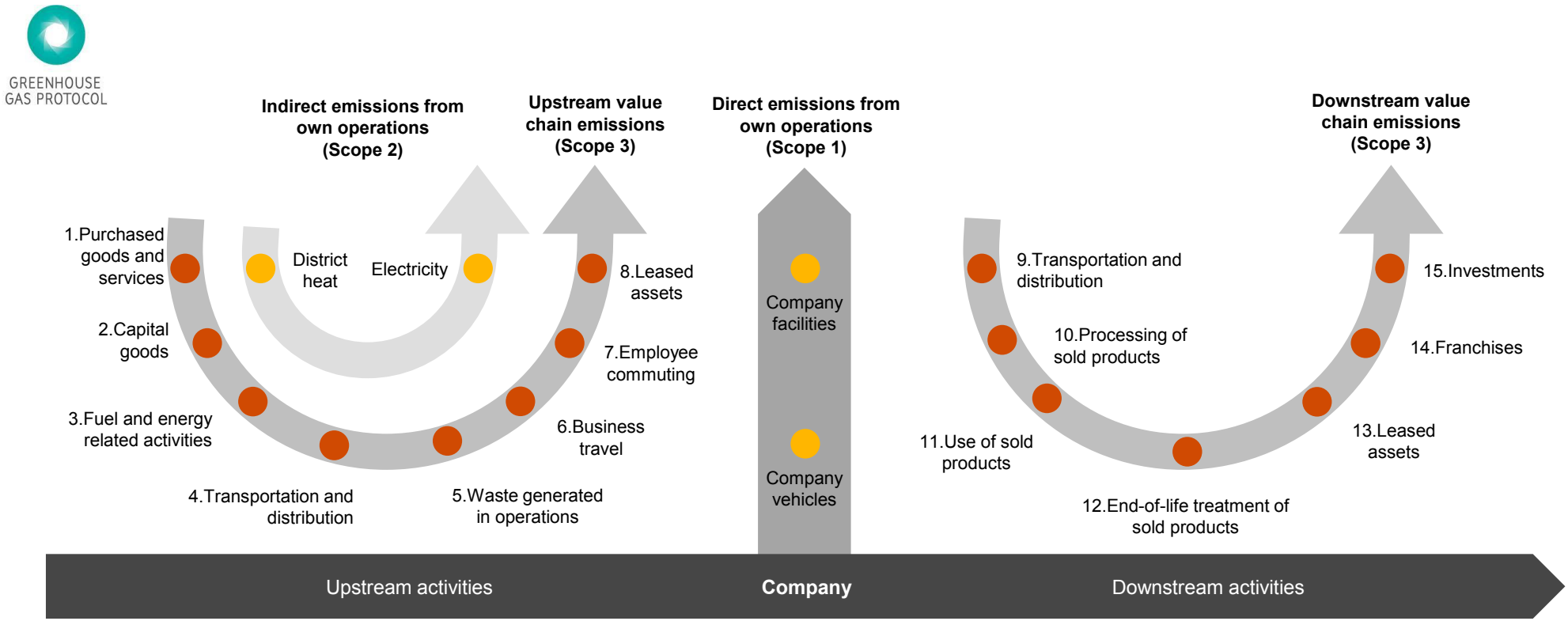
MACCs are an established tool for visualizing carbon abatement options and their potential

Marginal Abatement Cost Curves help determine the most cost-effective ways of reaching climate targets

Once the targets have been set, the most suitable and cost-efficient ways of reaching them can be determined using Marginal Abatement Cost Curves (MACCs)

For scope 3 targets, the abatement options should be complemented with a supplier engagement strategy

GHG Protocol guides on assessing emission impacts across the value chain –majority of companies have the most significant impacts outside of their own operations



SBTi targets need to meet six criteria – Net-Zero criteria are more ambitious than the former 1.5°C guidance

	Boundary Group-level Scope 1-3 emissions	**Ambition** Limiting global warming to max. 1.5°C	**Timeframe** 5 to 15 years, long-term target encouraged
	• Targets must **cover all relevant GHGs and emission sources** (based on GHGP) • **Scope 1&2** emissions must be 95% included • **Scope 3 screening** completed for all relevant value chain emission sources; if at least 40% of all emissions, then 67% need to be included in target	• **Level of ambition Scope 1&2:** on track with **1.5°C trajectory** • **Level of ambition Scope 3:** on track with **2°C trajectory**; more ambitious trajectory encouraged or **supplier engagement target** • **Offsets and avoided emissions are not counted** as emission reductions	• Targets cover **a minimum of 5 years and a maximum of 15 years** • Not acceptable: submitting **already achieved targets** • Baseline should be the **most recent year with available data**
Net-Zero criteria	• Near-term target: no change • Long-term target: 90% of Scope 3 emission included	• Near-term target: Well-below 2°C trajectory for Scope 3 • Long-term target: 1.5°C trajectory for all Scopes	• Near-term target: 5-10 years • Long-term target: +10 years, until 2050

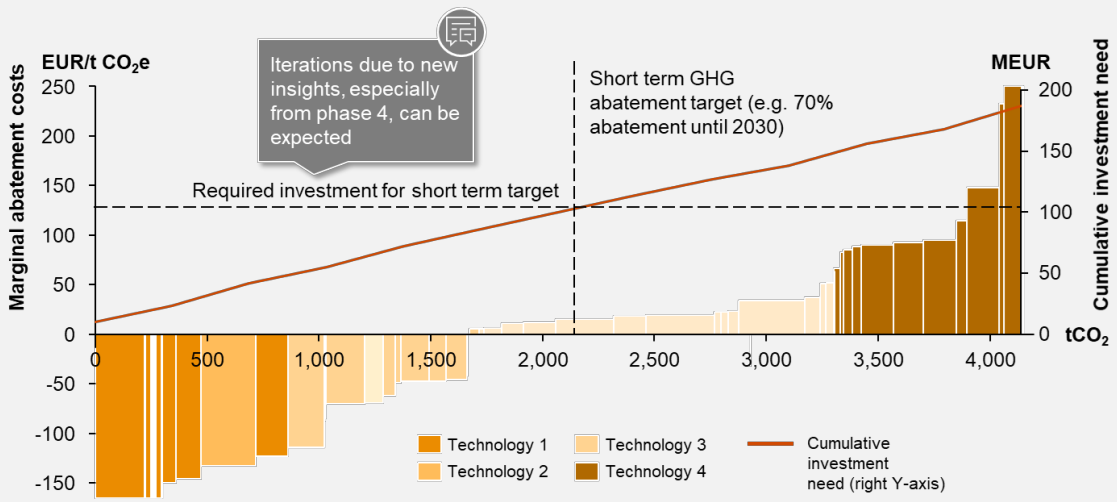
Metrics
Metric tons of CO2

Target validity
Approved targets must be announced publicly on the SBTi website within 6 months of the approval date

Reporting
Public GHG inventory disclosure & progress tracking annually

Prior to committing to climate targets, GHG abatement analysis of identified emission reduction measures is needed to ensure sufficient understanding of financial implications

Marginal abatement cost curve (MACC)

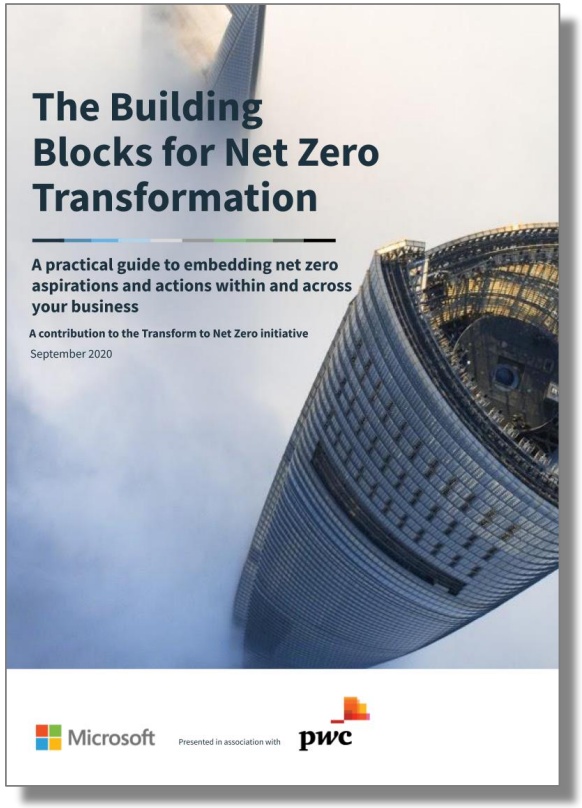


Investor key questions for companies

- Is your company committed to Science-Based Targets?
- What is the concrete action plan and required investment to meet the targets?
- Will the company still be profitable after implementing this transformation?

- We provide understanding of the **cost-efficiency of key emission reduction measures** through MACCs
- MACCs are based on **NPV calculation**, and it is a method for evaluating emission reduction options which have a differing investment and cashflow profile
- The analysis helps in **prioritising the most cost-efficient and impactful decarbonisation measures** needed to achieve a company's climate ambition
- MACC does not, however, indicate the profitability or cashflow of each emission reduction option in itself

Reaching the Net-Zero transformation requires significant investments and changes in operations across the value chain



1 | Ambition

Aligned to achieving Net Zero in accordance with national legislation and global goals

2 | Governance

Accountability driven from the top

3 | Strategy

Embedded and aligned Net Zero into organisational strategy

4 | Operations

Key operating model changes in support of transformation

5 | Procurement

Transforming the supply chain through standards, collaboration and innovation

6 | Innovation

Develop technical and business model innovation to tackle the toughest challenges

7 | Finance

Financing net zero - capital requirements, investor relations and innovative instruments

8 |Transparency

Communicating commitments, plans and progress reporting

9 | Engagement

Enhancing the pace and scale of net zero action by working with others

Source: The Building Blocks for Net Zero Transformation – Microsoft & PwC

Several leading companies in Finland have already set 1.5°C-aligned climate targets and even committed to Net-Zero

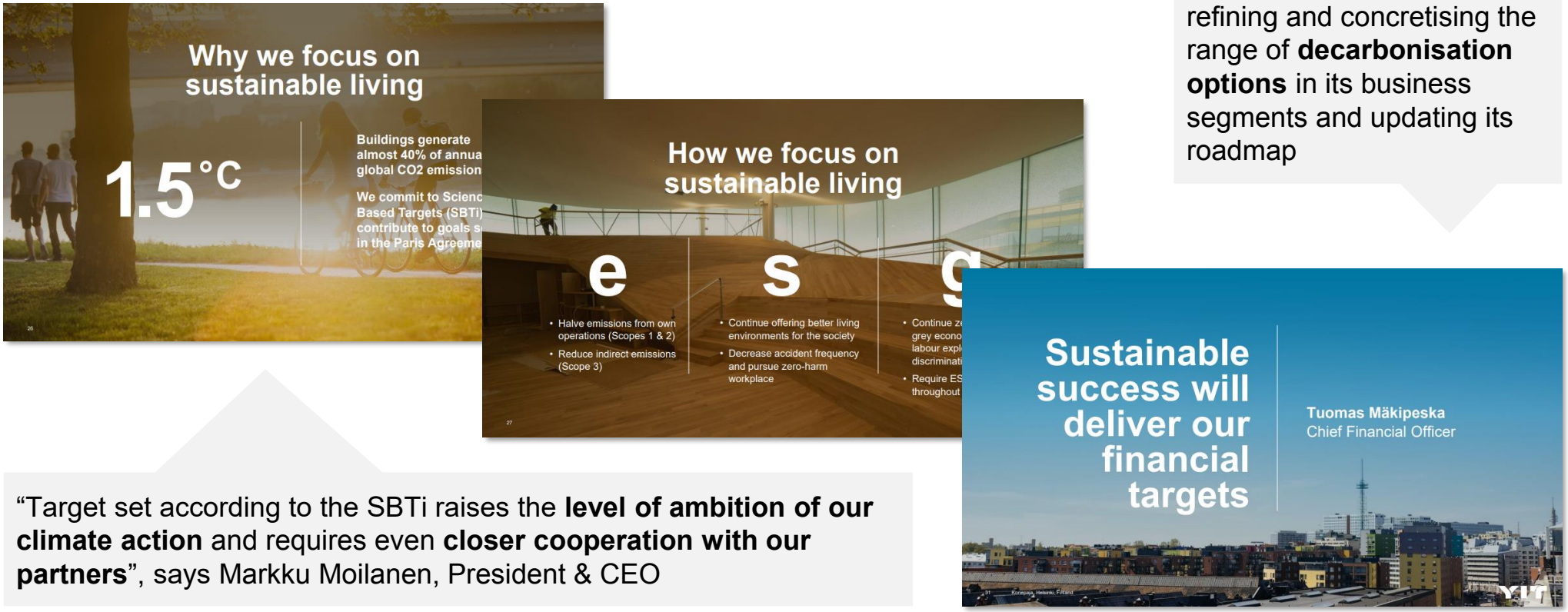
SBTi commitment examples from Finland

	Outokumpu	Cargotec	Metsä Board Corporation	UPM-Kymmene
Scope 1&2	GHG emissions **-42% by 2030** from 2016 baseline **1.5°C SBT**	GHG emissions **-50% by 2030** from 2019 baseline **1.5°C SBT**	GHG emissions **-100% by 2030** from 2016 baseline **1.5°C SBT**	GHG emissions **-65% by 2030** from 2015 baseline **1.5°C SBT**
Scope 3	*Included in the same target with Scope 1&2*	*Included in the same target with Scope 1&2*	Supplier engagement	GHG emissions **-30% by 2030** from 2018 baseline

Source: SBTi: Companies Taking Action.

Industry example: YIT has committed to 1.5°C SBTi as the first Finnish construction company

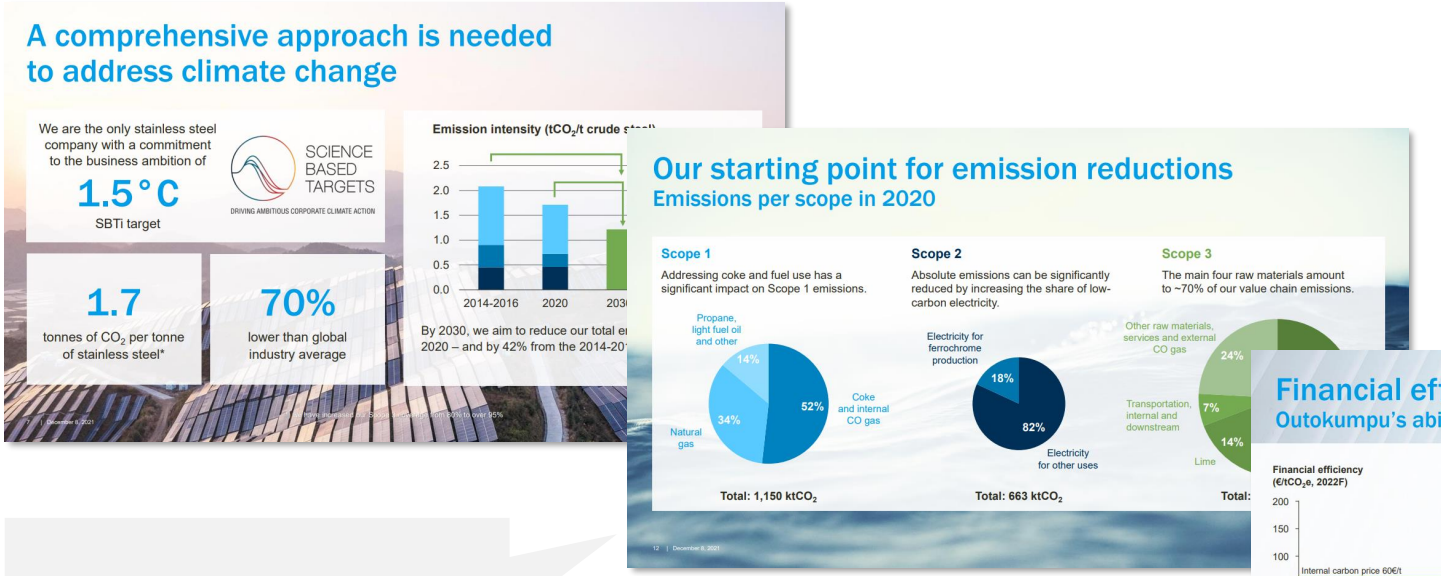
According to investor news, YIT is currently working on refining and concretising the range of **decarbonisation options** in its business segments and updating its roadmap

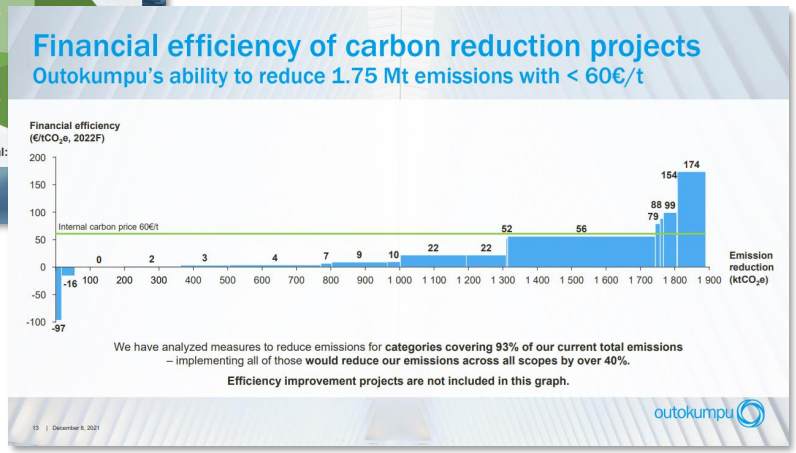


"Target set according to the SBTi raises the **level of ambition of our climate action** and requires even **closer cooperation with our partners**", says Markku Moilanen, President & CEO

Source: YIT CMD 2021 presentation, investor news.

Industry example: Outokumpu is the first stainless steel producer in the world to commit to 1.5°C SBTi





Outokumpu disclosed its **emission reduction approach** to capital markets in December 2021

Coke, electricity, and raw materials as key **emission reduction measures**

Source: Outokumpu ESG webcast presentation, press release.

Value chains are being decarbonised as companies have identified value creation opportunities in Net-Zero

Net-Zero tipping point – key players decarbonise whole value chains

Increasingly standardised methodologies

From risk mitigation to value creation – SBTi-aligned offerings