

ClimatePartner Online Deep Dive

Science-based Targets & Net Zero

04. March 2021

Speaker
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Agenda

Background

Criteria and derivation of SBT

Embedding SBTs in the corporate process

Net Zero Targets

Conclusion



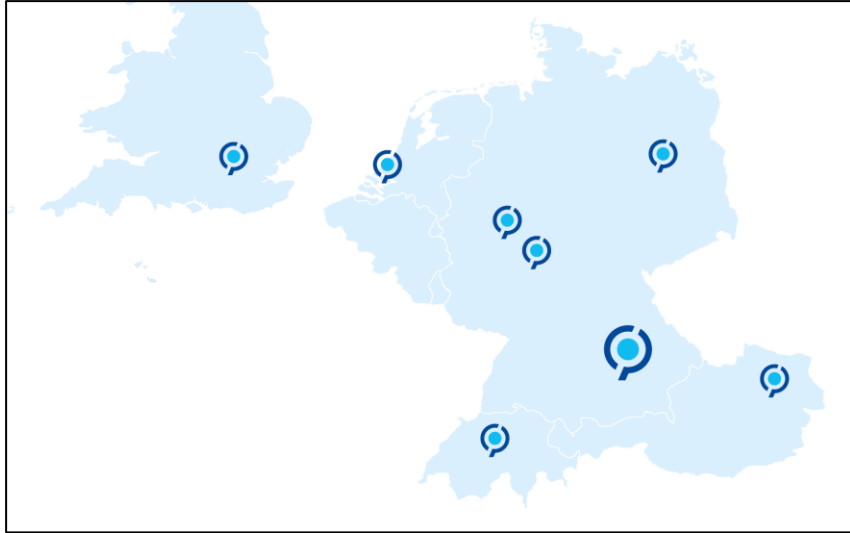
ClimatePartner – Your partner for climate action



Climate neutral companies, products and services

ClimatePartner – Your solution provider for climate action

Success in climate action since 2006



8x offices in Europe

Munich (HQ), Berlin, Cologne, Essen, Vienna, Zurich, Den Haag and London

Expansion 2021

USA, France, Sweden, Italy, Spain

Our international office with **native speakers in more than 10x languages** is located at our headquarters in Munich

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Climate action in companies includes six clear steps



Science-based targets are a new way to set climate goals

Reduction targets based on "planetary boundaries"

So far: Potential-based

The basis are **identified potentials** for emission reduction ("How much can we reduce?")



- Corporate reality and starting point are taken into account
- Bottom-up perspective

New: Science-based

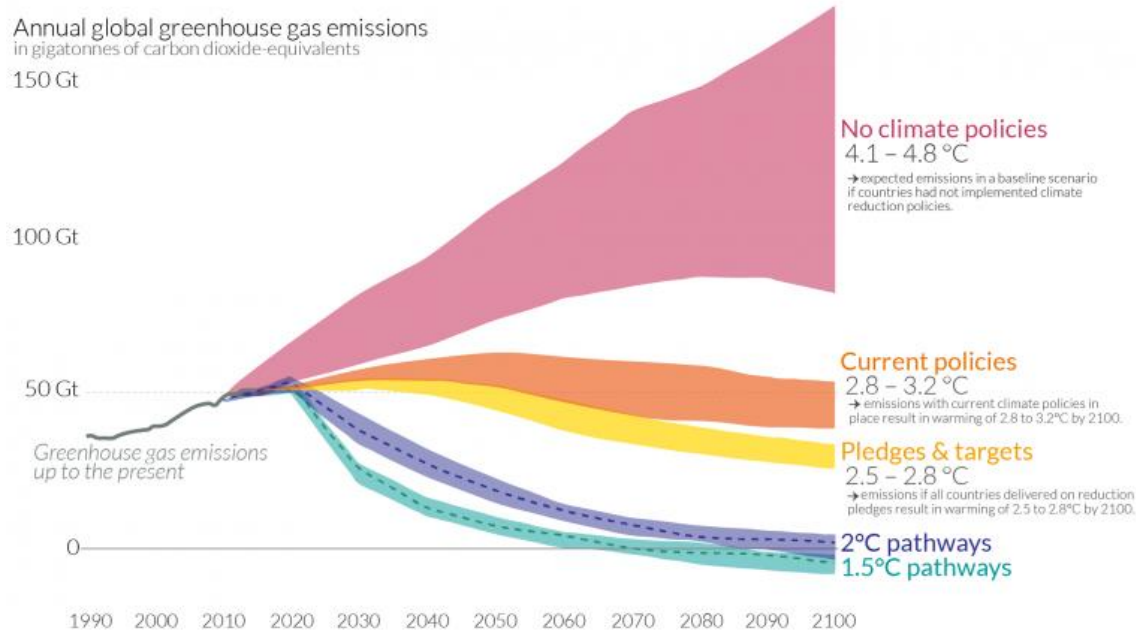
The basis is the remaining emissions budget up to 2100, based on the UN climate targets ("How much do we have to reduce?")



- Goals in line with global requirements
- Comparability within economic sectors
- External / top-down perspective

Corporate behaviour impacts global emission pathways

Urgent need for reduction of absolute emissions, despite economic growth



Data source: Climate Action Tracker (based on national policies and pledges as of December 2019).
OurWorldinData.org – Research and data to make progress against the world's largest problems.

Licensed under CC-BY by the authors Hannah Ritchie & Max Roser.

All actors, including companies, must rapidly reduce absolute emissions to limit global warming.

The Science Based Targets Initiative (SBTi) is the de facto authority to science-based targets

Background

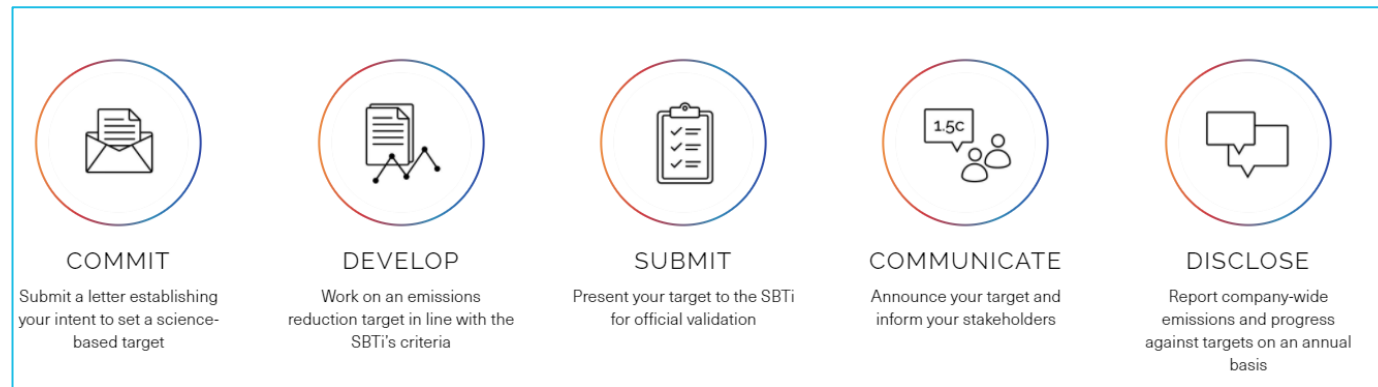
- Joint initiative by CDP, UNGC, WRI and WWF
- Develops methods and criteria for science-based targets
- Validates and publishes company targets
- As of March 2021, >1200 companies are "committed" to setting a science-based target and >600 of these already have set a validated SBT
- Additional information: <https://sciencebasedtargets.org>



PARTNER ORGANIZATIONS



The SBTi has defined a process, detailed criteria and tools for setting Science-based targets



- All SBTi materials are free to use
- To have your SBT validated and published by the SBTi, a fee applies (USD 5,000 / 1,000 for SMEs - [details on SMEs see slide 25](#))
- The SBTi criteria are updated annually and determine the minimum requirements

The SBTi publishes commitments and targets of companies

- Status of commitment / target setting
- Details of validated targets

Show 10 entries ☐ Business Ambition for 1.5°C only RESET

COMPANY	STATUS	TARGET CLASSIFICATION	LOCATION	REGION	SECTOR	DATE
Volkswagen AG	Targets Set	Well below 2°C	Germany	Europe	Automobiles and Components	Aug 2020
Commerzbank AG	Committed	-	Germany	Europe	Banks, Diverse Financials, Insurance	Aug 2020
Bayer AG	Targets Set	1.5°C	Germany	Europe	Pharmaceuticals, Biotechnology and Life	Jul 2020
BMW Group	Committed	-	Germany	Europe	Automobiles and Components	Jul 2020
Schwarz Gruppe (Kaufland Stiftung, Lidl Stiftung, PreZero Stiftung, Schwarz Produktion)	Committed	-	Germany	Europe	Retailing	Jul 2020
ALDI Einkauf GmbH & Co. oHG (Aldi Nord)	Committed	-	Germany	Europe	Retailing	Jun 2020
alstria office REIT-AG	Targets Set	1.5°C/Well below 2°C	Germany	Europe	Real Estate	Jun 2020
GEKA	Committed	-	Germany	Europe	Containers and Packaging	Jun 2020
Deutsche Bahn AG	Targets Set	2°C	Germany	Europe	Ground Transportation - Railroads Transportation	Jun 2020
Beiersdorf AG	Targets Set	1.5°C	Germany	Europe	Consumer Durables, Household and Personal Products	May 2020

Beiersdorf AG

Beiersdorf commits to reduce absolute scope 1 and 2 GHG emissions 30%, and scope 3 GHG emissions 10% by 2025 from a 2018 base year.

The targets covering greenhouse gas emissions from company operations (scopes 1 and 2) are consistent with reductions required to keep warming to 1.5°C.

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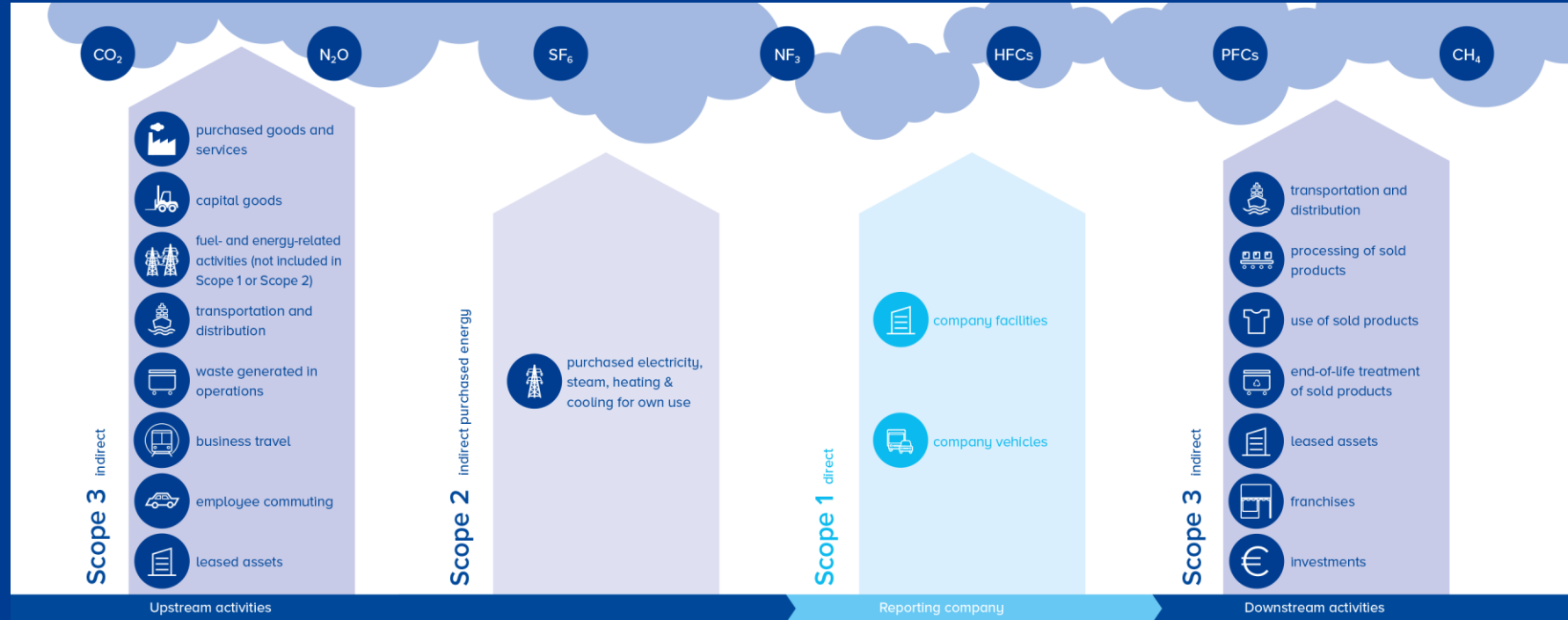
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Excursus: According to the GHG Protocol, greenhouse gas emissions are divided into three Scopes and various categories



All company activities need to be covered

*All criteria: According to the criteria V4.1 of the Science Based Targets Initiative

Coverage

- Inclusion of all company activities
- As far as possible at the company/group level
- Including all subsidiaries

SBTs are medium-term targets



- Minimum 5 years, maximum 15 years from now
- Base year can be chosen flexibly, but targets are always analysed compared to last available year
- → No recognition of already achieved reductions

Example:

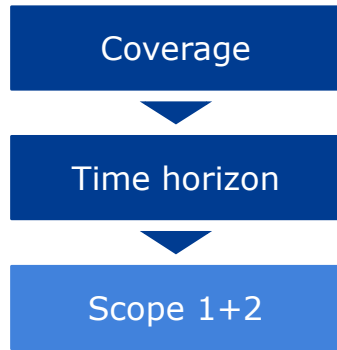
Emissions 2015: 100 t

Emissions 2020: 80 t

Proposed reduction target 2015-2025: -25%

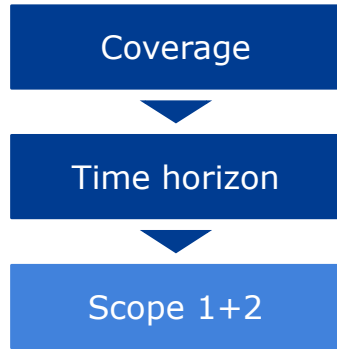
→ Not sufficient, only minor forward-looking reduction (6.25%) compared to 2020

A Scope 1+2 target is mandatory



- All major activities and sources of emissions must be included in the target(s) scope (only 5% exclusions allowed)
- Offsets/compensation do not count
- Green electricity does count (so-called market-based approach)

Minimum reduction is 2.5% per year (absolute emissions)



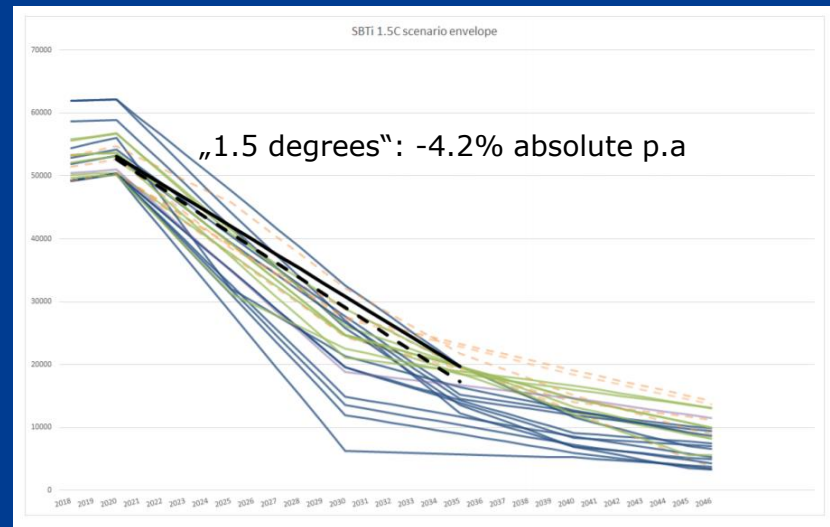
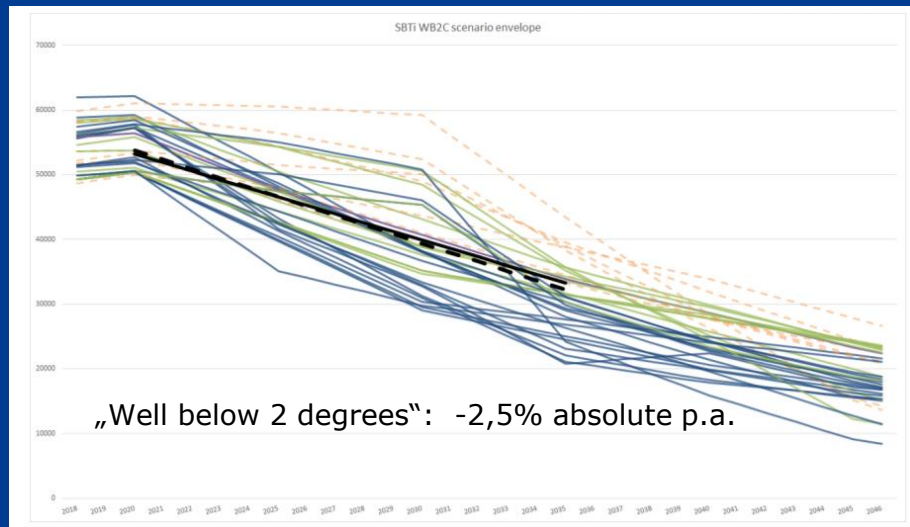
The minimum target level for Scope 1 and 2 is the same for (almost) all companies, and depends on your ambition:

- **Well below 2°C:** -2.5% absolute p.a.
- **1.5°C:** -4.2% absolute p.a.

Example	Base year 2020	Minimum target 2025	Minimum target 2030
<i>Well below 2°C</i>	100 t CO ₂ e	-12.5% → 87.5 t CO ₂ e	-25% → 75 t CO ₂ e
<i>1.5°C</i>	100 t CO ₂ e	- 21% → 79 t CO ₂ e	-42% → 58 t CO ₂ e

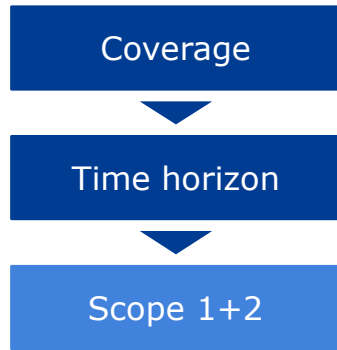
Excursus: Emission budgets and reduction rate

- The SBTI has investigated numerous "emission pathways" of global GHG emissions that are compatible with a target of "well below 2°C" or "1.5°C"
- These are non-linear (stronger reduction rate in the medium term, lower rate in the long term)
- For simplicity, the SBTI has derived a linear average reduction rate (source SBTI 2019):



For some sectors, there is a more specific approach available

Sectoral Decarbonization Approach



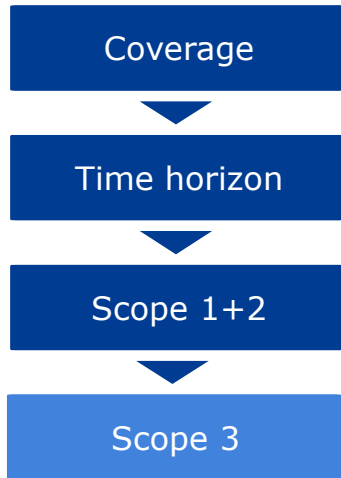
For the following sectors, there is another method:

- Energy-intensive industries (steel, aluminum, cement, paper)
- Energy
- Transport service providers
- Vehicle manufacturers
- Buildings / Office-based service providers
- Further sectors under development (e.g. food & agriculture)

Here, the target is derived via the so-called "Sectoral Decarbonization Approach" (SDA)

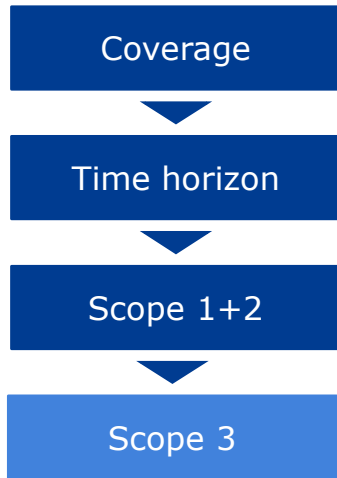
- Based on CO2 intensity per output unit
- Available via the [SBTI Tool](#)

Scope 3 targets are required for many companies



- SMEs with < 500 employees: No Scope 3 targets required
- For companies > 500 employees: Scope 3 targets are required if Scope 3 > 40% of the total footprint
- In this case, 2/3 of the Scope 3 must be covered with targets
- Based on calculation or screening of all relevant and required Scope 3 emissions (upstream & downstream)

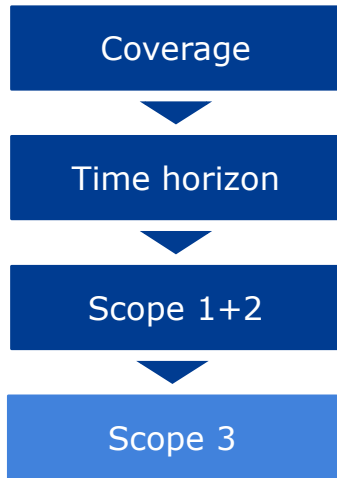
Two types of Scope 3 targets are allowed



Reduction targets – several options:

- Reduce absolute emissions at least 1.23% p.a. on average
- Reduce physical intensity (e.g. CO₂e per kg) at least 2% year-on year – but without growing absolute emissions
- Reduce economic intensity (e.g. CO₂e per € spent) at least 7% year-on-year
- For Scope 3 emissions from specific sectors: Reduction of intensity according to Sectoral Decarbonization Approach ([see slide 22](#))

Two types of Scope 3 targets are allowed



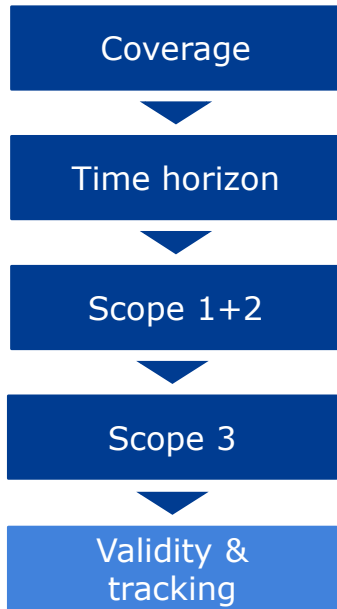
Engagement targets:

- Convince value chain partners (covering 2/3 of Scope 3) to set up their own SBTs within 5 years
- Validation of partner goals through SBTi recommended, but not required
- Examples:

ALDI SOUTH Group commits to reduce absolute scope 1 and 2 GHG emissions 26% by 2025 from a 2016 base year. ALDI SOUTH group also commits that 75% of its suppliers by emissions covering purchased goods will have science-based targets by 2024.

Zalando commits to reduce scope 3 GHG emissions from private label products 40% per €m Gross Profit by 2025 from a 2018 base year. Zalando also commits that 90% of its suppliers by emissions covering purchased goods and services sold on its platform, packaging and last-mile-delivery partners will have science-based targets by 2025.

The criteria for SBTs at a glance – validity & tracking



SBTs must be regularly checked and tracked

- The carbon footprint and progress towards the target must be published annually
- The company should regularly check the validity of the target itself
- After 5 years at the latest, the objective must be re-validated by the SBTI
- In case of major changes, a recalculation is required (e.g. mergers, shift in company activity)

For small and medium-sized enterprises (SMEs), simplified requirements apply for science-based targets

- SMEs: Independent enterprises with **<500 employees**
- **Time horizon fixed**: base year 2018, target year 2030
- **Two predetermined options** for Scope 1+2:
 - **"Well below 2°C"**: -30% reduction
 - **"1.5°C"** -50% reduction
- **No Scope 3 target required**, but companies need to calculate Scope 3 carbon footprint & reduce emissions in the future
- **Simplified process**: Shorter form, fee 1,000 USD
- Info & FAQ: <https://sciencebasedtargets.org/faqs-for-smes/>

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A clear process is key to implementing SBTs

CimatePartner offers targeted support

Analysis

- Analyse the complete Scope 1+2+3 carbon footprint
- Define or extend Climate Action Strategy
- Review SBTi criteria and calculate first target corridors

Finalization

- Emissions forecast of the most important categories and roadmap of reduction measures
- Finalization of target parameters

Validation

- Internal sign-off
- Validation of targets by SBTi
- Planning of communication

Implementation

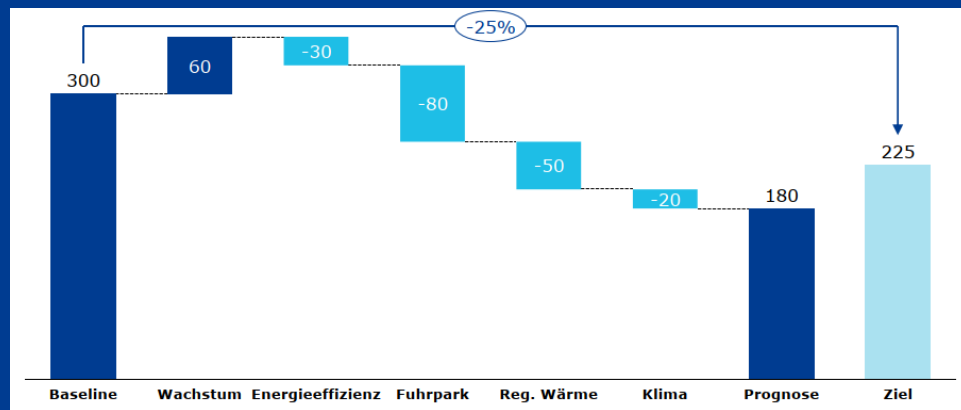
- Drive reductions within your internal management
- Regular reporting & review



Excursus: Emissions forecast

- Future emissions are forecast per activity area (e.g. power consumption, fleet, material)
- Internal drivers (e.g. growth), external factors (e.g. electricity sector emissions) and possible reduction measures are brought together
- As a result, the emission development under "Business as usual" as well as the roadmap towards a possible SBT can be derived

Field of action	Share of CF (CY 2018)	Trend "Business as usual"	Ambitious Target 2025	Measures/KPI change 2020-2025	Ambitious Target 2030	Measures/KPI change 2025-2030
Vehicle fleet	34%	➡	-35%	Reduce km driven by 25% (business, commuting, private) 30% Battery-electric share Lower CO2 limits by 15% (conventional & hybrid)	-65%	Reduce km driven by 30% (business, commuting, private, against 2020) 75% Battery-electric share Lower CO2 limits by 35% (conventional & hybrid, against 2020)
Business travel	36,0%	➡	-30%	Reduce trips by 20% 30% of flights -> train	-40%	Reduce trips by 30% against 2020
Commuting	23,0%	➡	-30%	Increase homeoffice by 20% Reduce car use by 15% (public, bike, car pool) Reduced vehicle emissions / private electric vehicles	-40%	Increase homeoffice by 25% Reduce car use by 25% (public, bike, car pool) (all against 2020)
Buildings	6%	➡	tbc	To be determined after move to new building	tbc	To be determined after move to new building
Green IT/materials	1%	➡	-20%	Various measures	-20%	Various measures
Logistics	not inc.					
Total reduction	100%		-30%		-46%	



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Net Zero targets refer to the balance of greenhouse gas emissions and removals

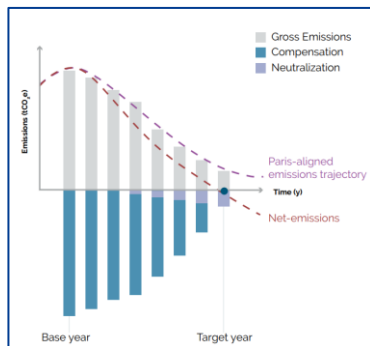
- Paris climate agreement: Global **balance** of emissions and removals necessary from mid-century
- The Science Based Targets Initiative (SBTi) has developed a unified **definition of net-zero goals** at the corporate level:
 - Emissions across the entire value chain are **reduced** in line with a **1.5°C-compatible path**
 - Remaining emissions of the value chain are **neutralised** by **carbon removals**
 - **Compensation** as an important, immediate instrument to achieve the Paris goals – compensation, however, cannot replace the necessary reduction of one's own emissions.



For companies, there are different pathways towards „Net Zero“

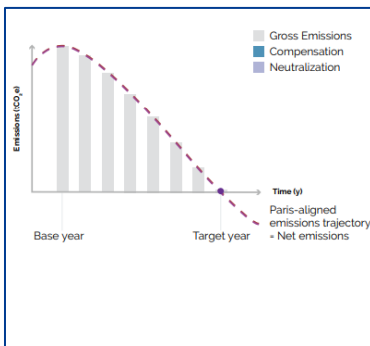
- Companies can combine and weight "reduction - compensation - neutralization" in different ways to achieve "net zero" emissions mathematically
- Not all scenarios are compatible with the narrower definition of the SBTi:

Compatible



"Climate positive":

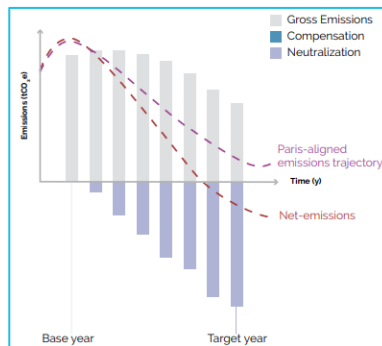
- Full compensation immediately
- Ambitious reduction
- Step-by-step neutralization



„Emission-free“:

- Full reduction to 0
- No compensation or neutralization in the meantime

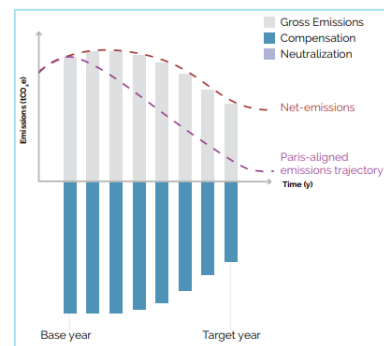
Problematic



„Neutralize instead of reduce“:

- No ambitious reduction
- Step-by-step neutralization

Not compatible



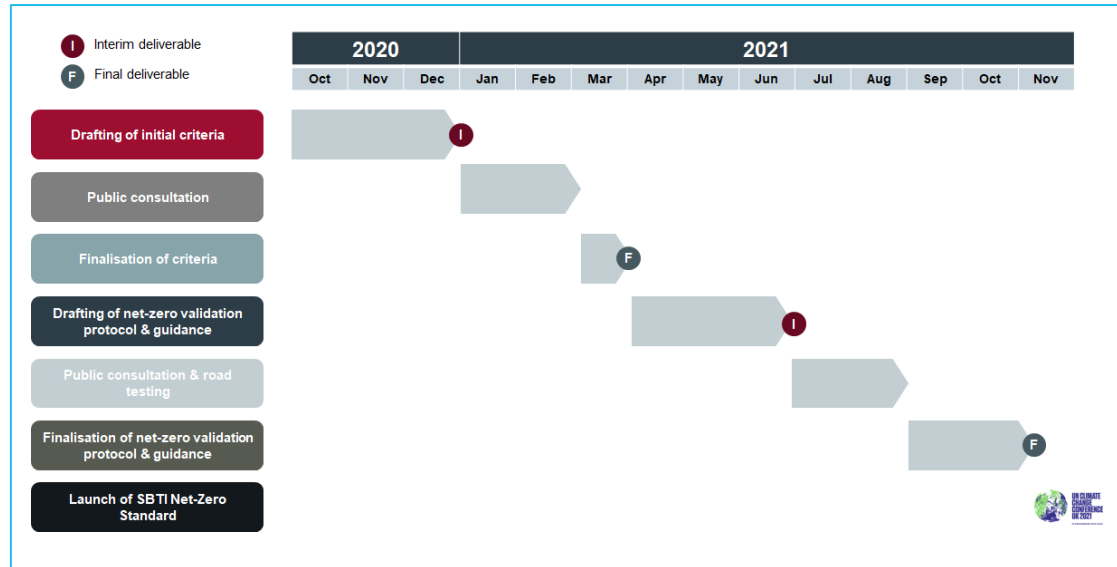
"Compensation instead of reduction":

- No ambitious reduction
- Full compensation or crediting "avoided emissions"

Source: [SBTi](#)

SBTi is developing a comprehensive standard for Net Zero targets

- The standard will define **criteria, guidance and tools** and set **validation processes**
- Final criteria** for Net Zero targets are currently **under development** by the SBTi and announced for **Q2 2022**



<https://sciencebasedtargets.org/net-zero#timeline>

Challenges to implement Net Zero targets

- High uncertainty until finalization of SBTi Criteria
- Existing examples use varying definitions of Net Zero
- Required „deep decarbonization“ of value chains is hard to envision for many companies
- CO₂ removal projects face specific challenges:
 - Biological processes (e.g. afforestation): availability, permanence, tradeoffs in other sustainability areas (e.g. biodiversity)
 - Technical procedures: cost, degree of maturity, regulation



Net Zero targets are not an easy alternative to strong reduction

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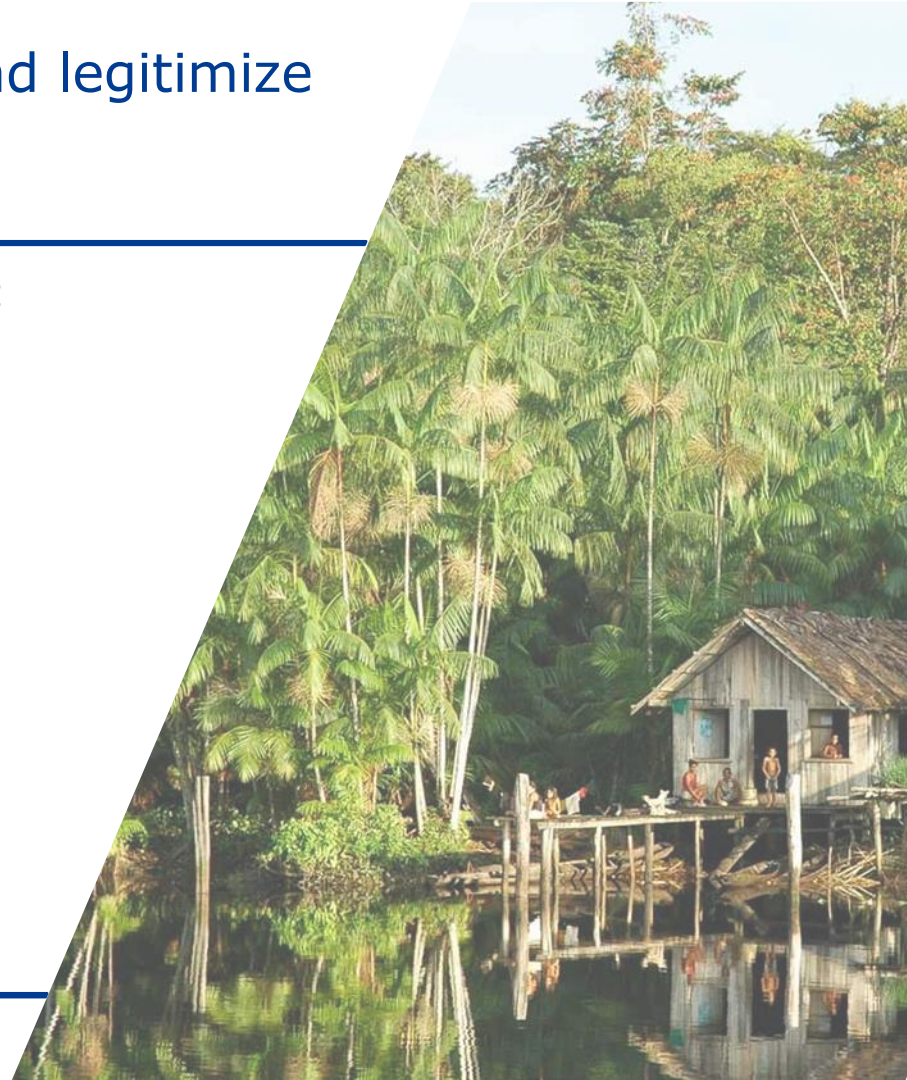
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SBTs are a good way to validate and legitimize climate goals externally

Conclusion

- The calculation itself is methodically simple, but due to the multitude of parameters and options complex to implement
- SBTs do not replace your own investigation and forecasting of reduction potentials
- Net Zero targets can be a useful long term addition to ambitious reduction and immediate action through compensation
- → Should be embedded in a climate strategy process
- External support can be very useful



Key resources to get started

- SBTI Homepage: <https://sciencebasedtargets.org>
- SBTI Call to Action Guidelines: <https://sciencebasedtargets.org/wp-content/uploads/2018/10/C2A-guidelines.pdf>
- CDP Technical Note on Science-based targets: [Link](#)
- SBTI Infos & FAQ for SMEs: <https://sciencebasedtargets.org/faqs-for-smes/>
- SBTI Landing page on Net Zero targets: <https://sciencebasedtargets.org/net-zero/>

Online Academy | 150 min EN/GER

Online Deep Dive | 90-120 min EN/GER

- Product Carbon Footprint
- Supply Chain Solutions
- Carbon Offset Projects
- CDP Reporting
- Science Based Targets

More information can be found via:
www.climatepartner.com/academy





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