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Training Course:
Establish greenhouse gas reduction targets: Science-based approach

Instructor:

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Moderator: Mr. Felix LAM

Remarks: This material/event is funded by the Professional Services Advancement Support Scheme of the Government of the Hong Kong Special Administrative Region. Any opinions, findings, conclusions or recommendations expressed in this material/any event organised under this project do not reflect the views of the Government of the Hong Kong Special Administrative Region or the Vetting Committee of the Professional Services Advancement Support Scheme.

Session 2
Thursday, 12th May 2022
14:00-17:00

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Understand SBT setting methods

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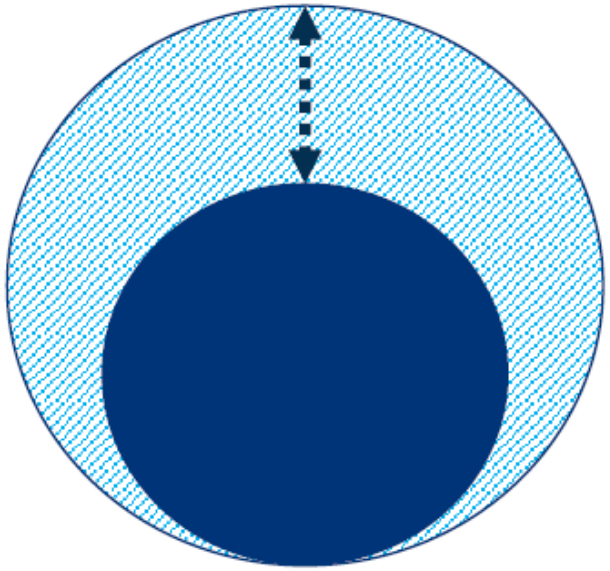
Three key steps in calculating a SBT

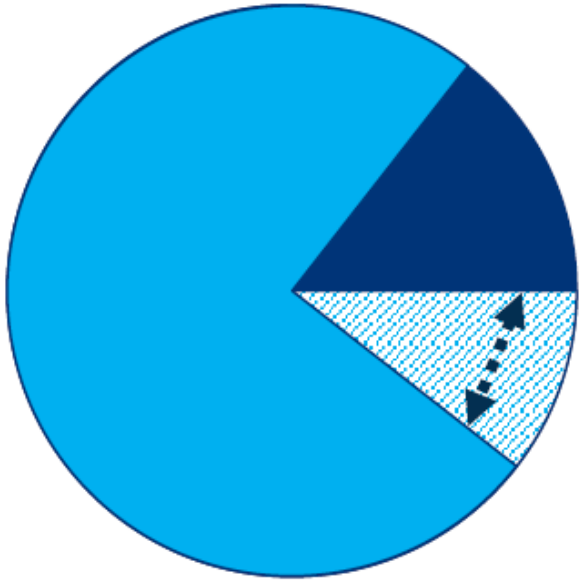
1. Assessing the global carbon budget

How large is the pie?



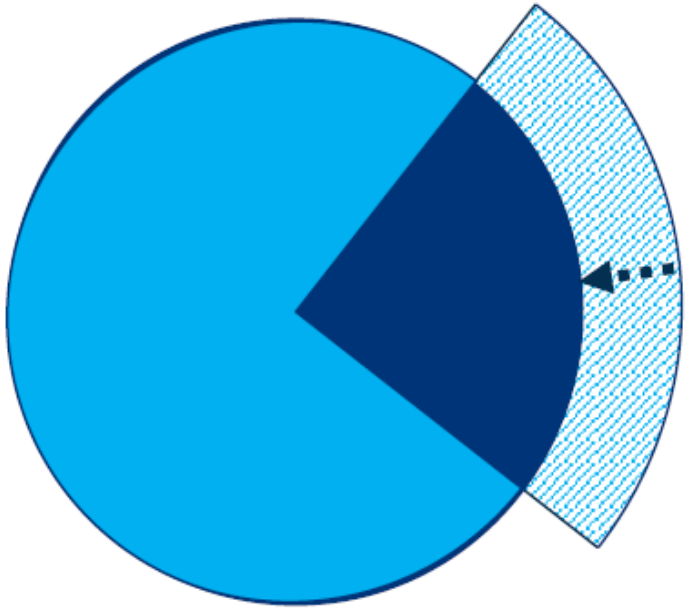
2. Calculating your business' carbon budget

How large is my slice?



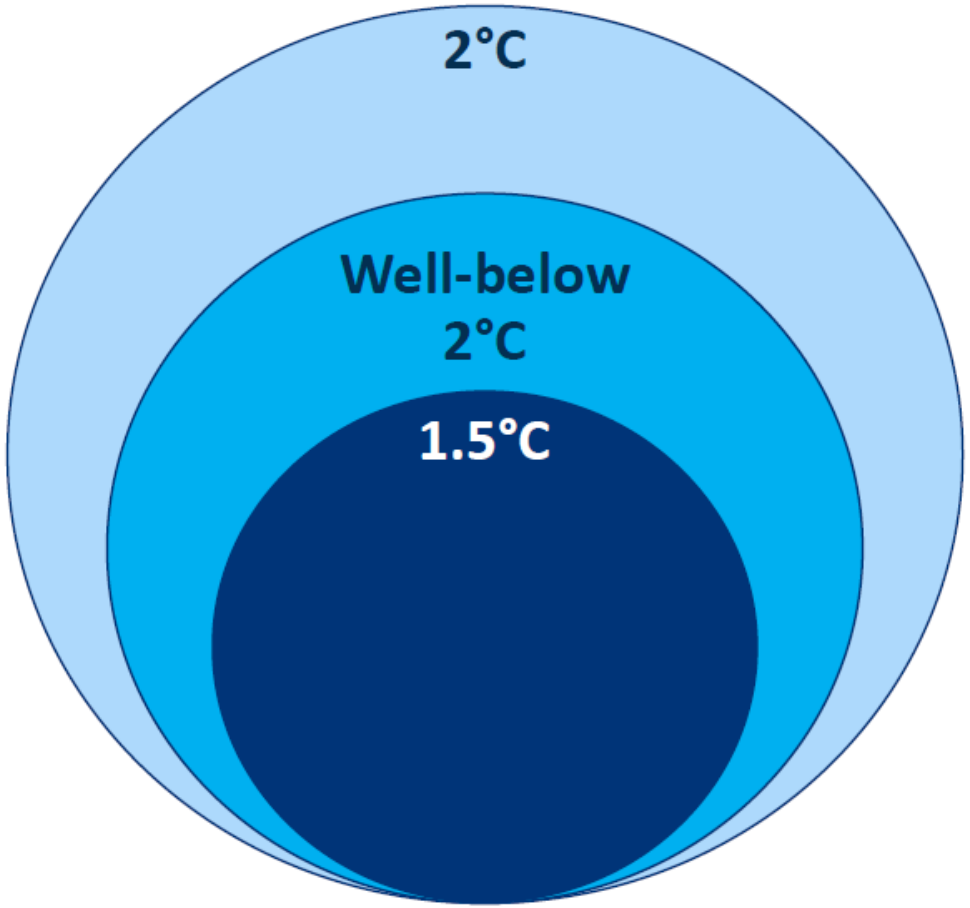
3. Compare your budget and your footprint

Am I eating too much?



Different emissions scenarios

Scenario



Description

- Limiting warming to 2°C is not longer accepted by the SBTi
- "Well-below 2°C" is equivalent to 1.75°C
- **1.5°C is current best practice**

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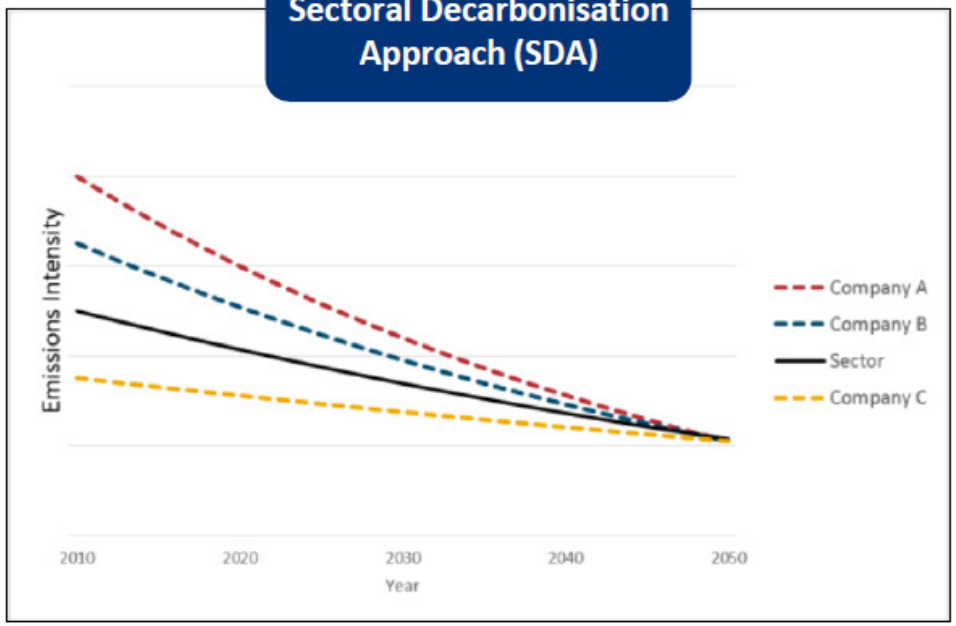
Different methodology

Absolute Contraction

- Same reduction pathway for all companies within a given timeframe
- Suitable for mixed, heterogeneous sectors
- Can be used for both:
  - Well-below 2°C (2.5% linear reduction / year)
  - 1.5°C (4.2% linear reduction / year)

Sectoral Decarbonisation Approach (SDA)



- Reduction pathways based on emissions intensity
- Reduction pathways different by sector and recognises current position – i.e. accounts for investments already made
- Currently only available for well-below 2°C

Science-based Target Setting

What is the best approach to apply SBTi since my company is a conglomerate that has many businesses in different sectors?

The company may have to modeled separate sectors, and therefore using absolute contraction is recommended. The combination of SDA for the relevant sectors with absolute approach for others also a great approach.

Setting a SBT

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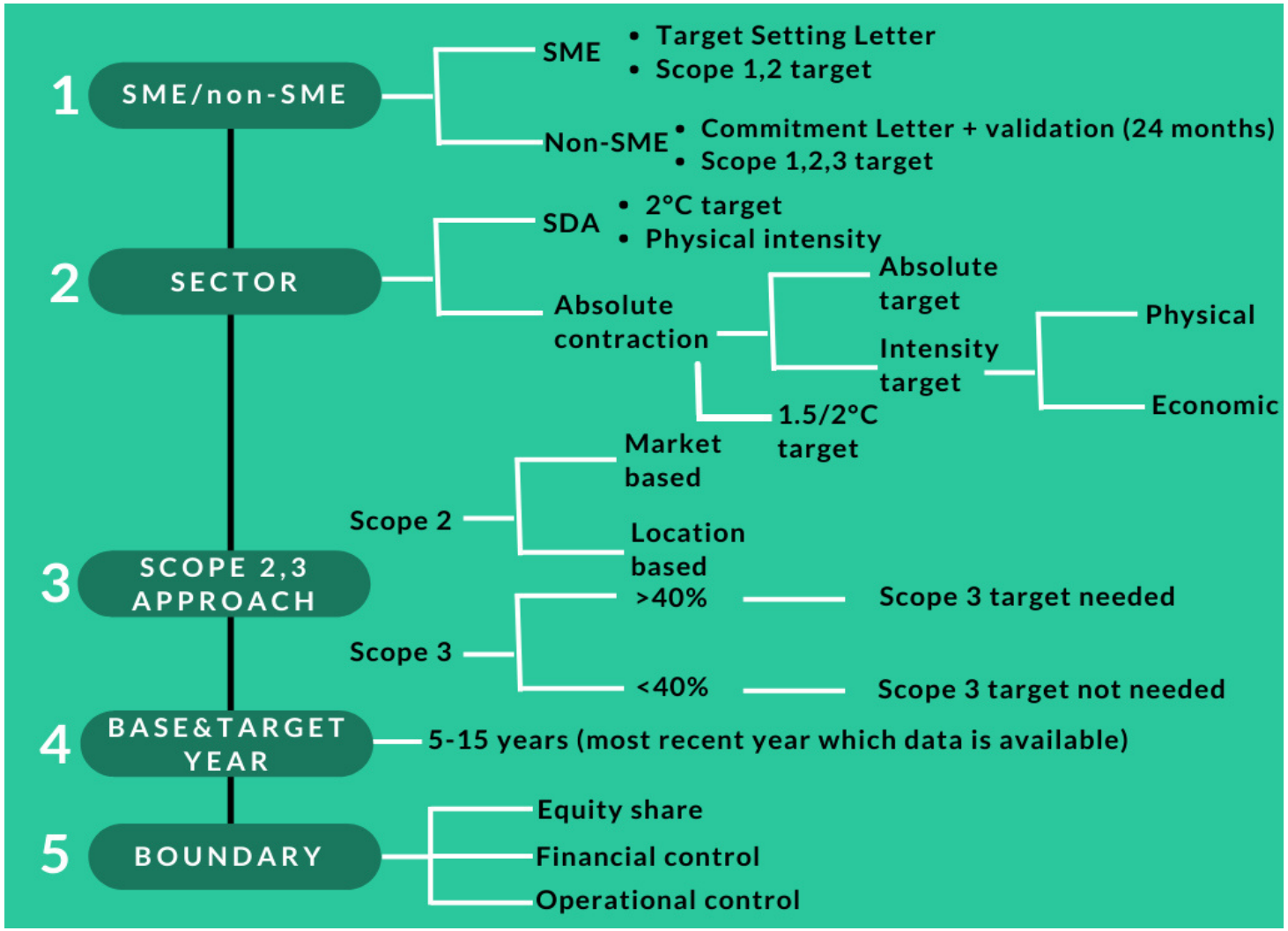
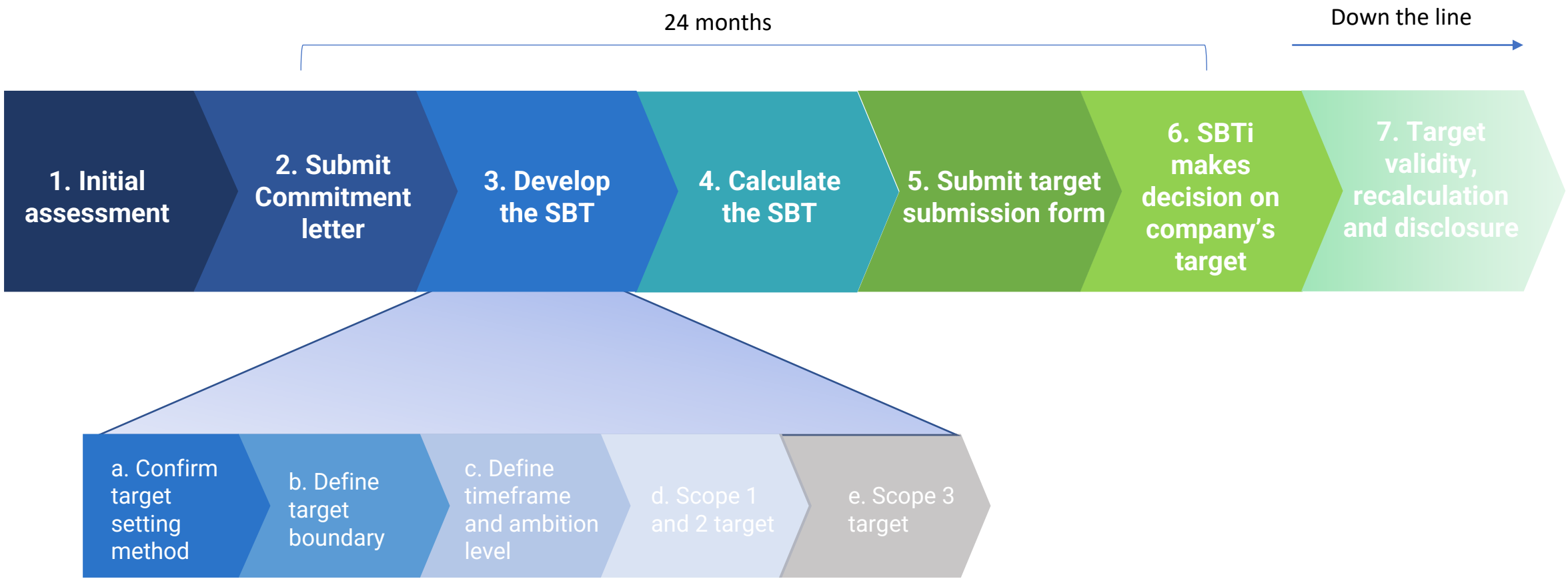
Overview of SBT setting decision tree

Process of setting SBT:



Target setting for standard commitment

Process Overview



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1. Initial assessment

Data availability

1. Check what activity or GHG emissions data the company has already or is in the process of gathering before committing to set an SBT, for scopes 1,2 and 3
2. Ensure a complete and verified GHG inventory **following the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard** and Scope 2 Guidance, before setting target
3. If there is no data available, the company should collect the relevant data for scope 1, 2 and 3, and produce an inventory

SME streamlined route

- Check whether the company fulfills the criteria to be eligible for the SME route
- SBTi defines SME as an independent, non-subsidiary company with fewer than 500 employees
- This does not include Financial Institutions and Oil & Gas companies

1.5°C aligned option
"_____ commits to reduce absolute scope 1 and scope 2 GHG emissions __% by 2030 from a 20__ base year, and to measure and reduce its scope 3 emissions."
☐ 50% from a 2018 base year
☐ 46% from a 2019 base year
☐ 42% from a 2020 base year

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2. Submit commitment letter

Standard Commitment Letter	Business Ambition for 1.5DS commitment letter	Target Setting Letter for SMEs
• Scope 1 and 2 targets must be in line with **well-below 2°C** trajectory • Scope 3 emission reduction target OR customer/supplier engagement targets to align with 2°C if scope 3 emissions make up 40% or more of total scope 1,2 and 3 emissions	• Launched in June 2019 to normalise ambition levels required to **limit warming to 1.5°C** • Scope 3 emission target to align with 1.5°C if scope 3 emissions make up 40% or more of total scope 1,2 and 3 emissions • Companies with existing SBTs can join this campaign by voluntarily boosting the ambition level of their current targets	• As of July 15, 2020, SMEs must submit the Target Setting Letter for SMEs instead of the Standard Commitment Letter • For Business Ambition for 1.5°C Commitment letter, SMEs shall first submit the SMEs Target Setting Letter. After having an approved target, SMEs can join the campaign through signing the Business Ambition for 1.5°C commitment letter

Once the company has submitted the letter to SBTi:

- The company will be recognised as "**Committed**" in SBTi's website
- The company has **24 months** to complete the target setting steps

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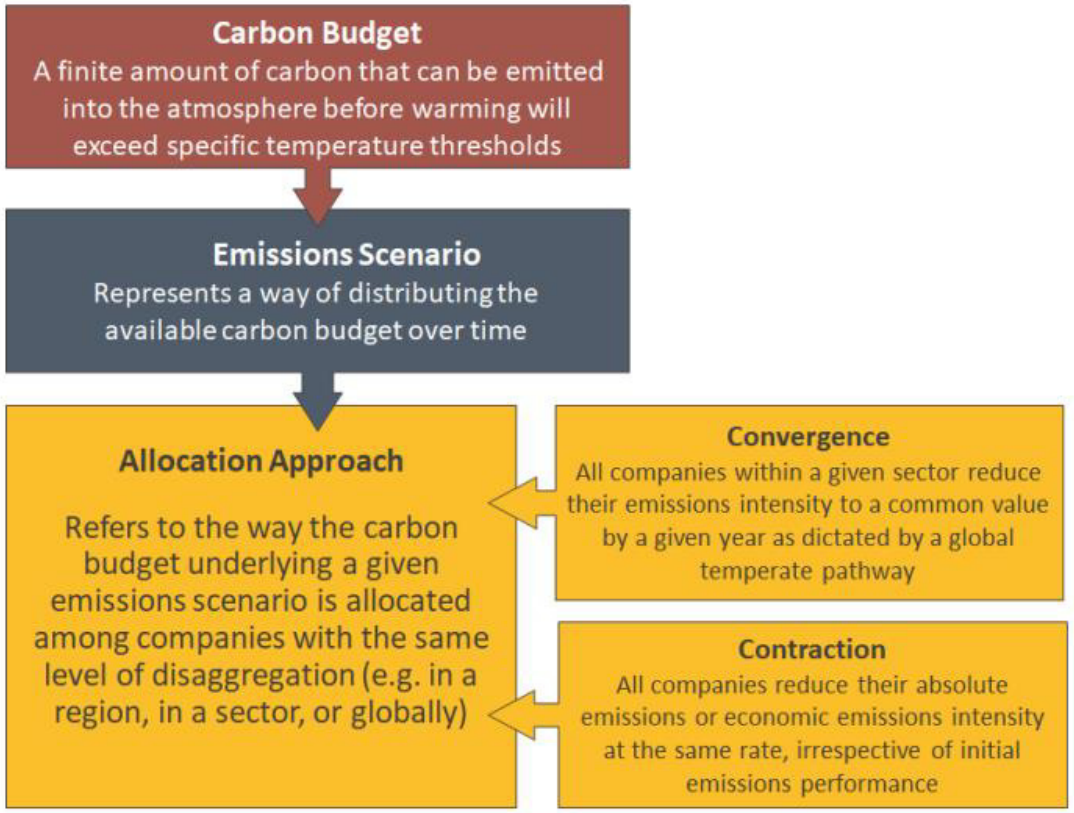
3a. Confirm target setting method

Figure 3-1. Main Elements of Methods for Setting SBTs



Sectoral Decarbonisation Approach (SDA)

- Setting physical target which takes sector specific mitigation potentials and projected growth into account
- Underlying scenario: beyond 2°C approach
- Fixed activity indicator of intensity target (depends on sector)

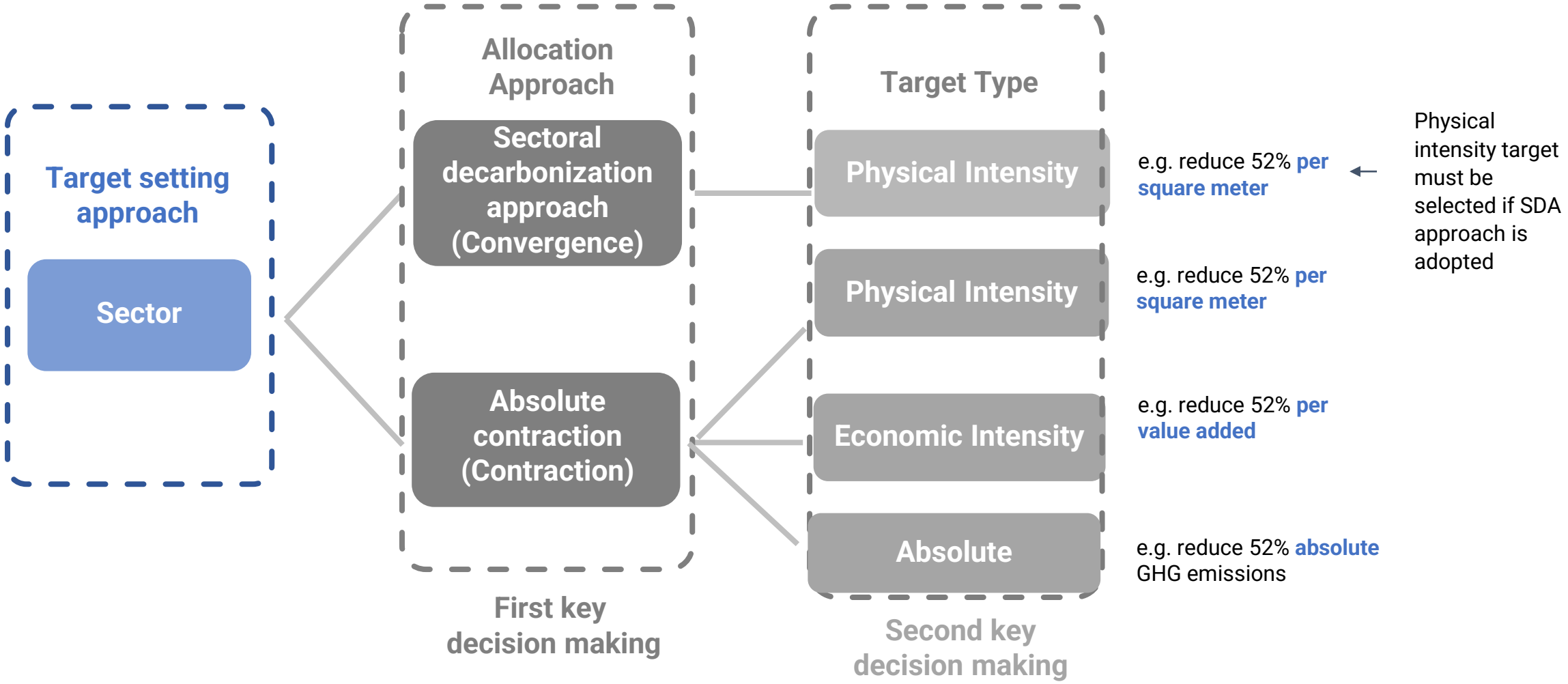
Absolute Emissions Contraction

- All companies reduce their absolute emissions at the same rate, irrespective of initial emissions performance
- An absolute emissions reduction target is defined in terms of an overall reduction in the amount of GHGs emitted to the atmosphere by the target year, relative to the base year
- Underlying scenario: well below 2°C and 1.5°C approach
- Companies can convert the absolute target into an intensity target with custom activity indicator

SBTi Target Setting Manual pg 19

3a. Confirm target setting method

Steps for selecting target type



Science-based Target Setting

Situation

Founded in 2014, Alaya Consulting has been advising listed companies on ESG disclosure, assurance and GRI certified training. Positioning itself as the leading facilitator of corporate sustainability, Alaya practices what it preaches. We not only have our own environmental policy and a defined recycling initiative but also manage our carbon footprint scrupulously.

Predominantly an office-based operation, Alaya consumes a relatively small amount of energy. Nevertheless, we believe it is critical for us to be a part of the solution to set our own carbon reduction target. We follow the methodology advocated by SBTi, a collaboration between CDP, the UN Global Compact, the World Resources Institute and the World Wide Fund for Nature. Targets adopted by companies to reduce greenhouse gas emissions are considered "science-based" if they are in line with the level of decarbonization required to keep global temperature increase below 2 degrees Celsius compared to pre-industrial temperatures.

Challenge

There was no ESG consultancy in Asia having approval from SBTi for its science-based target. To qualify for an approved SBT, Alaya's carbon reduction strategy was required to demonstrate its alignment with the Paris Agreement (the 2-degree Celsius commitment), meeting a set of stringent sector-based emissions reduction targets for Scope 1, 2 and 3 emissions. Leveraging on in-house capability on carbon accounting and consulting, we have intensively examined the SBT manual and identified critical decisions impacting target setting, for example, selecting the base year and target year, conducting Scope 3 screening, and more importantly, how can we be confident that the target is attainable.

Outcome

Alaya Consulting is the first ESG consultancy in Asia to receive approval from SBTi regarding carbon reduction target. We are committed to reduce Scope 1 and 2 GHG emissions by 47% per square meter by 2023, from the base year 2017. Scope 3 GHG emissions from purchased goods and services, capital goods, waste generated in operations, business travel and employee commuting are to be reduced 7% by 2023 from the base year 2017. ***By having our own SBT, which forms an integral part of our carbon disclosure strategy aligning with TCFD recommendations, we show by example to corporates in Hong Kong and China how they can contribute to a sustainable environment for business and for future generations.***

3a. Confirm target setting method

Case study: Apparel peer overview

Target Type	Company	Approved Target	Adopted Approach	Target timeframe
A	PVH Corp.	American clothing company PVH commits to reduce **absolute scope 1, 2 and 3 GHG emissions by 30%** by 2030 from a 2017 base year. PVH also commits *to increase annual sourcing of renewable electricity* from 22% in 2018 to 100% by 2030.	Absolute contraction-absolute	13 years
A	Ramatex	Ramatex Industrial (Suzhou) Ltd commits to **reduce absolute 1+2+3 GHG emissions 25%** by 2025 from a 2019 base year.	Absolute contraction-absolute	6 years
B	NIKE, Inc.	American multinational corporation NIKE, Inc. sets a target to reduce absolute scope 1 and 2 GHG emissions 65% by 2030 from a 2015 base year. NIKE, Inc. also sets a target to **reduce absolute scope 3 GHG emissions 30%** within the same timeframe	Absolute contraction-absolute	15 years
C	American Eagle Outfitters, Inc.	American Eagle Outfitters commits to reduce absolute scope 1 and scope 2 GHG emissions 80% by 2030 from a 2018 base year. American Eagle Outfitters also commits to **reduce absolute scope 3 GHG emissions from purchased goods and services and capital goods 40% by 2030 and 60%** by 2040, from a 2018 base year.	Absolute contraction-absolute	22 years
C	ASICS Corporation	ASICS Corporation commits to reduce absolute scope 1 and 2 GHG emissions 38% by 2030 from a 2015 base year. ASICS also commits to **reduce scope 3 GHG emissions from purchased goods and services and end-of-life treatment of sold products 55% per product manufactured** by 2030 from a 2015 base year	Absolute contraction-Physical intensity	12 years
C	Salvatore Ferragamo Group	Salvatore Ferragamo Group commits to reduce absolute scope 1 and scope 2 GHG emissions 42% by 2029 from a 2019 base year. Salvatore Ferragamo Group also commits to **reduce absolute scope 3 GHG emissions from purchased goods and services and downstream transportation and distribution 42%** over the same period.	Absolute contraction-absolute	10 years
D	Zalando SE	Zalando commits to reduce scope 1 and 2 GHG emissions 80% by 2025 from a 2017 base year. Zalando also commits to *increase annual sourcing of renewable electricity* from 34% in 2017 to 100% by 2025. 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.	Absolute contraction-economic intensity Supplier engagement	7 years

3a. Confirm target setting method

Pros and Cons of each target type

Absolute Contraction

- ✓ Environmentally robust and more credible to stakeholder
- χ Target may be **more challenging** to achieve of the company growth is linked to GHG emission

Physical Intensity

- ✓ **Reflects GHG performance and efficiency improvements <u>independent of business growth or decline</u>**
- χ Risk of being seen as less credible to stakeholders because absolute emissions may rise even if intensity decreases (e.g. because output increases more than GHG intensity decreases)
- χ Companies with diverse operations may find it difficult to define a single physical intensity common business metric

Economic Intensity

- ✓ **Appropriate for sectors with limited fluctuations in product prices over time, where growth in emissions is often tied to economic growth of the company**
- χ Less environmentally robust
- χ Economic intensity indicators are subject to extrinsic factors that can lead to apparent changes in a company's carbon intensity that are not linked to its environmental performance (e.g., fluctuation of commodity prices and inflation, etc.)
- χ May not correlate with emissions tied to physical production processes, especially for sectors with high price fluctuations.
- ❑ Companies are required to reduce their GEVA by 7% per year (compounded)
- ❑ Only applicable for scope 3 target-setting

3a. Confirm target setting method

Sector-specific resources

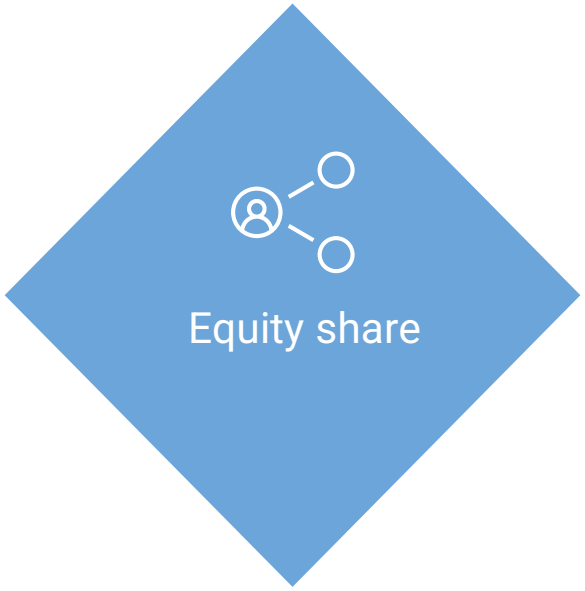
Sector	Status	
Aluminium	→ Scoping Phase	VIEW MORE
Apparel and footwear	Finalized	VIEW MORE
Aviation	Finalized	VIEW MORE
Buildings	In Development	VIEW MORE
Chemicals	In Development	VIEW MORE
Cement	In Development	VIEW MORE
Financial institutions	Finalized	VIEW MORE
Forest, Land and Agriculture (FLAG)	In Development	VIEW MORE
Information and Communication Technology (ICT)	Finalized	VIEW MORE
Oil and Gas	In Development	VIEW MORE
Power	Finalized	VIEW MORE
Steel	In Development	VIEW MORE
Transport	In Development	VIEW MORE

Source: SBTi

- For some sectors / industries, separate sector-specific methodologies, frameworks and requirements have been developed.
- If a company's sector is not listed here (or if it's sector-specific project is not finalized), the company should use SBTi's core methodologies and resources to set their targets.

3b. Define target boundary

- A company accounts for **100%** of the emissions from operations at which it has the **full authority** to introduce and implement operating policies
- It does not account for any of the emissions from operations in which it owns an interest but does not have operational control



- A company accounts for GHG emissions from operations **according to its share of equity** in the operation
- The equity share reflects economic interest, which is the extent of rights a company has to the risks and rewards flowing from an operation

- A company accounts for **100%** of the emissions from operations at which it can direct financial and operating activities with a view to gaining economic benefits from those activities

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Science-based Target Setting

For scoping, when it says "all company-wide", does a company need to include "associates" and other businesses that are without controlling interests (financial)?

Each company should follow the organizational boundary approaches outlined in the GHG protocol. Depending on the company you may choose a Financial Control approach, an Operational control approach or an Equity Share approach.

3c. Define timeframe

Select a base year

Data Availability

✓ Verifiable data on scope 1, 2 and 3 emissions

Representative of a company's typical GHG profile

✓ Do not have unusual fluctuations in emissions

Base year should be chosen such that the target has sufficient forward-looking ambition

✓The target should aim at promoting actions that have not yet been accomplished

X Targets that have already been achieved by the date they are submitted to the SBTi are not acceptable

- SBTi recommends choosing the most recent year for which data are available as the base year
- The most recent completed GHG inventory must not be earlier than 2 years

Regarding Covid-19:

- Companies significantly affected by Covid-19 can use 2019 as their base year instead of 2020 or 2021, or use the multi-year average base year approach
- In 2022, the SBTi will make an exception for acceptable most recent year inventories, allowing 2019, 2020, 2021, or 2022

3c. Define timeframe

Select a target year

Short-term Target

- ✓ Provokes greater accountability
  - Create more ownership among employees who may still be working at the company in the target year
- ✓ Motivate practical strategies that have a shorter planning cycle
- ✗ Cannot implement large-scale/long-term initiatives to achieve the target

Long-term Target

- ✓ Long-term target can facilitate initiatives and investments of larger-scale to reduce carbon emissions
- ✗ Longer target period may introduce uncertainties

Determining Factors

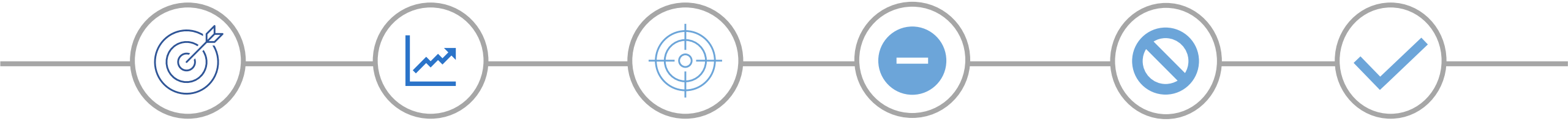
- Projections of business expansion
- Budget of the project
- Level of ambition

SBTi on long-term targets:

- Long-term targets cover more than 15 years from the date of submission
- SBTi encourages companies to develop mid term targets
- At a minimum, long-term targets must be consistent with well-below 2°C
- SBTi recommends using the same base and target years for mid and long term targets

Target timeframe requirement : minimum of 5 years and a maximum of 15 years

3c. Define ambition level



Level of ambition	Allocation approach	Method validity	Offsets	Avoided emissions	Recommended
At a minimum, scope 1 and scope 2 targets **must be consistent** with the level of decarbonization required to keep global temperature increase to **well-below 2°C** compared to preindustrial temperatures, though companies are encouraged to pursue greater efforts towards a 1.5°C trajectory	Intensity targets for scope 1 and scope 2 emissions are only eligible when they lead to absolute emission reduction targets in line with climate scenarios for keeping global warming to well-below 2°C or when they are modelled using an approved sector pathway applicable to companies' business activities.	Targets must be modelled using the latest version of methods and tools approved by the initiative	The use of offsets must not be counted as emissions reduction toward the progress of companies' science-based targets SBTi requires companies set targets based on emission reductions through direct action within their own boundaries/value chains Offsets lead to emissions reductions outside of company's own operations or value chain	Fall under a separate accounting system from corporate inventories and do not count toward science-based targets	Choosing an approach: The SBTi recommends using the most ambitious decarbonisation scenarios that lead to the earliest reductions and the least cumulative emissions

3d. Scope 1 and 2 target

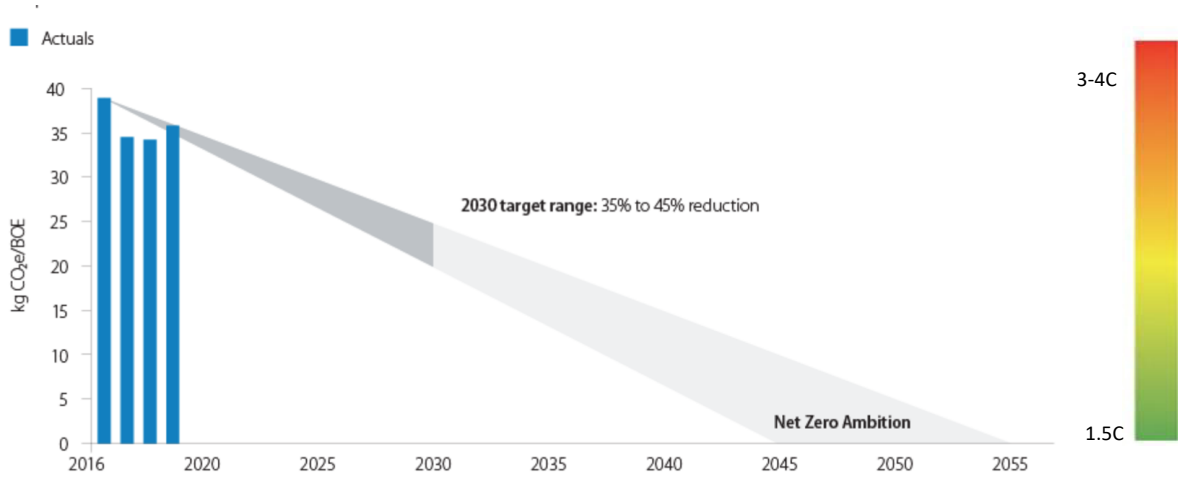
Criteria and recommendations

Scope 1 and 2 targets should:

- Cover at least **95%** of company-wide scope 1 and 2 emissions.
- Be consistent with the well-below 2°C pathway by 2100, including associated 2030 and 2050 emissions requirements

The GHG Protocol Corporate Standard requires that:

- Direct CO2 emissions from the combustion of **biomass** be included in the public report, but **reported separately from the scopes**, rather than included in scope 1.



Illustrative chart of emissions intensity trajectory aligned to well-below 2C for scope 1 and 2

Science-based Target Setting

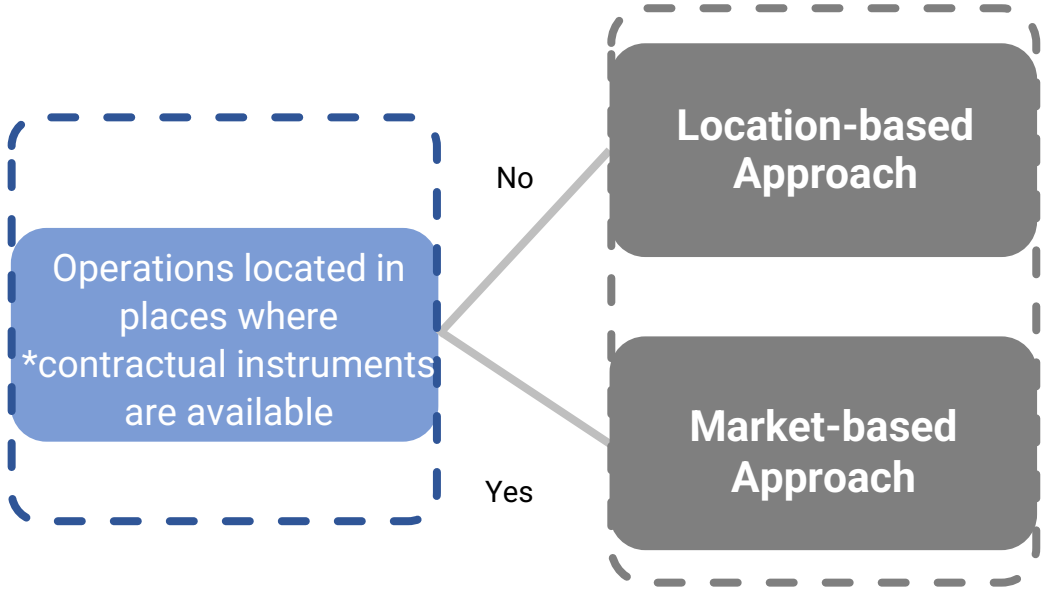
Are biogenic carbon emissions included in the SBTi?

Based on the SBTi criteria, direct emissions from the combustion of biomass and biofuels, as well as GHG removals associated with bioenergy feedstock1 , must be included alongside the company's inventory and must be included in the target boundary when setting a science-based target and when reporting progress against that target. If biogenic emissions from biomass and biofuels are considered climate neutral, the company must provide justification of the underlying assumptions.

3d. Scope 1 and 2 target

Determining Scope 2 accounting approach

Companies shall use a single, specified scope 2 accounting approach (location-based or market-based) for setting and tracking progress toward an SBT.



- Reflects the average emissions intensity of grids on which energy consumption occurs (using mostly grid-average emission factor data)
- Only regional grid average and national production emission factors can be used

- Reflects emissions from electricity that companies have purposefully chosen (or their lack of choice)
- Other than regional grid average emission factors, supplier-specific and contractual instrument emission factors can be used
- Can reflect emissions reductions from purchasing contractual instruments (i.e. Renewable Energy Certificate (REC))

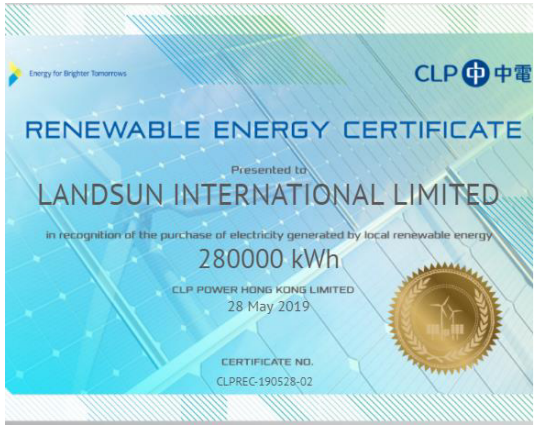
***Definition of contractual instruments in GHG Protocol Scope 2 Guidance:**
Any type of contract between two parties for the sale and purchase of energy bundled with attributes about the energy generation, or for unbundled attribute claims, e.g. energy attribute certificates (RECs)

3d. Scope 1 and 2 target

Renewable Energy Certificate (REC)

Renewable Energy Certificate in Hong Kong (HK Electric & CLP)

Sold in blocks of 100 **units of electricity**
$0.5 per unit
1 unit = 1 kWh of energy generated from **local renewable energy** source
Purchased unit will be shown on the electricity bill



Participating in the Scheme

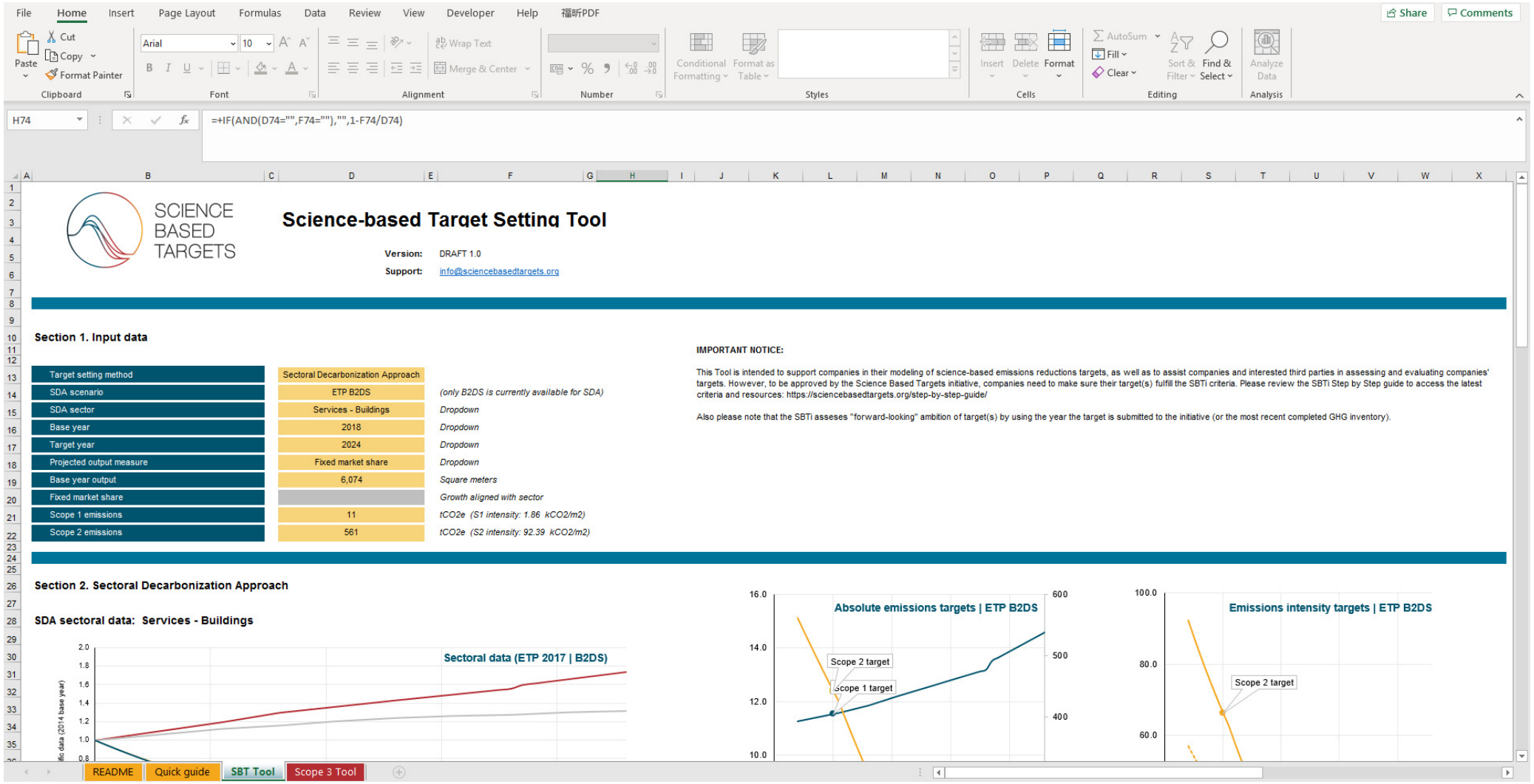
1. Submit application form any time in a calendar year
2. HK Electric to allocate REC on a first-come-first-served basis while REC inventory lasts
3. HK Electric to charge purchaser the cost of REC via electricity bill
4. HK Electric to dispatch electronic copy of REC after payment has been settled

Science-based Target Setting

Can we off set emissions by buying carbon credits / renewable electricity?

Offsets are not recognized as one of the strategies to set the SBTs. Renewable energy instruments such as renewable energy certificates (RECs) should only be used to meet reductions of scope 2 emissions using the market based approach. Please see the GHG Protocol Scope 2 Guidance for further guidance on scope 2 accounting.

Target Computation – Target Setting Tool



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Target Computation– Scope 1 & 2

Section 1. Input data

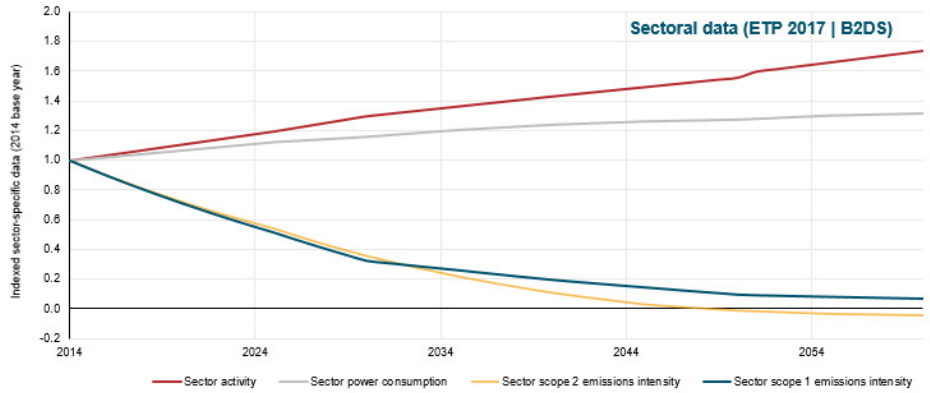
Target setting method	Sectoral Decarbonization Approach	
SDA scenario	ETP B2DS	*(only B2DS is currently available for SDA)*
SDA sector	Services - Buildings	*Dropdown*
Base year	2018	*Dropdown*
Target year	2024	*Dropdown*
Projected output measure	Fixed market share	*Dropdown*
Base year output	6,074	*Square meters*
Fixed market share		*Growth aligned with sector*
Scope 1 emissions	11	*tCO2e (S1 intensity: 1.86 kCO2/m2)*
Scope 2 emissions	561	*tCO2e (S2 intensity: 92.39 kCO2/m2)*

Input

Target Computation– Scope 1 & 2

Section 2. Sectoral Decarbonization Approach

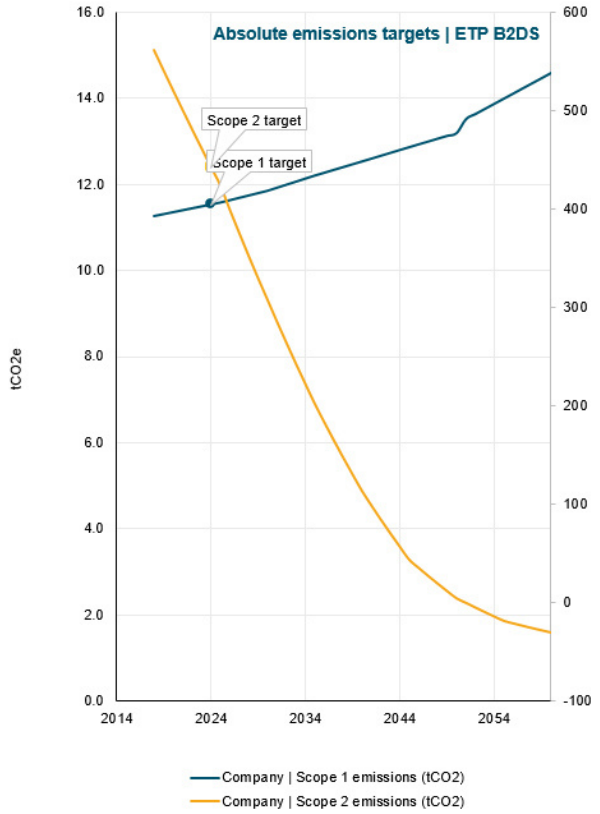
SDA sectoral data: Services - Buildings

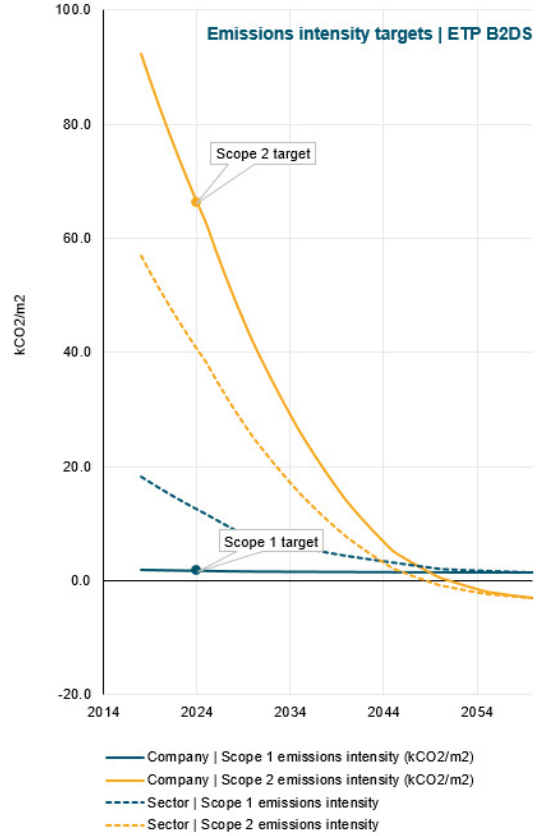


IEA ETP B2DS scenario

Review all target modelling data

	Base year (2018)	Target year (2024)	% Reduction
Company | Scope 1 emissions (tCO2)	11.3	11.5	-2.4%
Company | Scope 2 emissions (tCO2)	561.2	442.9	21.1%
Company | Scope 1+2 emissions (tCO2)	572.4	454.5	20.6%
Company | Scope 1 emissions intensity (kCO2/m2)			
Company | Scope 2 emissions intensity (kCO2/m2)			
Company | Scope 1+2 emissions intensity (kCO2/m2)			





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3e. Scope 3 Target

Process Overview

1. Conduct Scope 3 screening with the template and tool

Determine if a target should be set using scope 3 screening criteria

Criteria

- A scope 3 target is required if a company's relevant scope 3 emissions are 40% or more of total scope 1, 2, and 3 emissions
- Scope 3 targets should cover at least ⅔ of total scope 3 emissions
- Companies should calculate emissions from the scope 3 categories in which they

2. Establish inventory for significant emission hotspots

Establish inventory that have potential to influence reductions

Upstream or downstream	*Scope 3 category*
Upstream scope 3 emissions	1. Purchased goods and services 2. Capital goods 3. Fuel- and energy-related activities (not included in scope 1 or scope 2) 4. Upstream transportation and distribution 5. Waste generated in operations 6. Business travel 7. Employee commuting 8. Upstream leased assets
Downstream scope 3 emissions	9. Downstream transportation and distribution 10. Processing of sold products 11. Use of sold products 12. End-of-life treatment of sold products 13. Downstream leased assets 14. Franchises 15. Investments

3. Determine key drivers for reduction and evaluate reduction potential

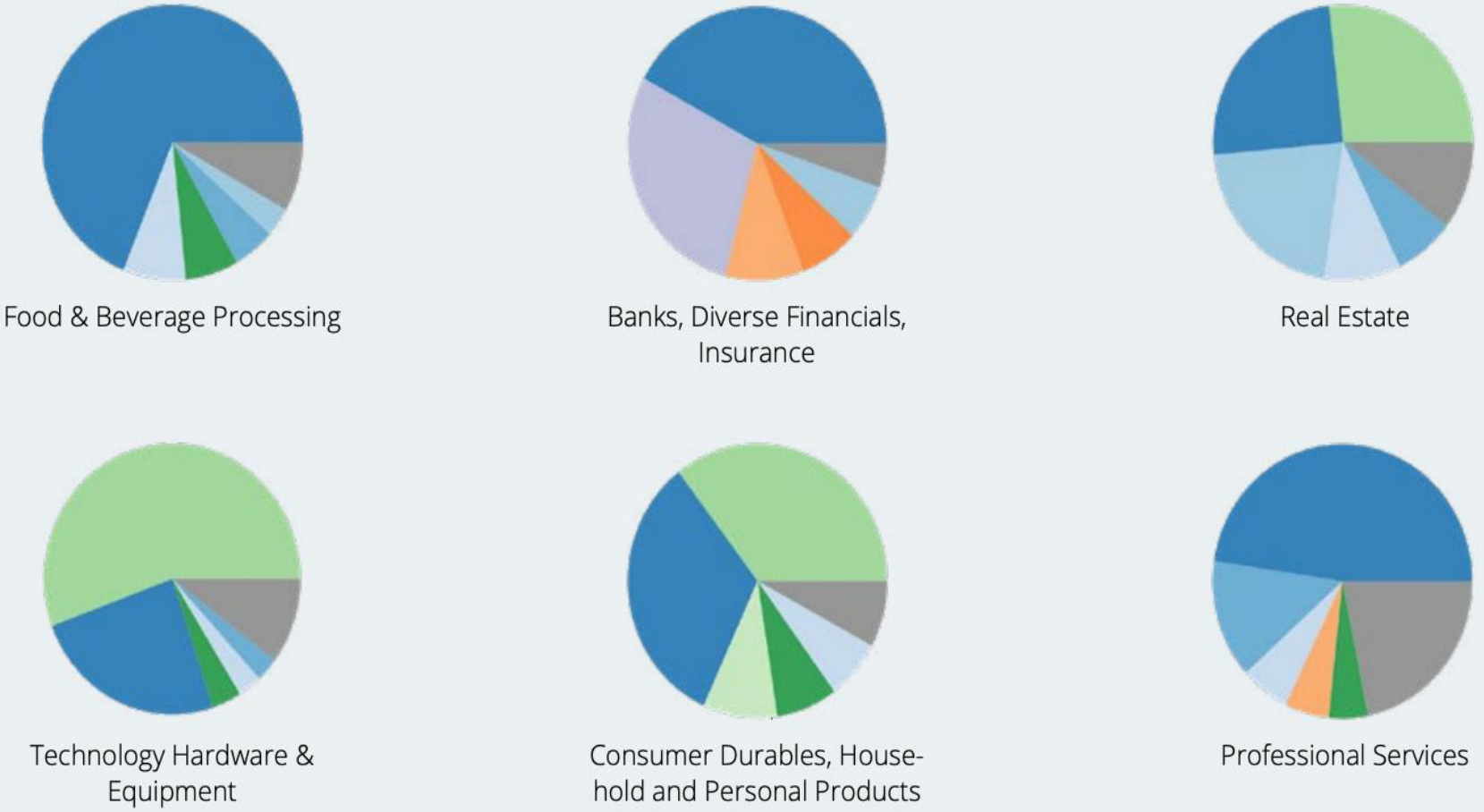
Develop scenarios trajectories and reduction roadmaps

4. Model reduction roadmaps to determine emissions reduction trajectory

Set Scope 3 reduction target(s)

3e. Scope 3 Target

3e) **Scope 3 target**
Relevance of scope 3 categories in different sectors



Source: WWF 2019 Discussion Paper OVERCOMING BARRIERS FOR CORPORATE SCOPE 3 ACTION IN THE SUPPLY CHAIN

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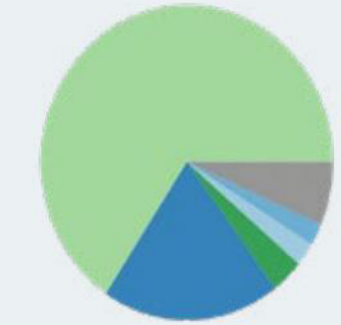
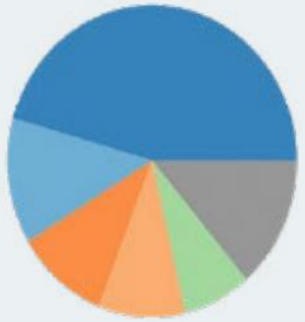
3e. Scope 3 Target

3e) **Scope 3 target**
Relevance of scope 3 categories in different sectors



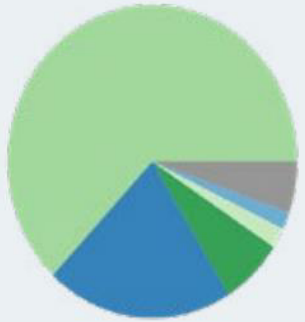
Electrical Equipment and Machinery



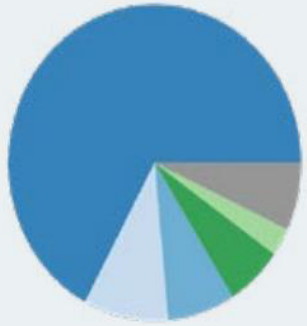
Software & Services

Telecommunication Services

Construction & Engineering



Automobiles & Components



Retailing

- Purchased Goods and Services
- Capital Goods
- Fuel-and-enery-related activities (not included in Scope 1 or 2)
- Upstream transportation and distribution
- Waste generated in operations
- Business travel
- Employee commuting
- Upstream leased assets
- Downstream transportation and distrbution
- Processing of sold products
- Use of sold products
- End of life treatment of sold products
- Downstream leased assets
- Franchises
- Investments
- Others

Source: WWF 2019 Discussion Paper OVERCOMING BARRIERS FOR CORPORATE SCOPE 3 ACTION IN THE SUPPLY CHAIN

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3e. Scope 3 Target

Challenges in setting and meeting scope 3 targets

Lack of transparency regarding the relevance of scope 3 emissions

- The usual **lack of high-quality data** requires different management approaches in comparison to scope 1 and 2 and the staff responsible for GHG emissions management need to be encouraged not to wait with supply chain action until the data quality is perfect

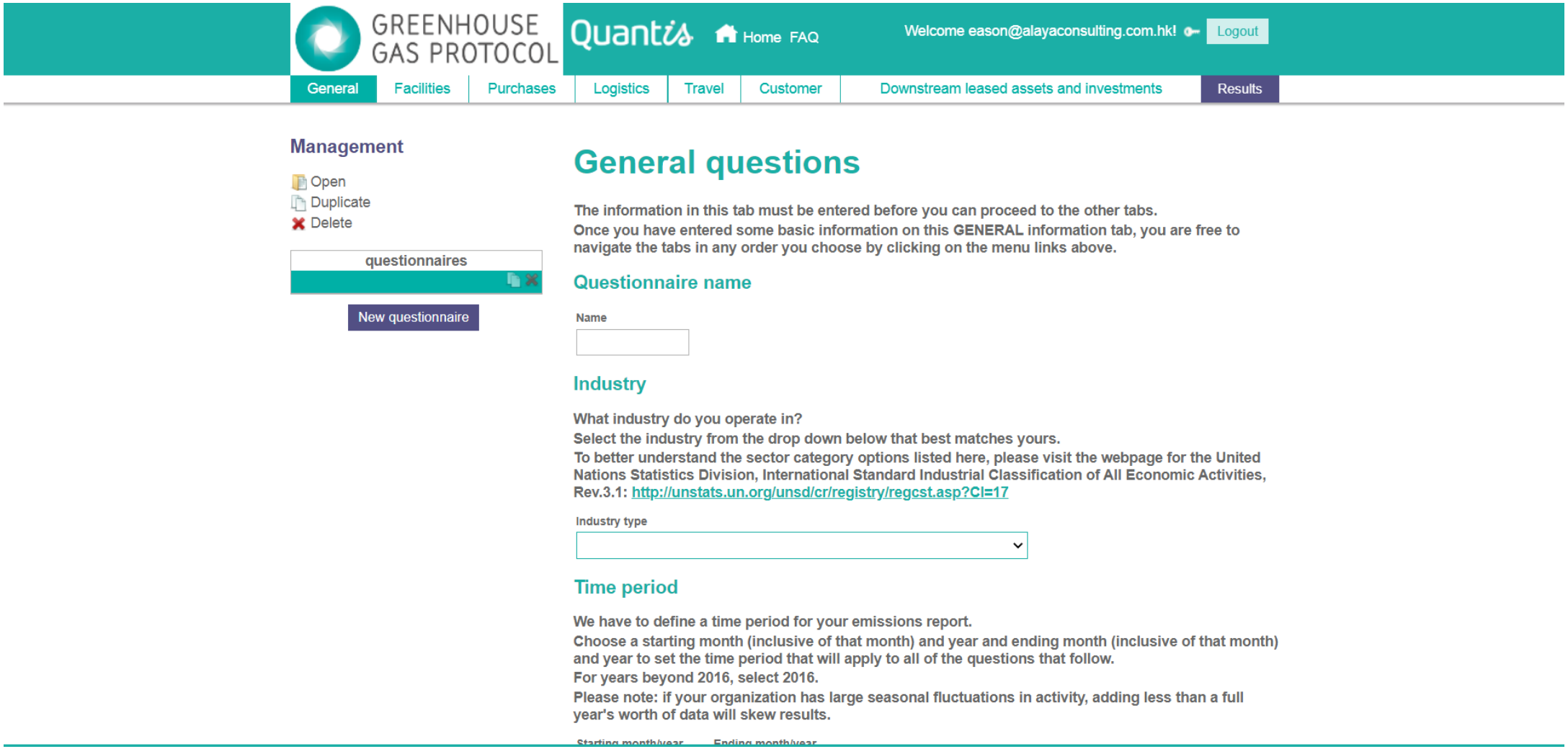
Lack of personnel resources and know-how hinders companies with their analysis and management of scope 3 emissions

- The more complex the organisational structure is, the more challenging the data collection and calculation
- Every single one of the 15 categories has its own logic and calculation approach and scope 3 data collection always involves interaction with different departments and external suppliers to gather activity data and find suitable emission factors

Lack of possibility to influence and lack of cooperation along the value chain hinders companies from successfully managing scope 3 emissions

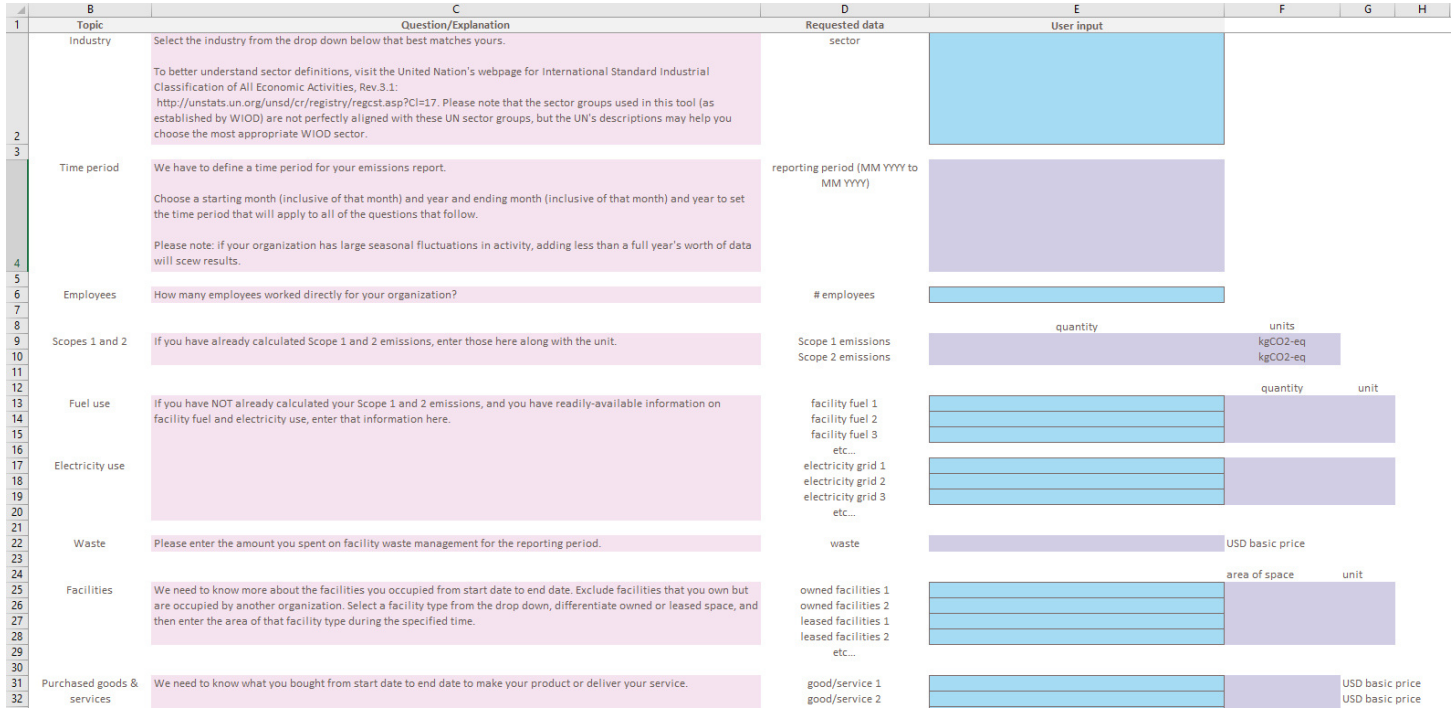
- **Difficult to challenge suppliers** on GHG emission reductions if a company does not have sufficient market power
- Market penetration of a low-carbon product with lower use phase emissions may require customer demand and an adequate policy environment in order to effectively reduce scope 3 emissions

Scope 3 Screening – Quantis



https://quantis-suite.com/Scope-3-Evaluator/

Scope 3 Screening – Quantis



	B	C	D	E	F	G	H
1	Topic	Question/Explanation	Requested data	User input			
2	Industry	Select the industry from the drop down below that best matches yours. To better understand sector definitions, visit the United Nation's webpage for International Standard Industrial Classification of All Economic Activities, Rev.3.1: http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=17. Please note that the sector groups used in this tool (as established by WIOD) are not perfectly aligned with these UN sector groups, but the UN's descriptions may help you choose the most appropriate WIOD sector.	sector				
3							
4	Time period	We have to define a time period for your emissions report. Choose a starting month (inclusive of that month) and year and ending month (inclusive of that month) and year to set the time period that will apply to all of the questions that follow. Please note: if your organization has large seasonal fluctuations in activity, adding less than a full year's worth of data will scew results.	reporting period (MM YYYY to MM YYYY)				
5							
6	Employees	How many employees worked directly for your organization?	# employees				
7							
8				quantity	units		
9	Scopes 1 and 2	If you have already calculated Scope 1 and 2 emissions, enter those here along with the unit.	Scope 1 emissions		kgCO2-eq		
10			Scope 2 emissions		kgCO2-eq		
11							
12					quantity	unit	
13	Fuel use	If you have NOT already calculated your Scope 1 and 2 emissions, and you have readily-available information on facility fuel and electricity use, enter that information here.	facility fuel 1				
14			facility fuel 2				
15			facility fuel 3				
16			etc...				
17	Electricity use		electricity grid 1				
18			electricity grid 2				
19			electricity grid 3				
20			etc...				
21							
22	Waste	Please enter the amount you spent on facility waste management for the reporting period.	waste		USD basic price		
23							
24					area of space	unit	
25	Facilities	We need to know more about the facilities you occupied from start date to end date. Exclude facilities that you own but are occupied by another organization. Select a facility type from the drop down, differentiate owned or leased space, and then enter the area of that facility type during the specified time.	owned facilities 1				
26			owned facilities 2				
27			leased facilities 1				
28			leased facilities 2				
29			etc...				
30							
31	Purchased goods & services	We need to know what you bought from start date to end date to make your product or deliver your service.	good/service 1			USD basic price	
32			good/service 2			USD basic price	

Scope 3, Category 1: Purchased goods and services

(On the PURCHASES tab) For any purchase types identified by the user as Standard Good or Service, the sector of purchase chosen by the user is linked to a 2009 world multiregional estimate of average environmental impacts by region-sector combined with global warming potential impact assessment (Timmer 2012, IPCC 2007). The reference flow quantity is provided by the user in the form of purchase quantity in basic price USD.

Scope 3, Category 2: Capital goods

(On the PURCHASES tab) For any purchase types identified by the user as Capital Good (regardless of Direct Procurement or Indirect Procurement), the identified sector of purchase points to a 2009 world multiregional estimate of average environmental impacts by region-sector combined with global warming potential impact assessment (Timmer 2012, IPCC 2007). The basic price USD purchase quantity entered by the user is the reference flow quantity.

Scope 3, Category 3: Fuel- and energy-related activities

(On the FACILITIES tab) It is determined if the user has already calculated Scope 1 and 2 emissions:

https://quantis-suite.com/Scope-3-Evaluator/

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Scope 3 Screening

General questions

The information in this tab must be entered before you can proceed to the other tabs.
Once you have entered some basic information on this GENERAL information tab, you are free to navigate the tabs in any order you choose by clicking on the menu links above.

Questionnaire name

Name

Industry

What industry do you operate in?
Select the industry from the drop down below that best matches yours.
To better understand the sector category options listed here, please visit the webpage for the United Nations Statistics Division, International Standard Industrial Classification of All Economic Activities, Rev.3.1: http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=17

Industry type

Time period

We have to define a time period for your emissions report.
Choose a starting month (inclusive of that month) and year and ending month (inclusive of that month) and year to set the time period that will apply to all of the questions that follow.
For years beyond 2016, select 2016.
Please note: if your organization has large seasonal fluctuations in activity, adding less than a full year's worth of data will skew results.

Starting month/year Ending month/year

Employees

How many employees worked directly for your organization?

No. employees

Owned and operated-facilities questions

Scopes 1 and 2?

If your company has already calculated its Scope 1 and Scope 2 emissions, please fill them in for your reporting period start date to end date.

☐ I have calculated Scope 1 and 2 emissions

Do you have readily-available expenditure or use data on facility fuel and electricity use?

☐ I have readily-available expenditure data on facility fuel and electricity use

Facilities

We need to know more about the facilities you occupied from start date to end date. Exclude facilities that you own but are occupied by another organization. If you have already included leased facility emissions in your scope 1 and 2 data, do not list those spaces here. Select a facility type from the drop down, select whether your own or lease the space, and then enter the area of that facility type during the specified time. Add additional facility types by clicking the "add more" button.

Facility type	Owned or leased?	Area	unit

Add more types

Waste

Please enter the amount you spent on facility waste management for the reporting period.

USD (basic price)

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Scope 3 Screening

Purchased goods and services questions

Purchased goods and services

We need to know what you bought from start date to end date to make your product or deliver your service.
Select a product or service type from the drop down and enter the amount of money (in basic price) that you spent on it during the specified time. Make sure to include services like legal and accounting.
Add additional product and service types by clicking the "add more" button. Note: please do not include transport-related fuels and building utilities (e.g., automobile fuel).
Disclaimer: there is a potential for double-counting if the user does not exclude facility fuel, waste, and electricity expenses from these inputs.

Purchase type	Broad sector of purchase	Purchases, USD (basic prices)
Standard goo	Electricity, Gas and Water Supply	
Service	Transport Equipment	
Capital good	Pulp, Paper, Paper , Printing and Publishing	

Add more types

Transportation and distribution questions

Vehicle

Do you own or lease any trucks, planes, trains, boats or automobiles (including company cars for employees)?

☐ Yes, I own or lease vehicles

Third-party transport

We need to know how much you spent from start date to end date on third-party transport (e.g., ocean freight, air freight).
Select a transport type from the drop down and enter the amount of money (in basic prices) that you spent on it during the specified time. Add additional transport types by clicking the "add more" button.

Third-party transport type	USD (basic prices)
Air freight	
Rail freight	

Add more types

Third-party distribution

We need to know how much you spent from start date to end date on third-party distribution (e.g., warehousing, upstream transportation and distribution, or downstream transportation and distribution).
Select a distribution type from the drop down and enter the amount of money (in basic prices) that you spent on it during the specified time. Add additional types by clicking the "add more" button.

Distribution type	USD (basic prices)

Add more types

Scope 3 Screening

Business travel questions

Business travel

Have you already calculated your business travel emissions and do you have the results readily available?

☐ I can provide business travel emissions

We need to know either how much you spent or the distance traveled and number of nights spent in a hotel, from start date to end date, on business travel.
Select a business travel activity from the drop down and enter the amount of money that you spent on it (in basic prices) or the distance traveled (or number of nights spent in a hotel) during the reporting period.
Add additional business travel activities by clicking the "add more" button.

Enter spend:

Activity	USD (basic prices)
Airplane	

Add more types

Enter distance or nights in hotel:

Activity	Qty	unit

Add more types

Downstream leased asset and investment questions

Downstream leased assets

☑ Are there any other leased assets that you have not accounted for using this tool OR did you use equity share to calculate your scope 1 and 2 emissions?

We need to know what, if any, income you received from start date to end date for leased assets that you own or franchises that you contract with.
First choose the asset type (facility or vehicle type, or franchise). Then, enter the income you received from it.

Asset type	USD (basic prices)
Office	

Add more types

Franchises

☐ Is your organization a franchisor?

Investments

☐ I have investments in joint ventures, subsidiaries, or associate companies that were not captured in my Scope 1 emissions

Scope 3 Screening – Results (sample)

Results

Export

	CO_2-eq (kg/year)	
Scope 1	96,857.14	0.28%
Scope 2	4,810,285.71	13.82%
Scope 3	29,907,469.40	85.90%

Scope 3 Breakdown view	CO_2-eq value (kg/year)	
Category 1 Purchased goods and services	523,190.18	1.75%
Category 2 Capital goods	0.00	0.00%
Category 3 Fuel- and Energy-Related Activities, Not Included in Scope 1 or Scope 2	986,271.43	3.30%
Category 4 Upstream transport	0.00	0.00%
Category 5 Waste generated in operations	30.11	0.00%
Category 6 Business travel	857,142.86	2.87%
Category 7 Employee commuting	17,485,714.29	58.47%
Category 8 Upstream leased assets	7,280,570.86	24.34%
Category 9 Downstream transport	0.00	0.00%
Category 10 Processing of sold products	0.00	0.00%
Category 11 Use of sold products	2,092,151.98	7.00%
Category 12 EoL of sold products (intermediate product, if relevant)	0.00	0.00%
Category 13 Downstream leased assets	682,397.70	2.28%
Category 14 Franchises	0.00	0.00%
Category 15 Investments	0.00	0.00%

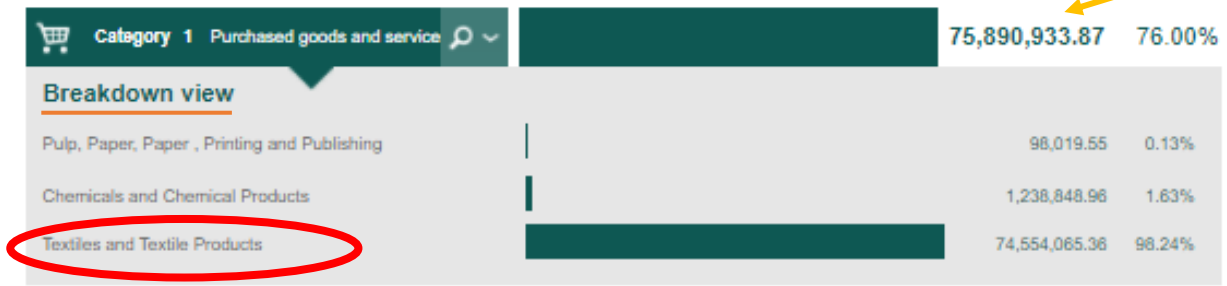
3e. Scope 3 Target

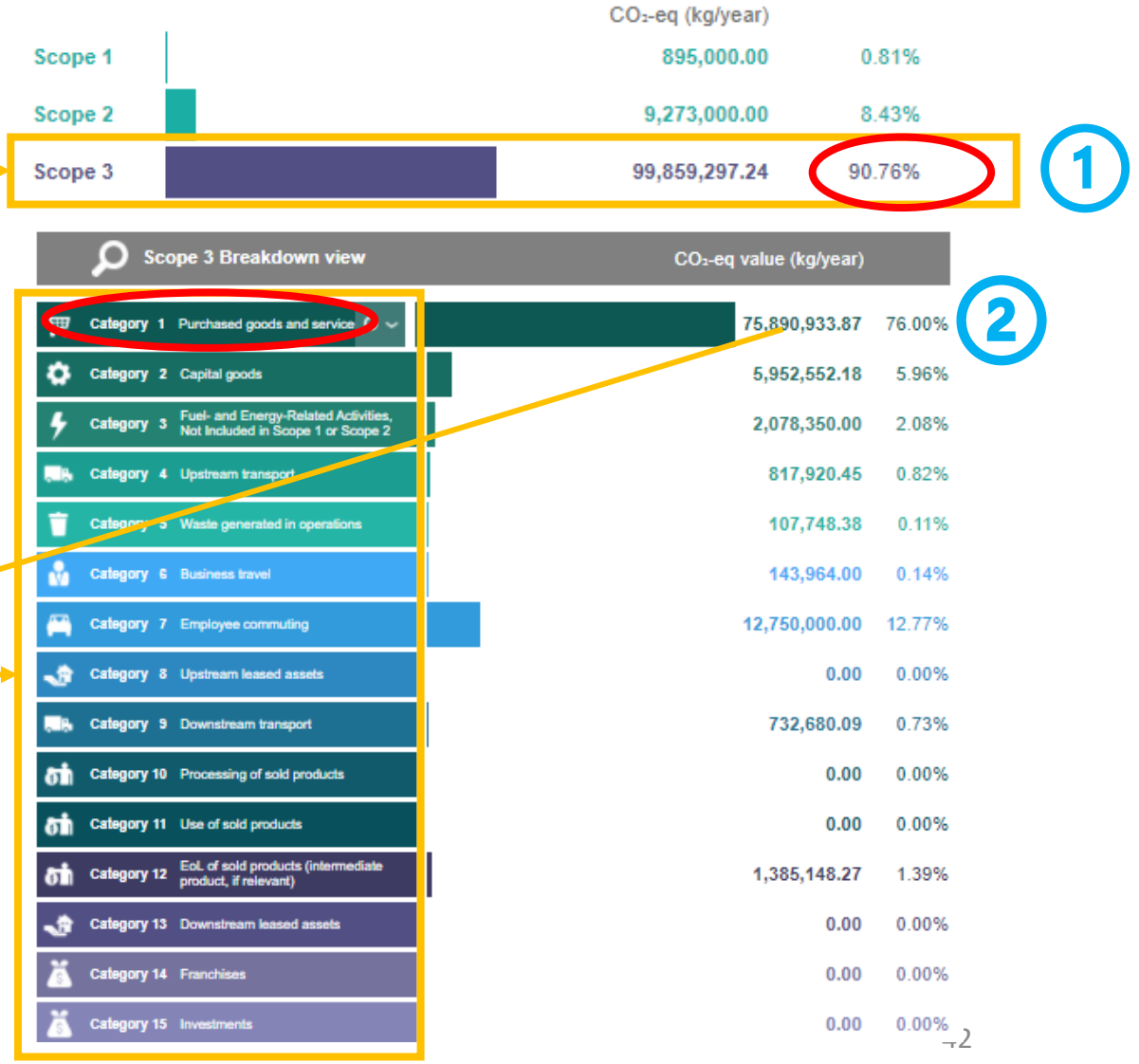
Case Study: Screening Result Initial Analysis

Per SBTi target setting manual:

1. Client's scope 3 emissions is **over 40%** of the total emissions → Scope 3 target must be set
2. Companies should calculate emissions from scope 3 source from 15 categories at which they have the **potential** to influence GHG reductions
3. The **Scope 3 target boundary** should include the majority of value chain emissions:
   - the **top three** emissions source categories or
   - **two-thirds** of total scope 3 emissions

3 Client to set a specific Scope 3 target for category 1





3e. Scope 3 Target

Example: Determine key drivers for reduction

Scope 3 Category	Reduction Initiative (Scope 3 Category 1 – Purchased goods & services)	Adopted by
Cat.1 - Textile & Textile Products	**1. Increased use of recyclable, reusable or sustainability sourced materials (e.g. BCI cotton, recycled polyester, nylon)**	• Hugo Boss • Ralph Lauren Corporation • PVH Corp • Kering • American Eagle Outfitters • CHANEL • ALDO Group • VF Corporation • Lenzing AG • Skunkfunk • EILEEN FISHER • Salvatore Ferragamo Group • Nike • Lululemon • PUMA SE
Cat.1 - Textile & Textile Products	**2. Recycled materials are reprocessed from reclaimed material and made into a new product or product ingredient**	• VF Corporation • Lenzing AG • Nike
Cat.1 - Packaging materials	**3. Source packaging materials from sustainable sources (e.g. FSC-certified paper tags, recycled cardboard)** • Ralph Lauren: Inventoried every material used in product packaging and identified items that met their sustainability criteria and items that will either stop using or transition to more sustainable sources	• PVH Corp • Ralph Lauren Corporation • Zalando SE • ALDO Group • Lenzing AG • Salvatore Ferragamo Group • Nike
Cat.1 - Packaging materials	**4. Reduce and eliminate packaging** • Work with suppliers or retail brands to eliminate, reduce or replace plastic bags • e.g. Zalando SE: Fold products more to reduce the size of polybag used, Use of reusable shipping bags	• Ralph Lauren Corporation • American Eagle Outfitters • Zalando SE • ALDO Group • Nike • Zalando SE
Cat.1 – Paper	**5. Uphold a commitment to recycling and paper reduction in owned facilities**	• American Eagle Outfitters
	6. Collaborate with partners and vendors to use clean energy	• ALDO Group
	7. Increase material efficiency *(Recommended by WRI)*	• Nil
	8. Deploy low carbon technology (e.g. waterless dyeing)	• VF Corporation

Target Computation – Scope 3

Section 1. Input data

Target setting method	Absolute Contration Approach	*Please review the latest version of the SBTi Guidance and Criteria*
Base year	2018	*Dropdown*
Target year	2024	*Dropdown*
Projected output measure		
Base year output		
Percentage growth rate (Linear)		
Scope 3 emissions (total or specific categories)	295	*tCO2e*

Section 2. Absolute Contraction Approach

	Base year (2018)	Target year (2024)	% Reduction
Company | Scope 3 emissions - 2C (tCO2e)	294.6	272.9	7.4%
Company | Scope 3 emissions - WB2C (tCO2e)	294.6	250.4	15.0%
Company | Scope 3 emissions - 1.5C (tCO2e)	294.6	220.4	25.2%

Scope 3 Screening Preparation

To make a first approximation of full scope 3 footprint

Tab in tool	Topic	Question/Explanation	Requested data	User input
General	Industry	Select the industry from the drop down below that best matches yours. To better understand sector definitions, visit the United Nation's webpage for International Standard Industrial Classification of All Economic Activities, Rev.3.1: http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=17. Please note that the sector groups used in this tool (as established by WIOD) are not perfectly aligned with these UN sector groups, but the UN's descriptions may help you choose the most appropriate WIOD sector.	sector	Textiles and Textile Products
	Time period	We have to define a time period for your emissions report. Choose a starting month (inclusive of that month) and year and ending month (inclusive of that month) and year to set the time period that will apply to all of the questions that follow. Please note: if your organization has large seasonal fluctuations in activity, adding less than a full year's worth of data will skew results.	reporting period (MM/YYYY to MM /YYYY)	07/2018 to 06/2019
	Employees	How many employees worked directly for your organization?	# employees	5,001 to 10,000

General Information
- Industry
- Time period
- Number of employees

				quantity	
Facilities	Scopes 1 and 2	If you have already calculated Scope 1 and 2 emissions, enter those here along with the unit.	Scope 1 emissions	895,000.00	kgCO2-eq
			Scope 2 emissions	9,273,000.00	kgCO2-eq
	Waste	Amount spent on facility waste management in 2019	waste		USD basic price

					Leased/Owned	Floor Area	
Facilities	Facilities	We need to know more about the facilities you occupied from start date to end date. Exclude facilities that you own but are occupied by another organization. Select a facility type from the drop down, differentiate owned or leased space, and then enter the area of that facility type during the specified time.	China - LN	Manufacturing			m^2
			China - XF	Manufacturing			m^2
			China - GG	Manufacturing			m^2
			China - NH	Manufacturing			m^2
			China - SN	Manufacturing			m^2
			Hong Kong Office	Office			m^2
			Thailand- MK	Manufacturing			m^2
			Thailand - MS	Manufacturing			m^2
			Thailand - MKT	Manufacturing			m^2
			Cambodia - CB	Manufacturing			m^2

Information related to the facilities that the company operates
- Scope 1 & Scope 2 Emissions
- Waste management expenditure
- Area of the facilities (area with human activities)

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Scope 3 Screening Preparation

To make a first approximation of full scope 3 footprint

Information related to purchased goods and services

- Amount spent on procuring goods and services (e.g. paper, electronic appliances) & capital goods (e.g. machinery, tools, raw materials including chemical)

Purchased goods and services	Purchased goods & services	We need to know what you bought from start date to end date to make your product or deliver your service. Select a product or service type from the drop down and enter the amount of money (in basic price) that you spent on it during the specified time. Make sure to include services like legal and accounting. Note: please do not include transport-related fuels and building utilities (e.g., automobile fuel). Disclaimer: there is a potential for double-counting if the user does not exclude facility fuel, waste, and	good/service 1	Manufacturing (not elsewhere classified); Recycling		USD basic price
			good/service 2	Pulp, Paper, Paper , Printing and Publishing		USD basic price
			good/service 3	Textiles and Textile Products		USD basic price
			good/service 4			USD basic price
			good/service 5			USD basic price
	Capital goods		capital 1	Textiles and Textile Products		USD basic price
			capital 2	Machinery (not elsewhere classified)		USD basic price
			capital 3	Other		USD basic price

Alaya Consulting: including raw material and machinery

Alaya Consulting: Please estimate the logistic cost or attain information from the suppliers

				Upstream	Downstream				
				Raw material to factory	Factory to port for export	Factory to airport for export	Transport to designated market by air freight	Transport to designated market by ocean frieght	
Logistics	Third-party distribution	We need to know how much you spent from start date to end date on third-party distribution (e.g., warehousing, upstream transportation and distribution, or downstream transportation and distribution) Enter the amount of money (in basic prices) that you spent on each during the specified time.	China - LN						USD basic price
			China - XF						USD basic price
			China - GG						USD basic price
			China - NH						USD basic price
			China - SN						USD basic price
			Thailand- MK						USD basic price
			Thailand - MS						USD basic price
			Thailand - MKT						USD basic price
			Cambodia - CB						USD basic price

*** Transported by vehicles owned and operated by a third party and not paid for by Top Form**

Information related to logistics

- Amount spent on third-party distribution (e.g. warehousing, upstream transportation and distribution, downstream transportation and distribution)

Please collect as much data as possible
→ Facilitate the communication with SBTi (SBTi may follow up on the scope 3 screening result with us during the target validation stage)
→ Estimation is acceptable with comprehensive explanation backing up

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Scope 3 Screening Preparation

To make a first approximation of full scope 3 footprint

Travel	Business travel	If you've already calculated business travel emissions, enter them here.	emissions	143,964.60	kgCO2-eq							
				Types of materials used in manufactured produ		Please estimate the percentage of each material used in the product						
						Proportion of packaging material (%)		Proportion of product material (%) -		Annual shipment		
						Paper	Plastic	Cotton	Plastic	Net Weight (kg)	Gross Weight (kg)	Non-hazardous waste sold to third parties (kg)
Customer	Sold products	We need to know how your products are sold. First, you must group all your products into material groups (e.g., plastics, metals, etc.) and select the one that most closely matches your products from the drop down. Report the total weight or volume of materials used to produce and package your products and services sold from start date to end date.	China - LN									
			China - XF									
			China - GG									
			China - NH									
			China - SN									
			Thailand- MK									
			Thailand - MS									
			Thailand - MKT									
			Cambodia - CB									
Downstream leased asset and investment	Investments	Do you have investments in joint ventures, subsidiaries, or associate companies that were not captured in my Scope 1 emissions? We need to know what, if any, investments you made from start date to end date. First, choose the type of investment from the drop-down (e.g., joint ventures, equity investments, assoicated companies, subsidiers, debt investment) and then select the industry sector that most closely matches the sector in which you made your investment. Then, enter the amount of the investment. Do not include any investments or joint ventures that are included in your scope 1 & 2 emissions.	joint ventures				USD basic price					
			equity investments				USD basic price					
			associated companies				USD basic price					
			subsidizers				USD basic price					
			debt investment				USD basic price					

Estimation is acceptable with comprehensive explanation backing up

Information related to business travel and customer

- GHG emissions generated from business travel
- Weight or volume of materials used
- Investment, if any

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4. Calculate the SBT

Screenshot of tool - Data input section

Section 1. Input data

Target setting method	Absolute Contraction Approach	*Note: this approach not applicable to Power Sector*
SDA scenario	Sectoral Decarbonization Approach / Absolute Contraction Approach	
SDA sector		
Base year	2019	*Dropdown*
Target year	2030	*Dropdown*
Projected output measure		
Base year output		
Target year output		
Scope 1 emissions	50,000	*tCO2e*
Scope 2 emissions	100,000	*tCO2e*

Screenshot of tool - Output/results section

Section 3. Absolute Contraction Approach

Well below 2 degree scenario (WB2C)

Review all target modelling data

	Base year (2019)	Target year (2024)	% Reduction
Scope 1 emissions (tCO2e)	5,000	4,375	12.5%
Scope 2 emissions (tCO2e)	10,000	8,750	12.5%
Scope 1+2 emissions (tCO2e)	15,000	13,125	12.5%

1.5 degree scenario (1.5C)

Review all target modelling data

	Base year (2019)	Target year (2024)	% Reduction
Scope 1 emissions (tCO2e)	5,000	3,950	21.0%
Scope 2 emissions (tCO2e)	10,000	7,900	21.0%
Scope 1+2 emissions (tCO2e)	15,000	11,850	21.0%

5) Submit target submission form

Around 1 week

SBTi conducts an initial screening for completeness and to ensure basic criteria are met

30 business days - Target validation by SBTi

SBTi makes a decision on the targets within 30 days if companies are able to respond to any queries within 2 business days

Approved targets are published on SBTi, We Mean Business and CDP websites

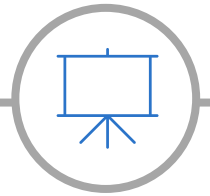
The targets must be made public by the company within 6 months of approval, to inform stakeholders

Target validity, recalculation and disclosure

Timing

The company must set target(s) **within 2 years** of committing to SBTi

If not, SBTi can remove the company from its website and any external publications, with no penalties to the company

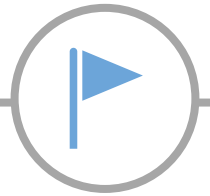


Review

Targets must be reviewed, and if necessary, recalculated and revalidated, at least every 5 years

Announcing target on SBTi

In the coming year, the SBTi will issue more specific guidance on what companies are required to report annually on a public basis to facilitate this process in the future



Tracking progress

SBTi is currently undergoing a process to track company progress against targets.

Disclosure

Companies should report their company-wide GHG emissions and progress against targets through:

- Annual reports
- Sustainability reports,
- Company's website
- Disclosure through CDP's annual questionnaire

Triggered recalculation

- Scope 3 emissions become 40% or more of overall scope 1, 2, and 3 emissions
- Exclusions in the inventory or target boundary change
- Significant changes in company structure and activities (e.g. acquisitions, divestitures, mergers, insourcing or outsourcing, shifts in product or service offerings)
- Significant changes in data used to calculate the targets such as growth projections
- Other changes to projections/assumptions used with SBT setting methods

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Science-based Target Setting

Q: Is it necessary to resubmit the target if we overstate our target?

A: Companies should check their targets annually and at minimum every five years. Best practice: A company should recalculate its SBT to reflect significant changes that might compromise the target's relevance.

Application and Implementation of SBTs

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An Overview of Real Estate Sector

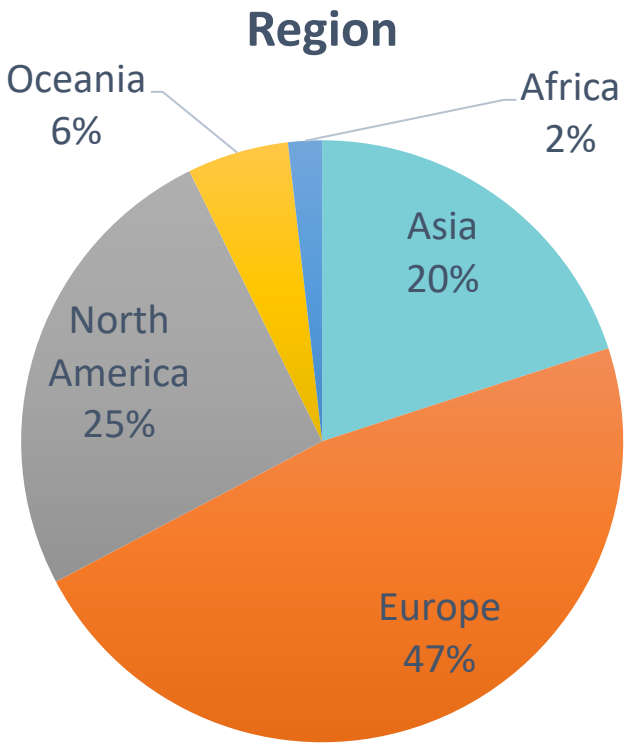
65 Companies have approved science-based targets

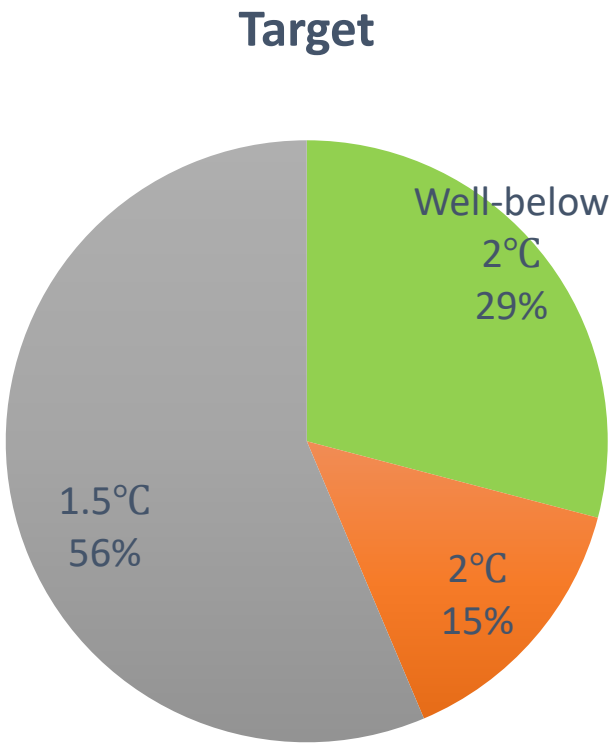
11 Companies in Asia have approved science-based targets

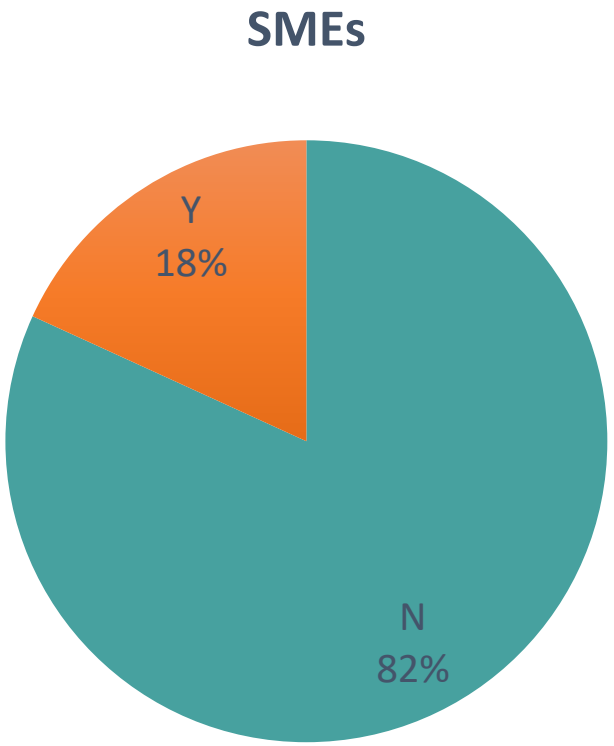
1 Company in Hong Kong has approved science-based targets

Tokyu Fudosan Holdings Corporation	VIEW TARGET	Targets Set	★	1.5°C	Japan	Asia	Real Estate
MITSUI FUDOSAN CO., LTD.	VIEW TARGET	Targets Set		Well-below 2°C	Japan	Asia	Real Estate
Nomura Real Estate Holdings, Inc.	VIEW TARGET	Targets Set		Well-below 2°C	Japan	Asia	Real Estate
CapitaLand	VIEW TARGET	Targets Set		Well-below 2°C	Singapore	Asia	Real Estate
Mahindra Lifespaces Developers Limited	VIEW TARGET	Targets Set		1.5°C	India	Asia	Real Estate
Mahindra World City (Jaipur) Ltd.	VIEW TARGET	Targets Set		1.5°C	India	Asia	Real Estate
Mahindra World City Developers Ltd	VIEW TARGET	Targets Set		1.5°C	India	Asia	Real Estate
Swire Properties Limited	VIEW TARGET	Targets Set	★	2°C	Hong Kong	Asia	Real Estate

An Overview of Real Estate Sector



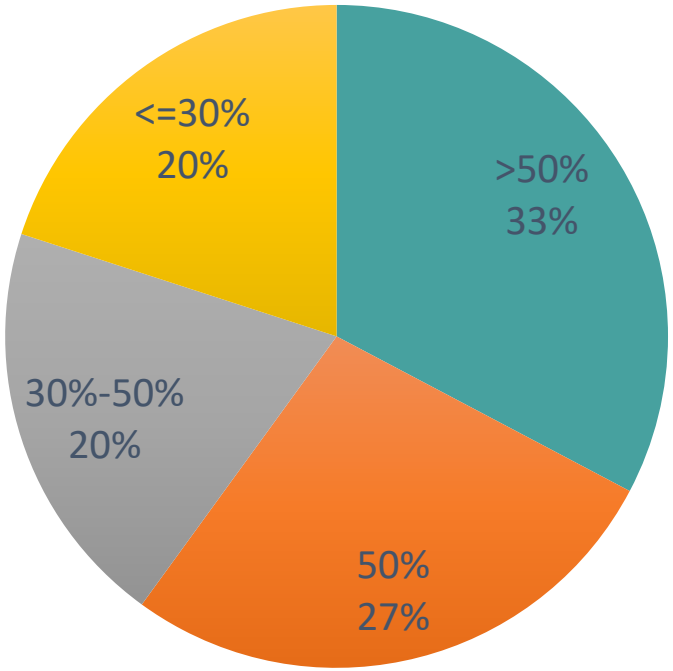




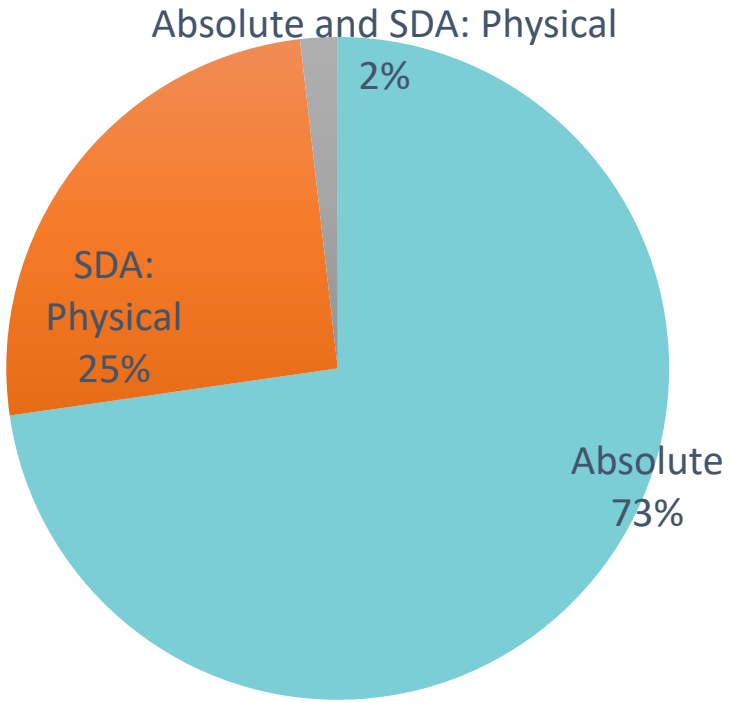
- **55** Companies in total
- **10 SMEs** companies
- All in sector of **Real Estate**

An Overview of Real Estate Sector

Target Value for Scope 1 and 2

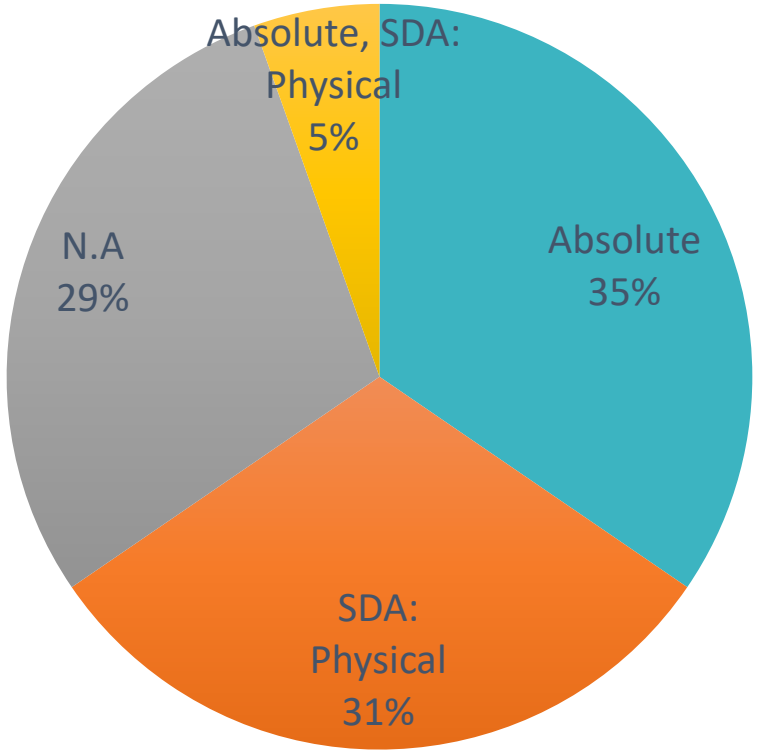


Target Method for Scope 1 and 2

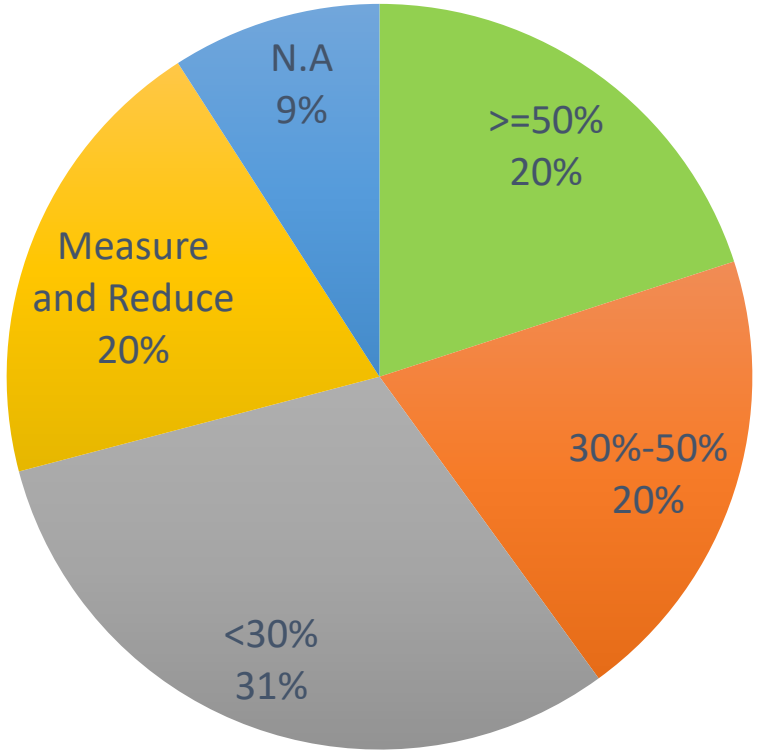


An Overview of Real Estate Sector

Target Method for Scope 3



Target Value for Scope 3



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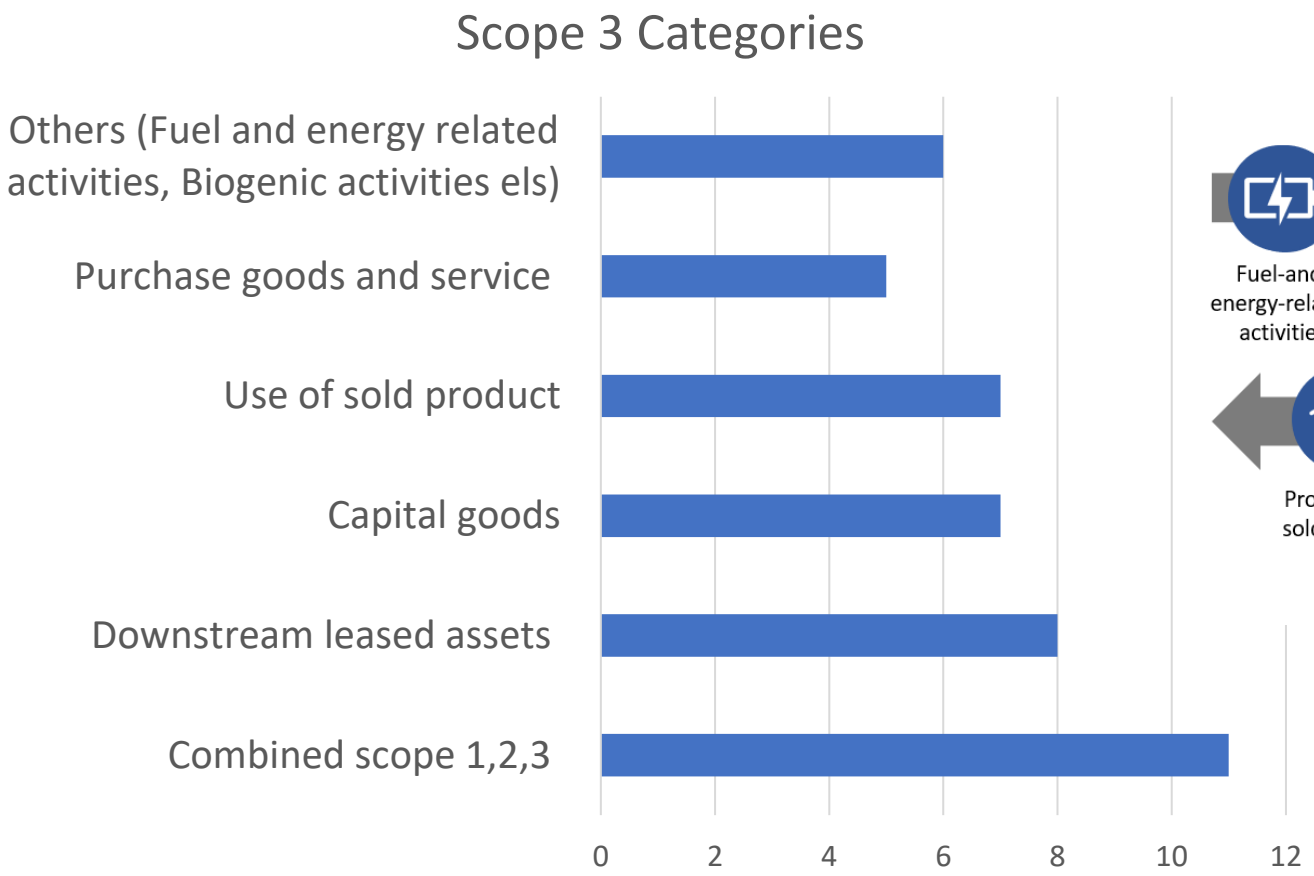
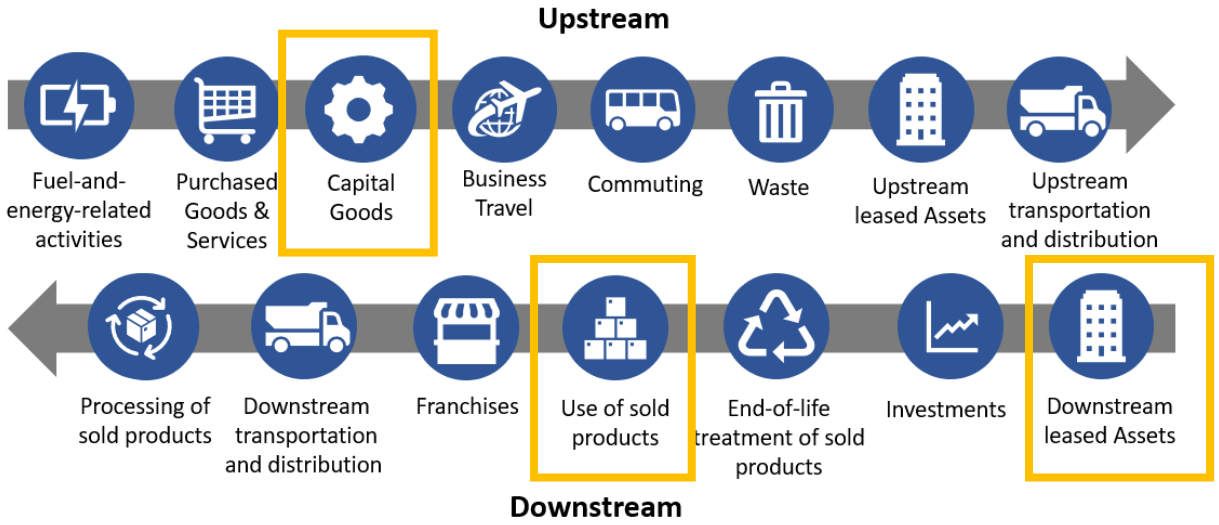
An Overview of Real Estate Sector

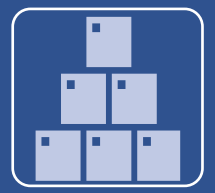




Top 3 Categories of Scope 3 Emissions (Real Estate)

According to:

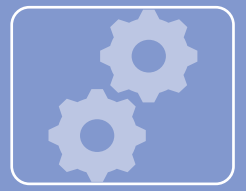
- Analysis of **companies with approved targets**
- **Guidelines on scope 3 accounting**, e.g. UKGBC Guide to Scope 3 Reporting in Commercial Real Estate



Category 11:

Use of Sold Products

e.g. Sold buildings



Category 2:

Capital Goods

e.g. Construction materials

Category 13:

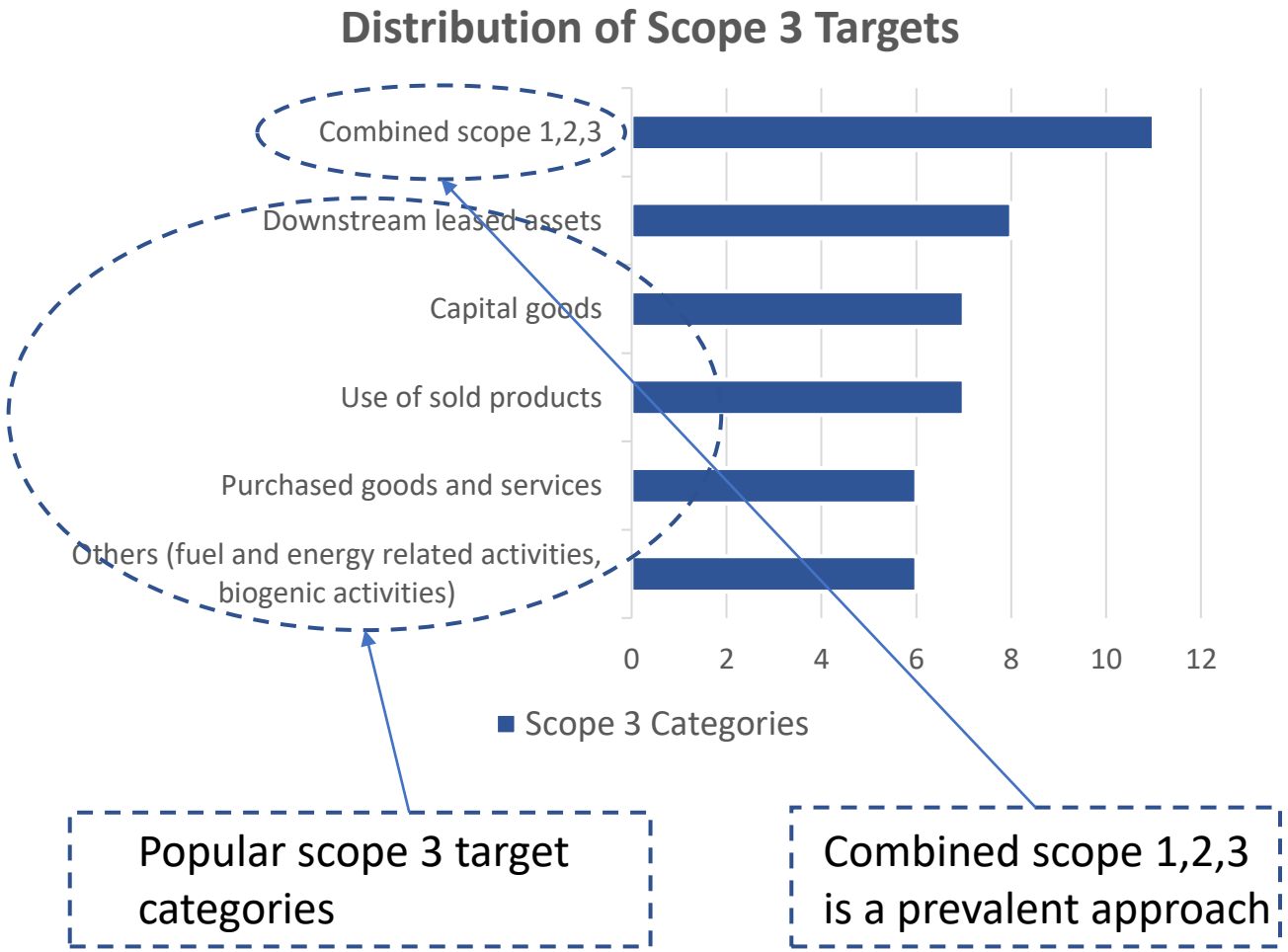
Downstream Leased Assets

e.g. Tenant operations

Approaches of Scope 3 Targets

3 Approaches

1. Combined target (scope 1,2,3)
2. Targets set against specific categories
3. Separate targets for scope 1&2 and scope 3



Pros and Cons of Scope 3 Target Approaches

Target Approach	Pros	Cons
Combined target (scope 1,2,3)	• Suitable when scope 3 reduction potential is low • Comprehensive emission management • Simple to communicate • Base year recalculation not required for shifting activities between scopes	• Low transparency • Require same base year for all scopes
Target set against specific categories	• Allow customization of target for different categories • High transparency • Provide additional metrics to track progress	• Complicated to communicate • May require base year recalculation when shifting activities between scopes • May fail to reduce excluded categories • Less flexibility in scope 3 reduction
Separate targets for scope 1&2 and scope 3)	• More comprehensive emission management and flexibility • Relatively simple to communicate	• Less transparent • May require base year recalculation when shifting activities between scopes

Scope 3 Screening

Data required for screening

Owned and operated-facilities

- Scope 1 and 2 emissions
- Expenditure on facility fuel and electricity use
- Type of facilities and area
- Spending on facility waste management (in USD)

Purchased goods and services

- Purchase type and amount of spending from:
  - Capital goods
  - Standard goods
  - Services

Transportation and distribution

- Third-party transport type and spending
- Third-party distribution type and spending

Business travel

- Days stayed or distance travelled
- Spending of the trip

Customer-related

- Type of sold products
- Total mass of products

Downstream leased asset and investment

- Whether there are downstream leased assets and investment

Data Collection (Top 3 Categories)

	Cat 11: Use of Sold Products		Cat 2: Capital Goods		Cat 13: Downstream Leased Assets		
Step 1: Identify basic information	• Asset type • Expected lifetime of assets		• Capital good type		• Asset type		
Step 2: Collect data	• Sales records • Building floor plan • Asset owner's carbon audit result/sustainability report • Electric bills/meter readings		• Breakdown of spend from procurement • team, broken down by procurement category and/or supplier		• Rental records • Building floor plan • Lessee's carbon audit result/sustainability report • Electric bills/meter readings		
Step 3: Choose a suitable calculation method	Sold asset's scope 1, 2 emission/ expected energy use and floor area	Industry average data (low accuracy)	**Spend-based method:** Amount of money spent by category	Industry average data (low accuracy)	**Lessee-specific Method**: Lessee's scope 1, 2 emission/energy use and floor area	**Average-data Method:** Lessee's floor area	Industry average data (low accuracy)

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Case Study - Landsec

A real estate developer in the United Kingdom committed to SBTi 1.5°C target
1.5°C target set combining scope 1, 2 and 3

Landsec's SBT (approved in 2016)

Emission Approach

- Combining Scope 1, 2 and 3
- Method = Absolute
- **Reduce carbon emissions (tCO2e) by 70% by 2030 compared with a 2013/14 baseline**

GHG scope	Category	2020/21 Emissions (t CO_2e)	2020/21 % of total value chain
Scope 1	Scope 1	7,554	3.3%
Scope 2	Scope 2	18,434	8.0%
Scope 3	Scope 3	205,235	88.8%

Scope 3 as the major source of emission

Major sources of scope 3

Scope 3		205,235	88.8%
1.	Purchased goods and services (PG&S)	34,004	14.7%
2.	Capital goods	84,261	36.4%
3.	Fuel- and energy-related activities	5,052	2.2%
4.	Upstream transportation and distribution	Grouped under PG&S	0.0%
5.	Waste generated in operations	284	0.1%
6.	Business travel	33	0.0%
7.	Employee commuting	168	0.1%
8.	Upstream leased assets	n/a	0.0%
9.	Downstream transportation and distribution	n/a	0.0%
10.	Processing of sold products	n/a	0.0%
11.	Use of sold products	n/a	0.0%
12.	End-of-life treatment of sold products	n/a	0.0%
13.	Downstream leased assets	81,433	35.2%
14.	Franchises	n/a	0.0%
15.	Investments	n/a	0%

Case Study - Swire Properties

First real estate developer in Hong Kong and mainland committed to SBTi
First real estate developer in Hong Kong committed to 1.5°C target

太古地產 SWIRE PROPERTIES

Swire Properties' SBT (approved in 2019)

Scope 3 target by categories

Scope 1 and 2 GHG Emissions Intensity	Scope 3 GHG Emissions Intensity	Scope 3 GHG Emissions Intensity
↓ 35 % per sqm, by 2025	Downstream Leased Assets	Capital Goods
↓ 52 % per sqm, by 2030	↓ 28 % per sqm, by 2030	↓ 25 % per sqm, by 2030
from a 2018 baseline	from a 2018 baseline	from a 2016-2018 baseline

Source: https://sd.swireproperties.com/2020/en/performance-environment/climate-change/making-progress-towards-our-science-based-targets

Cat 13: Downstream Leased Assets

- Tenant operations powered by 100% **renewable electricity**
- Improve tenants' **energy use intensity**

Physical intensity target

Cat 2: Capital Goods

- **Low-carbon procurement**
- **Platinum-certified concrete**
- **Battery storage system** to power tower cranes

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Case Study

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Target Setting Process

- **Boundary**
  Company-wide Scope 1 and 2 emissions (as well as Scope 3 if it constitutes more than 40% of total)
- **Timeframe**
  From date of announcement, 5-10 years
- **Reporting**
  Publicly disclose its company-wide GHG emissions inventory and progress against their targets on an annual basis
- **What are the associated costs?**
  From 2019, target validation services will be charged (USD 5000 for two assessments)

SBT Step-by-Step

	Step 1 Develop GHG Inventory	**Step 2** Target Year Selection	**Step 3** Target Setting	**Step 4** Submit, Validate and Announce the Target
Key action taken	Comprehend full picture including Scope 3 screening	Commence computation process	Provide recommendations on Scope 2 accounting approach and target selection method	List on SBTi website
Alaya	➢ Ascertain the organisation boundary and identify emission activities ➢ Identify outstanding data and provide data collection guideline ➢ Screen the scope 3 GHG emissions ➢ Scope 3 has to be included if exceeding 40% of total GHG emission	➢ Recommend target year	➢ Compute the carbon reduction targets ➢ Select scope 2 accounting approach and target setting method ➢ Draft a target statement	➢ Submit the targets to SBTi for auditing and approval
Client	➢ Provide the GHG emissions data (including sources of emissions) ➢ Collect data for scope 3 GHG emissions calculation	➢ Provide projections of business expansion in coming years		➢ Submit the commitment letter to SBTi ➢ Review and approve the targets

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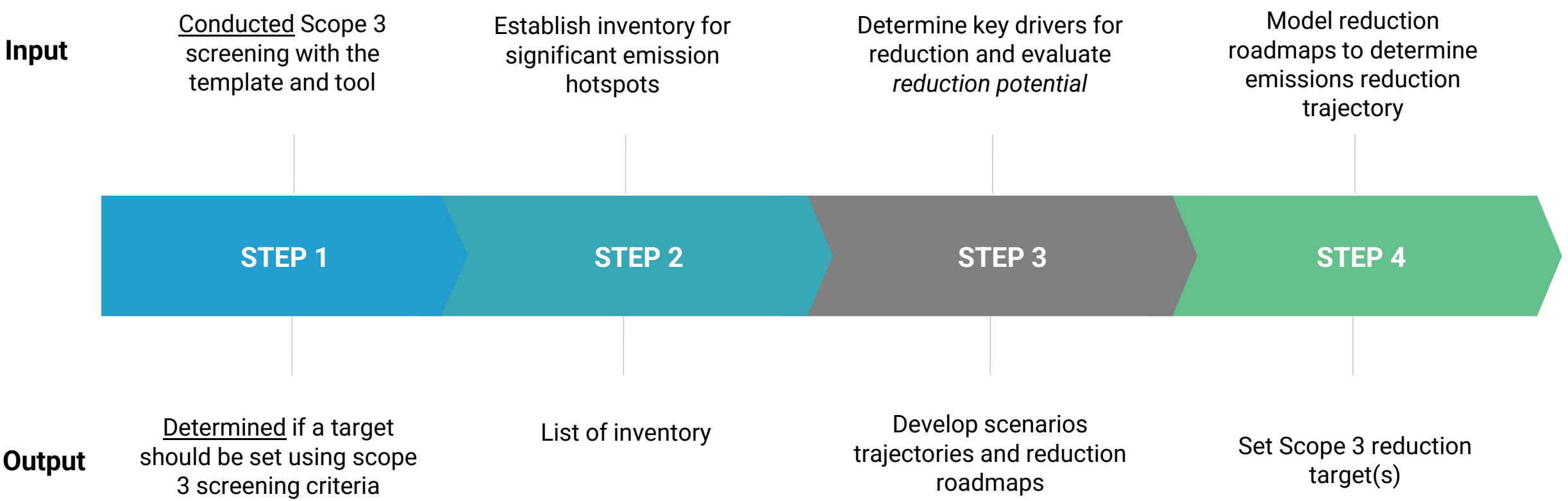
Scope 3 Target Setting

Process Overview



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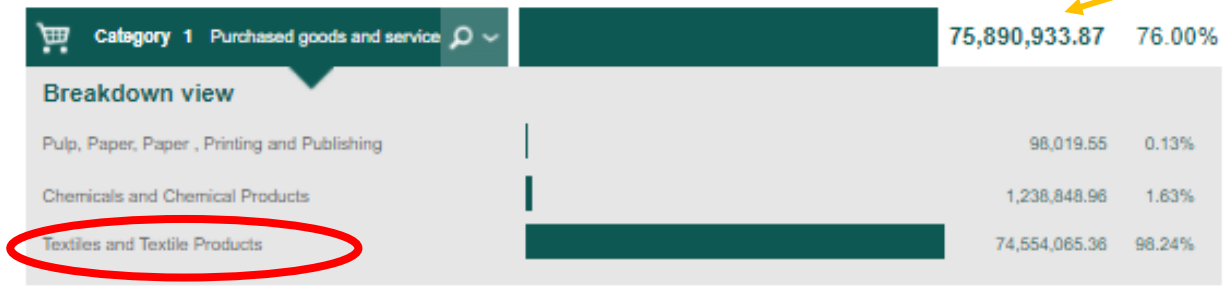
Scope 3 Target Setting

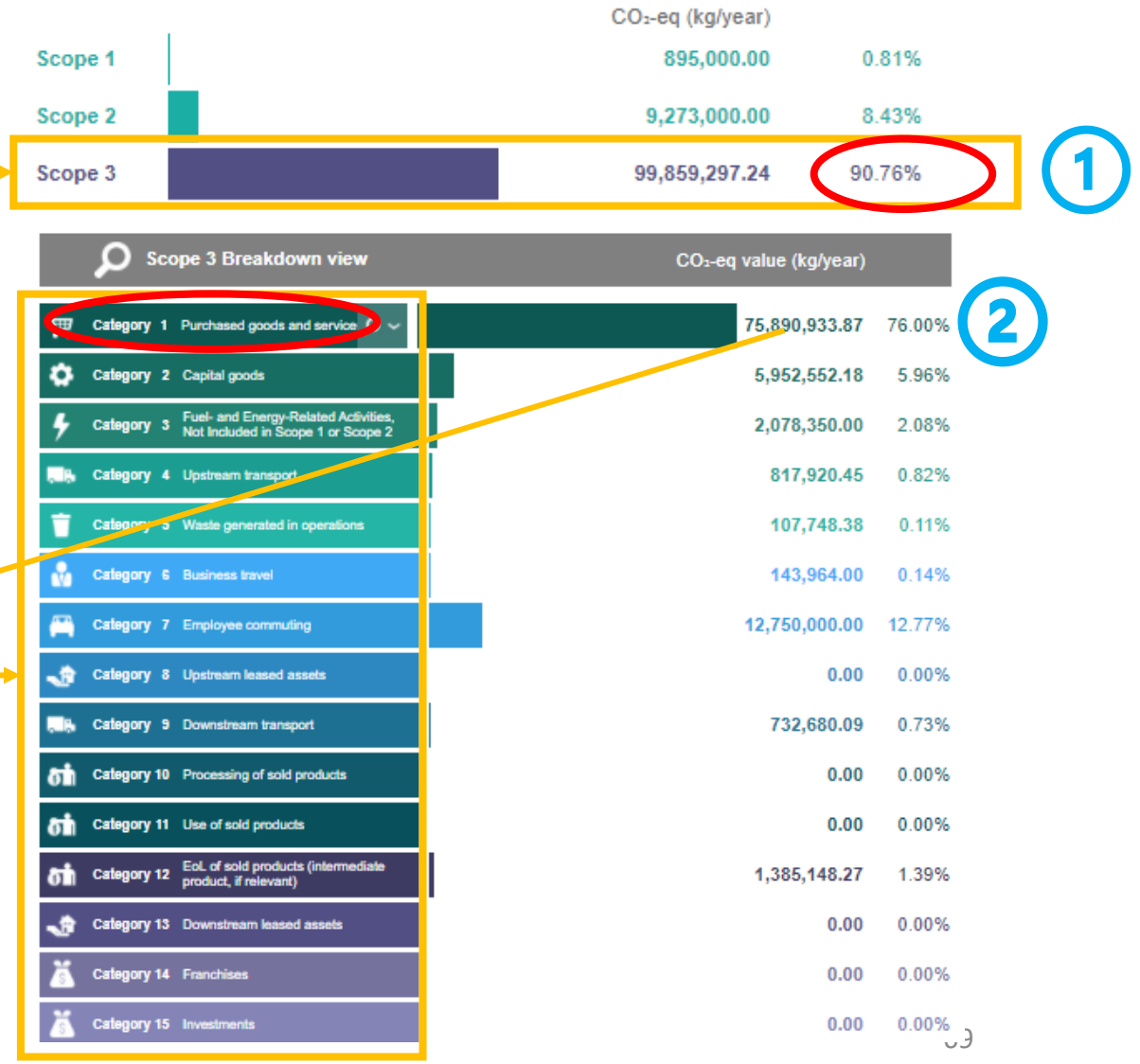
Case Study: Screening Result Initial Analysis

Per SBTi target setting manual:

1. Client's scope 3 emissions is **over 40%** of the total emissions → Scope 3 target must be set
2. Companies should calculate emissions from scope 3 source from 15 categories at which they have the **potential** to influence GHG reductions
3. The **Scope 3 target boundary** should include the majority of value chain emissions:
   - the **top three** emissions source categories or
   - **two-thirds** of total scope 3 emissions

3 Client to set a specific Scope 3 target for category 1





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Scope 3 Target Setting

Establish a scope 3 inventory for purchased goods and services

Decision-making Checklist

Hybrid method can be used

	Data to be collected	Supplier-specific method	Average-data method	Spend-based method
Purchased goods and services	**Textile and textile products** • Cotton • Polyester • Nylon • Rubber • Paper	Quantities or units of goods or services purchased	Mass or number of units of purchased goods or services for a given year (e.g., kg, hours spent).	Amount spent on purchased goods or services, by product type, using market values (e.g., dollars) Inflation data to convert market values between the year of the EEIO emissions factors and the year of the activity data (if applicable)
		Supplier-specific emission factors for the purchased goods or services (e.g., if the supplier has conducted a reliable cradle-to-gate GHG inventory, for example, using the GHG Protocol Product Standard)	Emission factors of the purchased goods or services per unit of mass or unit of product (e.g., $kgCO_2e/kg$ or $kgCO_2e$/hour spent)	Emission factors of the purchased goods or services per unit of economic value (e.g., $kgCO_2e/\$$)

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Scope 3 Target Setting

Hybrid method can be used

Establish a scope 3 inventory for purchased goods and services

Calculating Methods	Supplier-specific method	Average-data method	Spend-based method
Activity data	Quantities or units of goods or services purchased	Mass or number of units of purchased goods or services for a given year (e.g., kg, hours spent).	Amount spent on purchased goods or services, by product type, using market values (e.g., dollars) Inflation data to convert market values between the year of the EEIO emissions factors and the year of the activity data (if applicable)
Parties involved	Company & Suppliers	Company	Company
Emission factor used	Supplier-specific emission factors for the purchased goods or services (e.g., if the supplier has conducted a reliable cradle-to-gate GHG inventory, for example, using the GHG Protocol Product Standard) *third-party assurance on the suppliers' data might be needed to ensure data accuracy	Emission factors of the purchased goods or services per unit of mass or unit of product (e.g., $kgCO_2e/kg$ or $kgCO_2e$/hour spent)	Emission factors of the purchased goods or services per unit of economic value (e.g., $kgCO_2e/\$$)
Level of difficulty	* * *	* *	*

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Our Approach

Set a specific Scope 3 target for Category 1 Purchased Goods & Services

	Approach 1 Adopt Average-based method	Approach 2 **Estimate scope 3 emissions by obtaining the Higg index carbon emissions of client's top 5-10 material suppliers**	Approach 3 Adopt Spent-based method
Prerequisite	✓ Access to emission factor retrieved from Higg Index Material Sustainability Index (USD 1000)	✓ Suppliers can provide the carbon emissions for producing production orders from the Higg system	✓ Access to EEIO (Environmentally-Extended Input-Output)

Scope 3 Target Setting

Establish a scope 3 inventory for purchased goods and services

Scope 3 Inventory 范围三清单

SCOPE 3 (CATEGORY 1) INVENTORY - FY 2020
范围三(类别1)清单 - 2020财务年度

		LN	GG	NH	SN	HK	MK	MS	MKT	TFSEM	CB	Total
Textile and Textile products 布料及纺织品 (Please select either option 1 or 2 请选择其中一个选项 1或2)												
Option 1: By weight 选项1：按重量计算												
Cotton 棉花												
Organic 有机棉	kg											0.00
Recycled 环保棉	kg											0.00
Better Cotton Initiative (BCI) 良好棉花	kg											0.00
Total 总计	kg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polyester 聚酯纤维												
General 一般聚酯纤维	kg											0.00
Recycled 环保聚酯纤维	kg											0.00
Total 总计	kg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nylon 尼龙												
General 一般尼龙	kg											0.00
Recycled 环保尼龙	kg											0.00
Total 总计	kg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rubber 橡胶												
General 一般橡胶	kg											0.00
Recycled 环保橡胶	kg											0.00
Total 总计	kg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Option 2: By procurement proportion 选项2：按采购比例计算												
Total amount or weight spent on purchasing textile and textile products 用于购买布料和纺织品的总金额或重量	USD/ kg											
Cotton棉花	%											
Polyester 聚酯纤维	%											
Nylon 尼龙	%											
Rubber 橡胶	%											
Others 其他 (Please specify 请注明)	%											
Total总计	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	

Alaya Consulting:
If the weight of fabric used is not available, please provide the amount (in USD) that the company spent on or weight (in kg)of fabric and textile products in FY2020, and estimate the procurement proportion of the materials

如果不能提供各種布料的重量，请提供公司于2020财務年度用于购买布料和纺织品的总金额(单位:美金)或重量(单位:公斤)，以及估算采购比例

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Case Study

ASICS- Scope 3 Emission Reduction Initiatives

Use of recycled material

Recycled materials

We are aiming to switch 100% of the polyester used in our products to recycled polyester by 2030. This is one of our key strategies to reduce greenhouse gases emissions in our value chain and achieve our science-based target and help us toward a more circular approach.

In 2019, we developed a roadmap to 100% recycled polyester by 2030 for each product category. Based on this roadmap, more items are manufactured using recycled polyester from 2020.

We also use recycled materials for natural materials such as recycled leather.

ASICS launched the "Edo Era Tribute Pack," on April 24, 2020. This collection of shoes was designed and developed in 2019 inspired by and making tribute to the Edo period of Japan. Tokyo was called Edo until 1868, and was one of the first cities in the world to recycle and follow sustainable practices. The "Edo Era Tribute Pack," featuring high-tech sustainable shoes, made from recycled PET bottles, is inspired by Tokyo's heritage. Recycled polyester is used in shoe upper material and approximately 300,000 PET bottles are recycled to manufacture the whole collection.

Switch to the energy-efficient forms of transport

Reducing greenhouse gas emissions in transportation

Transporting products from factories to market is the second biggest contributor to our overall carbon footprint, accounting for about 7% of our total greenhouse gas emissions.

Since 2013, we've been working to reduce the carbon footprint of our distribution network through consolidation and by improving its efficiency. This includes switching to more energy-efficient forms of transport such as ships and trains.

In Japan, we have improved the efficiency of our logistics by developing a system that makes empty imported containers available to other companies for use as export containers at a number of distribution terminals. We also ship from our own factory in Japan directly to overseas subsidiaries, rather than via distribution centers in each region.

Globally, we ask our partner shipping companies to use ships assessed with the World Ports Sustainability Program's Environmental Ship Index (ESI). The ESI evaluates the amount of nitrogen oxide (NOx) and sulfur oxide (SOx) emitted by a ship, and includes a reporting scheme on the greenhouse gas emissions of the ship. We will continue to work with our logistics providers to make our distribution network more efficient globally.

More efficient use of containers → Reduce the no. of trips

We are also switching to more sustainable packaging, as well as improving how we use containers in our logistics to reduce the total number of trips needed to deliver goods in the value chain.

CO_2 transportation (tons)

Road and rail freight include data of 'port to DC' in the US, Europe and Japan, and 'DC to customers' in Japan. Sea freight is data of the footwear business. Air freight is data of the footwear business globally and the apparel business in Japan. The emissions factors provided by the GHG Protocol are used.

Ship products to subsidiaries instead of distribution centres

Use ships assessed with the World Ports Sustainability Program's Environmental Ship Index (ESI)

Switch to more sustainable packaging → Reduce waste production

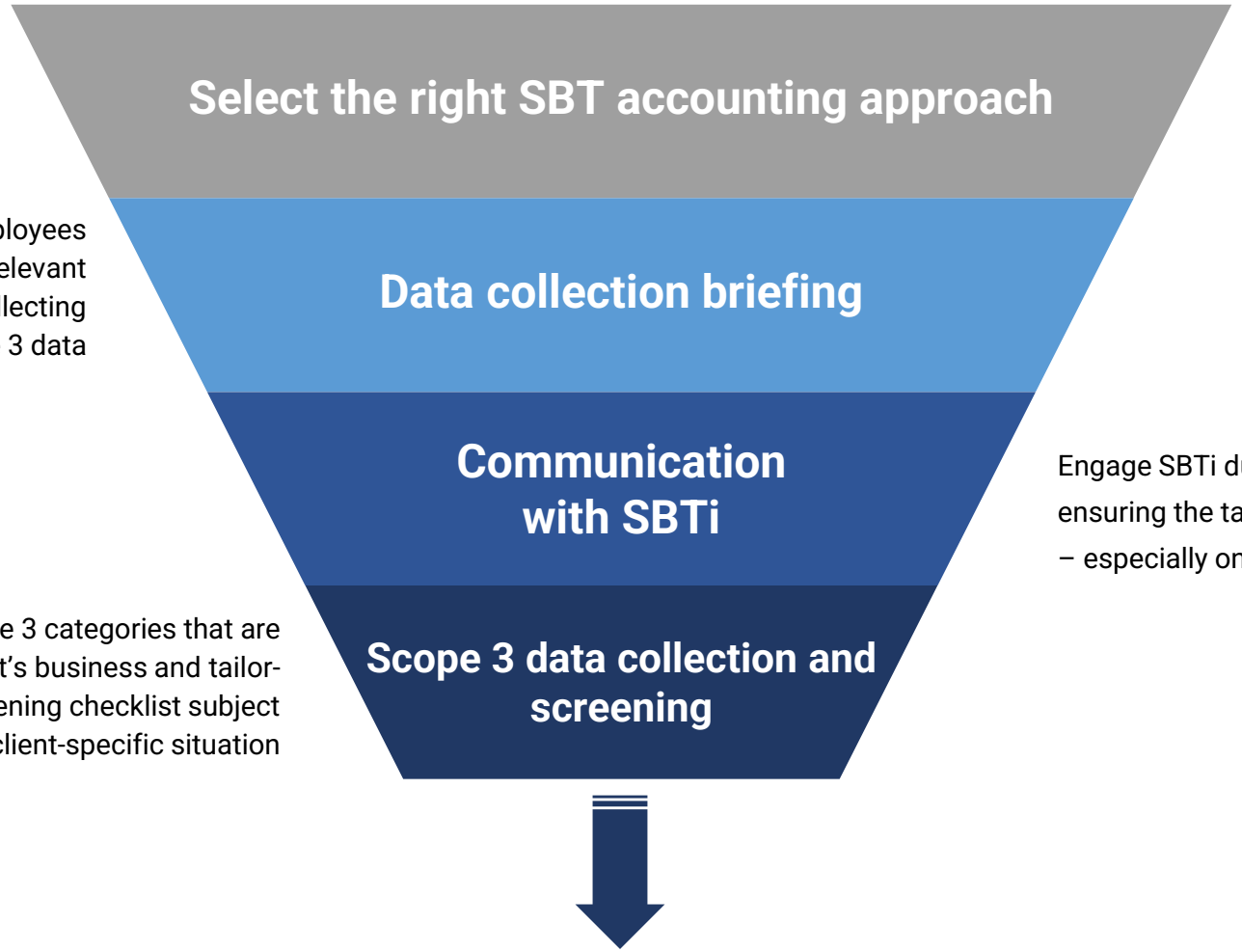
Sustainable packaging

In July, we launched a new sustainable packaging policy to reduce waste generated further down our supply chain, at the retail and consumer level. The main focus of the policy is on eliminating single-use plastic throughout the supply chain, and where plastic is necessary, switching to eco-friendly substitutes. Based on the policy, we decided to change the main material we use for our shopping bags in all directly-managed stores from plastic to paper by the end of 2020.

We are also planning to introduce a new, more sustainable shoebox. The box uses water-based rather than oil-based ink, and reduces the amount of ink used by around 50% compared with our previous boxes. The box itself also contributes to having less environmental negative impact by using around 10% less cardboard, so it is less carbon-intensive to produce, saving around 1,200 tons in CO_2 emissions per year in total.

▲ ASICS paper shopping bags.

Lessons learned from our experiences



Selecting the right approach offers higher flexibility in formulating carbon reduction strategy

Data collection training/briefing to employees is a must since they may not possess relevant knowledge and experiences in collecting scope 3 data

Engage SBTi during the target-setting process, ensuring the target fulfills SBTi's requirements – especially on scope 3 emissions

Consider scope 3 categories that are related to the client's business and tailor-made scope 3 screening checklist subject to client-specific situation

Aiming to set an ambitious yet attainable SBT

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Net-zero target

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SBTi proposed definition of net-zero emissions

- 'To reach a state of net-zero emissions for companies implies two conditions:
  1. To achieve a scale of **value-chain emission reductions** consistent with the depth of abatement achieved in pathways that **limit warming to 1.5°C** with no or limited overshoot and;
  2. To neutralise the impact of any source **of residual emissions** that remains unfeasible to be eliminated by **permanently removing an equivalent amount of atmospheric carbon dioxide**.'

SBTi proposed definition of net-zero emissions

Net-Zero Targets	Science-Based Targets
• Based on IPCC's scientific knowledge • Imbedded in the Paris Agreement, aligned with a below 1.5 or 2 degrees target • SBTs or reduction strategy + Carbon offsets/removal • Less strict than SBTs, does not trigger a validation process as of today • Long term target (15 years +) • Not all NZTs are SBTs	• Based on IPCC's scientific knowledge • Imbedded in the Paris Agreement, aligned with a below 1.5 or 2 degrees target • Rigorous process that requires validation by the SBT Initiative • Validated through current scientific methods, more strict • Short-term target (5-15 years) • Highly recommended to set for NZTs

Alaya Consulting
本識顧問

Building Trust Through Narrative

Thank you!