

CLIMATE ACTION TRAINING FOR THE FASHION INDUSTRY

Module 4: Target Setting



Implemented by







Lesson 1: Introduction

Welcome to the fourth module of the online training 'Climate Action for the Fashion Industry'

In this module, you will learn about:

- 1. **Baseline emissions and introduction to target setting** Why are baseline emissions important, and why do suppliers need to set targets?
- 2. **Defining the target base year and level of commitment** What to consider when choosing a target base year and completion year?
- 3. Defining the boundaries What to include in your targets (e.g. scope emissions, business units)?
- 4. **Defining the target type** What are absolute and intensity-based targets? What are their pros and cons, and which one should you choose?
- 5. **Setting interim targets and level of ambition** How to define your ambition and set interim targets?
- 6. **Developing an action plan** How to create an implementation plan to deliver the targets?
- 7. **Communicating and monitoring your progress towards targets** How to disclose and monitor your emission reductions progress?

You can review and apply what you have learned at the end of the module:

- check your knowledge in a short **quiz** covering the main topics of this module
- set a baseline and emission reductions targets in a real-life assignment

You can also have a look at the **frequently asked questions (FAQs)** concerning this module's topic at the end of the lesson.

How much time should I plan for this module?

Going through the core content of this module will take approximately 1-2.5 hours.

For the assignment and web meetings of the tutor-guided course, you should plan for another 2-3 hours, as per the tutoring plan (will be shared in advance).

Before we start, take a minute to reflect:

What are the capabilities you expect to gain from taking this module?

Think about this before you continue. If you like, note down your expectations so that you can revisit them at the end of the module.

Lesson 2: Baseline and introduction to target setting

In the previous module, you learnt how to compile a GHG inventory and calculate your emissions. At the end, we said that you can use your first GHG inventory as a baseline. What did we mean by that?

The baseline is a reference point to compare future GHG emission reductions against. With the baseline in place, you can measure your emissions reduction progress over a period of time. Let's take a closer look at this.

An emissions baseline is crucial for setting targets.

Key target setting terminology



Baseline

A baseline is a starting level or a reference point that you can use to compare your GHG emissions over time. A baseline refers to the emissions in a single year, known as the base year. In addition to a baseline, estimating your business-as-usual emissions (BAU), which is a hypothetical scenario for what GHG emissions would have been in the absence of a GHG reduction project or activity, enables companies to demonstrate improvements or reductions. Often targets are set against baseline emissions (e.g. 50% reduction in emissions by 2030 from a 2018 baseline).

Overall reduction target

This is the reduction you want to achieve by the target year. It is expressed as an absolute figure or percentage (i.e. 1 million kWh or 5% reduction in kWh/production unit).

Interim target(s)

Reaching the overall reduction target will not happen in one go. It will be a step-by-step process. These steps are interim targets, for example targets to be achieved within 5 years, or 10 years.

Target year

The target year (or completion year) is the year by which you want to have reached your overall reduction target. Again, there are different ways of defining a target year – see later in this module.

In practice, your organisation may experience organisational changes which require a recalculation of baseline emissions data. It is recommended that your organisation develops a baseline recalculation policy which underlines the basis for any calculation to your baseline.

A few scenarios below highlight the common rules on when and how the baseline needs to be recalculated.

Case 1

My company has undergone a few changes since 2020 due to the Covid-19 pandemic. Unfortunately, some factories were closed down.

Baseline calculation:

If these closed facilities existed in your base year, you need to recalculate the baseline by subtracting the emissions from the closed facilities.

Case 2

My company acquired a new facility from another company in March 2019.

Baseline calculation

Recalculate the baseline to include the emissions from the newly acquired facility. Emissions from the acquired facilities should be added to the baseline and all previous years' (historic) emissions only after one full calendar year data is available for the facility.

It is important to distinguish between a newly acquired and a newly built facility. For a newly built facility, the GHG inventories in 2019 and onwards will include data from this facility, however base year and historic year emissions will not be affected.

Case 3

My company decides to transfer two facilities' ownership to another company (change in lease status).

Baseline calculation

Increased or decreased ownership of facilities should follow the rule as stated in Case 1 and 2 above, respectively.

Case 4

My company recently adopted a new production process that is more efficient in one of our facilities and decided to change its emission factors for the GHG footprint calculation for the 2022 reporting period.

Baseline calculation

If the changes are related to emission factors or methodologies (e.g., change in activity data) that reflect real changes in emissions (e.g., changes in fuel type or technology), no baseline recalculation is required.

However, if the changes are to improve the accuracy of emission factors/activity data due to discovery of previous errors, recalculation of baseline is required to correct errors.

Case 5

Can my company omit GHG emissions if they are small (e.g., less than 5% of total GHG emissions)?

Baseline calculation

If a materiality assessment previously concluded that an emissions source did not meet materiality thresholds, but a recent review now indicates that the emissions are a larger portion (e.g., > 5%) of the total emissions, the baseline should be updated to include the emissions from this source.

Case 6

My company underwent a structural change in the middle of the reporting year.

Baseline calculation

It is recommended that base year emissions are recalculated for the entire year, not just the period from the structural change onwards. For example, if the structural changes occurred in mid-2019, the recalculation of the base year should be carried out in the following year (2020) when the full-year reporting data is available.

Given the urgency and scale of the climate challenge to the textile and fashion industry (as you will recall from Module 1), an increasing number of brands are setting targets to reduce their emissions, including their Scope 3 emissions, which come mainly from purchased goods and services.

Setting targets helps us quantify the amount of carbon reductions we need to make, and ultimately leads us to the final goal of achieving Net Zero emissions. The below figure shows the steps that we can take to reach Net Zero.



GHG Inventory

Creating a GHG inventory gives you a clear assessment of how much GHGs your company is emitting, what type of emissions you have and where are they coming from. This creates the baseline for you to set targets and track your progress.

Science-based Targets

An emissions reduction target that is in line with the climate science required to meet the Paris Agreement's goals, i.e. limit global warming to 1.5 degree Celsius, is called a 'science-based target'.

Net Zero

Net zero means setting a target of achieving zero emissions by using carbon reduction and avoidance activities, and then offsetting (compensating) emissions that cannot be removed. Carbon reduction activities can include energy saving, energy efficiency or renewable energy measures such as switching to renewable fuels or purchasing renewable energy certificates (RECs). Carbon avoidance activities can be implemented through projects that prevent the release of carbon (e.g. by reducing deforestation). The remaining residual emissions can be neutralized through the permanent removal and storage of carbon from the atmosphere, for example by purchasing high-quality GHG offsets or via direct air capture (DAC) and geologic storage (carbon capture and storage).

In practice, more and more companies in many sectors (including the fashion and textile industries) are adopting GHG emission reductions, as per the Science- Based Targets initiative (SBTi).

Science-based targets provide companies with a clearly defined emissions trajectory to futureproof growth, by specifying how much and how quickly their GHG emissions need to be reduced. Science-based targets are a vital step on the journey to net zero, which will require rapid decarbonisation.



DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Companies and financial institutions are urged to aim for the highest level of ambition in their target setting and also commit to setting long-term science-based targets to reach net zero value chain GHGs emissions by no later than 2050. In 2019, SBTi, UN Global Compact and the We Mean Business coalition launched the *Business Ambition for 1.5* °C campaign to urge companies to publicly commit and be recognized for aligning their businesses to a net zero, 1.5 °C future. Companies that have committed will appear on <u>SBTi's Companies Taking Action webpage</u>.

As of December 2022, 280 textile and fashion sector companies have committed to the Science-Based Targets Initiative, with 101 companies having their science-based targets approved.

Source: Science Based Targets (2022)



ADIDAS

- Base year: 2017
- Target year: 2030
- Scope 1 & 2: 90% absolute by 2025
- Scope 3:
- 30% of absolute Scope 1, 2 and 3 emissions by 2030
- Note:
- Near term: 1.5°C by 2025, 2030

AMERICAN EAGLE

- Base year: 2018
- Target year: 2030
- Scope 1 & 2:
- 80% absolute
- Scope 3: 40% absolute by 2030 and 60% absolute by 2040
- Note:
- Scope 3 GHG emissions reductions from purchased goods and services, and capital goods.
- Near term: 1.5°C by 2030 | Net zero: committed
- Business Ambition for 1.5°C campaign member

ASICS

- Base year: 2015
- Target year: 2030
- Scope 1 & 2:
 - 63% absolute by 2030
- Scope 3: 63% absolute by 2030
- Note:
 - From purchased goods and services and end of life treatment of sold products
- Net term: 1.5°C by 2030 | Net zero: Committed
- Business Ambition for 1.5°C campaign member

H&M

- Base year: 2019
- Target year: 2030, 2040
- Scope 1 & 2:
 - 56% by 2030| 90% by 2040
- Scope 3:
- 90% absolute by 2040
- Note:
 - Scope 1&2: From upstream transportation and distribution, business air travel and fuel and energy related emissions Scope 3: From purchased goods and services GHG emissions reductions from purchased goods
 - and services, and capital goods

- Near term: 1.5°C by 2030| Long term: 1.5°C by 2040 | Net zero: Committed by 2040
- Business Ambition for 1.5°C campaign member.

KERING

- Base year: 2015
- Target year: 2030
- Scope 1 & 2: 90% by 2030
- Scope 3: 70% per unit of value added by 2030
- Note:

Scope 1&2: From upstream transportation and distribution, business air travel and fuel and energy related emissions

Scope 3: From purchased goods and services

- Increase annual sourcing of renewable electricity from 25% in 2015 to 100% by 2022
- Near term: 1.5°C by 2030, 2022 | Net zero: committed
- Business Ambition for 1.5°C campaign member.

LEVI'S

- Base year: 2016
- Target year: 2025
 Scope 1 & 2:
- 90% absolute
- Scope 3:
- 40% absolute
- Note:

Scope 3: From purchased goods and services

- Near term: 1.5°C by 2025
- Business Ambition for 1.5°C campaign member

MARKS & SPENCERS

- Base year: 2017
- Target year: 2030 | 2035
- Scope 1 & 2:
- 55% absolute by 2030
- Scope 3: 55% absolute by 2030 Note: The complete scope 3
- Near term: 1.5°C by 2030, 2035 | Net zero: committed
- Business Ambition for 1.5°C campaign member

NIKE

- Base year: 2015
- Target year: 2030

- Scope 1 & 2: 65% absolute
- Scope 3:
- 30% absolute
- Note: Scope 3 includes all categories
- Near term: 1.5°C by 2030

PUMA

- Base year: 2017
- Target year: 2030
- Scope 1 & 2: 35% absolute
- Scope 3:
- 60% per million euro sales from purchased goods and services
- Note
- Near term: Well-below 2°C by 2030

TARGET

- Base year: 2017
- Target year: 2030
- Scope 1 & 2: 30% absolute
- Scope 3:
 20% shash t
- 30% absolute
- Note: From retail purchased goods & services Target suppliers to set Scope 1 & Scope 2 SBT targets by 2023s
- Near term: 2°C by 2030, 2023 | Net zero: Committed
- Business Ambition for 1.5°C campaign member

If you are interested to learn which textile and fashion companies are committed to science-based targets, you can browse the complete list on the SBTi website:

Companies taking action

Your company can also set science-based targets through a 5-step process:

(1) **Commit** – submit a commitment letter to SBTi to establish your intentions.

(2) **Develop** – set emissions reduction targets in line with SBTi criteria.

(3) Submit – submit targets to SBTi for validation within 24 months of submitting commitment letter.

- (4) **Communicate** publicly announce your targets to stakeholders.
- (5) **Disclose** report your emissions annually and track progress.

For more information on SBTi, please see the resources section.

As you can see from the previous examples, all brands are setting ambitious (science-based) targets on their Scope 3.

How does this affect you as a supplier?

It is important to note that brands are not requiring suppliers to set science-based targets. Brands are committed to ambitious Scope 3 reduction targets to meet the net zero ambition by 2050 as stipulated by The Fashion Charter and suppliers are required to set targets themselves (which do not have to be exclusively science-based targets).

Remember: Collaborative action is the way forward to reduce the industry's GHG emissions.

Why set a target?

The impacts of climate change to your business are closer than they may appear. Reducing emissions and setting climate targets can support four elements of business resilience that will keep your business going strong in the times of sustained climate crisis.

Which elements of business resilience can you think of?

Please think for yourself first, before looking at our feedback.

- Reduced costs
- Improved relationships with your customers
- Increased operational resilience
- Reduced carbon footprint of your product
- Reduced risk

To understand why you should set a target, let's look at the scenario below using the fictional company's case study.

An interview with North Sewing Ltd's heads of departments

North Sewing Ltd. (a sewing company) is a supplier to a number of leading international brands, including Pina. Management has called a meeting to discuss whether they should introduce GHG reduction targets in their company. You are invited as a visitor to interview the different attendees.



Customer relations

The key takeaway of the interviews:

Suppliers need to set targets not only for supporting their customers' (brands) GHG reduction commitments, but also for their own benefit (e.g., demonstrates commitment, reduces risks and provides opportunity).

Remember, setting the thermostat just two degrees lower in winter and two degrees higher in summer, for example, could save thousands of pounds of carbon dioxide emissions each year per facility and save electricity/energy consumption costs.

How to set a climate target

We have shown you the different types of targets that brands set, such as Climate Neutrality, Net Zero or Science-Based Targets. You have also been introduced to the benefits you will gain from setting targets.

Regardless of the targets you want to achieve, the process of setting targets is similar.

In this module, we will take you through the step-by-step process on how to set a target.



Lesson 3: Defining target base-year and level of commitments

Set a start date and concentrate on the end

Set a base year

For a target to be credible, we need to determine how target emissions are defined in relation to past emissions (this is known as the base year). For the textile and fashion industry, the general approach is to set a base year.

A base year is the reference point from which emissions reductions are compared. Most GHG targets are defined as percentage reduction in emissions below a base year (e.g., Crystal International Group Limited has committed to reduce 30% of GHG emissions by 2030, from a 2019 baseline).

When choosing a base year, keep the following aspects in mind:

- 1. Generally, verifiable data on Scope 1 and 2, as well as Scope 3 emissions should exist for the base year if we are including Scope 3 emissions as part of our GHG inventory and target. It is recommended that you choose the most recent year for which data is available.
- 2. The base year should be representative of a company's typical GHG profile. An average of 2-3 years of emissions footprint that are deemed representative is also acceptable.

Example: Which base year should North Sewing pick?

[Exercise 1]

North Sewing's volume of production has been stable for the last 3 years. In 2020, it compiled its first GHG inventory (using the 2019 data) and is now about to set their GHG reduction targets.

Which year should they pick as a base year?

- 2016, as this is the first possible year to choose according to the Paris Agreement
- 2017, as North Sewing had very high emissions in this year, and it will be easy to reach the required reduction target
- 2019, as this is the year they have reliable data

2019 is the best year to use as a base year.

Why? Because:

- all necessary and up-to-date data is available in their GHG inventory
- it was not an abnormal production year (production has been stable for 3 years)
- it fulfills the requirements of the Paris Agreement, as it is later than 2015

Long-term and short-term targets

Once the base year is defined, you should agree on the target completion year. A climate target can be either short- or long-term.

Long-term targets are usually reached within 10-15 years from the time the target is set. **Short-term targets** are completed within five-years from the time the target is set, are more practical and therefore recommended for companies with shorter planning cycles.

Both long-term and short-term targets can both carry large capital investments, however long-term goals help plan these capital investments across the organisation. It is more practical to set interim targets, however setting long-term targets has the benefit of envisioning long-term climate action.

While choosing a target completion year, consider the following:

- Boundary All company-wide Scope 1 and 2 GHG emissions must be covered.
- **Consistency** If more than one target is set, companies should use the same base year and target year for all targets.

Single year or multi-year period

Companies can also set a single year or multi-year period for target completion. This can determine a company's level of commitment.

Example of a single commitment period: North Sewing aims to reduce 20% of emissions compared to its target base year 2016, by the commitment year of 2021. For North Sewing to meet its target, the company should not produce more than 80% of emissions, as compared to 2016.

Example of a multi-year commitment period: North Sewing has a target to reduce emissions by 10%, compared to its base year in 2016, by the commitment period of 2017 - 2021. For North Sewing to meet its target, its average emissions over those five years (2017 - 2021) should not exceed 90% of year 2016 emissions.

[Exercise 2]

Following up the previous example, North Sewing Ltd has decided to use 2019 as a base year.

Now, which is a suitable target year for North Sewing?

- 2021
- 2025
- 2070

The best year to pick as a target year would be 2025.

2021 is too ambitious for North Sewing to set a target, as we are already halfway through 2021. On the other hand, 2070 is a good year to envision for a long-term target, but it is too far away (50 years). The best option is 2025. A short-term target is more practical to manage and achieve for suppliers, especially for those who are new with setting emission reduction targets for Scope 1 and 2.

Lesson 4: Defining the boundaries

Defining target boundaries is the next step in the process of target setting.

The boundary defines which GHGs, production facilities, emissions sources and activities are to be included in your target.

In Module 3, you learnt that there are organisational and operational boundaries to consider.

Do you remember what organisational and operational boundaries include?

Organisational boundaries:

- Boundaries based on equity share, operational control, or financial control
- Unlikely to be relevant to suppliers that have no subsidiaries or joint ventures

Operational boundaries:

- Defines which emission scopes to include (Scope 1 & 2 only, or Scope 3 as well)
- Likely to be relevant to suppliers

The boundaries of a company's target can be identical to a company's GHG inventory, or the target may address a specific subset of the sources included in the GHG inventory.

The quality of the GHG inventory could be a key factor in determining the boundaries. For example, it is advised that only country or regional operations with robust and reliable GHG inventory data should be included in the target.

For more information on boundary setting, refer back to Module 3, Lesson 3: Setting the boundaries.

Lesson 5: Defining the target type

Now choose the type of target which is best for you.

In general, there are two types of targets:

Absolute targets

- These describe a reduction of absolute (total) emissions over time.
- Example: reduce total CO₂ emissions by 30% below 2019 levels by 2030 or reduce total CO₂ emissions by 5,000 tCO₂ below 2019 levels by 2030

Intensity targets

- These describe a reduction in the ratio of emissions relative to a business metric over time.
- Example: reduce CO₂ by 30% per tonne of fabric between 2019 and 2030 or reduce CO₂ by 5 tCO₂ per tonne of fabric between 2019 and 2030.
- Intensity targets can be based on physical intensity (= CO₂ emissions reduction per physical unit, e.g. per kWh, tonne, m², pair of shoes, etc.) or economic intensity (= CO₂ emissions reduction per \$ value added).

Which types are the following CO₂ reduction targets?

Absolute target:

- 30% within 5 years, from 2021
- 45% by 2030, from a 2018 base year

Physical intensity target:

- 25% per pair of shoes by 2030, compared to 2019
- 40% per tonne of dyed fabrics by 2025, from a 2016 base year

Economic intensity target

• Reduction by 30% per \$ of value added by 2025, from a 2015 base year

No target

- 30% by 2030
- 28% per unit of value added

Note:

An appropriate target needs to include a base year and a target year.

Pros and cons of different types of targets

Each type of target has advantages and disadvantages. This table shows the most relevant ones:

	Absolute targets	Physical intensity targets	Economic intensity targets
Pros	Designed to reduce the quantity of GHGs emitted to the atmosphere by a specific amount. Demonstrates a strong ambition when communicating targets. Environmentally robust and more credible to stakeholders as it entails a commitment to reduce total GHGs by a specified amount, thus also making the contribution to global emissions reduction efforts predictable and transparent.	Reflects GHG performance and efficiency improvements, independent of business growth or decline. Can be more in line with emissions reduction strategies and internal progress tracking. May be more relevant for suppliers and manufacturers, whose Scope 1 and 2 emissions tend to be more significant.	Suitable for companies that generate a diverse product mix . Suitable for fast growing companies .
Cons	Does not allow comparisons of GHG intensity/efficiency to that of peers. Reported reductions can result from declines in production/output, rather than improvements in performance. The target may be more challenging to achieve for a growing textile company, as the emissions may significantly increase due to the companies' growth over time.	Can be less environmentally robust and less credible to stakeholders because absolute emissions may rise, even if intensity decreases (e.g., as output increases more than GHG intensity decreases). Companies with diverse operations may find it difficult to define a single physical intensity common business metric. Intensity targets need to additionally ensure that they are ambitious enough to be in line with the 1.5°C climate scenario.	For the apparel and footwear sector, the pricing of products can vary among and within companies (e.g., luxury vs mid- market vs fast-fashion, or from full retail pricing to discounted sales). Therefore, price point may not be the best basis for calculating GHG emissions and setting targets. Economic intensity targets can be less environmentally robust due to the volatility of economic metrics and tracking the target progress can be difficult if companies experience financial losses in certain years. Intensity targets need to additionally ensure that they are ambitious enough to be in line with the 1.5°C climate scenario.

How do I know which target is the best for my company?

Remember the list of the approved targets shared earlier?

➔ See page 7.

Setting an absolute emission reduction target is very common for international textile and fashion companies (as you can see in the table). While absolute targets are not the only way that companies set targets, they can make the most impact. By following absolute targets, companies are setting definite emission reduction targets that will shrink their carbon footprint, even if their production increases. Absolute targets are independent of company growth and therefore directly linked to the overall target.

In order to have absolute emission reduction targets compliant with the Science-based Target initiative (SBTi), the targets must be at least as ambitious as the minimum approved range of emissions scenarios consistent with the 1.5°C goal.

Below, we have two examples of different targets set by textile suppliers. The first supplier is an example of an intensity target, while the second supplier is an example of an absolute target.

Crystal International Group	TAL Apparel			
 Targets: Reduce carbon footprint per garment by 10%. Reduce freshwater consumption per garment by 8%. 	 Committed to a 30% reduction of emissions within their own operations. 			

Lesson 6: Setting interim targets and level of ambition

To achieve an overall target, companies often define interim targets with increasing levels of ambition.



We have talked about overall targets, i.e. targets to achieve by the completion / target year.

To reach overall targets, it is common for a company to break down the targets into interim targets in order to track progress.

[Exercise 3]

North Sewing supplier completed a GHG inventory in 2020 and took that year as the base year. The company is required by their customer (Pina Brand) to reduce its Scope 1 and 2 GHG emissions by 20% by 2030, to meet Pina's Scope 3 reduction targets.

How much does North Sewing need to reduce its GHG emissions per year to reach the 2030 target?

- 20%
- 2%
- 20 tCO₂e

Solution:

To reach a 20% GHG reduction between 2020 and 2030, North Sewing needs to reduce its emissions by 2% each year (20% / 10 years = 2%). Below you can see the reduction steps in detail.

Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Reduction target compared to baseline	2%	4%	6%	8%	10%	12%	14%	16%	18%	20%
Residual emissions compared to baseline	98%	96%	94%	92%	90%	88%	86%	84%	82%	80%



Interim Targets

Interim targets should also be set at a point 5-10 years into the future from the base year. Interim targets provide a milestone to keep enterprises on schedule, allowing them to make adjustments along the way if more aggressive action is required, thus improving their chances to successfully achieving their end target. For example, a company may have an overall goal of reducing emissions to net zero by the target year 2050. It will be extremely useful for them to set an interim target of, for example, 50% emissions reduction by an interim year of 2030. This way, it is ensured that the company starts actions quickly, rather than delaying plans until closer to their target year. At the interim year, the company can set another interim target to bridge the remaining years until their target year, allowing them to adjust targets as needed. To continue the example, once the year 2030 is reached, the company can set another interim target for year 2040 to make sure they are on target for year 2050.

[Exercise 4]

North Sewing's supplier completed a GHG inventory in 2020 and took that year as the base year. The company supplies to 2 customers (Pina Brand and Soma Brand). Each brand has set a different emissions reduction target of 20% reduction by 2030 and 45% by 2030, respectively. Therefore, North Sewing is required to reduce its Scope 1 and 2 GHG emissions to meet both brand's Scope 3 reduction targets.

Which brand's target should North Sewing aim to meet?

- Pina Brand
- Soma Brand

Solution:

As Soma Brand's target is more ambitious, North Sewing should aim to meet this target, as it would also be able to meet Pina Brand's target.

[Exercise 5]

How much does North Sewing need to reduce its GHG emissions per year to reach the target?

- 45%
- 4,5%
- 45 tCO₂e

Solution:

To reach a 45% GHG reduction between 2020 and 2030, North Sewing needs to reduce its emissions by 4.5% each year (45% / 10 years = 4.5%).

Level of Ambition

To put it simply, level of ambition means how much you want to achieve and by what time. As more information becomes available and time begins to run out, our level of climate ambition has increased. After the Paris Agreement in 2015, the common climate ambition was to limit global warming to 2 degrees Celsius, or 30% emissions reduction by 2050.

However, the scientific consensus now is that the level of ambition should be to limit global warming to 1.5 degrees Celsius by reducing emissions by 50% by 2030 and reaching net zero emissions by 2050.

The UNFCCC Fashion Industry Charter for Climate Action also supports the ambition of limiting global temperature rise to 1.5 degrees Celsius above pre-industrial levels by asking members to commit to one of the following two options:

- (i) Setting SBTI approved science-based emission reduction targets. OR
- Setting at least 50% absolute aggregate GHG emission reductions in scope 1, 2 and 3 by 2030 against a baseline of no earlier than 2019 and commit to achieving net zero emissions no later than 2050.

Net Zero Target

By now you have seen the term "net zero targets" in many places and you may be wondering where this idea came from and why it is important.

In 2018, the Intergovernmental Panel on Climate Change (IPCC) released a special report stating that we must limit average global warming to 1.5°C in order to avoid catastrophic climate change. At 1.5°C warming, there will still be changes to our environment, but they will be at a slower pace, allowing living organisms (humans, animals and plants) more time to adapt. Warming beyond 1.5°C would cause significantly more damage in terms of rising sea level, loss of biodiversity, extreme heat waves, flooding, etc.

The global average temperature is already approximately 1.1°C higher than pre-industrial levels. In order to not exceed 1.5°C warming, the IPCC said the world needs to cut emissions down to net zero by 2050.



Source: Climate Action Tracker (2021)

Reaching net zero emissions by 2050 will require rapid and enormous effort by all countries and sectors to change the way we operate. Following the IPCC 2018 report, many initiatives have been launched to rally industries and companies to take action. The UNFCCC Fashion Industry Charter for Climate Action, in

particular, has a mission to drive the fashion industry to net zero emissions by 2050, in line with 1.5°C warming.

Many leading fashion brands and suppliers (109 companies at the end of 2022) have already signed this charter. As we saw in Module 1, brands will need to reduce their indirect emissions from purchased goods and services (Scope 3), therefore, brands will need their suppliers to reduce emissions also. As a supplier, acting now to commit to net zero targets would position you as a leader in the industry, attracting more brands to do business with you and ensuring that your company will thrive as the global economy transitions to a net zero future.

How to achieve net zero?

To set net zero targets, companies can refer to the <u>Science Based Targets initiative</u>, which has created a clear, trusted and standardized method for setting targets to reach net zero emissions by 2050.

The Sustainable Apparel Coalition (SAC) has also announced in Dec. 2022 that SAC corporate members will need to set science-based targets starting in 2023.

Source: Sustainable Apparel Coalition (2022)

To help the fashion industry reach net zero, the World Resources Institute (WRI) has published a roadmap for the apparel sector, highlighting 6 key areas for emission reductions:

- Maximise material efficiency
- Increase the use of sustainable materials
- Accelerate the development of next-gen materials and recycling technologies
- Prioritise energy efficiency
- Eliminate coal-fired energy in manufacturing
- Transition to 100% renewable electricity

Download "A Roadmap to Net-zero Emissions for the Apparel Sector" [PDF, 40 pages]

Lesson 7: Develop an action plan

You have conducted the necessary steps to identify the type of targets and the level of ambition you want to have. Now, you need to put it into an action plan.

See below an example of how you can create an action plan.



Step 1:

Identify Scope 1 and 2 emission hotspots.

Step 2:

Identify energy saving/renewable energy opportunities (internal assessment or through third-party).

Step 3:

Evaluate energy saving/renewable energy options and calculate return on investments.

Step 4:

Approve budgets for selected solutions.

Step 5:

Implement solutions and realise reductions.

Step 6:

Conduct regular review on the action plan to check progress.

The activities defined in the action plan should always be monitored against the climate targets that your company/facility has. In practice, the entire cycle for developing an action plan will take a few years to complete, depending on your facility's resources as well.

Costs for setting targets will depend on the scope of work (e.g., organisational or operational boundaries included, energy audits, implementation plan, validation and so on). You may want to discuss this with a consultant.

The type of measures that you can implement to reduce your Scope 1 and 2 emissions at the factory will be discussed in more detail in Module 5.1 - Energy Efficiency and Module 5.2 - Renewable Energy and Biomass.

Energy Efficiency

Energy efficiency involves examining your processes and identifying ways to reduce the amount of energy used to produce at the same rate and quality. By reducing our energy demand, we actively reduce the amount of energy that needs to be produced, which translates to GHG emission reductions.

Renewable Energy and Biomass

Aside from looking for ways to reduce energy use, we must also urgently change the way we produce energy (electricity, steam, heat, cooling) to transition away from fossil fuels towards renewable energy.

Renewable energy is produced from fuels that are "renewable" (wind, solar, water, geothermal, etc.), from which GHG emissions are not released. Biomass refers to organic plant matter that can be burned to produce energy (i.e., agricultural and forestry waste). Although the combustion of biomass does release CO₂, ideally the emitted CO₂ is recaptured from the atmosphere when the biomass crops are replanted. Biomass can play an important role in coal phase-out programs by providing a cleaner and carbon neutral source of thermal energy.

Key performance indicators (KPI)

After identifying the emission reduction measures, you need to set key performance indicators (KPI) for your Scope 1 and 2 emissions.

KPIs can be used to give you an indication on the progress your company is making towards your climate targets.

KPIs can be used to monitor the day-to-day performance of your business, and trends in KPIs can be used to make early interventions to keep your company on track to hit your targets. Examples of KPIs may include:

- Energy use per tonne of product per shift / site / business unit
- Kilometre of business travel per business unit
- % of renewable energy consumed vs total energy consumption

KPIs can be a critical element in measuring your environmental performance.

Look at the scenario below for a vertically set-up factory with both fabric dyeing and garment cut-sew processes.

How should they define their KPIs?

Case 1

At the factory, we can see that there are two units with different product flows (e.g., not all dyed fabric is processed in the garment unit).

Approach for KPI development

Using submetering (e.g. electricity, steam), the energy consumption for each unit can be established. Based on this, you can allocate energy consumption to certain units and processes over a period of time (typically days or weeks).

Example of KPI

The KPI would be kWh/pieces of garment (cut-sew) or kWh/kg of fabric (dyeing)

Case 2

Compressed air consumption used by both dyeing and garment units.

Approach for KPI development

- 1. You need to calculate how much compressed air is used by the dyeing unit, and how much by the garment unit (e.g., 85% of compressed air is used by the dyeing unit, 15% by the garment unit).
- 2. You allocate the total electricity consumption of the compressor to both units (85% and 15%).

Example of KPI

- 1. For energy intensity of the dyeing unit, the KPI would be kWh per kg of fabric.
- 2. For energy intensity of the cut-sew process, the KPI would be kWh per kg of garment piece.

Case 3

The factory is currently using electricity from the local grid to power its operations. The country where the factory is located uses 100% fossil fuels to produce electricity. The factory starts to introduce renewable electricity, such as rooftop solar, to generate electricity for their own uses.

Approach for KPI development

- 1. Assess your grid power consumption, in MWh/month.
- 2. As you introduce renewable electricity, keep track of how much renewable electricity is consumed, in MWh/month.
- 3. The total electricity consumption is grid power (MWh/month) + renewable electricity (MWh/month).

Example of KPI

The KPI for percentage of renewable electricity consumption would be [renewable electricity (MWh/month)/ total electricity (MWh/month)] x 100.

Many brands in the fashion industry are setting targets for 100% renewable electricity consumption.

Make sure that your level of ambition (including the length of commitment) is aligned with the performance indicators you set. Each KPI should have a target value. If you meet all the target KPI values then you should be able to deliver your overall facility target.

Lesson 8: Communicating and monitoring your emissions to achieve your targets

Reporting is about transparency.

Previously in Module 3, you have assessed your CO_2 emissions, and through the lesson in this module, you have been briefed on how to set your targets, base year, and target year.

Now comes reporting.

Communicating information on GHG emissions and targets, and the actions to reduce them, allows external stakeholders to understand a company's ambition and progress on climate actions.

Are there any standards to follow for reporting your emissions and targets?

Manufacturers and suppliers are encouraged to create a standard operating procedure (SOP) that discloses your GHG emissions, and the approach that your management takes to set the emissions reduction targets.

There are several commonly used standards for reporting that manufacturers and suppliers can use as a guidance for reporting.

GHG Protocol

- The GHG Protocol requires companies to disclose at least their Scope 1 and 2 emissions.
- The appropriate level of reporting can be adjusted according to the objectives and intended audience of the report.
- Organisations do not report their emissions through the GHG Protocol, however the GHG Protocol provides guidance on reporting.

ISO 14064-1

• This standard specifies the principles and requirements at the organisation level for both quantifying and reporting GHG emissions and removals.

When reporting your target and progress, it is essential to disclose the information using the five principles defined by the GHG Protocol Corporate Standard.

Remember the principles from Module 3?

Relevance

Ensure the target reflects the GHG emissions of the company.

Completeness

Account for and report all GHG emission sources and activities within the chosen boundary. Disclose and justify any exclusions.

Consistency

Ensure consistent methodologies are used throughout.

Transparency

Document the actual data, inventory boundary, methods and other relevant factors in the report. For a progress report, any changes in all this information should also be reflected.

Accuracy

Ensure the quantification of GHG emissions are accurate as much as possible through reducing uncertainties (e.g., using primary data/information) and that the targets are specific to the relevant emissions.

GHG Protocol – Corporate Standard

If you'd like to know more about the reporting under GHG Protocol Corporate Standard, you can access their document.

Open the document "A Corporate Accounting and Reporting Standard"

ISO 14064-1

If you'd like to know more about ISO 14064 (and 14064-1 standard), you can check their website. See the abstract or buy the standard ISO 14064 here.

Congratulations!

You are one step closer to creating your own sustainability report.

There are no specific rules on where the GHG inventory and progress toward meeting targets should be disclosed. A common reporting platform is your own website or sustainability report. However, there are other reporting platforms that are used by fashion brands and suppliers such as CDP and The Higg Index.

CDP



CDP is a global reporting platform that is commonly used by investors and customers to understand a company's GHG emissions, and climate change risks and opportunities (targets and reduction measures).

Major international brands use the CDP to disclose their GHG emissions data, climate targets, and any emission reduction activities or programmes that they are implementing (at field and/or factory level) to meet their targets. Suppliers can support brands in their CDP reporting through data provision.

Manufacturers and suppliers can fill in the CDP Supply Chain to report their supply chain impacts on climate change, deforestation and water and how the manufacturers/suppliers are addressing them. In practice, it is common for brands to invite their suppliers to fill in the CDP Supply Chain questionnaire.

The Higg FEM of the Higg Index



For suppliers and fashion brands that are members of the Sustainable Apparel Coalition (SAC), the Higg Index platform is commonly used to report their GHG data with their customers. Besides being a reporting platform, it also has a suite of tools that can be used to assess and score a corporate or product's sustainability performance (Scope 1, 2 and 3).

For suppliers and manufacturers, the relevant tool and platform is the Higg Facilities Environmental Module (Higg FEM). The tool evaluates and provides information on carbon and other environmental footprints such as water use, chemical and other air-emissions. Using the Higg FEM, suppliers can manually report their GHG target and its progress.

You do not need to be a member of SAC to use the Higg Index tools, any manufacturer and small and medium sized business can use the Higg Index.

Higg FEM 4.0The next version of the Higg FEM (4.0) will be launched in November, 2023. The Higg FEM 4.0 will include new questions for target setting regarding renewable energy use and GHG emissions reduction. The facility will need to answer questions about their baseline year, intermediate (aka interim) and final targets, and whether the targets are absolute or normalised (aka intensity).

The Higg FEM 4.0 will also have specific questions asking if a facility has set science-based targets, either through SBTi or other organisations.

There will be some automatic rules to calculate scoring on how a facility is meeting their energy targets. By linking baseline, target, and achievement progress, the Higg FEM 4.0 aims to provide scoring that more accurately reflects a facility's climate action performance.

Source: Higg FEM 4.0 Technical Paper

Now that you have set your own targets, what's next?

The answer is: track them.

Monitor your progress

The recommendation is that the person or team you allocated to do GHG accounting should **check performance regularly, e.g., on a monthly basis** (this includes collecting periodic energy and carbon data).

The data should be analysed regularly, and the performance results can be shared internally (e.g. to key stakeholders or committees). Regular reviews enable you to monitor progress, and identify if revisions or additional actions are needed to reach reduction targets.

Once a year, your company should compile a report with the current data in relation to your targets, compare year-on-year data, and demonstrate reductions to the baseline.

It is recommended that consumption data be normalised to a common parameter (i.e. units of production, number of employees, revenue), to show overall performance even if an absolute target has been set.

We've reached the end of Module 4: Target Setting

Did you do the self-evaluation at the start of the module? If so: were your expectations met?

Compare your personal take-aways with the notes you might have made when starting the module.

Before we proceed with the practical assignment, please check your knowledge in a short quiz.

[Quiz 1]

Which of the following terms refer to recognised climate targets?

- Climate neutrality (correct)
- Net zero (correct)
- Science-based targets (correct)
- GHG footprint targets
- Baseline targets

[Quiz 2]

What are the benefits of target setting?

- Reduced costs (correct)
- Reduced risk (correct)
- Improved relationships with your customers (correct)
- Increased operational resilience (correct)
- There are no major benefits.

[Quiz 3]

What should you consider when choosing a base year?

- Target base year should have verifiable data (correct)
- Target base year represents a company's typical GHG profile (correct)
- Target base year should not be too far in the future (correct)
- It is always best to choose the previous year as a base year
- A year with a large emissions footprint should be chosen as the target base year

[Quiz 4]

What is the difference between a long-term and a short-term target completion year?

Long-term targets >>> usually reached within 10-15 years Short-term targets >>> usually completed within five-years

[Quiz 5]

What are the benefits of setting interim targets?

- Keeps the company on track to meet the final target (correct)
- Let's the company make adjustments along the way (correct)
- Encourages the company to start actions quickly (correct)
- There are no benefits

[Quiz 6]

Which of the following statements are correct?

- Both long-term and short-term targets can carry large capital investments (correct)
- Long-term targets help plan these capital investments across the organization (correct)
- Short-term targets are more practical, and therefore recommended for companies with shorter planning cycles (correct)
- Short-term targets are not necessarily easier to reach (correct)
- Long-term targets are easier to attain

[Quiz 7]

What are the two types of reduction targets?

- Absolute targets these describe a reduction of absolute (total) emissions over time (correct)
- Intensity targets these describe a reduction in the ratio of emissions relative to a business metric over time (correct)
- **Relative targets** these describe the emission reductions relative to the global emission
- Exclusive targets these describe only emissions resulting from GHG which are not CO₂

[Quiz 8]

Why are absolute targets more relevant than intensity targets for meeting SBTi?

- Demonstrates a strong ambition for climate action (correct)
- Allows the company to continue growing at a fast pace
- Creates real emissions reduction (correct)
- •
- Absolute targets allow facilities to compare their climate performance with their peers.

[Quiz 9]

What are some commonly used standards for reporting?

- GHG Protocol (correct)
- GRI (correct)
- ISO 14064-1 (correct)
- ISO 9001
- UN Fashion Charter

Tokyo Protocol

[Quiz 10]

What are some common reporting platforms?

- CDP (correct)
- A company's own website or sustainability report (correct)
- The World Climate Index
- Verified Carbon Standard

[Quiz 11]

The 2018 IPCC Special Report recommended that we limit global temperatures to what degree?

- 1.0°C
- 2.5°C
- 1.5°C (correct)
- 2.0°C

[Quiz 12]

What are some measures a company can take to reach net zero emissions?

- Improve the energy efficiency of your factory (correct)
- Install a new natural gas turbine to generate electricity
- Install rooftop solar to generate electricity (correct)
- Use sustainable biomass to replace coal for thermal heat (correct)

Your assignment for this week

Imagine that a major customer of your company has set science-based targets. As part of this commitment, your customer has decided to reduce absolute Scope 3 emissions from their suppliers by 25%, by 2030. They are engaging their major suppliers, including your facility, to help support them in achieving this target.

Using your factory's emissions calculation from the previous assignment (Module 3), establish a baseline and set a 25% emissions reduction target (of your Scope 1 and 2 emissions) by 2030 to align with your customer. Once you have established your targets, develop a list of potential actions your factory could take to reduce its Scope 1 and 2 emissions.

Deliverable: Please create a short draft of sustainability report, highlighting the GHG emissions of your operations, summarise the high-level reduction targets and draft climate actions based on the outcomes (state and justify the target base and completion year, target bounda etc). You can use the template we provide on the learning platform or create your own document.

The content of your report should consist of:

- Introduction and boundary setting
- Emissions calculation summary
- Target setting and emissions reduction strategy

Frequently Asked Questions

I am a supplier and new to the whole GHG accounting and target setting process. Should I start with setting short-term targets or do I need to also focus on long-term targets?

Answer: To start with, setting short term targets is more important as it establishes good practice, gets 'quick wins' on the board and promotes engagement. Once you have had success with a short-term target, start to look at the medium- to long-term target horizon.

What emissions data do I need to report?

Answer: You should report GHG emissions as a gross figure in tonnes of CO₂e. Gross figure means total GHG emissions before accounting for any emission reductions. It is recommended that you report a summary table of your GHG emissions data for your chosen annual reporting period; your previous year's performance; and your base year. Organisations should also report their emission reduction activities.

DEFRA has provided guidance on the list of supporting information to be included in your sustainability reporting. <u>You can access it here</u> (p. 27 - 28).

How do I track my emissions over time?

Answer: In the same way that you calculated your baseline emissions data. When setting up the baseline calculation, identifying data sources and calculation methodologies will make your work in the future much easier. Some (large) companies establish energy data management systems to record their activity data, but often a spreadsheet is enough.

How often should a company check their performance to target?

Answer: Companies are recommended to check their performance against targets, at a minimum, on an annual basis. This enables the identification of over or under-achievement, and enables plans and actions to be put into place. As ambition increases, companies could also report more regularly to identify more opportunities for emission reductions, and make emission reductions part of the company's business-as-usual activities.

Will my company meet SBTi requirements if we only set intensity targets?

Answer: Intensity targets describe a reduction in the ratio of emissions relative to a business metric, such as per piece of garment or per kg, over time. Intensity targets do not necessarily lead to reductions in absolute emissions. This is because increases in business output can cause absolute emissions to rise even if efficiency improves on a per unit basis. Intensity targets are only eligible when they lead to absolute emission reduction targets in line with climate scenarios for keeping global warming below 1.5°C by creating incentives for energy efficiency and the development of clean energy technologies.

Conclusion, the company can only set intensity targets, but it is not recommended.

Do I need to recalculate my targets? When do I need to do it?

Answer: To ensure a consistent performance tracking over time, a company should recalculate their climate targets when there are significant changes in:

- company structure (e.g., acquisition, mergers, outsourcing, etc.)
- methodology for calculating the base year inventory due to improved emission factors or activity data
- methodology for calculating the target (e.g., emissions scenarios, growth projections and other assumptions). For long-term targets, recalculations based on the updated company's growth assumption need to reflect the latest climate science (e.g. latest emission scenarios available from the IPCC or other scientific bodies).

Other than the above points, recalculations should also be performed to identify any significant errors. Re-assessment of targets is recommended every five years to ensure consistency with most recent best practices.

It is also important to note that a company **should not undertake a recalculation based on organic growth and decline** (increases or decreases in production output, changes in product mix, and closures and opening of operating units that are owned or controlled by the company) - WRI & WBCSD (2011).

What are the benefits of setting science-based targets? How different is it from 'normal' climate targets?

Answer: Science-based targets follow recent best practices of climate science for reducing GHG emissions and aligning with the goals of the Paris Agreement. Setting an SBT would support your company in:

- demonstrating your commitment in overall environmental policy and climate change proving your company to be forward-thinking.
- setting an SBT that will increase your company's resilience against upcoming regulations. This is because the SBT aligns with the Paris Agreement. Wherever you and your facilities are located, national governments globally continue to work to implement the Paris Agreement.

What happens if we don't achieve our announced SBT?

Answer: Some companies may not achieve their target (or interim targets) due to unexpected, external factors. Don't worry! Companies should communicate this situation transparently with their stakeholders, highlighting any progress achieved to date and remaining gaps. This is why progress reporting is important. You should also describe a plan to address these gaps.

What should we do if we want to go beyond the target once it is set?

Answer: Companies often increase their level of ambition after an initial target is set. This is not a problem. You should continue to report against both the old target, and the new target. Some companies also set a standard target and a 'stretch' target, and report progress against each. As long as you are consistent and transparent, then having multiple targets is acceptable.

Some equipment in the factory has a default system which makes it hard to reduce its emissions and therefore challenging to arrange a target plan. What should I do?

Answer: It depends on the fuel source of the equipment. Fossil fuel-powered equipment are more challenging for emission reductions but when the equipment reaches its end of life, it can be replaced with a more efficient/electric option. Despite its challenge, you still need to set a target! When setting a target for this type of equipment, there is a high chance that you need to set a medium/long-term target (e.g., 10-15 years) to allow for equipment turnover, in comparison to other electrified equipment. We will learn more about how to be more energy efficient in the next module (Module 5).

Setting a net zero target is very hard for my company. Is it really important to eliminate all our emissions by 2050?

Answer: It is true that it is not easy to achieve net zero emissions, but we are at an extremely crucial period in history. What we do in the next decades will greatly influence how life will be on our planet. The net zero emissions by 2050 target is what is necessary to keep warming to 1.5°C. Going beyond 1.5°C warming would cause great damage to our environment and society. Innovations to reduce emissions are happening rapidly and most of the technology is already available. We have the opportunity now to work together and act quickly. We must try our best to make changes quickly to keep this planet liveable. In Module 5 we will explore concrete actions your company can take to reduce emissions.

Resources

Science-Based Targets initiative (SBTi)

The SBTi provides a clear framework for science-based target setting and supports companies every step of the way.

The initiative provides tools, best practice guidance and sector specific resources on how such targets should be set. In 2019, the SBTi published an apparel and footwear sector-specific guidance that provides a clear, standardized and credible approach for companies in this sector to set SBTs.

Science-Based Targets: Apparel and Footwear Sector: Science-Based Targets Guidance. PDF: 48 pages <u>SBTi's Net-Zero Standard</u> PDF: 65 pages <u>Science-Based Target initiative: Commitment letter</u> PDF: 6 pages

Science-Based Targets: Sustainability Short (Video)

The video below by The Supply Chain Sustainability School is also a good reference to understand what science-based targets (SBTs) are, why they are relevant to you and how you can participate.



https://www.youtube.com/watch?v=A96Yf-Fz5pg

Intergovernmental Panel on Climate Change, 2018 Special Report: Global Warming of 1.5°C

The complete special report can be viewed on their website

Go to IPCC Special Report: Global Warming of 1.5°C website.

Or you can read the headline summary here.

IPCC Special Report: Global Warming of 1.5°C Headline Summary

PDF: 2 pages

GHG Protocol – Corporate Standard

To learn more about reporting under the GHG Protocol Corporate Standard, you can access their document.

The Greenhouse Gas Protocol. A corporate accounting and reporting standard

PDF: 116 pages

GRI

To learn more about the GRI standards and platform as one of the global best practices for public reporting, visit their website.

Go to GRI Standards website

ISO 14064-1

To learn more about ISO 14064 (and the 14064-1 standard) for the quantification and reporting of greenhouse gas (GHG) emissions and removals, visit their website.

Go to the standard on the ISO website

CDP Supply Chain

To learn more on how companies take responsibility for their value chain and purchasing decisions through CDP Supply Chain, visit their website.

Go to CDP Supply Chain website

Higg Index

If you want to get more information on the Higg Index, visit the Apparel Coalition website.

Go to "The Higg Index" on the Apparel Coalition website

Higg Facilities Environmental Module (Higg FEM)

You can access the Higg FEM in the 'Facility Tools' area. To use the Higg FEM, you need to create an account first.

Standardizing the Measurement of Social and Environmental Impacts in Facilities

on the Apparel Coalition website

Resource Efficiency Module (by Implementation Hub)

The Resource Efficiency Module (REM) supports suppliers in reducing the consumption of water, chemicals, energy and GHG emissions. The tool offers facilities over 250 recommendations and 50 projects, targeted to various supplier types and processes.

Through the REM, the users (suppliers) can track and monitor the climate targets (GHG), along with other targets such as water and energy. The REM thereby provides hands-on implementation guidance and opportunities to track efficiency gains.

Image sources

Climate Action Tracker (2021) *Temperatures: Addressing global warming*. Available at: https://climateactiontracker.org/global/temperatures/

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