

Mindful Fashion
New Zealand



CLIMATE ACTION TOOLKIT

TOOLKIT

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CLIMATE ACTION CHECKLIST

COMPANY NAME		DATE	
1. GHG INVENTORY PLANNING		4. ANALYSE AND REDUCE	
Set your Organisational Boundary		Analysed your emissions	
Define your Reporting period		Identified and planned Scope 1 reduction strategies	
Define your Reporting Boundary		Identified and planned Scope 2 reduction strategies	
Screen for categories & scopes		Identified and planned Scope 3 reduction strategies	
Planned data collection		5. TARGET SETTING	
2. DATA COLLECTION		Defined targets	
Collected Scope 1 data		Defined target boundaries	
Collected Scope 2 data		Defined target base year	
Collected Scope 3 data		Defined target completion date	
3. DATA CALCULATION		6. SHOW PROGRESS	
Calculated Data using tool		Plan & measure subsequent year/s to track progress	
Produced summary and graphs		Extended into further scope 3 categories	

Mindful Fashion New Zealand



CLIMATE ACTION GUIDE

Part 1

Introduction to Climate Action

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PART 1

2	Introduction to the Guide
3	Climate Change and Emissions Fashion and Climate Global ambition and industry commitment
7	Understanding GHG Accounting Accounting and reporting principles Scopes 1-3 & Categories 1–6
10	Resources and Terminology

About Mindful Fashion

At Mindful Fashion New Zealand we are working to advance a fashion and textiles ecosystem in Aotearoa New Zealand where business, nature and people thrive within planetary boundaries. Our mission is to unite the industry to create an innovative, full-circle and thriving future.

INTRODUCTION

Mindful Fashion New Zealand - Climate Action Guide

The Mindful Fashion Climate Action Guide supports businesses through the process of measuring their organisational greenhouse gas (GHG) emissions and developing reduction strategies. This guide has been developed after a successful pilot programme in 2022 which took 10 businesses through the process of measuring their emissions and developing reduction strategies. This action oriented approach is designed to be accessible and build capability within businesses regardless of size.

Mindful Fashion New Zealand has developed this guide directly in response to industry needs. There is compelling scientific evidence supporting the critical need for action. Our recent analysis shows New Zealand clothing and textile businesses¹ want to take climate action but face barriers including time, cost and know-how.

How its been developed

The Guide has been developed by Mindful Fashion New Zealand and informed by the Climate Action pilot programme run in 2022 in conjunction with Ekos. The Guide has been developed in-line with international standards the Greenhouse Gas Protocol Corporate Reporting Standard and ISO:14064-1 (2018).

An organisational footprint covers a businesses New Zealand headquarters, and any retail stores, manufacturing units, warehouses and other facilities the organisation has operational control over. It includes emissions generated from the use of electricity, purchased fuel including company vehicles and gas, business travel and accommodation, waste and freight. This Guide does not cover emissions generated at suppliers facilities during production or emissions from product use & disposal. Facilities outside NZ that are within operational control may be covered if required.

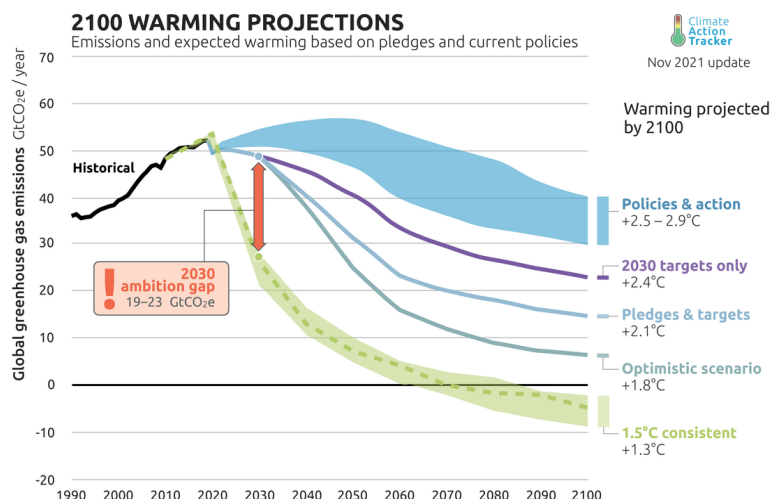
CLIMATE CHANGE AND EMISSIONS

The climate emergency is one of the most significant and threatening challenges of our time. Without urgent action to shift from our current path we will face devastating consequences, with implications for where we live, how we work, how we grow food, what we consume and how we provide services vital to well-being. Everyone has a duty to act.

Scientists agree that the warming planet can be attributed to the increase of greenhouse gases in the atmosphere. Today we are already seeing the impact of a 1.1°C global temperature increase above the pre-industrial period driven largely by increased carbon dioxide emissions into the atmosphere and other human [activities](#): loss of sea ice, accelerated sea level rise and longer, more intense heat waves².

The diagram shows just how urgent an issue climate change is. By 2100 it is predicted that, if nothing changes, the increased temperatures on the earth will make life as we know it unsustainable.

Figure 1: 2100 Warming projections. [Source: Climate Action Tracker 2021](#)

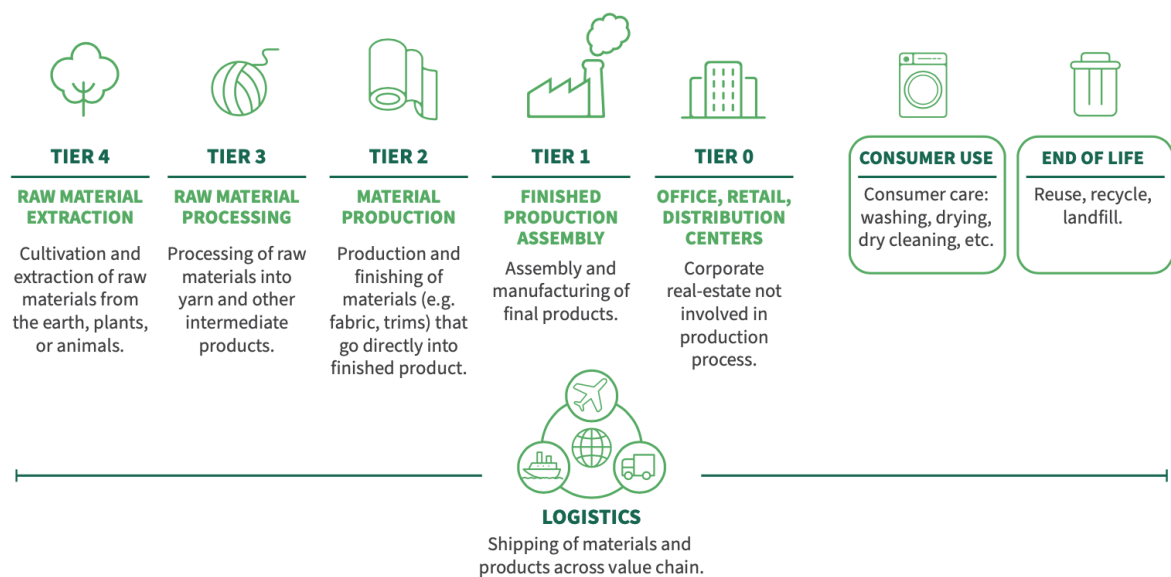


Fashion and Climate

The fashion industry is the [third](#) highest producer of greenhouse gas emissions globally³. The sector is a major contributor to climate change, with estimated emissions ranging from [4 to 8 percent](#) of the world's total⁴. The industry is on track to increase emissions [50% by 2030](#) putting it on a 3°C trajectory⁵, double the volume of emissions required to align with the 1.5°C pathway outlined in the Paris Agreement.

Emissions occur along the value chain from raw material production to processing, manufacturing, retail, care and disposal. See Figure 2.

Figure 2: Apparel and Footwear Value Chain / [Source: Fashion Charter Climate Playbook](#)



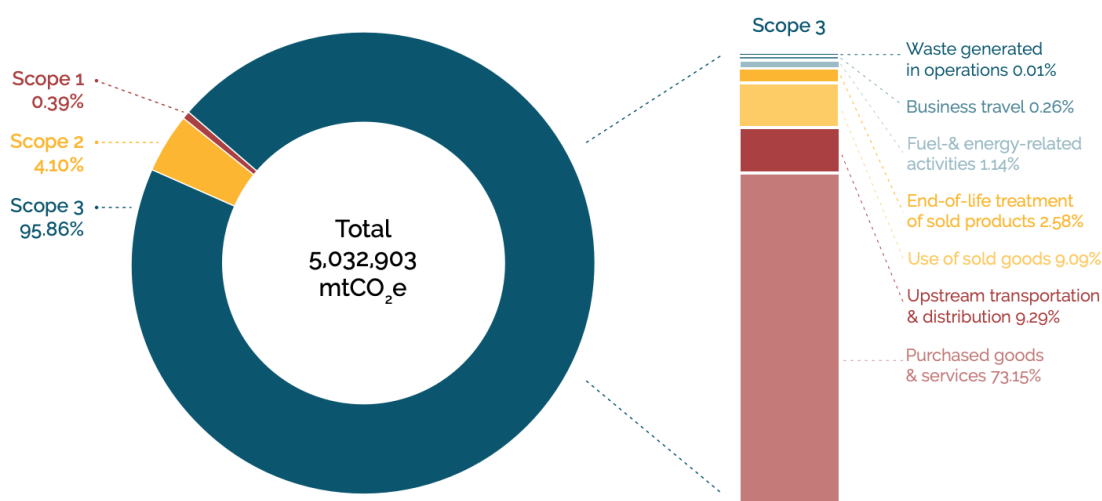
As outlined in the WRI Roadmap to Net Zero, the vast majority of emissions lie in the upstream value chain of brands, in particular raw material extraction, processing and production. While Stage 1 of our Guide deals **primarily with organisational emissions**, we will seek to address further value chain emissions in Stage 2.

For companies wanting to make a start now, beyond reducing emissions by producing and selling fewer items, [The Science Based Targets Initiative](#) describes the two primary ways for the sector to reduce emissions in line with science:

- Aggressively deploy energy efficiency and renewable energy across the value chain;
- Substitute materials with lower environmental impact alternatives (a key lever for SMEs in New Zealand with limited ability to influence supplier energy use).

An example footprint from an apparel company is shown below.

Figure 3: C&A Total GHG Emissions in 2017, by Scope. | [Source: Science Based Target Apparel Guide](#)



Source: C&A 2018.

Risks and Opportunities

The industry is under threat from a range of climate change related risks, including:

● Regulations	GHG emissions-reduction laws or regulations introduced or pending in regions where the company, its suppliers, or its customers operate.
● Cost	Suppliers passing higher energy- or emissions-related costs to customers
● Scrutiny	Water use in some textile producing countries is under scrutiny due to increased scarcity.
● Disruption	Adding delays, uncertainty and cost due to Production facilities located in countries with higher risks of severe weather events such as fires, droughts, floods and hurricanes.
● Product	Decreased demand for products with relatively high GHG emission footprints; increased demand for competitors' products with lower emissions footprints.
● Reputation	Consumer/stakeholder backlash or negative media coverage about a company, its activities, or value chain based on GHG management practices and emissions.

However this disruption to business as usual provides opportunities for business to innovate, alongside building strong partner and customer networks. Opportunities include:

- A reduction in GHG emissions often corresponds to decreased costs (upstream and downstream) and an increase in companies' operational efficiency.
- A comprehensive approach to GHG management provides new incentives for innovation in supply chain management and product design.

- Low-emissions goods and services are increasingly more valuable to consumers, and demand will continue to grow for new products that demonstrably reduce emissions.
- Improve stakeholder relationships through proactive disclosure and demonstration of environmental stewardship.
- External parties (e.g. customers, investors, regulators, shareholders, and others) are increasingly interested in documented emissions reductions.

Global Ambition

The Fashion industry globally is taking some action to address emissions. In December 2018 a group of leading brands and NGOs launched the [Fashion Industry Charter for Climate Action](#), under the United Nations. With over 180 signatories the charter sets out commitments to meet a 1.5°C pathway, including a reduction in GHG emissions of 45 percent by 2030.

The Sustainable Apparel Coalition (SAC) has an objective that all SAC members must achieve a 45% greenhouse gas (GHG) emissions reduction in line with SBTs by 2030 against a 2019 baseline, and has recently released a [SAC Guide for Members](#) to support this.

Other global initiatives include the Apparel Impact Institute's [WRI Roadmap to Net Zero](#) which lay outs the interventions needed to unlock transformative decarbonisation; the [Science Based Targets Initiative](#) which supports companies to use science to set reduction targets; and the [Fashion Pact](#), a global coalition of over 70 businesses committed to stopping global warming, restoring biodiversity and protecting the oceans. See Industry Commitments and Initiatives in the Appendix for details.

The Need for Collaborative Action

Fashion and textile companies are uniquely placed to support New Zealand's journey to a low carbon future. While any one business can make progress in reducing operational emissions under their direct control with the right knowledge and tools, transformative change across the industry and value chain will require concerted collaborative action. Our industry has shown its appetite to work together to address common challenges. By arming businesses with the tools and knowledge, we can then facilitate further collective action to create innovative local solutions to reduce emissions.

UNDERSTANDING GHG ACCOUNTING

Greenhouse Gases

Greenhouse gases are gases in Earth's atmosphere that trap heat. They let sunlight pass through the atmosphere, but they prevent the heat that the sunlight brings from leaving the atmosphere, thus creating a warming effect.

GHGs such as carbon dioxide enter the atmosphere primarily from burning fossil fuels - coal, natural gas, and petroleum - for energy use. Other GHGs include Methane, which comes from landfills, agriculture, and oil and natural gas operations, and Nitrous oxide, which comes from using nitrogen fertilisers and certain industrial and waste management processes.

Greenhouse Gas Accounting

GHG accounting measures the emissions generated from activities during a specified period (usually a period of one year), and covers the seven main greenhouse gases: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF₆) and nitrogen trifluoride NF₃. To enable a meaningful comparison between the seven gas types, GHG emissions are commonly expressed as carbon dioxide equivalent or CO₂e.

Measuring your organisation's emissions requires you to gather activity data for the specified period, for activities which are known to generate emissions. For example, the amount of fuel used in a company vehicle. The activity data is multiplied by emissions factors to determine the quantity in tonnes (or kg's) of greenhouse gases generated.

This process allows you to produce a GHG inventory of your organisation's emissions for the specified period, showing an overview of emissions from different categories and activities.

Accounting and Reporting principles

There are two common standards used in GHG Accounting, the [Greenhouse Gas Protocol Corporate Accounting and Reporting Standard](#), and [ISO 14064-1:2018](#). All greenhouse gas accounting and reporting should be based on the following five basic principles defined by the GHG Protocol and ISO 14064-1:2018.

● Relevance	Ensure the inventory appropriately reflects the GHG emissions of the company and serves the decision-making needs of users – both internal and external to the company.
● Completeness	Account for and report on all GHG emission sources and activities within the chosen inventory boundary. Disclose and justify any specific exclusions.
● Consistency	Use consistent methodologies to allow for meaningful comparisons of emissions over time. Transparently document any changes.

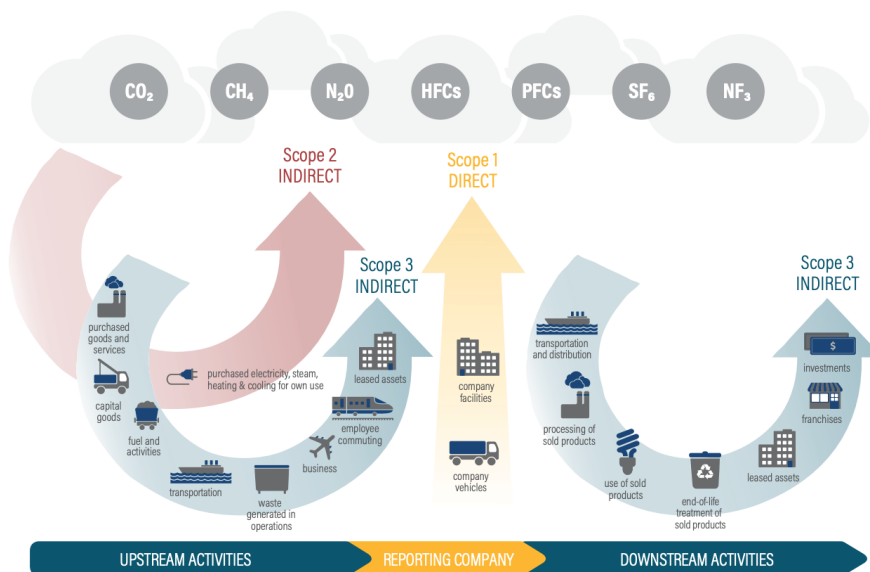
• Transparency	Address all relevant issues in a factual and coherent manner, based on a clear audit trail. Disclose any assumptions and reference methodologies and data sources used.
• Accuracy	Ensure the quantification of GHG emissions is systematically neither over nor under actual emissions, and that uncertainties are reduced as far as practicable.

How emissions are categorised & reported

The GHG Protocol places emission sources into Scope 1, 2 and 3 activities, while ISO 14064-1:2018 places emissions into Categories (see Fig 2 for overview). GHG Scopes are:

- **Scope 1:** Direct GHG emissions from sources owned or controlled by the organisation (eg. company vehicle fuel).
- **Scope 2:** Indirect GHG emissions from the generation of purchased energy that the organisation uses (eg. electricity).
- **Scope 3:** Other indirect GHG emissions occurring as a consequence of the activities of the organisation but generated from sources that it does not own or control (eg. air travel). Scope 3 is broken down into 15 'Source Categories'.

Figure 2: GHG Protocol Corporate Standard emissions categories



How emissions are quantified

To quantify and report GHG emissions, organisations need data about their activities for each of the categories being reported (for example the quantity of fuel used). This Guide provides information on calculating emissions from Scope 1, Scope 2, and a limited number of Scope 3 (and their co-relating Categories) sources as identified in Table 1.

Table 1. Emissions by Scope, Category and Source Category

Scopes used in GHG Protocol	Categories used in ISO 14064-1:2018	Emissions Source Category (GHGP)	Activity Source (For this Guide)	Included in prog
Scope 1	Category 1	Direct GHG emissions from sources owned or controlled by organisation	Stationary Fuel Combustion (eg. LPG)	✓
			Mobile Fuel combustion (eg. petrol, diesel)	✓
Scope 2	Category 2	Indirect GHG's from purchased energy	Purchased electricity, steam, heat	✓
Scope 3	Category 3 Indirect GHG emissions from transportation	Upstream transportation and distribution	Inwards freight	✓
			Outwards freight	✓
		Business Travel	Business travel and accommodation	✓
			Private mileage	✓
		Employee commute	Private vehicle, public transport	X
		Downstream Transport & Distribution	Transport to end consumer (consumer pays)	~
			Clients collecting products	X
		Working from home	Emissions generated with employees working from home	X
	Category 4 Indirect GHG emissions from products an organisation uses	Purchased goods and services	Water	✓
			Emissions from purchased goods and services used by the organisation	X
		Capital Goods	Emissions from Capital goods purchased	X
		Waste generated in operations	Disposal of solid (Landfill) waste	✓
			Disposal of liquid (Wastewater) waste	✓
		Fuel & energy related emissions	Transmission and distribution losses	✓
	Category 5 Indirect emissions associated with the use of products from the organisation	Use of products	Emissions generated in the use of sold product / service	X
		Processing of sold products	Processing of products sold by the organisation	X
		Leased assets	Emissions from downstream leased assets	X
		End of Life of products	Emissions generated in the end of life disposal of sold product	X
		Investments	Investments & franchises	X
	Category 6	Indirect GHG emissions (other sources)	All indirect emissions from all other sources.	X

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FURTHER RESOURCES

Greenhouse Gas Protocol Corporate Accounting and Reporting Standard, Revised Edition.

- <https://ghgprotocol.org/corporate-standard>

Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

- <https://ghgprotocol.org/standards/scope-3-standard>

ISO 14064-1:2018 - Greenhouse gases - Part 1: Specification with guidance at the organisation level for quantification and reporting of greenhouse gas emissions and removals.

- <https://www.iso.org/standard/66453.html>

Measuring emissions: A guide for organisations: 2022 detailed guide. Ministry for the Environment.

- <https://environment.govt.nz/publications/measuring-emissions-a-guide-for-organisations-2022-detailed-guide/>

TERMINOLOGY

Activity Data	Activity data refers to the data associated with an activity that generates GHG emissions. This activity data is collected in physical units or energy units.
Baseline	The baseline is the state against which change is measured, i.e. GHG emissions that have occurred in the past, prior to the introduction of reduction strategies.
Boundary	The inventory boundary determines which emissions are accounted and reported by the organisation. GHG accounting and reporting boundaries can have several dimensions, i.e. organisational, operational, geographic, etc.
Carbon Credit (offset)	A carbon offset credit is a transferable instrument to represent an emission reduction of one metric tonne of CO ₂ -e. The purchaser of an offset credit can “retire” it to claim the underlying reduction towards its own GHG reduction goals.
(Carbon) Footprint	Total greenhouse gas emissions caused by an individual, organisation, or product, expressed as CO ₂ equivalent (CO ₂ -e).
Category	Emissions are broken down into 6 Categories for ISO 14064-1:2018 standard, and 15 Categories for the GHG Protocol.
Climate neutral	Climate neutral means that an activity releases <i>net zero</i> GHG emissions into the atmosphere. This can either be achieved by balancing GHG emissions with GHG removal or simply eliminating GHG emissions altogether.
Carbon neutral	Carbon neutral means that an activity releases <i>net zero</i> carbon (<u>CO₂</u>) emissions into the atmosphere. This can either be achieved by balancing carbon emissions with carbon removal or simply eliminating carbon emissions altogether.
Climate positive	Climate positive or carbon negative means that an activity goes beyond achieving net zero carbon emissions by removing additional CO ₂ from the atmosphere.
CO₂ equivalent (CO₂-e)	A CO ₂ equivalent (CO ₂ -e) is a unit of measurement that is used to standardise the climate effects of various greenhouse gases by comparing their emissions based upon their global warming potential.
Cradle to gate	Cradle to gate is a commonly used boundary in LCA studies, which considers all activities starting with the extraction of materials from the earth (the cradle), their transportation, refining, processing and fabrication activities until the material or product is ready to leave the factory gate.
Cradle to grave	Cradle to grave is a commonly used boundary in LCA studies, which considers the cradle to gate results but also includes the impacts associated with the transportation, use, maintenance and end of life (disposal, reuse, recycling).

INDUSTRY COMMITMENTS & INITIATIVES

[UN Fashion Industry Charter for Climate Action](#)

- Supports the goals of the Paris Agreement in limiting global temperature rise.
 - Signatories commit to 45% GHG emission reductions in scope 1, 2 and 3 by 2030 and Net-Zero emissions by 2050.
 - Sourcing 100% of electricity from renewable sources by 2030, environmentally friendly raw materials, and phasing out coal from the supply chain by 2030.
-

[Science Based Targets Initiative](#)

- Participants set GHG emission reduction targets in line with climate science (aligned with 1.5°C or well- below 2°C trajectories). Scope 3 targets must be set.
 - Provide recommendations, advice and guidance on best practices for retailers, brands, finished goods manufacturers and mills.
-

[Fashion Pact](#)

- Supports the UN Fashion Industry Charter
 - A voluntary pact with 70+ signatories
 - Ambition to implement SBTs, offset remaining emissions to achieve net-zero by 2050, commit to sustainable sourcing of key raw materials, and use 100% renewable energy across own operations.
-

[The Swedish Textile Initiative for Climate Action](#)

- Supports apparel and textile companies to set SBTs and reduce their GHG emissions in line with 1.5oC warming pathway.
 - Development of joint projects and cross-sector collaborations
-

[Textile Exchange Climate +](#)

- Goal: 45% reduction in GHG emissions from producing fibres and raw materials by 2030. Known as Tier 4 of the supply chain, it accounts for 24% of the industry's GHG impacts related to it.
 - Aligns with SBT and UNFCCC Fashion Charter.
 - Mindful Fashion is a member of Textile Exchange.
-

[Apparel Impact Institute - Roadmap to Net Zero](#)

- In collaboration with WRI, has developed an Industry Roadmap to Net Zero, outlining 6 interventions necessary in the supply chain to reduce emissions by 45% by 2030 and reach net-zero by 2050 in line with Paris Agreement targets.
 - Works globally with supply chain to activate funding mechanisms and implement reduction strategies from high emission activities eg. switching plants to renewable energy.
-

For further information see Part 2 and 3 of our Climate Action Guide.
www.mindfulfashion.co.nz

Direct emissions	Emissions from sources are owned or controlled by the reporting organisation.
Downstream	Activities that occur once products / services exit the organisation.
Emission Factor	An emission factor converts activity data into emissions data: ie the GHG emitted per unit of activity.
Global warming potential (GWP)	The factor describing the radiative forcing impact (trapped heat in the atmosphere) of one unit of a given GHG relative to one unit of carbon dioxide. GWP values convert GHG emissions data for non-CO2 gases into units of carbon dioxide equivalent.
Greenhouse gas (GHG)	Greenhouse gases trap heat radiated from the sun in the atmosphere, warming the planet's surface. The Kyoto Protocol and the GHG Protocol cover the following seven greenhouse gases: Carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF6), and nitrogen trifluoride (NF3).
Indirect emissions	Emissions that are a consequence of the operations of an entity but occur at sources owned or controlled by another entity.
Insetting	Insetting generally refers to organisations investing in emissions reduction projects in their supply chains or adjacent to their supply chains. In contrast to offsetting, the investment remains within an organisation's value creation cycle.
GHG Inventory	A GHG inventory contains all applicable emissions for an organisation within a defined boundary during a period. An inventory is key to <i>measuring</i> emissions.
GHG Report	A GHG report expands on the inventory with context about the organisation, as well as analysis and progress over time. A report is key to <i>reporting</i> emissions.
Net zero	"Net zero" refers to achieving a balance between emissions produced and emissions taken out of the atmosphere through a combination of internal reduction efforts and external offset purchases.
Offsetting	Offsetting broadly refers to a reduction in GHG emissions – or an increase in carbon storage (e.g., through land restoration or the planting of trees) – that is used to compensate for emissions that occur elsewhere.
Scope (1, 2, 3)	Emissions are broken down into three scopes by the Greenhouse Gas Protocol.
Baseline Year	A specific year or an average over multiple years against which an organisation's emissions are tracked over time (against a target).
Upstream	Upstream defines activities related to the organisation's suppliers that occur prior to activities that occur within the organisation itself. EG. raw material production.

Mindful Fashion New Zealand



CLIMATE ACTION GUIDE

Part 2

Measuring your Emissions

CONTENTS

PART 2

2	Introduction & Step by Step guide
3	Step 1: Inventory Planning
5	Step 2: Data Collection
9	Step 3: Calculation
10	Appendices: 1. Instructions for using the Ekos Business Lite calculator 2. Verifying your emissions with Ekos 3. Link to tools 4. Climate Action Roadmap for Businesses 5. Checklist

INTRODUCTION

The Mindful Fashion Climate Action Guide will take you through the process of measuring your organisation's GHG emissions for a specified year, producing a summary of your emissions across each category, and identifying strategies to reduce your emissions.

Using this document

- Black text – for your Information
- Blue Text – instructions for you to follow

Step by step Guide to measuring your GHG emissions (see Appendix)

Step 1. Plan your inventory

1. Set your Organisational Boundary
2. Define your Reporting period (ie, calendar or financial year)
3. Define your Reporting Boundary
4. Screen for categories & scopes

Step 2: Data Collection

5. Collect activity data for each emission category
6. Collate data in the spreadsheet

Step 3: Calculate your emissions

7. Use a tool to calculate your GHG emissions

Step 4: Reduction Strategies (covered in Part 3)

Step 5: Set Targets (covered in Part 3)

Step 6: Show progress (covered in Part 3)

INVENTORY PLANNING

A GHG inventory is the tool to provide your business with a detailed understanding of its GHG impact. The inventory will show you where your emissions are generated, and give you a starting point to develop reduction strategies. Download an Excel copy of the **Data Collection sheet**, rename it for your business and use this to record and gather all your data.

Set your Organisational Boundary

Individual businesses have differing legal and organisational structures and operations. In setting organisational boundaries, a business defines the scope of its GHG accounting and reporting. The Greenhouse Gas Protocol defines two different approaches that can be used to set organisational boundaries.

Equity share approach

Under the equity share approach, a company accounts for GHG emissions from operations according to its share of equity in the operation. Eg. if your company owns 50% of a facility it accounts for 50% of the emissions.

Control approach

Under the control approach, a company accounts for 100 % of the GHG emissions from operations over which it has financial or operational control. It does not account for GHG emissions from operations in which it owns an interest but has no control. This is the most common approach SME businesses use.

If a company owns all its operations the result will be the same regardless of which approach it uses.

- For more information, see GHG Protocol Corporate Standard, p 16 - 23.
- [Complete the 'Company Information' tab, listing all facilities / units within your organisation, their location and number of staff.](#)
- [Decide which Organisational approach best applies to your business.](#)
- [Enter this information on the 'Company Information' tab on the Data Collection Spreadsheet.](#)

1.2 Define your Reporting Period

Your reporting period is generally a 12 month period, often aligned to your organisation's financial year (for ease of reporting). If this is the first year your organisation has produced an inventory, you can use it as a baseline year for measuring the change in emissions over time (as long as the scope and boundaries represent your usual operations).

- Define your Reporting Period on Tab 2 of the Data Collection Spreadsheet.
- Specify whether this is your first (baseline) year of reporting.

1.3 Define your Reporting Boundary

Your reporting boundary defines which emissions categories that your inventory includes. The GHG Protocol requires businesses to account for all Scope 1, 2 and 3 emissions and disclose and justify any exclusions (see below). For the Mindful Fashion Climate Action Programme, at a minimum businesses are required to report on the following categories, or justify their exclusion:

- Scope 1 / Category 1: Fuel consumption;
- Scope 2 / Category 2: Purchased energy;
- Scope 3 / Category 3: Business Travel, Freight, Waste.

It is acknowledged that accounting for all scope 3 emissions may not be feasible or applicable, especially in the first year of calculating. Businesses should report zero emissions or “not applicable” for any categories that are not applicable.

De minimis: For some organisations, certain GHG emissions may contribute such a small portion of the inventory that they make up less than 1 % of the total inventory. These are known as **de minimis** and may be excluded from the total inventory. Using a materiality threshold of 5 %, the total of all emission sources excluded as de minimis must not exceed 5 % of the inventory. Typically, an organisation estimates any emissions considered de minimis using simplified methods to justify the classification. It is important these are transparently documented and justified.

Exclusions: Businesses may have scope 3 activities, but be unable to estimate emissions due to a lack of data, or difficulty gathering data and limited ability to influence reductions, such as offshore manufacturing or offshore textile production. In such cases, businesses may exclude these activities provided reasoning is justified and disclosed.

Scope 3 Value Chain: This Guide does not include Scope 3 emissions from upstream supply chain production due to the difficulty in obtaining accurate data to quantify or measure the large range of scenarios, and the limited ability that many SMEs have in influencing reductions in these areas. Mindful Fashion is investigating how best to reduce impact in these areas, and/or include these categories in future stages.

- For more information about Scope 3, see GHG Protocol Corporate Value Chain Scope 3 Standard, p 61
- Specify which categories you are measuring by marking Y / N / NA in the column on the ‘Reporting Boundary’ of the Data Collection Spreadsheet.
- For any categories you are excluding, briefly justify your reasoning alongside the category.

DATA COLLECTION & MANAGEMENT

Primary data is data which is sourced directly from company or supplier records. In general, primary data is the preferred data source for key activities. For areas where your company aims to set reduction targets, track performance over time or engage suppliers, you should strive to collect primary data.

Secondary data is data that is not from specific activities within a company's value chain. It can be collected for non-priority areas, activities for which no primary data is available, or where the quality of secondary data is assessed to be higher than primary data.

According to the GHG Protocol: "In the initial years of Scope 3 data collection, companies may need to use data of relatively low quality due to limited data availability. Over time, companies should seek to improve the data quality of the inventory by replacing lower quality data with higher quality data as it becomes available".

Primary data can generally be gathered for most of the categories the Mindful Fashion Guide covers. In some instances, for example rental car, freight and waste, data may need to be estimated if primary data has not been captured. For any categories that are estimated, it is advised to establish systems that allow for primary data to be gathered in subsequent reporting periods.

Activity data sources and calculation methods

Activity data must be gathered for each category you are going to measure. The following table shows common sources of activity data for each category.

- This information can also be found on the 'Data Required' Tab on the Data Collection spreadsheet.

Table 1: Data Sources

Activity	Source	Unit	Data Required for the period	Data Source
Stationary fuel consumption	Diesel consumption	Litres	Amount/volume of fuel used in facilities/operations, by appliance/facility/country.	Invoices from suppliers Company Records
	LPG consumption	Litres		
	Natural Gas consumption	kWh		
Transport fuel consumption (company owned/leased)	Regular Petrol consumption	Litres	Volume fuel consumed (preferable) OR Distance travelled, vehicle type and year.	Fuelcard reports for individual vehicles Receipts
	Diesel consumption	Litres		
Purchased electricity, heat or steam	Electricity consumption; imported heat or steam consumption	kWh	Electricity Kwh for all company owned or controlled facilities.	Supplier invoices / reports

Rental car, Uber & taxi travel	Rental car & taxi/uber fuel consumption or distance travelled	Litres; or, Kilometres travelled	Fuel consumed in rental cars OR Distance (kms) travelled OR \$ spent	Invoices / Hire agreements
Domestic Air travel	Passenger air travel	Pkm (passenger kms)	Data on domestic air travel, including departure and destination and # of passengers per trip.	Flight records: invoices / tickets / travel agent report
International Air travel	Passenger air travel	Pkm (passenger kms)	Data on international air travel, including departure and destination (short haul or long haul), # of passengers, and class of travel.	Flight records: invoices / tickets / travel agent report
Accommodation	Accommodation Nights	# Rooms; location	Data on location country, number of rooms and number of nights.	Invoices/bills from hotel or travel agent.
Waste	Waste sent to landfill	Kilograms or litres	Volume of Waste to landfill by facility Landfill destination Broad waste composition if known (office, general, textile, etc)	Report from waste supplier OR Estimation of average data from facilities
Upstream transport and distribution	Freight paid for by the organisation	Tkm Distance x Weight By mode	Mode of transport (truck, van, ship, plane) Weight of shipment Distance travelled by mode (kms)	Report from Freight supplier OR Company records
Downstream transport and distribution	Freight to customers (where not paid for by the organisation nor in vehicles owned by the organisation)	Tkm Distance x Weight By mode	Mode of transport (truck, van, ship, plane) Weight of shipment Distance travelled by mode (kms)	Report from Freight supplier OR Company records
Rental car, Uber & taxi travel	Rental car & taxi/uber fuel consumption or distance travelled	Litres; or, Kilometres travelled	Fuel consumed in rental cars OR Distance (kms) travelled OR \$ spent	Invoices / Hire agreements
Domestic Air travel	Passenger air travel	Pkm (passenger kms)	Data on domestic air travel, including departure and destination and # of passengers per trip.	Flight records: invoices / tickets / travel agent report
International Air travel	Passenger air travel	Pkm (passenger kms)	Data on international air travel, including departure and destination (short haul or long haul), # of passengers, and class of travel.	Flight records: invoices / tickets / travel agent report
Accommodation	Accommodation Nights	# Rooms; location	Data on location country, number of rooms and number of nights.	Invoices/bills from hotel or travel agent.
Waste	Waste sent to landfill	Kilograms or litres	Volume of Waste to landfill by facility Landfill destination Broad waste composition if known (office, general, textile, etc)	Report from waste supplier OR Estimation of average data from facilities

Gathering and Recording Data

Begin by gathering data for the more straightforward categories, such as electricity and fuel, then proceed through each category methodically. Some categories will be easier than others. Much of the data will be sourced through supplier reports or company invoices therefore access to the relevant (eg. finance) people within your organisation will be necessary.

You must record the data source and keep records of activity data. However it is not necessary to record granular data on the spreadsheet, all that's required is the total for the reporting period. We recommend recording data by calendar month - both to give your organisation the ability to monitor changes over reporting periods, and because it makes checking for accuracy more straightforward.

- Use the 'Data Sources' tab to record the source of your data source for each category.
- On the Data Collection Spreadsheet, use each category tab to collate your information.

Notes on data collection

1. Stationary Fuel Consumption

- LPG, Diesel, Natural Gas
 - Identify if/where the gas is used within the organisation, record appliance type or ICP, & location.
 - Calculate volume of gas used for the period using supplier reports / financial records.

2. Transport Fuel Consumption

- Record a list of company owned/leased vehicles and corresponding fuel type.
- Gather records on volume of fuel consumption using fuelcard reports, invoices or receipts. Calculate total fuel consumption for each fuel type for the period.
 - If volume of fuel use is unavailable, distance travelled or \$ spent can be used.

3. Purchased Electricity

- Identify sites where electricity is used. Record location, ICP & supplier.
- Calculate electricity consumption in kWh for the period using reports from suppliers/invoices.
 - If you only occupy part of a space, include % of the facility you use.
 - Can be itemised by facility so that comparisons can be made by Country/Region.

4. Rental Car travel

- Calculate Rental Car fuel consumption by fuel type* OR
- If consumption is not available, distance (kms) travelled can be used.

- Source data from supplier invoices, travel agent reports or mileage records. Alternatively, calculate distance using a mapping tool.

5. Domestic Air Travel

- Gather information on Domestic air travel trips taken by staff from travel agent reports, tickets or airline records.
- Record Origin, Destination, and # of passengers.
- Using the 'Air Travel Calculator' tab, calculate total passenger kilometres (pkm) travelled.

6. International Air Travel

- Gather information on International air travel trips taken by staff from travel agent reports, ticket or airline records.
- Record Origin, Destination, # of passengers and class of travel.
- Using the 'Air Travel Calculator' tab, calculate total passenger kilometres (pkm) travelled by class of travel.

7. Accommodation

- Gather information on the number of nights per person in each country location using travel agent reports, invoices or company financial records.

8. Waste to landfill

- Record waste bins at each site/location, their capacity, how frequently they are collected, who the supplier is.
- Calculate data* on volume of waste sent to landfill (litres or kgs) either;
 - Report/records from your waste supplier, or
 - Estimate average volume/weight for each bin, multiply by number of collections.
- *Specific data is not available for many organisations, so estimates can be used.
- Provide any available data on construction materials and demolition waste incurred during the year.

9. Freight*

- Using your accounting records identify your freight suppliers and rank by order of \$ spent. Determine what freight each supplier is responsible for. To visualise easily you could map freight movements, by drawing a transport map of all your sites and all freight flows.
- Information is required for all freight the organisation pays for. Eg. Inbound freight, outbound freight, and freight between an organisation's facilities (in non-company vehicles).
- You need to calculate all freight that travels around New Zealand. You also need to measure all freight that arrives in New Zealand, making the calculation from its departure point if possible.
- Request reports from all freight suppliers. Some may provide pre-calculated emissions, others might only have distance and mode.
- For each freight movement, the information needed is either:

- Pre-calculated emissions for all freight by that supplier or;
- Mode/Distance/Weight to calculate TKM (tonnes per kilometre travelled)
 - Mode of travel - air, sea, truck
 - Distance travelled by each mode (kms)
 - Weight of shipment (tonnes)
- For some freight, an average figure may need to be used eg. NZ Post/Courier Post can be estimated using average emissions multiplied by total number of shipments sent around NZ.
- Use the spreadsheet to record freight by mode of transport.
- The calculation is:
 - Distance (kms) x weight (tonnes), by mode.
 - Eg. Truck travel: (100kms x 0.5tonnes) = 50 tkm truck travel.
- *Freight is often the most complicated step in the GHG inventory. The best approach is to start with identifying freight suppliers and a transport map, and methodically approach each supplier/freight movement to collect data.

Once you have entered complete data sets for the reporting period into each tab, this stage is complete.

CALCULATION

Once you have final totals for each of the emissions categories you are ready to enter your data into a calculator. There are a number of free-to-use calculators. Two we have trialled are the [Ekos Business Lite Calculator](#) and the [Climate Action Toolbox calculator](#).

Using the Ekos Business Lite Calculator

The [Ekos Business Lite Calculator](#) is straightforward to use. It requires you to enter your total annual figures for each category that you have collected data for into the online calculator. It generates an online summary and an email summary showing your emissions for each category. Details on how to use the tool are below.

Using the Climate Action Toolbox

The [Climate Action Toolbox calculator](#) is straightforward to use. It requires you to enter your total annual figures for each category that you have collected data for. It then presents you with an online table showing a breakdown of your emissions for each category.

There is a limitation with both tools where you do not automatically see a breakdown of emissions within each category eg. air freight vs sea freight. We recommend you record this manually from the online calculator as you go, which is time consuming but the simplest way we have found to get an accurate breakdown using these free tools. You can use the table on the last tab of the Data spreadsheet to record emissions for each category and mode.

Once you have entered your data into a tool, you have completed your GHG Inventory, congratulations! You're now ready to analyse your inventory and develop reduction strategies.

APPENDIX 1

Instructions for using Ekos Business Lite Calculator

1. Go to <https://ekos.co.nz/businesslitecalculator>
2. Enter your Company information as per the prompts on the page.
3. Select the country of your headquarters/main operation – assume NZ (the New Zealand electricity factor will be applied to your power use.)
4. Enter the measurement period as per your Data collection sheet and click 'Next'.
5. Enter your Stationary Fuels consumption as per your data collection sheet.*
6. Enter your Company vehicles data.* Fuel data is preferable. If you don't have fuel data, you can enter km travelled as an alternative. You can select up to 3 different vehicle types within the Business Lite calculator.
7. Enter your Electricity data.*
 - a. Please note that if you use Ecotricity, you can select "Carbon neutral electricity provider". If you use Meridian Energy, it doesn't mean your electricity is automatically 'carbon neutral'. You will need to have purchased their Renewable Energy Certificate (REC), and be able to supply that to us as evidence, before we're able to recognise this as carbon neutral energy.
8. Freight - select "Accurate measurement". Then tick Inward/Outward freight as most appropriate for you.
9. For either International freight (left hand side) or Domestic freight (right hand side), select the transport mode using the drop down arrow, then enter the total TKM for that mode as per your data collection sheet. Repeat if you have more than 1 transport mode. Repeat again if you have selected both Inward/Outward freight.*
10. Flights - select "Accurate measurement" and enter your flight data as per your data collection sheet. Remember the flights need to be split by Domestic, International short haul and International long haul.*
11. Enter your Accommodation data. Select the country where you have stayed in hotels. You can enter data for up to 3 different countries. (If you have more than 3, please choose your top 3.)
12. Enter your Non-Company vehicles data as per your data collection sheet.*
13. Enter your Waste data as per your data collection sheet. (The calculator assumes all waste goes to a landfill facility that does NOT have landfill gas recovery.)

14. If you have any emissions sources where the calculator does not have a calculation field, and/or you had to undertake manual calculation using a spreadsheet, enter it in “Other Additional Emissions Sources” by choosing which emissions scopes it belongs to (i.e. Scope 3), typing in the emissions source name (i.e. staff commute), and the calculated tCO₂e total. Otherwise, please select “I don't have any sources to add”.
15. Once you have completed your data entry, you may choose to SAVE or SUBMIT.
16. Choose “SAVE” to get a resume link to come back to your entry at a later time. You may want to choose this option if you are considering going through the verification and certification process.
17. Choose "SUBMIT" to finalise your entry. You will no longer be able to come back to your entry or make any updates/changes.

^ **Australian sites** - If you have Australian sites follow this process in the Ekos Calculator Tool:

- Set up NZ as the primary office location in the calculator (i.e. select NZ in first page) and enter the NZ electricity usage in the electricity page.
- Save this and create a second entry in the online calculator with Australia as the location. In this entry only enter the Australian electricity, go through to the end and complete the calculation to work out what the total emissions are for Australian Electricity.
- Add this total in "Additional sources" section in the online calculator, under scope 2.

* Any T&D losses and WTT emissions from these categories will be automatically calculated and added to your emissions total.

Please note: At any point you can save your entry by clicking “SAVE”. You will get a resume link to return to your entry at a later time.

Once submitted you will receive a summary of your emissions. Your emissions total will be summarised in Scope 1, 2 & 3. (Within the Business Lite calculator, all categories 3-6 emissions are aggregated and reported as a scope 3 total, hence why we recommend recording as you enter them).

Verifying with Ekos

Footprints over 50 tonnes

If your total Footprint is **greater than 50 tCO₂e**, you are not eligible for standard Business Lite verification or certification. You can offset your ‘estimated emissions’ by purchasing carbon credits, or complete a quality review and/or certification by contacting Ekos.

Footprints under 50 tonnes

If your Footprint is **less than 50 tCO₂**, you are eligible for Ekos Business Lite verification and certification directly through the online calculator;

- If you do not wish to complete verification or certification, select “I just want a summary”.

- If you want to proceed with verification and certification, please select “check qualification”. Please tick all that applies.
- If you meet all the requirements for Business Lite certification, and you’ve completed your data collection sheet, please select “I’m ready for the verification process”.
- Click on the link shown on your screen to go to the verification submission page.
- Upload your data collection sheet as per prompts on the page and you can submit your data for an Ekos Business Lite verification review.

APPENDIX 3

Tools

- [Mindful Fashion Data Collection spreadsheet \(link in Toolkit\)](#)
- Mindful Fashion Freight Calculation spreadsheet - available on request

Mindful Fashion New Zealand



CLIMATE ACTION GUIDE

Part 3

Reduction Strategies

CONTENTS

PART 3

2	Step 4. Reduction Strategies • Understanding your emissions • Identifying reduction strategies
4	Step 5. Setting targets
6	Verification, Certification, Offsetting and Insetting principles
7	Step 6. Next steps - Year 2 and beyond • Track progress • Beyond organisational footprint - value chain emissions
8	Appendices: 1. Ease / Impact decision matrix 2. Strategies to reduce emissions

REDUCTION STRATEGIES

Understanding your emissions

Once you've calculated your organisation's GHG footprint the next step is to work out where you can make reductions.

Analyse your emissions summary. You can use the template on the Data Collection Spreadsheet <Summary> tab to input your emissions into the table and generate a graph that illustrates the emissions from each activity.

We know that for many businesses travel and freight will be a significant part of their organisational emissions. We recommend using the calculator to break down travel and freight emissions for each mode of transport eg air, sea, road. This may help you identify specific areas to prioritise for reduction strategies.

The next step for your business is to:

1. Create a plan outlining strategies to reduce your carbon emissions.
2. Set targets that you can track your progress against.

Reduction strategies, tools and resources

Create an action plan by outlining your strategies, and set targets to give you something to aim for. Your plan should include:

- Your baseline year measurement across each scope and category;
- Categories you have identified as priority areas for reduction;
- Targets you are aiming for;
- Actions you have identified to make reductions, with your timelines.

Identify your top 5 emissions sources as this is where you can make the most impact. Then prioritise where you can make the most impact with the lowest effort. A useful guide is the following:

PILLAR 1	PILLAR 2	PILLAR 3
Reduce your own emissions: • Prioritise, plan and reduce Scope 1 and 2 emissions (fuel consumption, electricity)	Reduce value chain emissions: • Prioritise, plan and reduce organisational Scope 3 emissions (travel, waste, freight)	Further reduce value chain emissions reductions: • Plan for and implement Initiatives that may require some capital investment to reduce emissions.
Short term	Short - Medium term	Medium - Long term

Focus on emissions sources where you have direct control, often your scope 1 and 2 emissions sources, for example Electricity consumption and Fuel consumption. Start by implementing 'low hanging fruit' initiatives that do not cost anything (cost neutral) and potentially save money (cost negative).

You can use the **Ease/Impact Decision-making Matrix** (Appendix 1) to help map out which areas to prioritise. Consider the following types of intervention:

- **Behaviour change** - Identify where can you change behaviour easily, eg. reduce waste, packaging, travel habits.
- **Operational/Policy change** e.g maximum trips per year, minimum numbers in vehicles, supplier considerations. e.g energy supplier, equipment suppliers, maintenance contractors (where are they coming from? Can someone do it locally?)
- **Infrastructure change** - Equipment/Technology Changes/ Upgrades – vehicles, onsite energy generation.

See Appendix 2 for common reduction strategies for Scope 1, 2 and 3 categories.

Identify strategies that apply to your organisation, and prioritise the implementation of these based on impact and ease. Once you have set targets, use the strategies to help you achieve them. Consider tracking progress on a monthly basis to monitor progress.

SETTING TARGETS

Target setting and having clear reduction goals are critical to reducing your emissions. Climate action is a long-term endeavour, so targets give you a measuring stick to report progress against each year to ensure you're on track. Setting company wide targets will also help ensure that climate is kept on management's radar and factored into relevant decisions.

Types of targets

1. **Absolute targets** - refer to a target that aims to reduce GHG emissions by a set amount in a future year compared to a baseline year. Eg. reduce overall emissions by 2025, 4.7% against baseline year.
2. **Intensity targets** - a future reduction in emissions that has been normalised to a business metric when compared to the same normalised business metric emissions in a base year. That metric can be anything from clothing produced, to total revenue.

Some companies choose to use both absolute and intensity targets. We suggest to start with setting an absolute target as it ensures your overall emissions are actually reduced and is thus easier to communicate and understand.

Target Boundary

The target boundary defines what is covered by a GHG target. It can be identical to the inventory boundary, or it may only address a subset of sources, such as:

- Which geographical operations;
- Which direct and indirect emission sources.

Target Base Year

Most GHG targets are defined as a percentage reduction in emissions compared to a target base year. Usually the target base year will be identical to the inventory base year.

Target Completion Date

As with the target base year, you are also free in choosing a target completion date. It is, however, recommended for targets to cover a minimum of 5 years and a maximum of 15 years. Many industry initiatives and brands, for example the Fashion Industry Charter for Climate Action, have defined 2030 as completion date for their targets.

In the context of climate change, the targets we need to achieve collectively to limit global warming to 1.5° C, and hence avoid the worst effects, are defined by science. Human-caused GHG emissions need to fall by about **45 percent from 2010 levels by 2030**, and reach 'net zero' around 2050. Here is an example targets from Kathmandu:

- Reduce total Scope 2 emission intensity by 15% per store by 2025, relative to base year.
- Reduce absolute air travel emissions by 5% by the year 2025, relative to base year.

Science-based targets

Targets are considered ‘science-based’ if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement – limiting global warming to well-below 2°C above pre-industrial levels and pursuing efforts to limit warming to 1.5°C.

SBTs are thus based on an objective and scientific evaluation of what is needed, in contrast to what is achievable by a company. SBTs need to be assessed and approved by the Science Based Target Initiative before they can be publicly announced as such.

The Science Based Target Initiative has released sector guidance for the apparel industry (see resource section below), which shows that to meet a 1.5°C pathway, reduction targets should be set at a minimum of **4.2% annual linear reduction**.

Science based targets for SMEs

The Science Based Target Initiative has also released a streamlined target validation route for SMEs, to immediately set an SBT for their Scope 1 and 2 emissions by choosing one of several predefined target options (see below). SMEs are not required to define a Scope 3 target however they must commit to measure and reduce their Scope 3 emissions.

Target Options for SMEs

- 1.5°C aligned option - 50% reduction of absolute Scope 1 and Scope 2 emissions by 2030 from a 2018 base year, and measurement & reduction of Scope 3 emissions.
- Well-below 2°C option - 30% reduction of absolute Scope 1 and Scope 2 emissions by 2030 from a 2018 base year, and measurement & reduction of Scope 3 emissions.

SBTi provides guidance and criteria for science-based climate change targets and validates company targets. The website includes several essential resources including the SBTi criteria, an Excel-based target setting tool, and a detailed manual for companies setting targets.

Resources & Tools

- [SBTi: Sector guidance for the apparel industry.](#)
- [SBTi: Science-Based Target Setting Tool](#)
- [SBTi: More information on the SME validation route](#)

Examples of targets set by apparel companies

Ganni

- 50% absolute reduction in overall CO2 emissions by 2027 (from a 2021 baseline).

Reformation

- Reduce Scope 1 & 2 emissions 46% by 2030 (absolute - from 2019 baseline).
- Reduce Scope 3 emissions 55% per unit revenue by 2030 (economic intensity - from 2019 baseline).

VERIFICATION, CERTIFICATION, OFFSETTING & INSETTING

The manufacture of a physical product and most activities inevitably leave a carbon footprint which is impossible to eliminate using internal measures only. No matter how hard your business tries it can never reach carbon neutrality as an organisation, or for a certain product or activity (e.g. air travel), with reduction measures alone.

Therefore additional solutions are needed to balance emissions that cannot be eliminated. Carbon offset credits are one tool for achieving such reductions. Due to their ease of use and cost-efficiency, it can be tempting for companies to rely on carbon offsets as primary means to meet their emission reduction targets, instead of identifying and investing in internal reduction measures. However this approach would fall short of our overall global climate targets. There is broad agreement that the primary focus of every company must first be on reducing GHG emissions directly and dramatically in line with global mitigation goals, and then considering offsetting the remainder.

Verification

Verification provides a confirmation that your greenhouse gas calculations have been completed correctly following the requirements of the international standards. Verification is completed by a third party on the data you provide to them. Having your inventory verified can give you certainty that you have measured correctly, and a degree of confidence when setting targets and communicating any emissions reductions activity.

Certification

Many organisations offer certification programmes. Certification generally requires an audit to verify your inventory and footprint is accurate and complete. You can then optionally choose from a selection of carbon credits to offset your emissions to meet certification requirements.

Offsetting

A carbon offset broadly refers to the reduction, avoidance, or removal of greenhouse gas emissions. Carbon offsets invest in projects that help counteract greenhouse gas emissions that have already taken place. Offsetting is achieved when you buy a unit of CO₂e (a carbon credit) and 'retire' it against your emissions.

Insetting

Carbon insetting is a mechanism to reduce emissions while driving business value. It uses organisational investment to promote sustainable practices and reduce your company's carbon footprint within your own value chain. As explained by the International Platform for Insetting, insetting is the implementation of nature-based solutions such as reforestation, agroforestry, renewable energy and regenerative agriculture. Some insetting activities also improve the livelihoods of indigenous communities as a result.

For example, Ganni is working directly with suppliers to evaluate emissions hotspots and invest in ways to mitigate those at the source, rather than through offset projects elsewhere. "We stopped compensating for our carbon footprint. We put aside that money and saved it up for investments in bringing down the carbon footprint of our supply chain, making actual reductions along our supply chain," says founder Nicolaj Reffstrup.

YEAR 2 AND BEYOND

Once you have identified priority activities, started to implement changes to reduce emissions and set annual targets for emissions reductions, the next step is to monitor progress to ensure you are on track to meet targets. See Climate Action Roadmap for Businesses (Appendix 3).

Calculate your GHG inventory every year using the same boundary (at a minimum) to ensure you are making progress to meet reduction targets. You should endeavour to broaden the boundary of the inventory to include further value chain categories over time to account for the full extent of your organisation's emissions.

Scope 3 value chain emissions

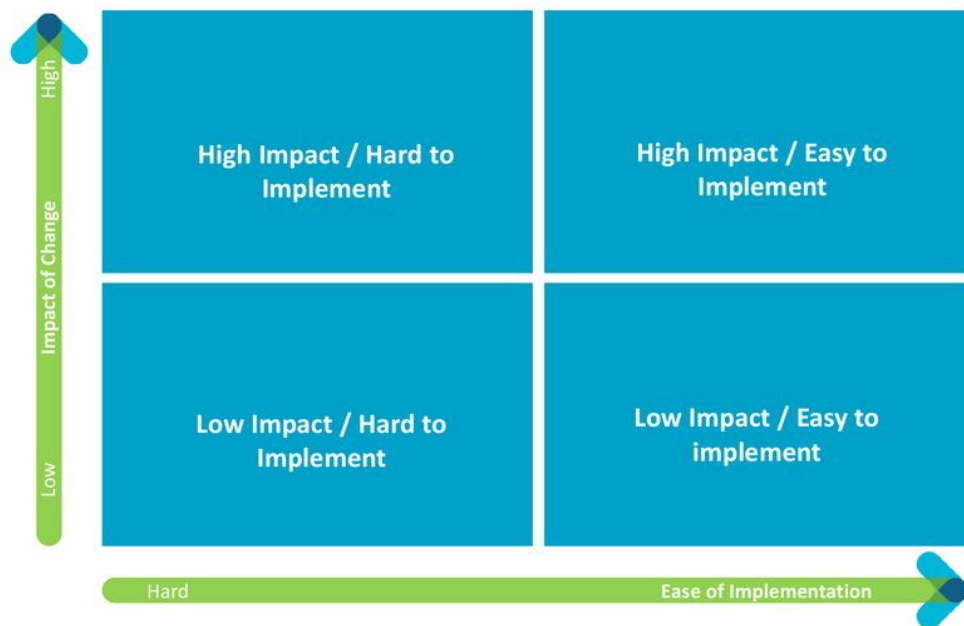
It is widely accepted that value chain emissions are the most significant contributor to the footprint of an apparel company, and that these emissions mainly occur in raw material extraction, processing and production. However emissions from these activities can be challenging to calculate accurately due to the complexities of gathering accurate data for individual supply chains for each fibre and material. Companies should pursue measures to gather data from their textile supply chains, or use estimated LCA data in order to calculate as accurately as possible to get a broad understanding of impact scale. At the same time, it is recommended to map fibre/material usage volumes and immediately start shifting materials to low impact and recycled versions.

The [Scope 3 Evaluator](#) is a free tool from the GHG Protocol and Quantis that allows users to estimate emissions for each of the 15 GHG Protocol Scope 3 categories. Companies can use the tool to identify which areas to pursue a more accurate inventory and where to focus reduction efforts.

Appendix 1

EASE / IMPACT MATRIX

Use the Matrix to map out reduction strategies, and identify which are priorities over short/med/long term.



Appendix 2

Emissions Reductions Strategies For Organisational Footprints

Scope 1 Reduction measures - Fuel consumption

In general, organisations can reduce vehicle-related emissions by reducing the kms travelled by employees for business purposes, and shifting away from fuel-based vehicles. For example, meeting online more, moving your fleet to EVs, encouraging and incentivising forms of transport other than single-occupancy vehicles, use of public transportation, car pooling, and cycling.

Behaviour changes	Encourage/enable staff to use push bikes/e-bikes for commuting to and from work, e.g., through provision of safe and convenient bike storage facilities, shower/changing facilities and cycling clothes storage facilities rather than providing company vehicles and/or carparks.
	Enrol in an electric or hybrid car rideshare service and use rideshare vehicles when the use of a car is necessary. This is an option in larger centres.
Policy changes	Manage mileage, set a CO2e cap, downsize/optimize fleet.
	Encourage/enable staff to use public transport for commuting to and from work e.g., through subsidising public transport use.
	Encourage/enable regular working from home through providing the necessary tools and process to work remotely, such as desk, chair, computer etc.
	Where vehicle travel is unavoidable, use EVs where possible. Find out more at FECA.
Infrastructure upgrade	For staff commuting over distances that exceed pushbike/ebike travel and where public transport/rideshare isn't available, encourage/enable the use of EVs through providing access to EV charging facilities at work.

Scope 2 Reduction Measures - Electricity

Start by implementing energy efficiency measures, as this will also reduce operating costs.

Behaviour Changes	Avoid using heat pumps for air conditioning during summer where possible. Studies show heat pumps are not efficient coolers. Fans and natural ventilation are the most efficient form of cooling.
	Ventilate a room before heating it, this will remove damp air.
	Only heat rooms that are being used. If heaters tend to be left on, install timers.
	Have an energy auditor or electrician to do a complete sweep of your workplace. They will be able to advise on suitable replacements and the cost paybacks.
	Set your hot water cylinder (if you have one) to 60 degrees. This is the temperature that will prevent Legionella and keep your water suitably warm when it comes out of the tap (assuming that it is fit with a thermostat).
	Make energy efficiency a priority at your work. Appliances such as computers left on will use power, so make sure people turn them off overnight/on weekend.
	Switch to providers that are using renewable energy. An example of such a provider is Ecotricity.
Infrastructure upgrade	Install sensors, especially in places that are used intermittently and are prone to having the lights left on.
	All Incandescent bulbs should be upgraded immediately to LEDs. A simple switch from an incandescent to an LED will also save you \$20 a year in running costs.

	Cheapest is not always best - try to buy high quality LEDs so that they will last you the full 15 years of their life span.
	Halogen/sodium/mercury bulbs all have LED equivalents that will save close to 40% of the electricity usage. To find a sufficient replacement that will match your required lumens and fitting, you should always seek advice from a lighting technician/electrician or auditor.
	Fluorescent lights, though still relatively efficient, can be upgraded to LED tubes. This will make most sense in workplaces where the lights are used every day for long periods of time. This upgrade will often require electrical rewiring so if you are having work done to the roof and/or are hiring an electrician to do electrical rewiring anyway -seize the opportunity then.
Policy changes	Develop a policy that commits your organisation to always install the most efficient LED lighting option available and to design your workplace in a way that optimises natural & passive lighting.
	Implement a policy where any new appliance purchases (e.g office refrigerators or heatpumps) will be blue star energy rated. Blue star energy rated appliances will cost more at the beginning, but pay back over time.

Scope 3 Reduction Measures - Freight

Given the combined contribution of upstream and downstream transportation to Scope 3 GHG emissions, it is crucial to find ways of collaborating with suppliers in order to reduce emissions in these categories.

Behaviour changes	Change planning procedures to allow for longer transport times so sea freight and rail freight can be utilised more over air freight and road freight.
	Improve systems to capture freight data metrics. Analyse and consolidate where possible.
	Inform your freight company of your commitments and ensure they record the data you need for reporting.
Policy changes	Have a procurement policy that favours organisations with sustainability strategies i.e. sustainable/electric fleet, measuring their GHG footprint, offsetting their emissions etc.
	Procurement - look at sourcing from local suppliers where possible.
Infrastructure upgrade	Consider the weight of the goods being delivered, is there any way for making the product packaging lighter or to consolidate shipments for more efficient use of space and/or to reduce the number of loads required.

Scope 3 Reduction Measures - Business Travel

Behaviour changes	Improve systems to capture business travel metrics. Analyse travel and consolidate where possible - set targets for staff.
	Avoid the use of air travel and use video/phone calls where possible instead. This may require investing in an upgrade of teleconferencing technologies and/or service plans to enable high quality communications.
	Educate staff on climate impacts of travel options. Encourage/enable staff to use pushbikes/e-bikes for commuting to and from work, e.g., through provision of safe and convenient bike storage facilities, shower/changing facilities and cycling clothes storage facilities rather than providing company vehicles and/or carparks.
	Where vehicle travel is unavoidable, use EVs where possible.
Policy Changes	Use technology to avoid travel where possible.
	Set an “only when essential” flying policy along with an annual flight emissions reduction target.
	Restrict the class of air travel to economy and educate & inform staff on why the economy class policy has been introduced and what it achieves.
	Consider trip limits per year/time period and implement a clear company policy. Eg. Set an “only when essential” flying policy along with an annual flight emissions reduction target.
	Encourage/enable staff to use public transport for commuting to and from work e.g., through subsidising public transport use

Scope 3 Reduction Measures - Waste

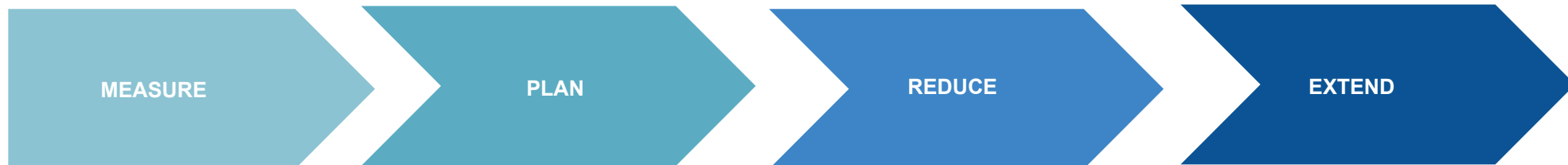
Behaviour changes	Educate and internalise the policy of: Reduce, Reuse, Recycling in that order.
	Conduct a waste audit annually. This process helps reveal where waste at your work site is coming from. Waste audits can be a great way to engage your staff members in a learning journey.
	Work to eliminate any single use plastics sold or used on site at your workplace. Sometimes plastics are unavoidable. If you have to use plastics, prioritise plastics grade 1 & 2 that can be recycled in NZ. Ensure that you have best practice bin stations that inform your staff how to treat these plastics – (ensure they are empty and rinsed).

Policy Changes	Set a waste reduction target at your workplace. Establish a green team to oversee the ongoing commitment to reaching these targets.
	To reduce waste brought into your organisation, establish a responsible procurement policy. This may include best practice and ethical purchases of all items/materials: e.g. paper, cafeteria items, refurbished electronics.
	When manufacturing products, adopt the principles of product stewardship/ circular economy and only create responsible products that can be 100% reused or recycled, as high value products in NZ as a priority). This may mean thinking about / changing the packaging you use for your products.
Infrastructure changes	Introduce a full recycling system (including compost) and make sure your workforce are educated on what goes where.

Further Emissions Reductions guidance

- [Climate Action Toolbox](#)
- [EECA](#)
- [Gen Less](#)
- [UNFCCC Fashion Industry Charter for Climate Action - playbook](#)
- [Science Based Targets Institute, sector guidance - Apparel](#)
- [Sustainable Apparel Coalition - Decarbonisation Guide](#)
- [WRI and All - Roadmap to Net Zero](#) (apparel)

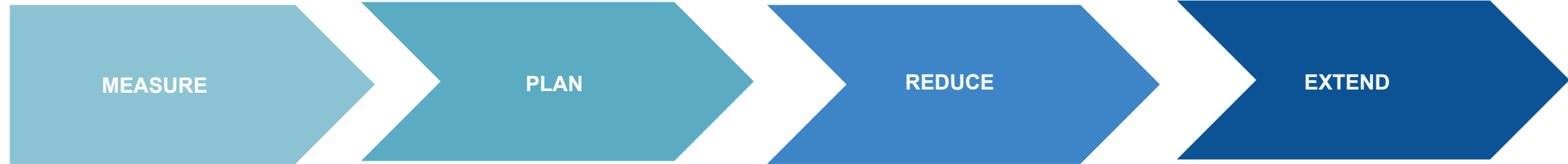
CLIMATE ACTION ROADMAP FOR BUSINESS



AMBITION	YEAR 1 (3-6 months)	YEAR 1 (6-12 months)	YEAR 1-2 (6-24 months)	YEAR 2+ (24 months>)
BEGINNING	- Educate and upskill key staff - Access tools and resources	- Identify hotspots, areas within organisational control and/or ability to influence - Engage and educate teams	- Take identified actions to decarbonise scope 1, 2 & 3 - Collaborate with suppliers/partners to accelerate progress	- Continue to measure and track progress annually - Show continuous improvement
PROGRESSING	Collect activity data	- Develop reduction strategies - Set goals/targets, make plan	- Start to understand value chain emissions & climate risks - Identify areas of influence / control. - Initiate value chain reduction activities	- Deepen Scope 3 reduction activities - Engage suppliers
ADVANCING	- Calculate baseline emissions - Understand and analyse emissions profile.	- Establish data collection and management systems for subsequent measurement - Activate reduction plan - Further educate teams & suppliers	- Measure Y2 emissions - Track progress against goals - Share learnings internally and externally - Educate customers & stakeholders	- Establish partnerships to meet common needs - Develop and implement projects

CLIMATE ACTION ROADMAP FOR BUSINESS

Mindful Fashion New Zealand



AMBITION	YEAR 1 (3-6 months)	YEAR 1 (6-12 months)	YEAR 1-2 (6-24 months)	YEAR 2+ (24 months>)
BEGINNING				
PROGRESSING				
ADVANCING				