



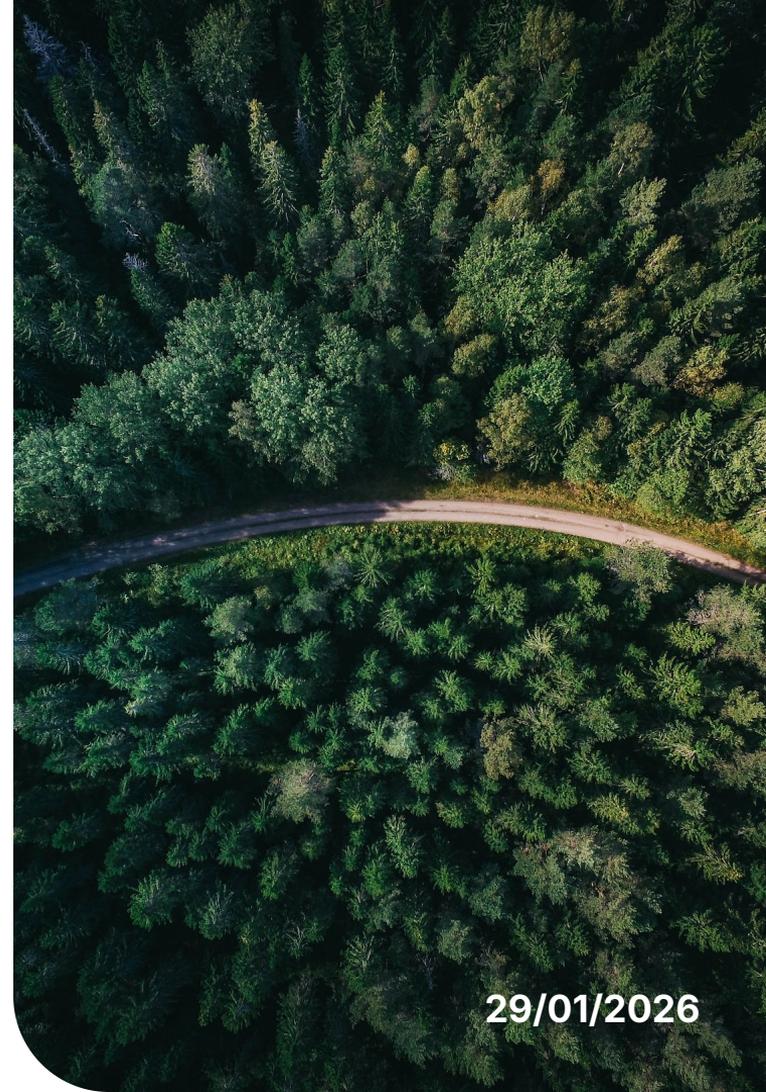
**PENTAX**  
MEDICAL

Year 2024

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# GHG emissions report

## PENTAX Medical



29/01/2026

# Foreword

Congratulations on pursuing your climate journey. Greenly is proud to contribute to PENTAX Medical's climate strategy, and support you on a path towards Net Zero.

This report synthesizes the results of your greenhouse gas (GHG) emissions assessment. It is a first step toward identifying reduction actions and helping you plan for the energy transition.

While offering some benchmarks to compare with other companies, a GHG emissions assessment is mainly used to identify ways to improve your global impact and to help you define a reduction trajectory. Achieving your decarbonization targets involves engaging your ecosystem of employees, customers and suppliers who will need to align with your new targets.

The evaluation of your emissions is in line with carbon accounting international standards as standardized by the GHG Protocol.

We are happy to support you on your journey. The entire Greenly team would like to thank you for your outstanding commitment.



**Alexis Normand**  
CEO of Greenly

A handwritten signature in black ink, appearing to read 'Alexis Normand', positioned below the printed name and title.

# Overview

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## Introduction

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- GHG emissions assessment parameters
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## Emissions report

- Results by scope
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- Estimated costs
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## Conclusion – What's next?

- Summary of reduction actions
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## About Greenly

- Our vision & team

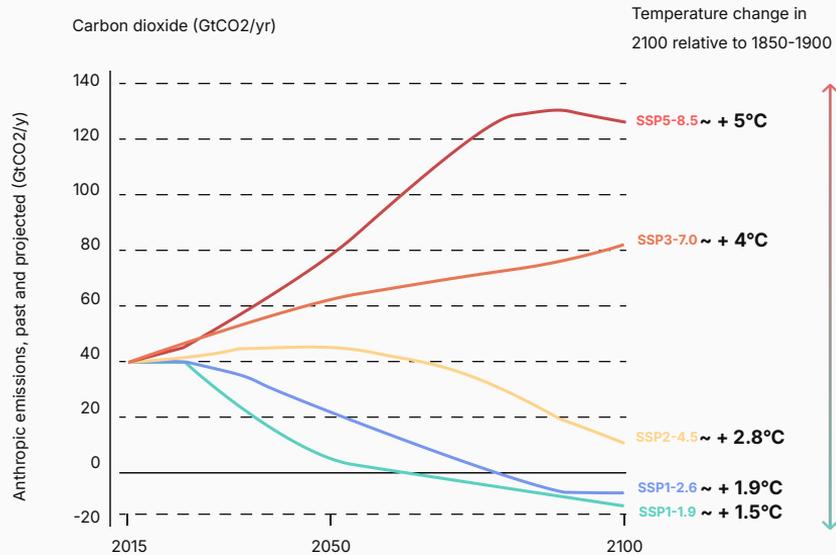
6

## Appendix

- Scope 1-2 details
- Scope 3 details

# Why care about the energy transition

Regardless of our management of the environmental crisis, organizations and individuals are heading towards major upheavals that will affect entire ecosystems.



Source: Carbone 4

## Two types of disruptions

 Physical risks and constraints

 Transition risks and opportunities

## Impacted sectors

 Production

 Supply chain

 Market

 Infrastructure

 HR

 Legislation

# Physical risks...

## Definition

Risks related to exposure to the physical consequences of global warming



Average temperature increase and more extreme fluctuation



Intensification of extreme weather events (rain, heat waves/droughts, etc.)



Sea level rise



Scarcity of resources (especially energy), food and water insecurity



Biodiversity collapse

## What are the consequences if I don't commit?

- 1 Deterioration of infrastructure, value chain losses
- 2 Direct economic consequences
- 3 Low resilience to future events and physical constraints (e.g. natural disaster)
- 4 Dependence on an increasingly fragile supply chain (availability and cost of resources, flexibility, fluctuation of fossil fuels)
- 5 Disruptions in living conditions (housing, food, health, transport, etc.)

# Transition risks (and opportunities)

## Definition

Risks related to the transition to a low-carbon economy



Regulatory developments and mitigation policies



Markets and sectors migrating towards promoting low-carbon value creation:  
Opportunities to seize  
Associated market risks



Growing stakeholder demands on environmental commitments



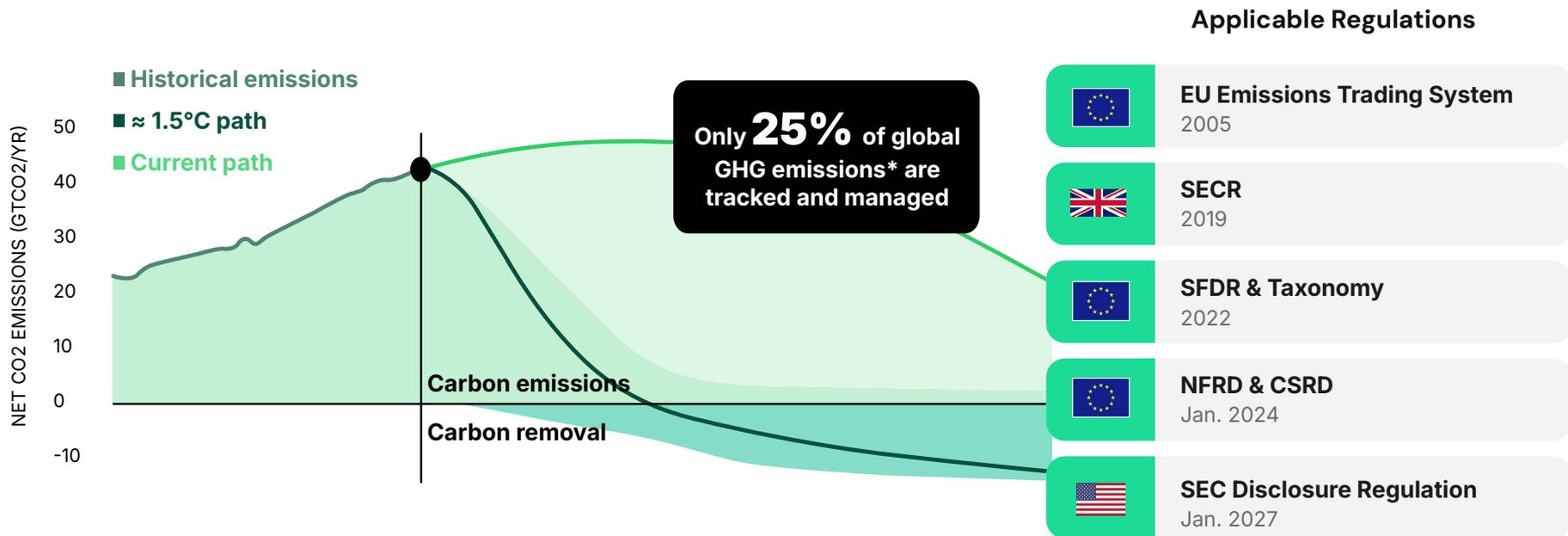
Shifting employee mindsets and expectations regarding the environmental reputation of their employer

## What are the opportunities if I commit?

- 1 Optimization of flows and costs
- 2 More sustainable business activity and corporate strategy
- 3 Increased competitiveness within my ecosystem
- 4 Resilience and autonomy of activities in the face of the new socio-economic paradigm
- 5 Lower exposure to legal and financial constraints and sanctions

# It is critical to set a course for Net Zero

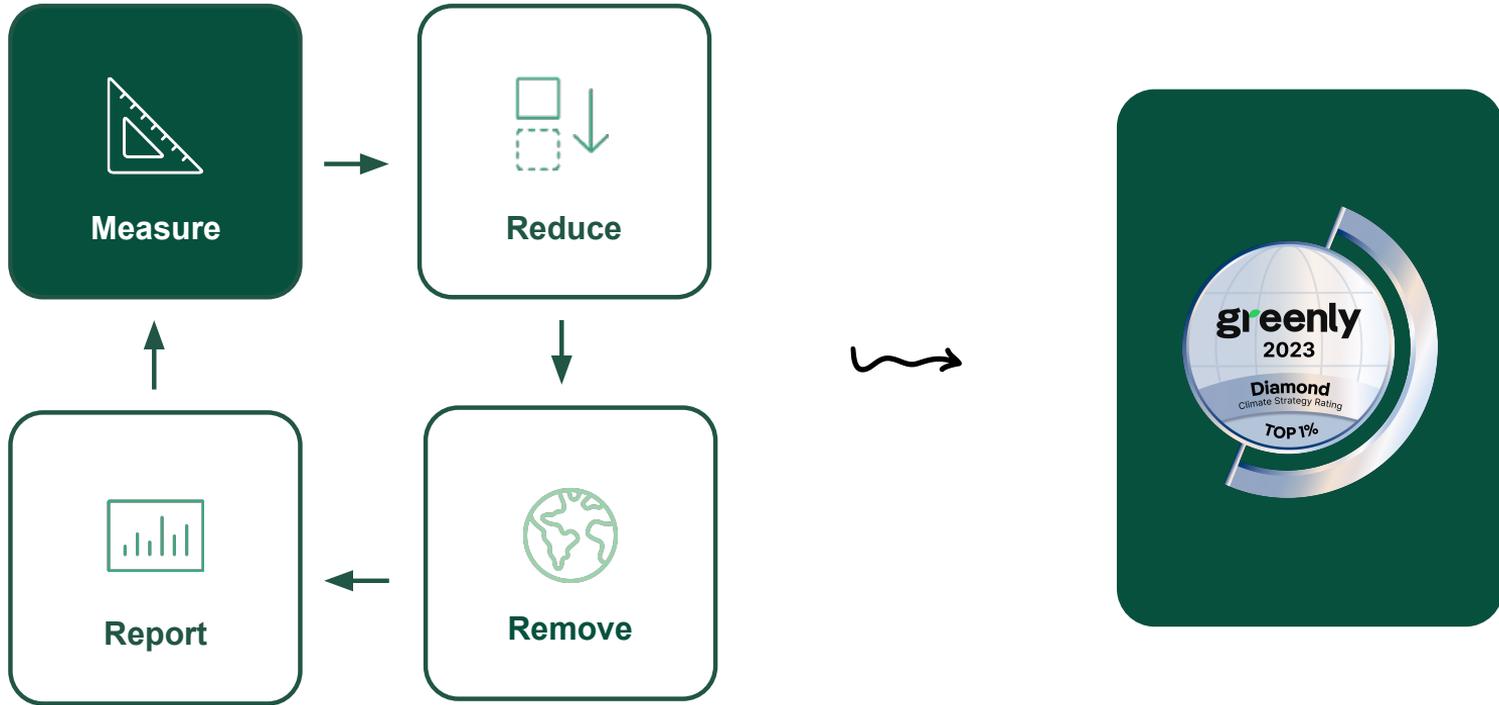
REACHING PLANETARY DECARBONIZATION GOALS IMPLIES THAT ALL BUSINESSES TRACK THEIR EMISSIONS, REGULATIONS ARE KICKING IN



Source: \*Carbon Pricing Leadership Report

# Solving the Climate Equation

MEASURING EMISSIONS IS THE FIRST STEP TO SETTING A PATH TOWARDS NET ZERO



# Carbon accounting methodology

## Scope 1 | Direct emissions

GHG emissions generated directly by the organization and its activities.

**Examples:** combustion of fossil fuels, refrigerant leaks, etc.

## Scope 2 | Indirect emissions related to energy consumption

Emissions related to the organization's consumption of electricity, heat or steam.

**Example:** electricity consumption, etc.

## Scope 3 | Other indirect emissions

Emissions related to the organization's upstream and downstream operations and activities

**Example:** transportation, purchased goods and services, sold products, etc.



# How are emissions computed?

ANALYZING EMISSIONS, AUTOMATING TRACKING

**Activity metrics x Emissions factors = CO2 Eq. Emissions**

<p><b>Expense based</b></p> <p>↑</p> <p>Increasing Accuracy*</p> <p>↓</p> <p><b>Activity based</b></p>	 <p><b>Total Expense</b> 80€</p>	<p>1.75 kgCO<sub>2</sub>e/€</p>	<p>140 kgCO<sub>2</sub>e</p>
	 <p><b>Total Distance</b> 600 km</p>	<p>0.2 kgCO<sub>2</sub>e/km</p>	<p>120 kgCO<sub>2</sub>e</p>
	 <p><b>Total Fuel</b> 40 liters</p>	<p>2.8 kgCO<sub>2</sub>e/liters</p>	<p>112 kgCO<sub>2</sub>e</p>

\*depending on the availability of data

11% of your emissions of 2024 are calculated using activity data

## Emission Factor Sources



eurostat



Fraunhofer



JOINT RESEARCH CENTRE

European Commission



Department for Business, Energy & Industrial Strategy

# | GHG emissions assessment scopes

## Entity

PENTAX Medical

From April 2024 to March 2025

-

## Primary data

Accounting data

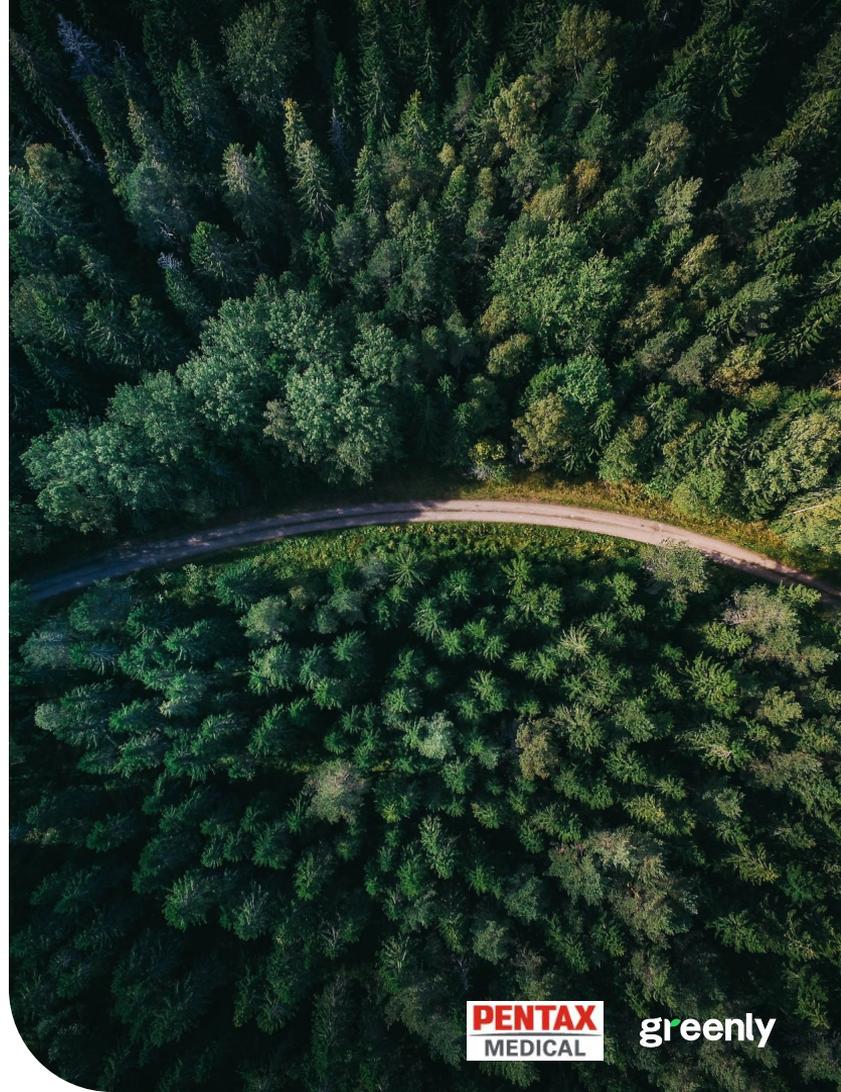
Buildings data

Activity data from the following modules: Business travel and vehicle fuel consumption, End-of-life of sold products | GHG P, Freight, IT Inventory, Products, Raw Materials & Packaging Inventory, Processing of sold products | GHG P, Vehicle Fleet, Waste , Water Consumption

## Methodology

Official and approved GHG Protocol methodology; GWP 100

*Emissions generated in and outside the country of operation are accounted for. The methodological details of the calculation of each carbon footprint source are available on the Greenly platform.*



# General overview

KEY RESULTS - 2024

Absolute

**116k**  
tCO<sub>2</sub>e



Per employee

**58**  
tCO<sub>2</sub>e

*Employee number : 2k*



Per revenue (M)

**239**  
tCO<sub>2</sub>e

*Revenue : 485M€*



This report summarizes the results of PENTAX Medical's 2024 GHG emissions assessment based on the information collected and subject to its completeness, correct categorization and validation.

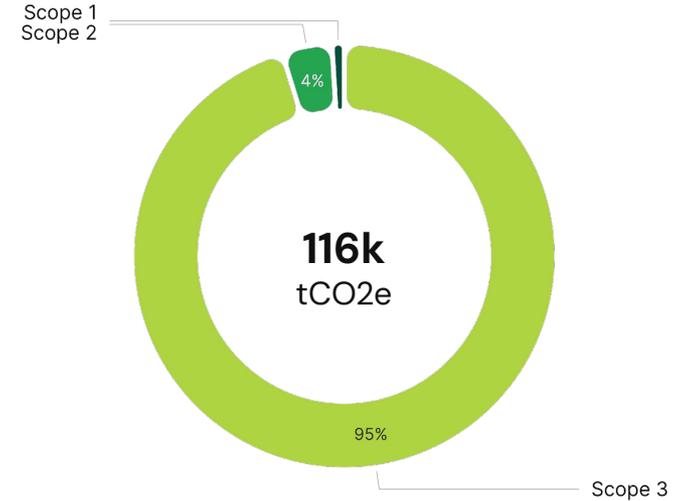


# Emissions Report

# General overview

BREAKDOWN BY SCOPE - 2024

	Scope 1	Scope 2	Scope 3
Absolute tCO <sub>2</sub> e	1.1k	4.4k	110k
Employee tCO <sub>2</sub> e/employee	0.5	2.2	55
Revenue tCO <sub>2</sub> e/M€	2.2	9.1	227

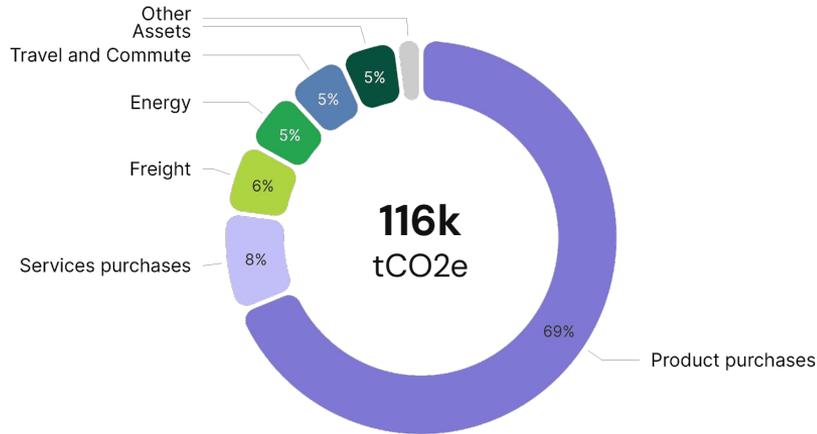


Results subject to the correct categorization and validation of expenses of PENTAX Medical.

# General overview

## GROUP – RESULTS BY ACTIVITY

### Total emissions of PENTAX Medical, by activity (% tCO<sub>2</sub>e)



### Is equivalent to:



The amount of CO<sub>2</sub> sequestered annually by 11k hectares of growing forest\*



The annual emissions of 9.4k Japanese\*



35k Tokyo - New York round trips\*

	Absolute tCO <sub>2</sub> e	Per employee tCO <sub>2</sub> e/employee
Product purchases	80k	40
Services purchases	9.6k	4.8
Freight	6.8k	3.4
Energy	5.9k	2.9
Travel and Commute	5.8k	2.9
Assets	5.5k	2.8
Others**	2.4k	1.2

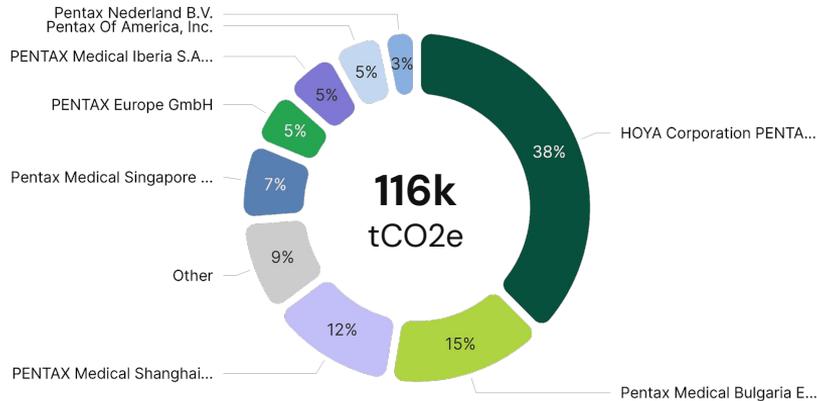
\*Sources: Labos1Point5, ExioBase, French National Forests Office

\*\*Activities and events, Digital, Waste, Food and drinks

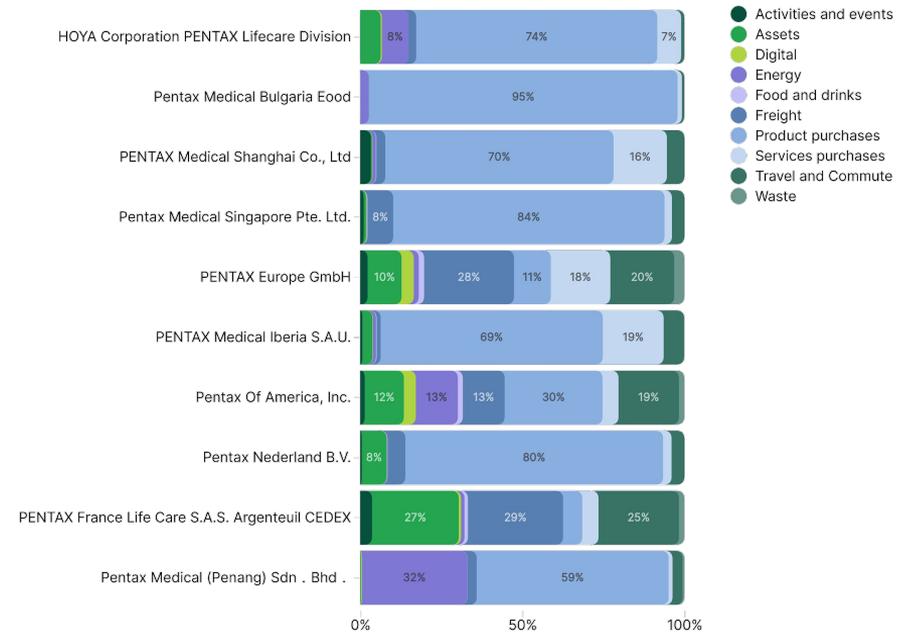
# General overview

## ENTITY - RESULTS BY ACTIVITY

### Emissions per entity (% tCO<sub>2</sub>e)



### Breakdown by activity, by entity (% tCO<sub>2</sub>e)



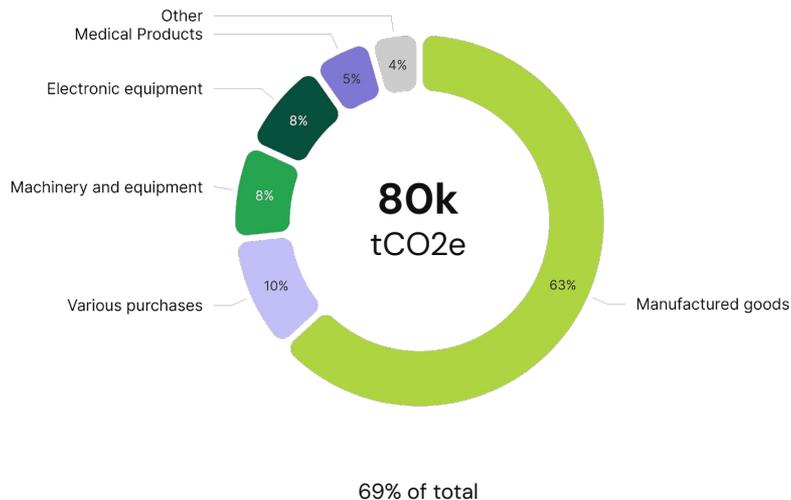
Only top 10 most emissive companies are displayed, please visit your Greenly platform for additional details.

# Focus on Product purchases

**Activity data**  
560 tCO<sub>2</sub>e (1%)

**Expense data**  
79k tCO<sub>2</sub>e (99%)

## Product purchases emissions by category (% tCO<sub>2</sub>e)



### What is included in this category?

CO<sub>2</sub> emissions from purchased products, covering raw material extraction and manufacturing. Excludes transport and end-of-life emissions.



### How to reduce the impact of this category?

You can adopt the following measures:

- Import aluminium from low carbon countries
- Make your customers aware of the impact of your purchases
- Make your customers aware of the impact of your purchases

See additional best practices in the action plans section

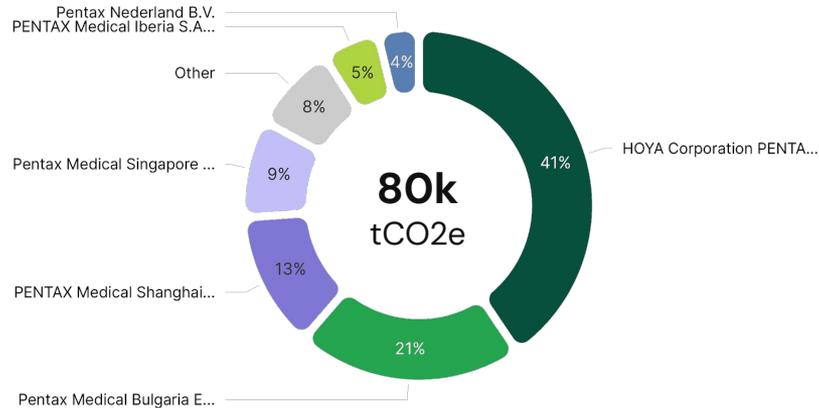
## Methodology

1. Emissions calculated using activity and expense data, by multiplying a quantity by an emission factor.
2. The emission factors used for this category come from the following databases: Base Empreinte Ademe 23.4, Base Empreinte Ademe 23.5, Base Carbone Ademe 22.0, Base Empreinte Ademe 23.6, Base Empreinte Ademe 23.7, Company Report 1.0, Ecoinvent 3.7.1, Exiobase 3.8.2, Greenly 23.5, Greenly 1.0
3. Details of the methodology used to calculate each carbon footprint source are available on the Greenly platform.

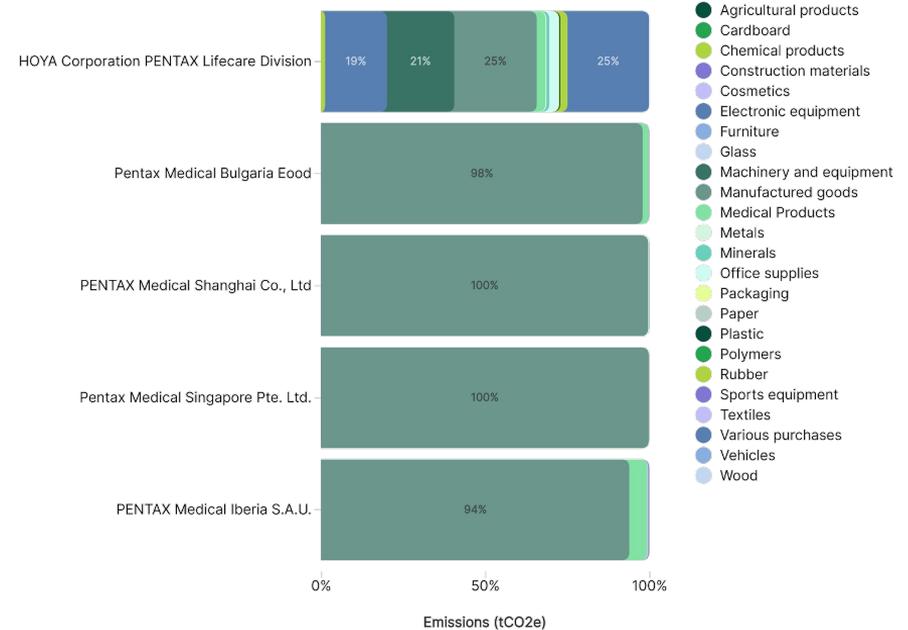
# Focus on Product purchases

## EMISSIONS PER ENTITY

### Emissions per entity (% tCO<sub>2</sub>e)



### Breakdown by activity, by entity (% tCO<sub>2</sub>e)



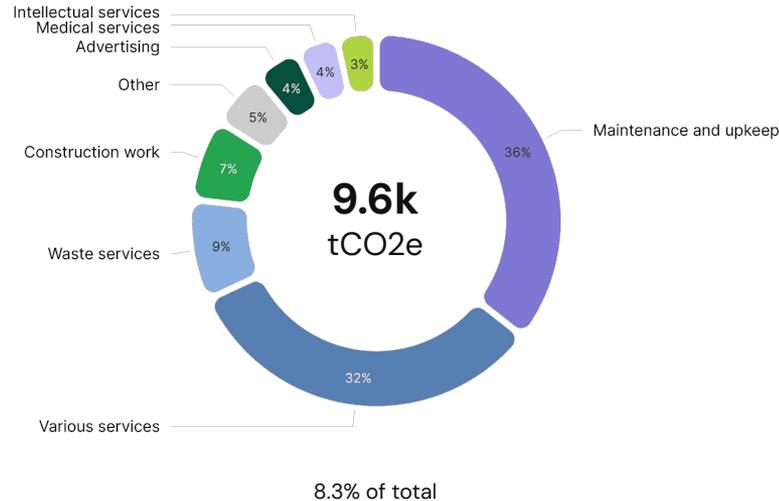
Only top 5 most emissive companies are displayed, please visit your Greenly platform for additional details.

# Focus on Services purchases

**Activity data**  
0 tCO2e (0%)

**Expense data**  
9.6k tCO2e (100%)

## Services purchases emissions by category (% tCO2e)



### What is included in this category?

CO2 emissions from service purchases, covering professional services. Primarily from upstream energy/material use and energy consumed during service provision.



### How to reduce the impact of this category?

You can adopt the following measures:

- Improve your advertisement targeting
  - Implement carbon impact conditions in your purchase policy
  - Implement carbon impact conditions in your purchase policy
- See additional best practices in the action plans section

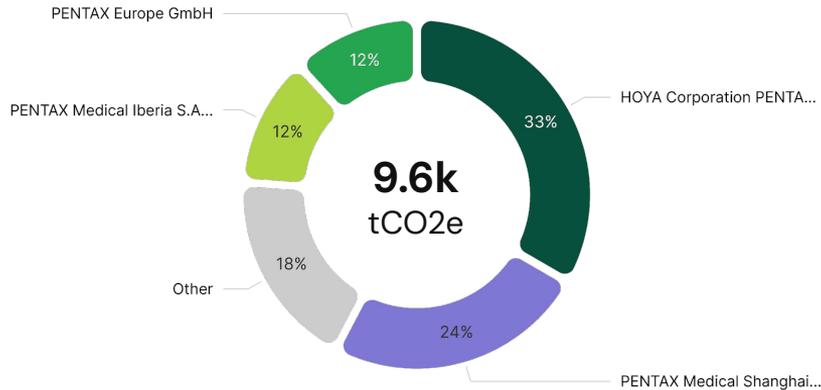
## Methodology

1. Emissions calculated using expense data, by multiplying a quantity by an emission factor.
2. The emission factors used for this category come from the following databases: Base Empreinte Ademe 23.5, Company Report 1.0, Exiobase 3.8.2, Greenly 1.0
3. Details of the methodology used to calculate each carbon footprint source are available on the Greenly platform.

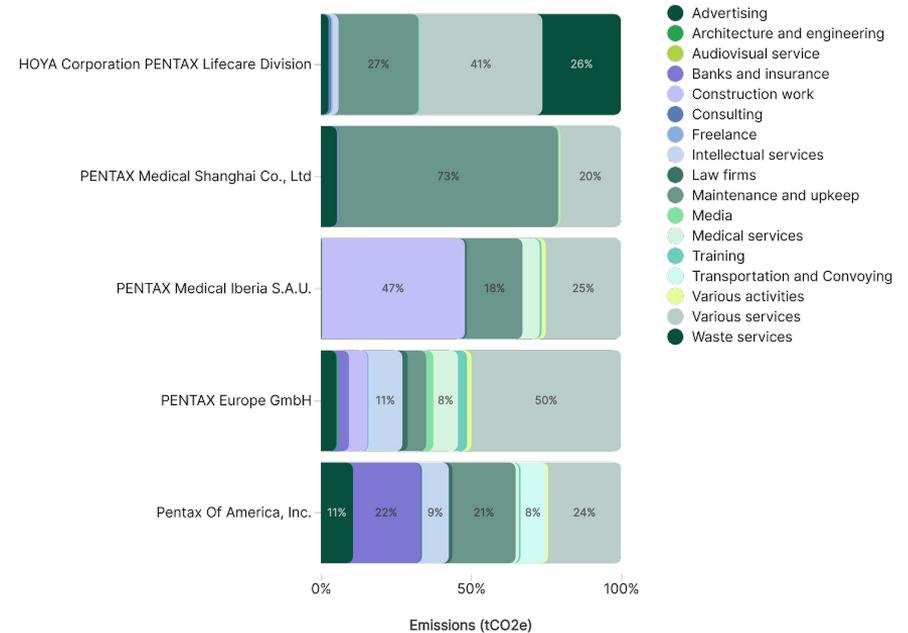
# Focus on Services purchases

## EMISSIONS PER ENTITY

### Emissions per entity (% tCO2e)



### Breakdown by activity, by entity (% tCO2e)

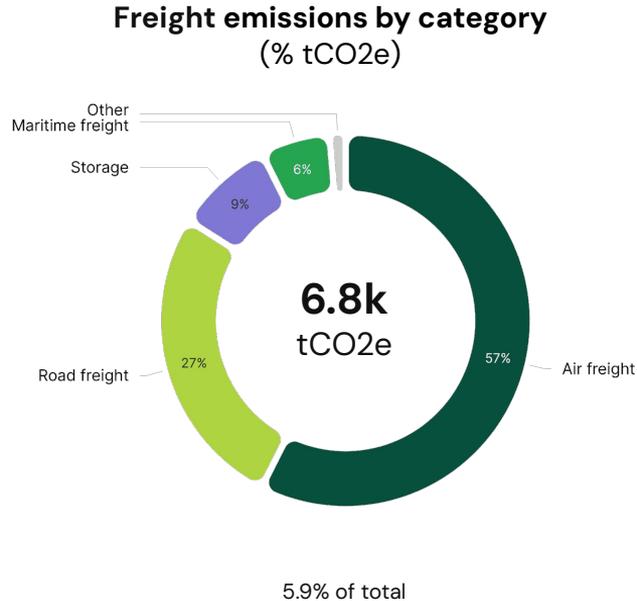


Only top 5 most emissive companies are displayed, please visit your Greenly platform for additional details.

# Focus on Freight

**Activity data**  
2.3k tCO<sub>2</sub>e (33%)

**Expense data**  
4.6k tCO<sub>2</sub>e (67%)



## What is included in this category?

CO<sub>2</sub> emissions from freight transport, covering shipping, trucking, rail, and air cargo. Includes emissions from fuel combustion and production.



## How to reduce the impact of this category?

You can adopt the following measures:

- Use of non-road modes of transport – Rail freight
- Replace air freight with sea freight
- Replace air freight with sea freight

See additional best practices in the action plans section

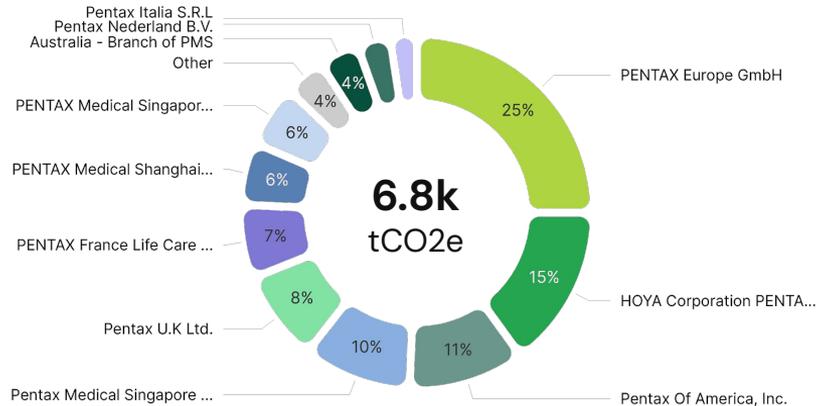
## Methodology

1. Emissions calculated using activity and expense data, by multiplying a quantity by an emission factor.
2. The emission factors used for this category come from the following databases: Base Empreinte Ademe 23.5, Company Report 1.0, Exiobase 3.8.2, Greenly 1.0, UK GHG Conversion Factor 2025
3. Details of the methodology used to calculate each carbon footprint source are available on the Greenly platform.

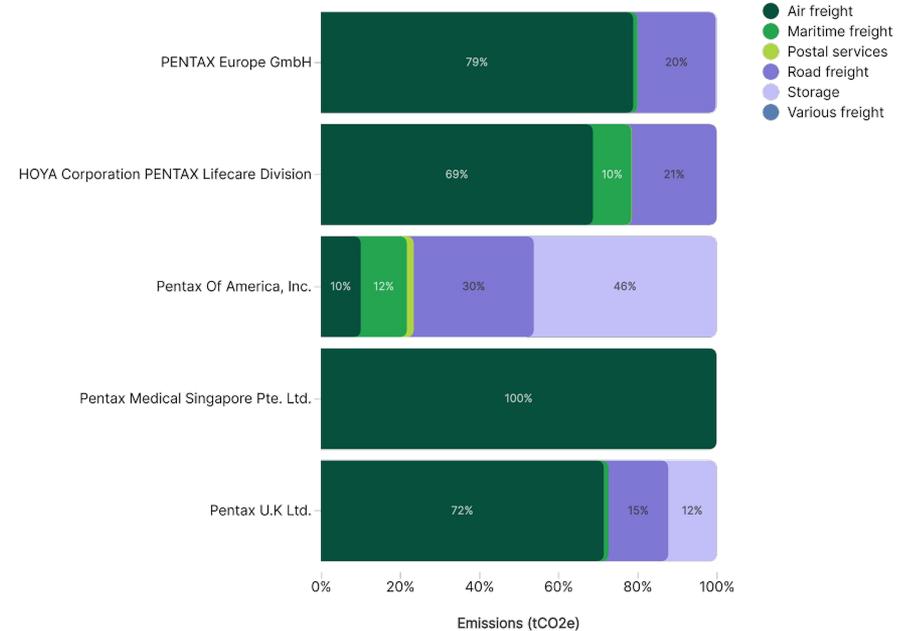
# Focus on Freight

## EMISSIONS PER ENTITY

Emissions per entity (% tCO<sub>2</sub>e)



Breakdown by activity, by entity (% tCO<sub>2</sub>e)

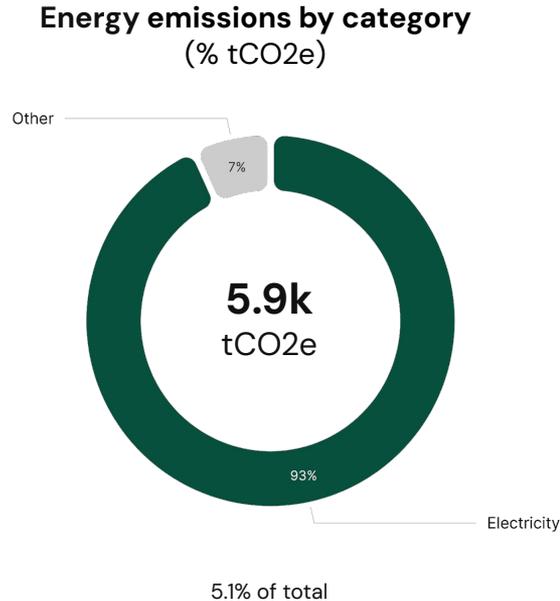


Only top 5 most emissive companies are displayed, please visit your Greenly platform for additional details.

# Focus on Energy

**Activity data**  
5.8k tCO<sub>2</sub>e (99%)

**Expense data**  
58 tCO<sub>2</sub>e (1%)



## What is included in this category?

CO<sub>2</sub> emissions from energy production and consumption, covering fossil fuels and renewables. Varies by energy source type, efficiency, and carbon intensity.



## How to reduce the impact of this category?

You can adopt the following measures:

- Turn off the lights at night
- Purchase renewable electricity
- Purchase renewable electricity

See additional best practices in the action plans section

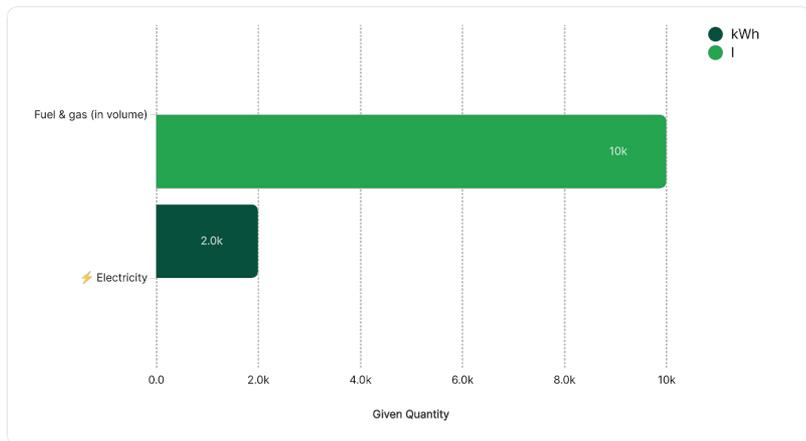
## Methodology

1. Emissions calculated using activity and expense data, by multiplying a quantity by an emission factor.
2. The emission factors used for this category come from the following databases: undefined 2024, Base Empreinte Ademe 23.6, Base Empreinte Ademe 23.7, Base Empreinte Ademe 23.8, Ecoinvent 3.11, Ecoinvent 3.12, eGRID 2023, Electricity Maps 2022, EPA GHG Emission Factor Hub 2025, Exiobase 3.8.2, Greenly 1.0, undefined 2025, IEA 2023, IEA 2024, Public Authority (e.g. IPCC) 2023, Public Authority (e.g. IPCC) 2025, Uk GHG Conversion Factor 2025
3. Details of the methodology used to calculate each carbon footprint source are available on the Greenly platform.

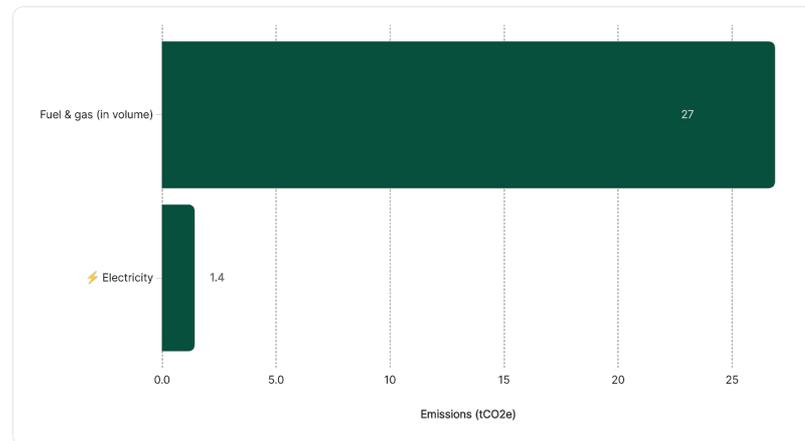
# Focus on Energy

ACTIVITY DATA ANALYSIS: PROCESSING OF SOLD PRODUCTS | GHG P

## Quantities



## Emissions



**This module covers < 0.1% of total emissions.**

This represents 28 tCO2e.

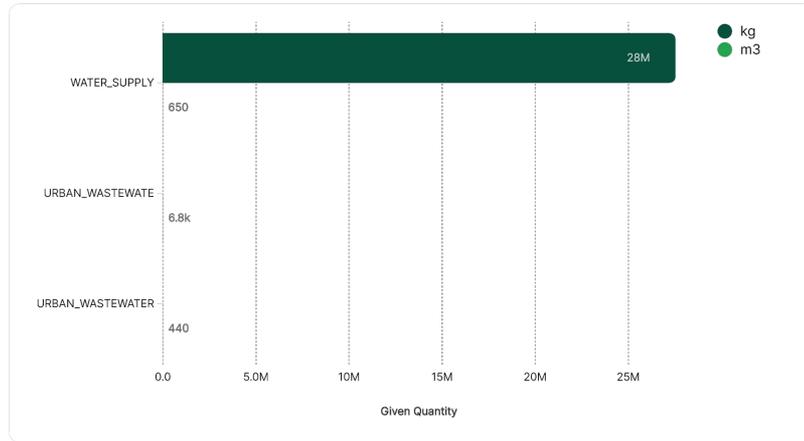
## Methodology

1. Emissions are computed by multiplying the physical data with emission factors (in kgCO2e, for instance).
2. Emission factors used for this category come from the following databases: Base Empreinte Ademe 23.7, IEA 2023
3. Data from the following entities: Pentax-Aohua Medical Technologies Co., Ltd.
4. To see more visualisations visit Greenly's platform

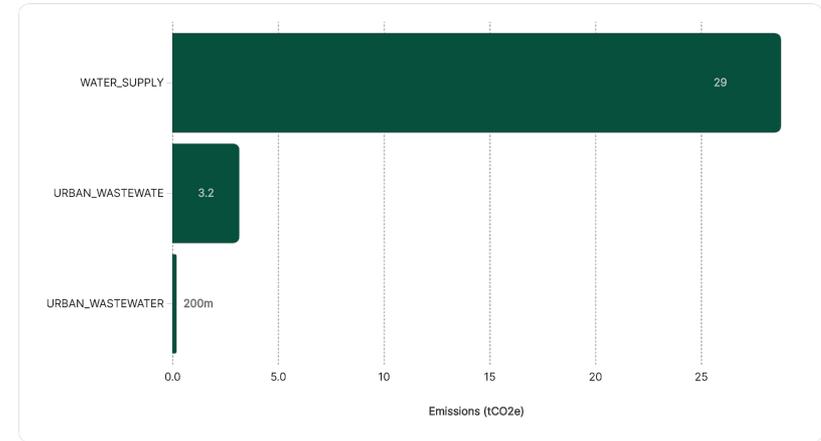
# Focus on Energy

## ACTIVITY DATA ANALYSIS: WATER CONSUMPTION

### Quantities



### Emissions



**This module covers < 0.1% of total emissions.**

This represents 32 tCO2e.

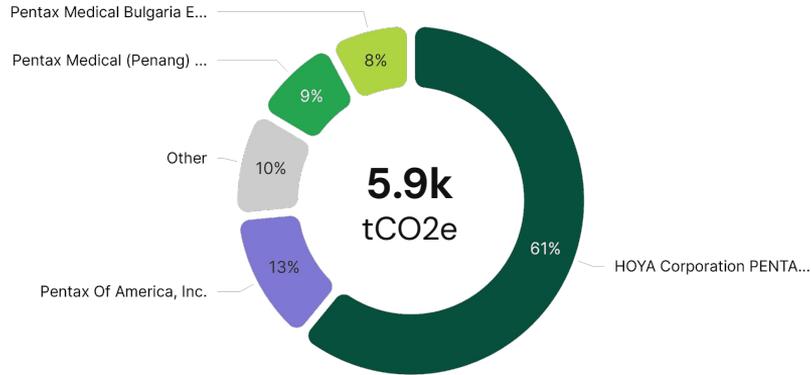
### Methodology

1. Emissions are computed by multiplying the physical data with emission factors (in kgCO2e, for instance).
2. Emission factors used for this category come from the following databases: Base Empreinte Ademe 23.8, Ecoinvent 3.11, Ecoinvent 3.12
3. Data from the following entities: Digital Endoscopy GmbH, HOYA Corporation PENTAX Lifecare Division, Pentax-Aohua Medical Technologies Co., Ltd., PENTAX Europe GmbH, PENTAX France Life Care S.A.S. Argenteuil CEDEX, Pentax Medical Bulgaria Eood, PENTAX Medical Iberia S.A.U., Pentax Medical India Private Limited, Pentax Medical (Penang) Sdn. Bhd. , PENTAX Medical Singapore Pte. Ltd. Korea Branch, Pentax Of America, Inc., Pentax U.K Ltd., PLASMABIOTICS SAS
4. To see more visualisations visit Greenly's platform

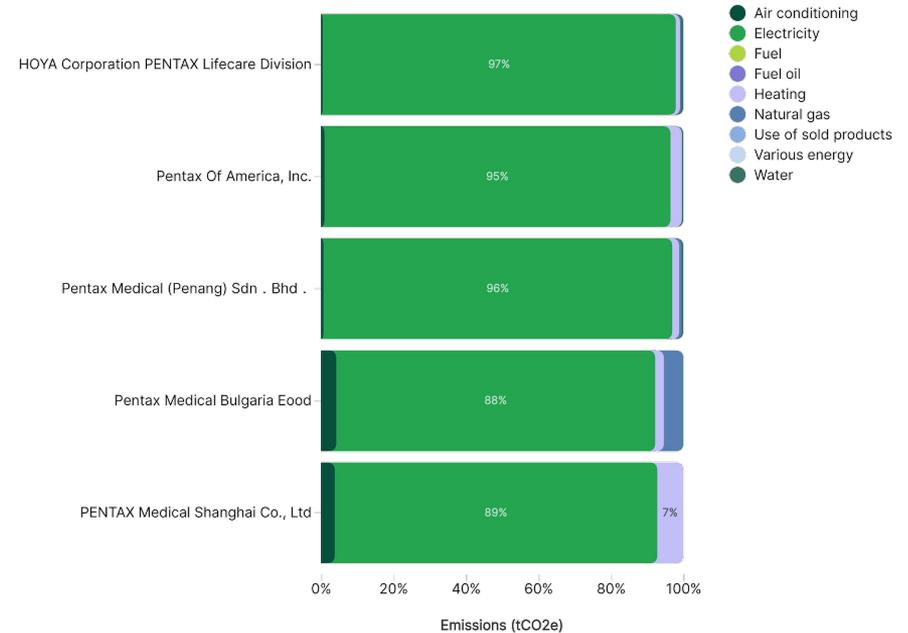
# Focus on Energy

## EMISSIONS PER ENTITY

Emissions per entity (% tCO<sub>2</sub>e)



Breakdown by activity, by entity (% tCO<sub>2</sub>e)

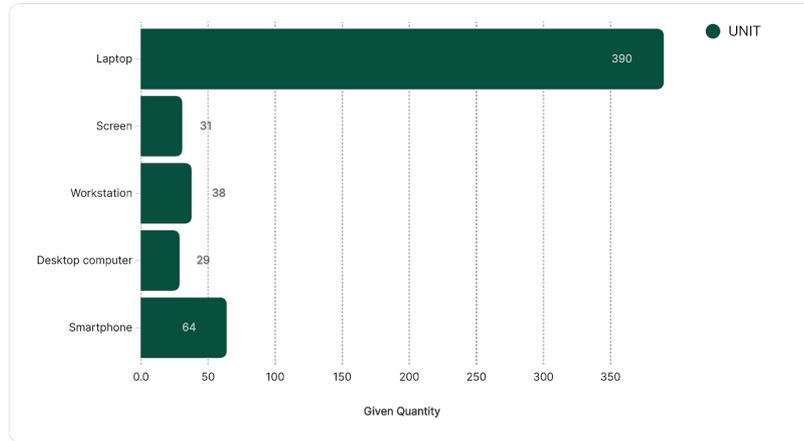


Only top 5 most emissive companies are displayed, please visit your Greenly platform for additional details.

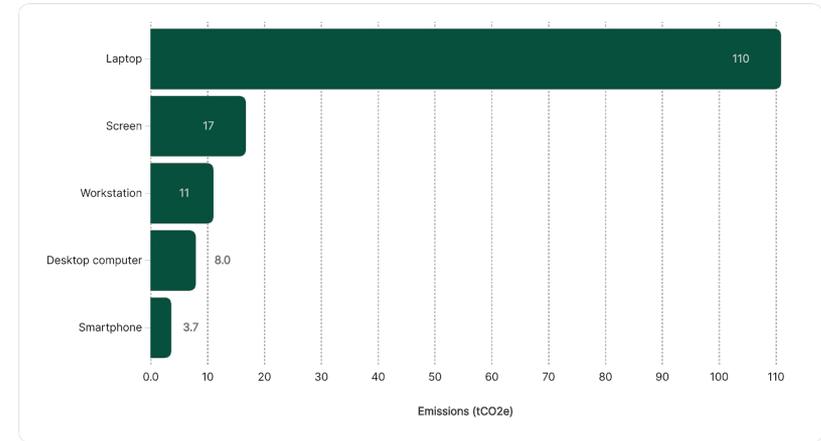
# Focus on Assets

## ACTIVITY DATA ANALYSIS: IT INVENTORY

### Quantities



### Emissions



**This module covers 0.1% of total emissions.**

**This represents 155 tCO2e.**

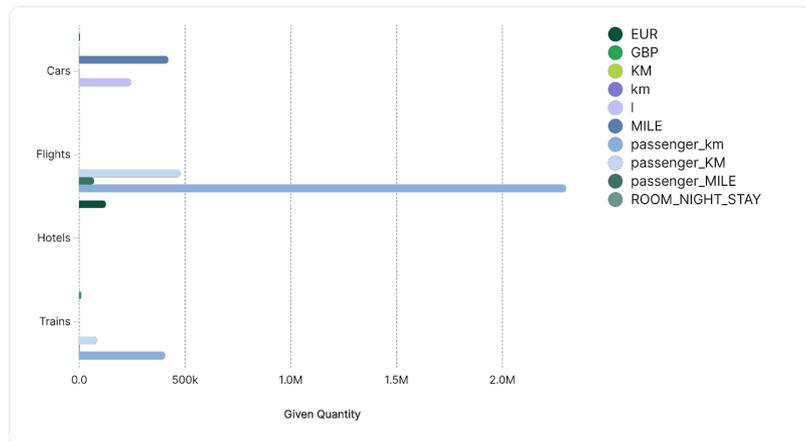
### Methodology

1. Emissions are computed by multiplying the physical data with emission factors (in kgCO2e, for instance).
2. Emission factors used for this category come from the following databases: Greenly 1.0
3. Data from the following entities: HOYA Corporation PENTAX Lifecare Division, PENTAX Europe GmbH, PENTAX France Life Care S.A.S. Argenteuil CEDEX, Pentax Italia S.R.L., Pentax Medical Bulgaria Eood, PENTAX Medical Iberia S.A.U., Pentax Medical India Private Limited, PENTAX Medical Singapore Pte. Ltd. Korea Branch, Pentax Nederland B.V., Pentax U.K Ltd.
4. Only the 5 most emissive categories are displayed. Visit Greenly's platform to view all results.

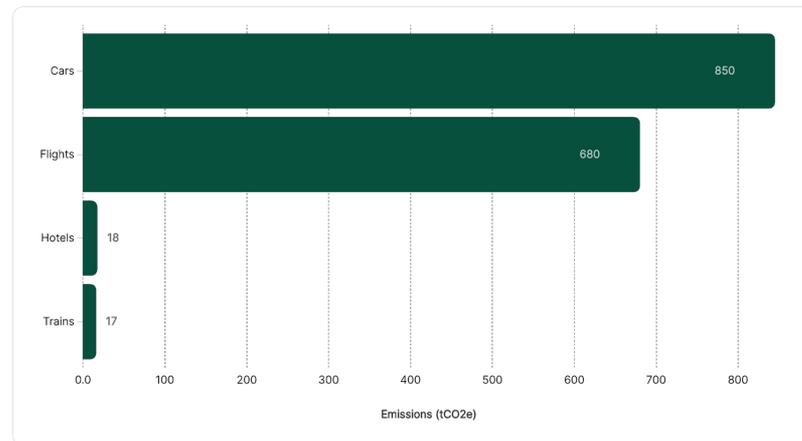
# Focus on Travel and Commute

## ACTIVITY DATA ANALYSIS: BUSINESS TRAVEL AND VEHICLE FUEL CONSUMPTION

### Quantities



### Emissions



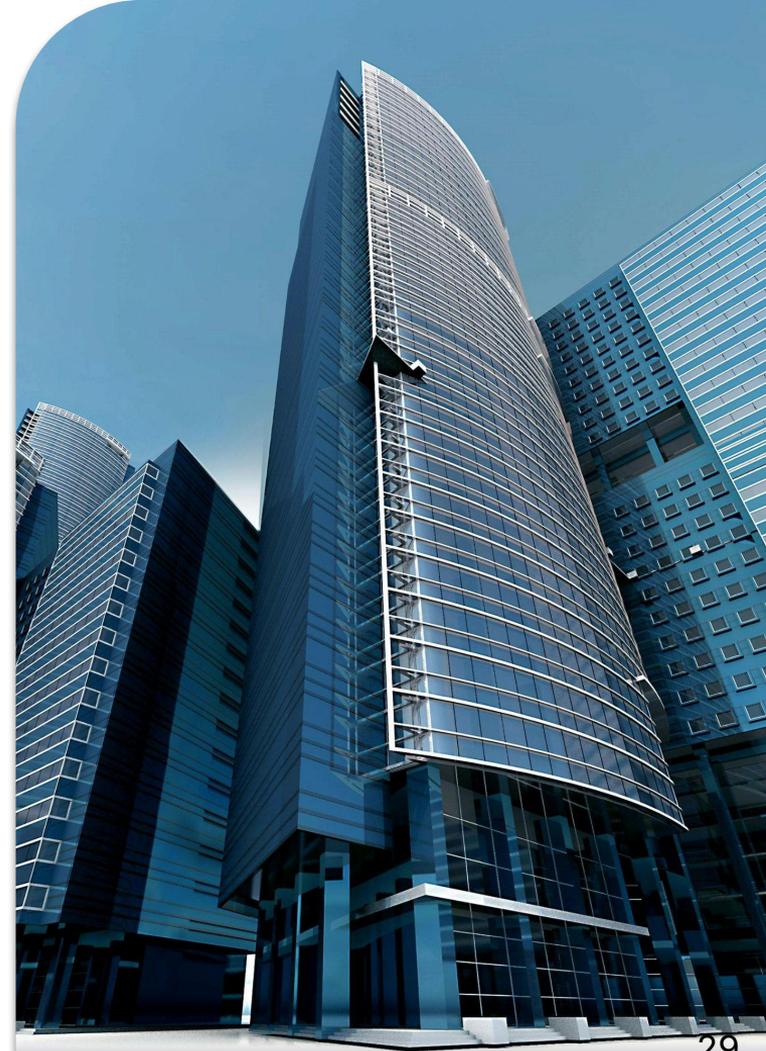
**This module covers 1.3% of total emissions.**

This represents 1.6k tCO2e.

### Methodology

1. Emissions are computed by multiplying the physical data with emission factors (in kgCO2e, for instance).
2. Emission factors used for this category come from the following databases: Base Empreinte Ademe 23.6, Base Empreinte Ademe 23.7, Cornell Hotel Sustainability Benchmarking Index 2024, Exiobase 3.8.2, Greenly 1.0, Greenly 1.0, Uk GHG Conversion Factor 2025
3. Data from the following entities: Pentax-Aohua Medical Technologies Co., Ltd., PENTAX Europe GmbH, PENTAX France Life Care S.A.S. Argenteuil CEDEX, Pentax Italia S.R.L, PENTAX Medical Canada, Inc., PENTAX Medical Iberia S.A.U., PENTAX Medical Singapore Pte. Ltd. Korea Branch, Pentax U.K Ltd.
4. To see more visualisations visit Greenly's platform

# Focus on buildings



# Focus on buildings

## ACTIVITY ANALYSIS

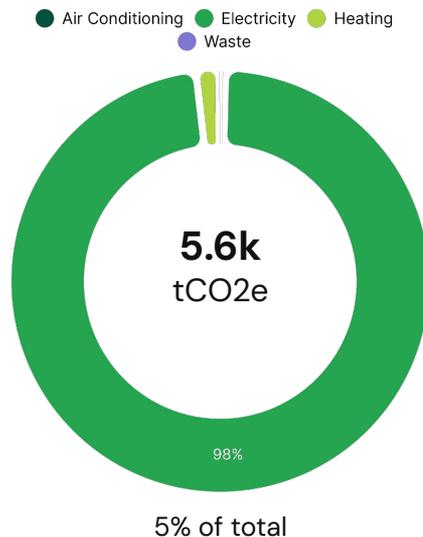
### Activity emissions

5.6k tCO<sub>2</sub>e (100%)

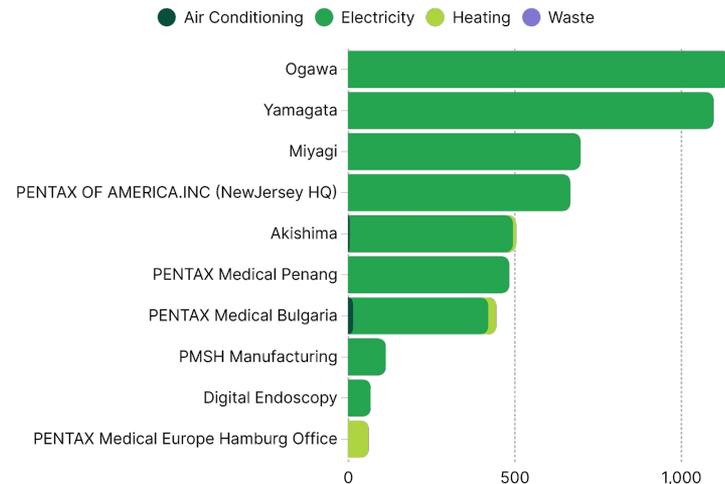
### Estimated emissions

0 tCO<sub>2</sub>e (0%)

Total emissions per category (tCO<sub>2</sub>e)



Total emissions per building (tCO<sub>2</sub>e)



Only top 10 most emissive buildings are displayed, please visit your Greenly platform for additional details.

## Methodology

1. Emissions linked to heating and energy use are calculated by multiplying (where available) the building's electricity or gas consumption by an emission factor. Failing this, an estimate is calculated on the basis of building surface area, or even the number of employees when surface area is not provided.
2. Waste-related emissions are estimated on the basis of the number of employees.
3. Air-conditioning emissions correspond to refrigerant leaks (average estimate).



# Focus on reduction actions

# Product Purchases





# Implement carbon impact conditions in your product purchase policy

## Product purchases

Procuring products and services often contributes to a significant portion of a company's emissions, with supply chains accounting for over 80% in the consumer goods sector. To effectively address this issue, incorporating eco-conditions into your company's purchasing policy is a direct and efficient approach. Consider establishing requirements like the use of recycled materials and conducting a GHG assessment to ensure quantifiable environmental impact. These measures can be applied both with existing providers and during the contract awarding process.

### Benchmark

In 2020, several companies joined forces to launch the 1.5°C Supply Chain Leaders with the Exponential Roadmap initiative. It involves management commitment to work with suppliers to halve their GHG emissions before 2030, establishing public targets, and supply chain GHG mapping and prioritization.

Livent emphasizes the monitoring and reduction of GHG emissions by its suppliers. As part of the pre-qualification process, Livent assesses suppliers' willingness and ability to meet their requirements through a questionnaire, and reviews answers periodically to ensure adherence.

### Estimated Impact

Increased visibility into the carbon footprint of your suppliers and the ability to implement diverse eco-conditions within your purchasing policy can yield a significant impact on your scope 3 emissions in the long run.

Can serve as a catalyst to encourage other industries to embark on decarbonization efforts.

### Estimated Cost

Variable depending on the resulting changes in the supply chain.

### Recommended Service Providers

Greenly sustainable procurement module automates this process.

### Implementation

- 1** ESTABLISH and start monitoring your KPIs (ex. percentage of suppliers that have completed a carbon footprint assessment, percentage of suppliers with a roadmap aligned to the goals of the Paris Agreement for 2030, ex. SBTi certification, etc)
- 2** Based on your goals and KPIs, IDENTIFY the eco-conditions you want to implement in your purchase policy. Clearly define them, ensuring they are specific, measurable, attainable, relevant, and time-bound (SMART).
- 3** SUPPORT and recognize suppliers' efforts. If possible, provide them tools, trainings, and resources to help them achieve the objectives. Follow and report suppliers' progress.



# Reduce the weight of your packaging

## Product purchases

*Reducing the weight of your packaging will have a relevant impact on your emissions. Not only the use of raw materials will be reduced, but it will also reduce waste and freight-related emissions. The goal is to aim for minimalism while preserving the packaging's functionality.*

### Benchmark

Seventh Generation, a company specializing in eco-friendly household and personal care products, has prioritized lightweight packaging. They have made efforts to reduce the weight of their packaging materials while maintaining product integrity, resulting in lower carbon emissions.

Lush is a cosmetics company known for its commitment to sustainability. They have introduced 'naked packaging', where products like shampoo bars and solid shower gels are sold without any packaging or with minimal packaging.

### Estimated Impact

The impact of this option depends on your current packaging and its potential for weight reduction. Usually, reduction opportunities range for 5 to 20% of the total packaging's impact.

### Estimated Cost

This action typically results in cost savings as less material is purchased.

### Implementation

- 1** ASSESS the current packaging system, identify areas of inefficiency and importance, and analyze the carbon emissions associated with packaging waste.
- 2** STREAMLINE packaging to minimize weight, volume, and material usage while ensuring product protection and integrity.
- 3** INVOLVE internal and external stakeholders, raise awareness about the project's goals, and communicate the importance of sustainable packaging practices in reducing carbon emissions.

# Encourage the reuse of parts when repairing machines

## Product purchases

*Encouraging the reuse of parts when repairing your machines can greatly reduce your carbon footprint. This approach aims to maximise the use of repaired spare parts, rather than throwing them away, by reusing them in other repairs or selling them to other companies. This would reduce the greenhouse gas emissions associated with the production of new parts, while promoting a more circular and sustainable management of resources.*

### Benchmark

As a car manufacturer, Renault is committed to reusing parts when repairing its vehicles. They have set up programmes to recover and reuse spare parts.

Komatsu, a manufacturer of construction machinery and mining equipment, focuses on the reuse of spare parts. They have set up remanufacturing centres where parts are recovered, repaired and put back into circulation.

### Estimated Impact

Reusing parts when repairing machines reduces the carbon footprint by avoiding the manufacture of new parts and limiting the extraction of raw materials. This helps to reduce production-related CO2 emissions and cut the amount of waste.

### Estimated Cost

Potentially reduce costs compared to purchasing new parts. Re-used parts can often be cheaper, which can lead to significant savings on machine repair and maintenance costs.

### Implementation

- 1 IDENTIFY machines requiring frequent repairs. Analyse the spare parts available and their potential for re-use.
- 2 SET UP recovery and sorting processes. Create procedures for recovering and storing reusable spare parts.
- 3 INTEGRATE the reuse of parts into repair practices: Raise awareness and train staff.



# Make your customers aware of the impact of your purchases

## Product purchases

*The emissions linked to your purchases of products for resale are directly linked to your customers' demand. By highlighting items with a low carbon footprint, you can help your customers to choose the product with the lowest carbon footprint from two products with similar characteristics. To communicate effectively with your customers, you can use carbon scores or labels.*

### Benchmark

Mano Mano has set up a Carbon Score with Greenly, which was launched in April 2023. This is a major project in the DIY sector, covering products for both consumers and professionals.

The aim of this tool is to make it easier for customers to understand the carbon footprint of products.

### Estimated Impact

The effectiveness of the impact will be contingent upon the disparity in emissions between the products available and their lower-emission alternatives. Several factors come into play, influencing the magnitude of this impact. These factors include the target audience - how receptive they are to environmentally conscious choices, the price of the products in question - where higher prices for eco-friendly options might affect consumer decisions, and the effectiveness of marketing strategies in conveying the environmental benefits of opting for lower-emission alternatives.

### Estimated Cost

The cost of this action can vary depending on various factors such as the size of your company, the communication channels you use, the scope of your awareness campaign, and the resources you devote to this initiative.

### Recommended Service Providers

Welov  
Greenly

### Implementation

- 1** COMPLETE a Life Cycle Assessment (LCA) of your products or the products you use most.
- 2** DISPLAY the results on your website or platform to raise customer awareness of the carbon impact of your products.
- 3** MONITOR the associated emissions. This will help in setting targeted emission reduction goals, and in communicating progress to stakeholders.



# Ecodesign your product by conducting comparative LCAs

## Product purchases

*The goal of ecodesign is to create products that are more environmentally friendly, energy-efficient, and resource-efficient, while still meeting functional and aesthetic requirements. This involves taking into account factors such as materials selection, energy consumption, waste generation, recyclability, and product lifespan.*

*Conducting life cycle assessments (LCAs) allows you to understand where most of the emissions come from in a product's design and avoid/reduce them while keeping up with your operational constraints.*

### Benchmark

The well-known denim and apparel company Levi's has used LCA to evaluate the environmental impact of their products. They conducted an LCA study to assess the water and energy footprint of their jeans and identified opportunities to reduce water consumption, energy use, and CO2 emissions in their manufacturing processes.

The multinational electronics company Philips has integrated LCA into their product development process. They use LCA to assess the environmental impacts of their products and identify areas for improvement. For example, they conducted LCAs for their LED light bulbs to optimize energy efficiency and reduce carbon emissions throughout the product's life cycle.

### Estimated Impact

Highly variable depending on the action implemented and the product.

### Estimated Cost

The cost of such a study highly depends on the product, its complexity, the available data, the expertise needed, and the level of detail.

It can go from a few thousand dollars to tens of thousand of dollars.

### Recommended Service Providers

Greenly can perform dynamic comparative LCAs on your products and provide specific reduction recommendations.

### Implementation

- 1** CHOOSE the products you want to assess based on the results of your GHG Assessment and your customer's sensitivity to sustainability issues.
- 2** PERFORM the LCA, and order reduction actions based on their potential impacts and their compatibility with the current product requirements and production methods.
- 3** IMPLEMENT the action and communicate to your customer the new design choices and their benefits.



# Reduce emissions from top-emitting suppliers

## CUSTOM ACTION - Product purchases

We want to target the top-emissive suppliers on the consolidated level (80% of consolidated emissions) and engage them to reduce their emissions.

### Benchmark

In 2020, several companies joined forces to launch the 1.5°C Supply Chain Leaders with the Exponential Roadmap initiative. It involves management commitment to work with suppliers to halve their GHG emissions before 2030, establishing public targets, and supply chain GHG mapping and prioritization.

Livent emphasizes the monitoring and reduction of GHG emissions by its suppliers. As part of the pre-qualification process, Livent assesses suppliers' willingness and ability to meet their requirements through a questionnaire, and reviews answers periodically to ensure adherence.

### Estimated Impact

At the time of creation, this action is only targeting the supplier "Hoya Corporation" which is contributing to 13% emissions on a group level. 77% emissions are not matched with any supplier yet. We assume a 30% emission reduction for the targeted supplier(s) by 2030.

### Estimated Cost

N/A

### Implementation

- 1** MAP your emissions by supplier during data collection for the GHG assessment.
- 2** ENGAGE suppliers from the early stage to provide insight about their decarbonization targets.
- 3** INVOLVE suppliers in discussing decarbonization options and pathways, collaborate with suppliers to design and implement decarbonization strategies, monitor the impact on emission reduction.

# Services Purchases





# Implement carbon impact conditions in your service purchase policy

## Services purchases

*Procuring products and services often contributes to a significant portion of a company's emissions, with supply chains accounting for over 80% in consumer companies. To effectively address this issue, incorporating eco-conditions criteria into your company's procurement policy offers a straightforward and efficient strategy. To ensure suppliers' climate maturity, engage them through the Greenly Feature, facilitating a comprehensive understanding of their Climate Maturity. These criteria can be implemented with current suppliers and incorporated into the supplier selection process for new contracts.*

### Benchmark

In 2020, several companies joined forces to launch the 1.5°C Supply Chain Leaders with the Exponential Roadmap initiative. It involves management commitment to work with suppliers to halve their GHG emissions before 2030, establishing public targets, and supply chain GHG mapping and prioritization.

### Estimated Impact

Increased visibility into the carbon footprint of your suppliers and the ability to implement diverse eco-conditions within your purchasing policy can yield a significant impact on your scope 3 emissions in the long run.

Can serve as a catalyst to encourage other industries to embark on decarbonization efforts.

### Estimated Cost

Variable depending on the resulting changes in the supply chain.

### Recommended Service Providers

Map the climate maturity of your Service Providers: Understand your supplier climate actions and maturity with the Greenly Procurement module

### Implementation

- 1** LAUNCH the Greenly Sustainable Survey to assess suppliers' climate maturity and align their practices with your sustainability goals
- 2** SET and TRACK KPIs with Greenly dashboards: monitor suppliers' GHG emissions, Paris Agreement 2030 alignment, and SBTi certification.
- 3** SUPPORT and recognize suppliers' efforts. Offer tools, training, and resources to help them meet goals. Track and report their progress.



# Evaluate your supplier's climate maturity

## Services Purchases

*The first step to creating a sustainable purchase strategy is engaging suppliers, which is crucial for reducing Scope 3 emissions. This addresses significant environmental impacts throughout the supply chain. By collaborating to improve supplier sustainability practices, companies can effectively lower their overall carbon footprint. Aligning with global climate goals through supplier engagement enhances corporate reputation and prepares businesses for evolving regulatory landscapes. This proactive strategy ensures comprehensive emissions reduction and promotes sustainable business practices*

### Benchmark

In 2020, several companies joined forces to launch the 1.5°C Supply Chain Leaders with the Exponential Roadmap initiative. It involves management commitment to work with suppliers to halve their GHG emissions before 2030, establishing public targets, and supply chain GHG mapping and prioritization.

### Estimated Impact

Enhancing visibility into the carbon footprint of your suppliers and integrating diverse eco-conditions into your purchasing policy can significantly reduce Scope 3 emissions over time. This approach can also serve as a catalyst, encouraging other industries to embark on their own decarbonization efforts.

### Estimated Cost

Variable depending on the resulting changes in the supply chain.

### Recommended Service Providers

Map the climate maturity of your supply chain: Understand your supplier climate actions and maturity with the Greenly Sustainable Procurement module

### Implementation

- 1** LAUNCH the Greenly Sustainable Survey to assess suppliers' climate maturity and align their practices with your sustainability goals
- 2** USE Greenly dashboards to track KPIs like supplier carbon assessments, alignment with Paris 2030 goals, and SBTi certification.
- 3** SUPPORT suppliers with tools, training, and resources. Recognize efforts and report their progress toward achieving objectives.



# Precise scope 3 emissions with supplier-specific emission factors

## Services Purchases

Enhancing GHG emission precision is crucial. By adopting supplier-specific emission factors and GHG transaction-based approaches, companies can accurately measure and reduce Scope 3 emissions. This method ensures detailed emission data, supporting informed decision-making and environmental accountability. Benefits include fostering sustainable practices, enhancing supply chain resilience, and bolstering corporate reputation. Use the Greenly tool to engage suppliers and obtain data for tailored emission factors. Precise GHG data empowers ambitious reduction targets, aligning with global climate goals, and leading in sustainability practices.

### Benchmark

Livent emphasizes the monitoring and reduction of GHG emissions by its suppliers. As part of the pre-qualification process, Livent assesses suppliers' willingness and ability to meet their requirements through a survey, and reviews answers periodically to ensure adherence.

### Estimated Impact

Enhancing visibility into the carbon footprint of your suppliers and integrating diverse eco-conditions into your purchasing policy can significantly reduce Scope 3 emissions over time. This approach can also serve as a catalyst, encouraging other industries to embark on their own decarbonization efforts.

### Estimated Cost

Variable depending on the resulting changes in the supply chain.

### Recommended Service Providers

Map the climate maturity of your Service Providers: Understand your supplier climate actions and maturity with the Greenly procurement module

### Implementation

- 1** USE Greenly's Sustainable Procurement Tool to IDENTIFY suppliers. Access our Supplier-Specific EF database for precise GHG Scope 3.
- 2** ENGAGE YOUR SUPPLIERS: If specific EFs aren't available, the tool helps request this crucial information (Exclusively for Service Providers).
- 3** VERIFICATION & AUDITABILITY: After obtaining supplier information, we conduct an audit to verify data. Approved audits integrate EF into the GHG

**Freight**





# Replace air freight with sea freight

## Freight

Sea freight, while still emitting CO<sub>2</sub>, offers a lower carbon footprint per ton of transported goods compared to air freight. This is due to the higher transportable load on ships than on cargo planes. Air freight emits 1.08 kgCO<sub>2</sub>e/t.km, whereas sea freight emits only 0.008 kgCO<sub>2</sub>/t.km.

### Benchmark

In 2018, Ikea announced its decision to replace air freight with sea freight for transporting products from suppliers to stores. The multinational consumer goods company Unilever, has replaced air freight with sea freight for certain products as part of its sustainability efforts.

### Estimated Impact

90-95% reduction, depending on the precise initial route and its sea alternatives

### Estimated Cost

Sea freight is usually cheaper than air freight. However, shipping times are significantly extended, and this must be anticipated to avoid any significant disruption in your activity.

### Recommended Service Providers

Get in touch with your current freight providers to learn about what they can offer.

### Implementation

- 1 ANALYSE your transportation needs (ex. volume, distances, frequency of deliveries, nature of the goods, required delivery times, etc.).
- 2 MAKE a benchmark of the different carriers offering the alternative of sea freight, and meeting your transport criteria.
- 3

# Use of non-road modes of transport – Sea freight

## Freight

*Improving the environmental performance of freight transport involves not only the intrinsic optimization of road transport, but also the use of other complementary modes such as rail, river and sea. Each mode of transport has its own strengths and weaknesses. Combining several of these modes can, in some cases, achieve a better balance between cost, service quality and environmental impact.*

### Benchmark

IKEA: IKEA is striving to replace road transport with rail or sea transport for its goods, with the aim of reducing transport-related CO2 emissions by 70% by 2030..

### Estimated Impact

According to ADEME's "Objectif CO2" action sheets (2020), the potential reduction through the use of maritime solutions in addition to road transport is -21%.

### Estimated Cost

Variable

### Recommended Service Providers

Consult professional associations in the transport or logistics sector in your country. They may have lists of suppliers or recommendations.

### Implementation

- 1 Analyze current modes of freight transport.
- 2 Explore non-road alternatives (rail, river, sea).
- 3 Adapt the mode of transport according to needs and environmental benefits.



# Work collaboratively with customers for better optimization

## Freight

*This action leverages strategic partnerships to enhance supply chain efficiency and reduce environmental impact. By engaging directly with clients, the action focuses on integrating CO2 emissions considerations into logistics planning and execution. This collaborative approach enables tailored optimization of transport routes and modalities, potentially leveraging data-driven insights to minimize empty runs and consolidate loads. Check relevant industry benchmarks and tools to monitor and improve the carbon efficiency of your logistics operations.*

### Benchmark

Unilever: Unilever works with its suppliers and customers to optimize the supply chain, integrating environmental concerns such as reducing CO2 emissions.

### Estimated Impact

Direct Emission Reductions:

Optimizing routes and loads can directly decrease fuel consumption, leading to a significant reduction in CO2 emissions per trip.

Indirect Benefits:

Enhanced operational efficiency may encourage more sustainable practices across the industry. Collaborative planning can also promote the adoption of greener technologies.

### Estimated Cost

Time: Significant time investment is needed from both the company and its customers to analyze current operations, develop tailored solutions, and implement changes.

Personnel: Skilled personnel must be allocated to manage the collaboration, monitor progress, and analyze data.

Technology: Implementing real-time tracking systems, AI for route optimization, and other digital tools.

### Recommended Service Providers

Consult professional associations in the transport or logistics sector in your country. They may have lists of suppliers or recommendations.

### Implementation

- 1** EVALUATE the current logistics and freight operations to identify areas for CO2 emissions reduction and efficiency improvements.
- 2** DEVELOP strategies such as shared freight services, route planning, and alternative scheduling to minimize less-than-full-load trips.
- 3** Roll out the new logistics strategies in phases to monitor their effectiveness and make necessary adjustments based on real-time data.

# Travel and Commute





# Reduce the number of people travelling on the same mission

## Travel and Commute

*Reducing the number of people involved in business travel can reduce the carbon footprint of your activities. By optimising the number of employees sent on business trips, it is possible to significantly reduce the CO2 emissions associated with travel and keep costs down. What's more, better planning can improve overall efficiency.*

### Benchmark

**Schneider Electric:** The company has reduced its business travel by encouraging virtual meetings and rationalising necessary travel. When travel is unavoidable, Schneider Electric limits the number of participants.

**SAP:** Software publisher SAP has also reviewed its travel policy, introducing measures to reduce the number of people travelling on similar assignments. SAP prioritises essential travel and makes extensive use of videoconferencing technologies for internal and external meetings.

### Estimated Impact

Having two people instead of four on the same business trip reduces the emissions linked to that trip by 50%. You can estimate the total impact of this action by assessing how much of your business travel can be optimised in this way.

### Estimated Cost

Reduction in travel costs, including tickets, accommodation and living expenses, proportional to the number of people not sent.  
50% of the costs with the impact estimate assumptions above.

### Recommended Service Providers

-

### Implementation

1

**ASSESS** all assignments requiring business travel. Identify missions where the number of participants can be reduced.

2

**DEVELOP** and apply a clear travel policy to ensure that the minimum number of people required for missions is kept to a minimum.

3

**ESTABLISH** and monitor your KPIs (e.g. percentage reduction in the number of passengers per mission) and the associated reduction in emissions.



# Renew your gas vehicle fleet with electric vehicles

## Travel and Commute

*Even though the manufacturing of an electric vehicle causes more emissions than a thermal one, in the long term, the CO2 emitted by the combustion of fuel by thermal cars are significantly greater than those from the production of electricity for the electrical car. However, this conclusion depends on the carbon intensity of the country you're located in and the usage of the vehicle. To check the carbon intensity of electricity in your country, use the website [electricity maps](#). Hybrid vehicles can be an option too, under the condition that their electric functionalities are used as much as possible in a country with a low carbon energy mix: otherwise, they can actually have higher emissions than their thermal counterparts.*

### Benchmark

UPS has been transitioning its delivery fleet to electric vehicles. The company has set a target of having 40% of its ground fleet be electric by 2025 and aims to achieve 100% alternative fuel vehicles by 2040. UPS has communicated extensively about its EV adoption plans, highlighting the environmental benefits and showcasing its EV deployments in various cities.

### Estimated Impact

In the worst case; the battery is produced in China and is powered with a very emitting energy mix. It then can reduce emissions by 20 to 30% compared to an equivalent thermal model. In the best case, the battery is produced and powered using a green energy mix; emissions reduction over the complete lifecycle can then reach up to 80%.

### Estimated Cost

Although electric cars have a higher upfront cost, their recharging costs are far lower than those of a conventional car. Throughout their complete lifecycle, their costs become similar.

### Recommended Service Providers

### Implementation

- 1 IDENTIFY the thermal vehicles that are used in a context where they can be gradually be replaced by electric vehicles.
- 2 MAKE a benchmark of the possible electrical vehicles to buy.
- 3 ROLLOUT the change progressively through your vehicle fleet, and gather feedback from end-users.



# Favor direct flights

## Travel

*Direct flights emit less carbon than flights with stopovers because they don't require the plane to take off and land multiple times.*

### Benchmark

The sustainable travel policy of the United Nations outlines sustainable travel measures for their employees, including choosing the most direct route with no stop-over and systematically choosing economy class for employees for trips of less than 9 hours.

### Estimated Impact

Reduction of emissions by roughly 10% when comparing flights with a stop-over and direct flights.

### Estimated Cost

Some indirect flights may be cheaper than their direct alternatives, but these price increases are usually offset by the reduction in total travel time.

### Implementation

- 1** DEVELOP a Sustainable Travel Policy in which you include guidelines and criteria for selecting direct flights.
- 2** PROMOTE awareness and employee engagement on the importance of sustainable travel and the rationale behind favoring direct flights.
- 3** ESTABLISH and monitor your KPIs (ex: % of flights booked as direct flights, GHG emissions per employee or per km traveled).



# Stop air travel when a 6 hours train alternative is available

## Travel

*Opting for train travel instead of air and car travel for short-distance trips (e.g., within a 6-hour train journey) can substantially reduce the carbon footprint of your business travel. Trains have significantly lower carbon emissions per passenger-kilometer compared to airplanes and cars. Apart from being environmentally friendly, train travel offers efficient boarding, minimal waiting times, spacious seating, and direct access to city centers, enhancing the overall travel experience.*

### Benchmark

Mama Loves Ya has set a goal to select train travel for 50% of its trips below 750 km by 2025 (versus 10% today). This commitment is projected to result in a 45% reduction in emissions from flights, equating to over 2t of CO2eq emissions avoided annually. Additionally, it will contribute to an 8% reduction in the company's total carbon footprint.

### Estimated Impact

Taking a train instead of a car for medium-length distances would cut your emissions by ~80%. Using a train instead of a domestic flight would reduce your emissions by ~84%. From that, you can estimate the total impact of the action plan by assessing which share of your total flight emissions would be impacted.

### Estimated Cost

Variable, train tickets may be more or less expensive than plane tickets or car travel depending on various factors.

### Recommended Service Providers

Rome2Rio  
Travel Perk  
Offres entreprise SNCF  
Suppertripper

### Implementation

- 1** CONDUCT an assessment of all existing air travel routes within your organization, identify those that have a train alternative of less than 6 hours, and evaluate the feasibility of replacing air travel with train.
- 2** DEVELOP and enforce a clear travel policy that mandates the use of train travel instead of air travel for these routes.
- 3** ESTABLISH and start monitoring your KPIs (ex. total percentage reduction in air travel, percentage reduction in air travel on eligible routes, etc.).



# Replace part of your business travel with video conferencing

## Travel

*By promoting the use of video conferencing instead of direct travel, your business travel CO2 emissions will be significantly reduced. This is the main reason why overall emissions were particularly low during the COVID period!*

### Benchmark

Microsoft has been actively promoting the use of video conferencing and reducing business travel. In a blog post, they shared that they have saved millions of dollars in travel expenses and reduced carbon emissions by using Microsoft Teams for meetings and collaborations instead of traveling to different locations.

Accenture, a global professional services company, has recognized the environmental impact of business travel and actively encourages the use of virtual meetings.

### Estimated Impact

While the costs of these meeting forms depend on many factors such as distance traveled, meeting duration, and the technologies used, we find that video conferencing takes at most 7% of the energy/carbon of an in-person meeting. Emissions are thus reduced by more than 90%.

### Estimated Cost

Given online meeting solutions are already in place for most companies, no additional cost comes from this measure.

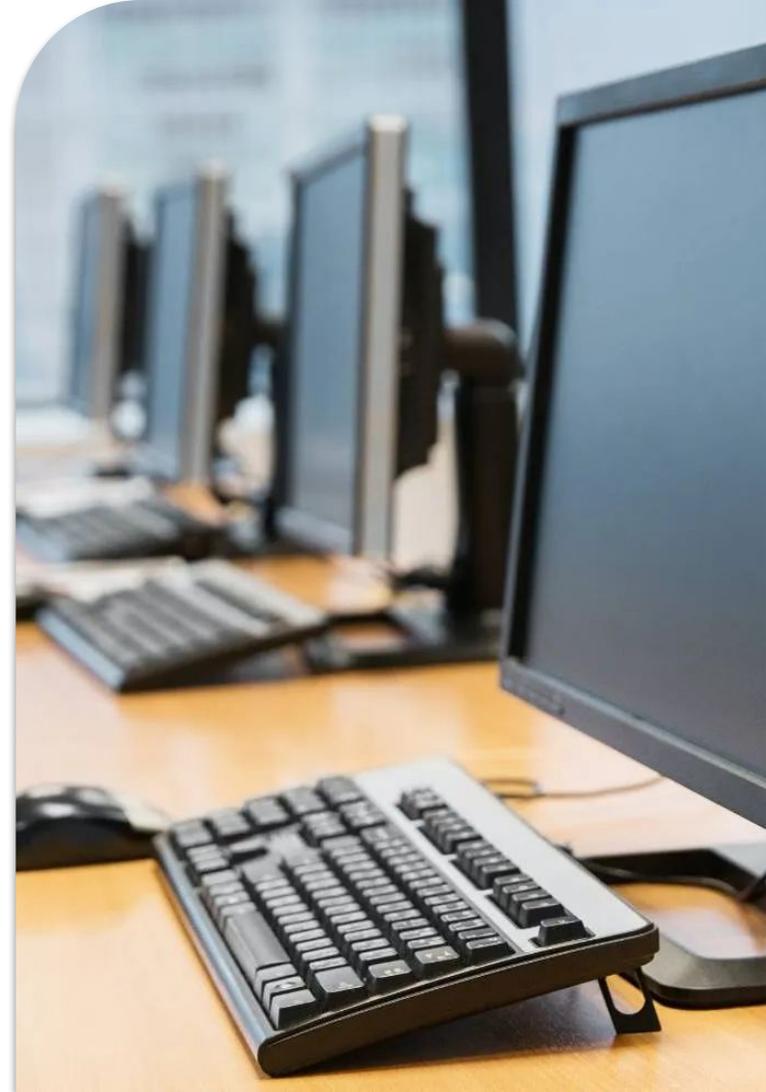
### Recommended Service Providers

Your current video conferencing provider

### Implementation

- 1** IDENTIFY the routes that can be avoided and agree with the different actors of the meetings on a video conferencing solution.
- 2** ESTIMATE the carbon and monetary savings from avoiding transportation.
- 3** AGREE with partners/colleagues who usually meet in person to schedule the video conference meeting.

# Assets





# Limit the renewal of your IT equipment

## Assets

*While it's important to regularly update this equipment to ensure functionality, companies should also consider the environmental impact of device renewal policies. Renewing devices solely for image or standardization purposes, rather than necessity, contributes to e-waste and increases carbon emissions. Additionally, some companies provide employees with more equipment than necessary for completing their tasks, or equipment that's redundant with personal equipment that could be used in a professional setting (headphones, mouses, screens, etc.).*

### Benchmark

Evernex took measures to eradicate ephemeral hardware and unnecessary equipment and replace them with long-lasting, trusted systems that maximize resources and reduce carbon footprint.

### Estimated Impact

Emission reduction in both assets (fewer purchases of IT equipment) and energy (fewer appliances in the offices). Depending on companies, between 10% and 25% of total IT purchases could be avoided.

### Estimated Cost

Only cost savings thanks to lower IT expenditure.

### Recommended Service Providers

### Implementation

- 1** ESTABLISH and start monitoring your KPIs (ex. percentage decrease in new equipment acquisition per employee).
- 2** DEVELOP a device management policy that outlines guidelines for the management of digital devices, with purchase, maintenance, and replacement.
- 3** PROMOTE the concept of sufficiency among employees by highlighting its importance in minimizing waste and reducing environmental impact.



# Extend the life of your machinery

## Assets

*Machinery and equipment are essential for businesses, but their environmental impact is significant. On average, the manufacture of one tonne of machinery emits almost 5.5 tonnes of CO2 (Ademe figures). Extending the life of these machines can make a significant contribution to reducing greenhouse gas emissions.*

### Benchmark

Caterpillar, a manufacturer of heavy equipment, encourages the extension of product life by providing high-quality spare parts and certified repair services. This enables customers to keep their equipment in good condition for longer.

### Estimated Impact

Extending the life of machinery and equipment can reduce the carbon emissions associated with their manufacture by 20% to 30% or more, depending on the frequency of replacement.

### Estimated Cost

Preventive maintenance, repair and refurbishment costs depend on the initial condition of the equipment. However, they are generally lower than the cost of acquiring new equipment.

### Recommended Service Providers

To implement this action, you can call on specialist equipment maintenance and repair services. This can include certified spare parts suppliers and qualified technicians.

### Implementation

- 1** MAKE an inventory of all your company's machinery to assess their current condition and determine which can benefit from a life extension.
- 2** DRAW UP a preventive maintenance plan for each piece of equipment, taking into account the manufacturer's recommendations.
- 3** TRAIN your staff in good maintenance and repair practices, and encourage communication so that potential problems can be reported quickly.



# Set up a system for recovering and reusing used work equipment.

## Asset

*Implementing a system for recovering and reusing used work equipment reduces the company's carbon footprint by minimizing the emissions associated with the production of new equipment. This approach, focused on extending the lifespan of existing goods, promotes a circular economy while generating savings, enhancing the company's image and contributing to responsible waste management. Adopting this initiative demonstrates the company's commitment to sustainability and reducing its carbon footprint.*

### Benchmark

Google has introduced a program called the "Take Back Program" which allows employees to return their old work clothes for recycling. They have also adopted a more relaxed dress code policy, encouraging more moderate consumption.

IKEA encourages a more sustainable approach to fashion by providing sustainable work uniforms and exploring solutions to extend the life of its employees' clothing.

### Estimated Impact

The implementation of a system for the recovery and reuse of used work equipment is estimated to have a significant positive carbon impact. By reducing the manufacture of new equipment, this action contributes directly to the reduction of greenhouse gas emissions throughout the life cycle, thus promoting a more sustainable and responsible approach to the environment.

### Estimated Cost

The estimated cost of setting up a system to recover and reuse used work equipment varies according to the size and complexity of the company. Despite potential initial investments, long-term economic benefits, such as savings on the purchase of new equipment, can offset these costs.

### Implementation

- 1** VALUE the quantity of materials that could be recovered. Consider volume, associated emissions and market impact.
- 2** CONDUCT a study to see how to set up a recovery and reuse system.
- 3** SEARCH for suppliers who can meet your materials collection and recycling needs.

# Energy





# Implement energy saving trainings

## Energy

*People consumption has a great influence on the carbon footprint of a building. Therefore, using messages to influence residents. According to Pegels, Figueroa and Never, "Using less energy" as such is hardly ever the main motivation for investing in new technology or engaging in energy-saving behavior. In contrast, if people are particularly motivated by competition, status, or helping others, they are likely to react favorably to respective interventions."*

### Benchmark

Schneider electric implements various programs for its employees to limit their energy consumption.

### Estimated Impact

According to Sun&Hung, in the US, the austerity behavior style employee consumes 17.8-32.1% less energy than the "normal" employee. The estimated CO2 impact will depend on the energy source and usual consumption

### Estimated Cost

Prices depend on the length of the training, the number of employees.

### Recommended Service Providers

### Implementation

1

TRACK consumption of different items (water, electricity etc.).

2

IDENTIFY on which aspects employees might need training.

3

REQUEST training services from external provider.



# Purchase renewable electricity

## Energy

*A Power Purchase Agreement (PPA) commits the buyer to purchase a specific amount of electricity from the producer over a set period at a fixed price. PPAs help finance renewable energy projects and reduce the carbon intensity of the supplied energy. Meanwhile, certificates of origin (RECs or GOs) certify the renewable source of electricity. They provide less stable revenue for suppliers and encourage renewable energy investments to a lesser extent.*

### Benchmark

Lidl : Since March 2018, Lidl Ireland and Northern Ireland converted to using only renewable electricity.  
Adobe : Adobe has committed to 100% of their operations with renewable electricity from 2035.

### Estimated Impact

PPAs or RECs allow you to reduce to the same extent as installing renewable energy sources on your premises, but only if you account energy related emissions using the market-based method.

### Estimated Cost

In the case of PPAs and RECs, energy prices might be higher than conventional electricity production. Contact a renewable energy provider to get a more precise quote.

### Recommended Service Providers

Ekwater  
Eneercoop

### Implementation

- 1** BENCHMARK the different energy providers to determine which offers the most interesting offer from a techno-economic perspective.
- 2** DEVELOP a comprehensive implementation strategy (detailed plan with steps, timelines, resource allocation, relevant stakeholders).
- 3** IMPLEMENT monitoring solutions to track green energy consumption and cost / CO2e savings.

**Waste**





# Reduce food and packaging waste

## Waste

Food production contributes over a quarter of global GHG emissions, with about one-third of food being lost or wasted. This waste depletes natural resources and adds avoidable GHG emissions. Disposable packaging also worsens the problem, though plant-based options emit less than plastic or cardboard. However, the lowest impact comes from reusable containers.

### Benchmark

Google works with partners to reduce food waste by sourcing imperfect products and using upcycled ingredients. Their chefs use Leanpath to track and minimize waste. Abel & Cole collaborated with carrot suppliers to identify waste hotspots and implement solutions that reduced waste and improved profitability.

### Estimated Impact

Cut your food emissions by reducing your food purchases volume by up to 30% while keeping the same production. Packaging emissions can be reduced to almost 0. They typically represent roughly 10% of the emissions of the average meal.

### Estimated Cost

Cost savings (estimated at \$7 saved for each \$1 invested).

### Recommended Service Providers

Fraîche  
Meal canteen  
Too Good To Go  
Tenzo  
Leanpath

### Implementation

- 1** ESTABLISH and start monitoring your KPIs (ex. percentage reduction in food waste).
- 2** CONDUCT a waste audit to understand where your company's food and packaging waste is coming from.
- 3** DEVELOP waste reduction strategies based on the audit. Raise employee awareness.

# Food and Drinks





# Raise employees awareness on the carbon impact of different foods

## Food and drinks

*Raising awareness is essential for changing habits and reducing emissions. Awareness can motivate individuals to take action. It also creates a ripple effect by influencing not just individual behavior but also social norms and collective action. In the long run, the action plans you implement may be more easily supported by the employees.*

### Benchmark

92% of IKEA's employees have gone through a sustainability training, focusing on how to live a more sustainable life as a human being, and what, as a company, they are doing to contribute to a better world.

### Estimated Impact

If the impact of raising awareness is not direct, it allows other action plans to be more easily and effectively implemented.

### Estimated Cost

Overall, the cost is low, and depends on the type of actions taken.

### Recommended Service Providers

### Implementation

- 1** DEVELOP educational resources that explain the carbon footprint of various foods (infographics, brochures, presentations, interactive online modules...).
- 2** ORGANIZE educational events, such as workshops, vegetarian cooking sessions, and lunch-and-learn sessions. Highlight success stories, interesting facts, and tips for making sustainable food choices.
- 3** ENCOURAGE participation and MEASURE and CELEBRATE progress. Create incentives or challenges to encourage employees to actively engage employees. For example, you could implement a "Meatless Monday" campaign and provide small rewards or recognition for participation.



# Conclusion

# Conclusion

The GHG assessment made it possible to identify PENTAX Medical's main GHG emission sources so as to frame the company's carbon strategy and identify the items that need to be studied in greater depth with the aim of continuously improving the company's environmental impact.

It has been established that direct emissions (Scope 1) and energy-related indirect emissions (Scope 2) represent a small part of a company's impact. It is therefore essential to mobilize our company's suppliers and employees.

To meet the 2015 Paris Agreement target of a 50% reduction in GHG emissions between 2020 and 2030, we need to achieve a 6.3% reduction in emissions within one year (-7.2k tCO<sub>2</sub>e).

## The recommended next steps in PENTAX Medical's carbon strategy are:

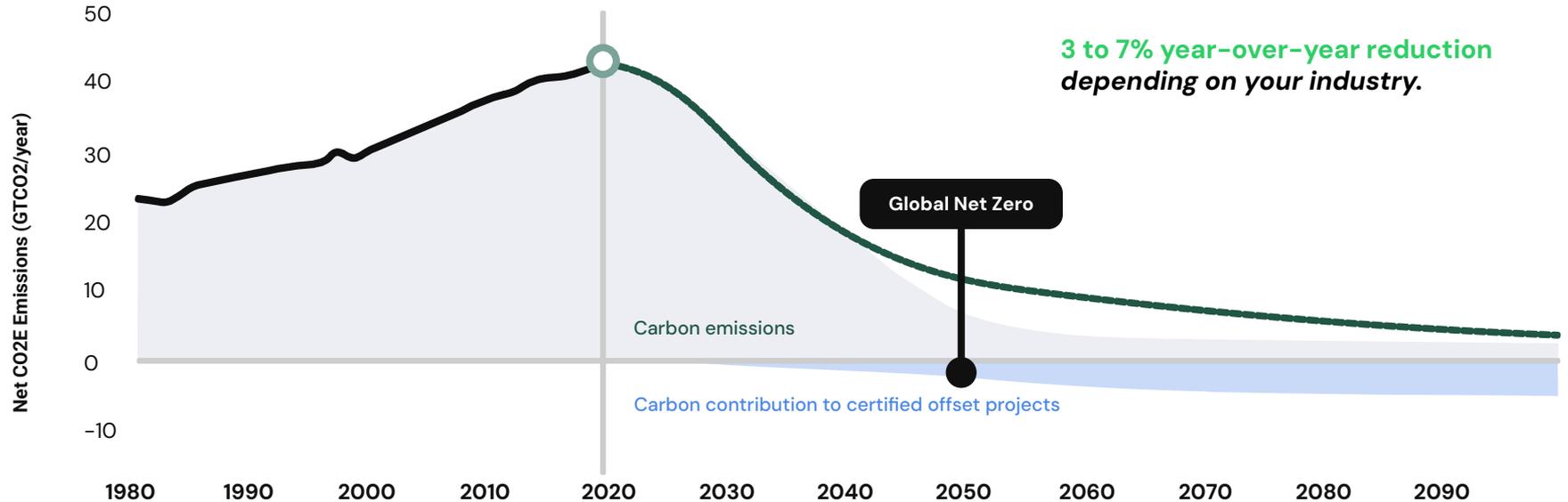
- 1 **Study key emission sources in greater depth**, if you opt for that. Your Climate Expert can help you decide between the different options available!
- 2 **Establish GHG emission reduction targets and implement an action plan** in order to achieve these targets.
- 3 **Engage your suppliers** using the Greenly supplier engagement tool.
- 4 **Engage your employees** using the interactive Greenly training quizzes.
- 5 **Communicate with your stakeholders** about your commitment and carbon footprint, your reduction targets and the action plan considered.
- 6 **Contribute to certified GHG reduction / sequestration projects** available on the Greenly platform.



# What's next?

# Committing to a multi-year decarbonization strategy

A SUSTAINED EMISSIONS REDUCTION BASED ON THE LEVELS REQUIRED BY THE PARIS AGREEMENT



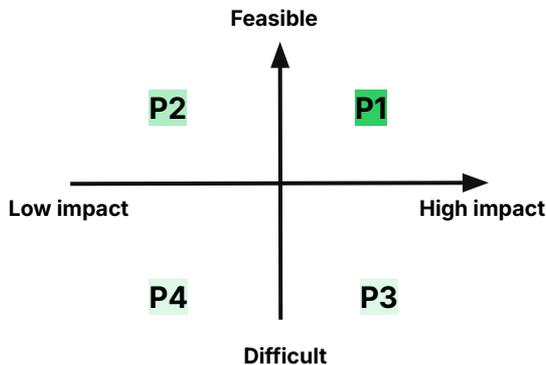
# How can I build my reduction trajectory?

THE 4 KEY STAGES IN DEFINING AND FOLLOWING YOUR TRAJECTORY

## Refine your greenhouse gas emissions assessment

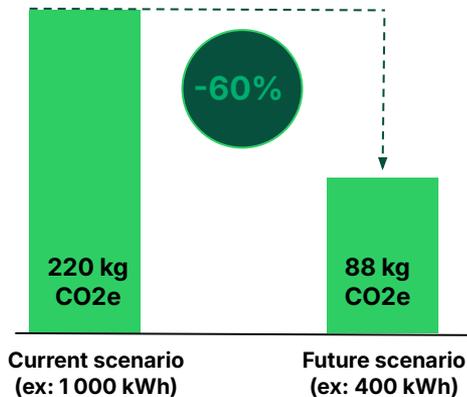
Your 2024 assessment is based on **11%** of physical data, the rest being financial data. We recommend that you regularly improve the accuracy of your greenhouse gas assessment by adding more physical data. You will be able to quantify and monitor your reductions with precise targets in km, kg, kWh, etc.

### Prioritize your actions



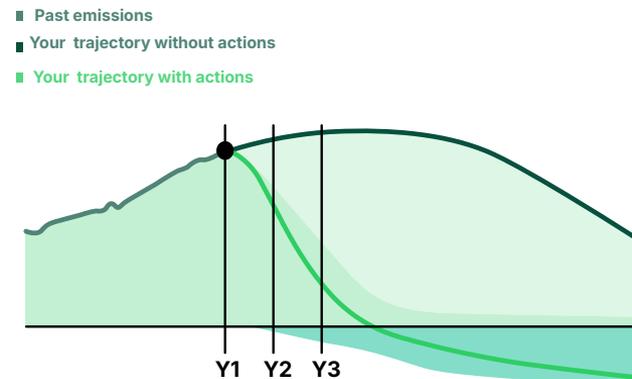
Place your actions on the matrix after identifying operational constraints in consultation with your teams.

### Calculate their reduction potential



Select the right KPIs before you start, then calculate the reduction potential.

### Monitor your results



Monitor your progress regularly and measure your results during your annual GHG assessment.

# The 5 Pillars of a Climate Strategy

DISCOVER THE 5 PILLARS BASED ON THE NET ZERO INITIATIVE

## 1. Measure

- Track emissions annually
- Go deeper in the analysis of your main emission sources



[Carbon data analysis](#)



[CSR](#)



[LCA](#)

## 2. Reduce

- Choose an action plan in line with the Paris Agreement
- Quantify your action plan to build a carbon trajectory



[Action Plan Tab](#)

## 3. Educate

- Engage your suppliers in your strategy
- Train your employees



[Supplier engagement](#)



[Employee training](#)

## 4. Commit

- Commit to an objective
- Communicate transparently



[Communication kit](#)

## 5. Contribute

- Contribute in carbon sequestration & avoidance projects to cover non compressive emissions



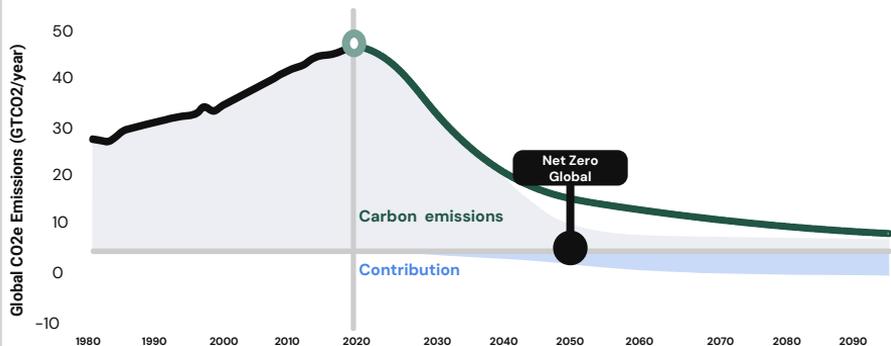
[Carbon contribution](#)

# Commit to a Multi-year Carbon Trajectory

A LONG-TERM REDUCTION IN EMISSIONS IN LINE WITH THE OBJECTIVES OF THE PARIS AGREEMENT OR YOUR PERSONAL OBJECTIVES

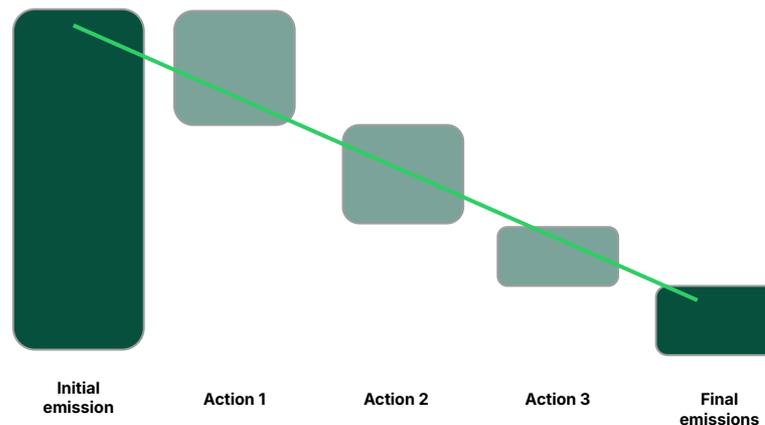
## Paris Agreement Objective

-3% to -7% reduction annually



## Objective Based on your Actions

Define your reduction objective based on facilitating actions



# Build Your Carbon Reduction Trajectory

3 KEY STEPS TO BUILD YOUR TRAJECTORY

## Prioritize your actions

Calculate their reduction potential

Optimize your trajectory

1

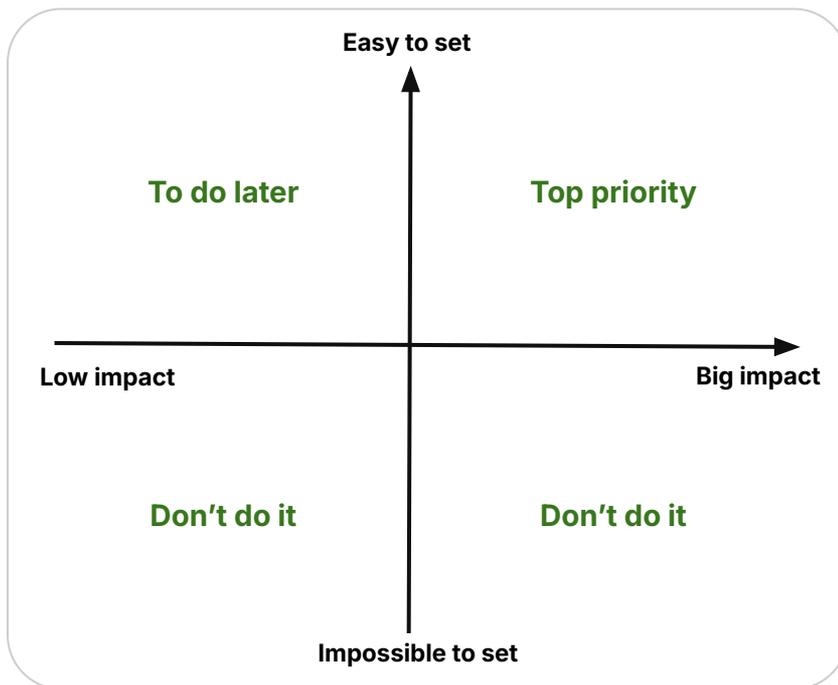
Bring together the stakeholders in your climate strategy

2

Place the action suggestions from the Greenly report on the matrix after identifying their constraints

3

Keep all feasible actions and prioritize those with the greatest impact



# Build Your Carbon Reduction Trajectory

3 KEY STEPS TO BUILD YOUR TRAJECTORY

Prioritize your actions

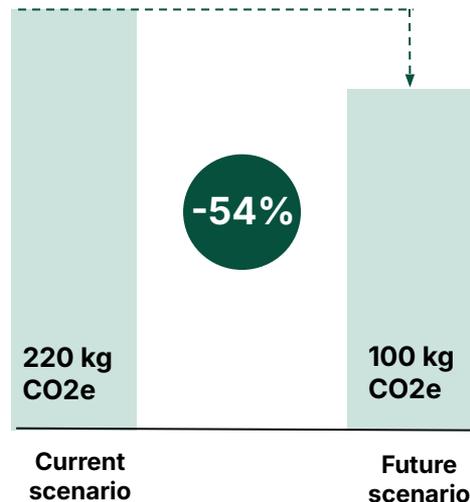
Calculate their reduction potential

Optimize your trajectory



<b>Current scenario</b>	1,000 km per year with thermal cars	1,000 km per year with electric cars	<b>Future scenario</b>
<b>Emission Factor</b>	0.22 kg CO2e/km	0.1 kg CO2e/km	<b>Emission Factor</b>
<b>Total Emissions</b>	220 kg CO2e	100 kg CO2e	<b>Total Emissions</b>

 Potential reduction



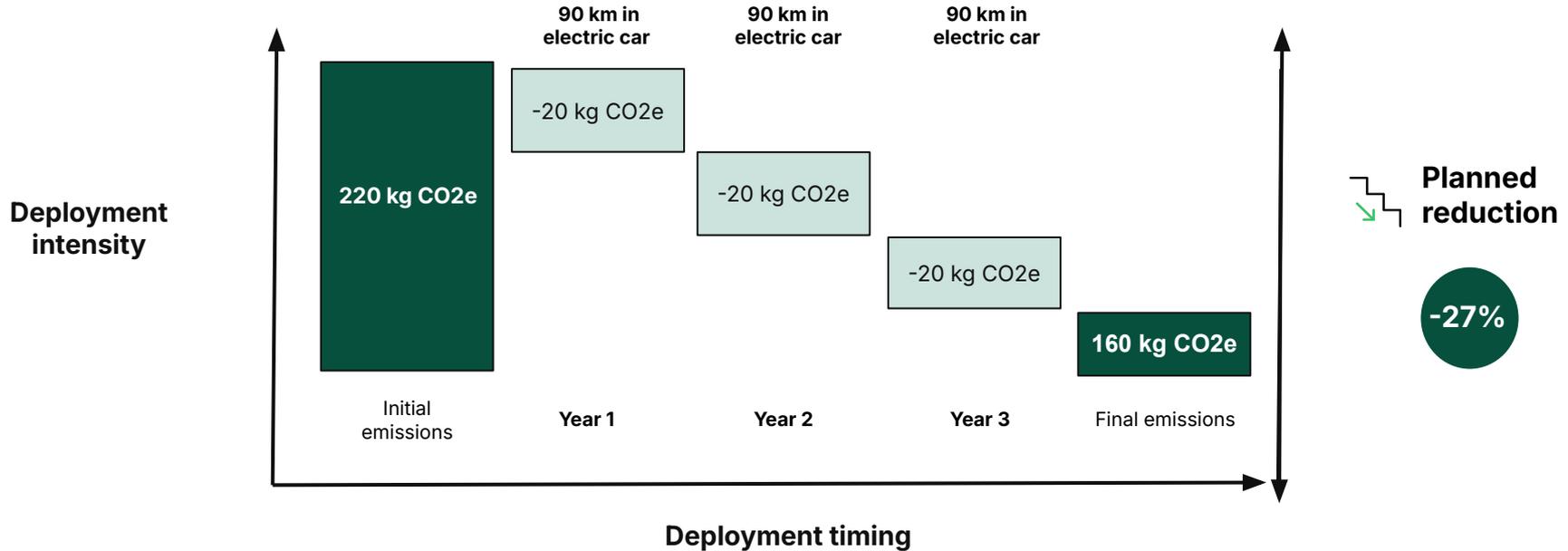
# Build Your Carbon Reduction Trajectory

3 KEY STEPS TO BUILD YOUR TRAJECTORY

Prioritize your actions

Calculate their reduction potential

Optimize your trajectory



# Greenly's communication support to highlight commitment

## Company & Personal Certificates

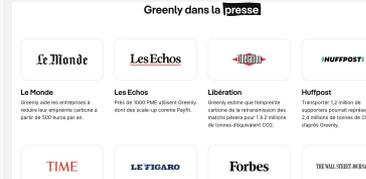


## Social Networks



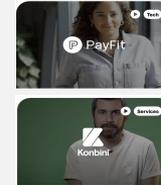
## PR

Communicate on media



## Customer Video Testimonials

Testimonials showcasing the work done with Greenly



Premium

## Join our community: ESG Connect

Slack Channel, afterwork, Events, Webinars

350k Members  
As of August 2023

10+ Countries  
including USA, UK, France, Australia etc.

## Case studies



## Webinar

Communicate on your results in a Webinar with a Greenly expert!



## Extended Report

Get your report formatted by our marketing team

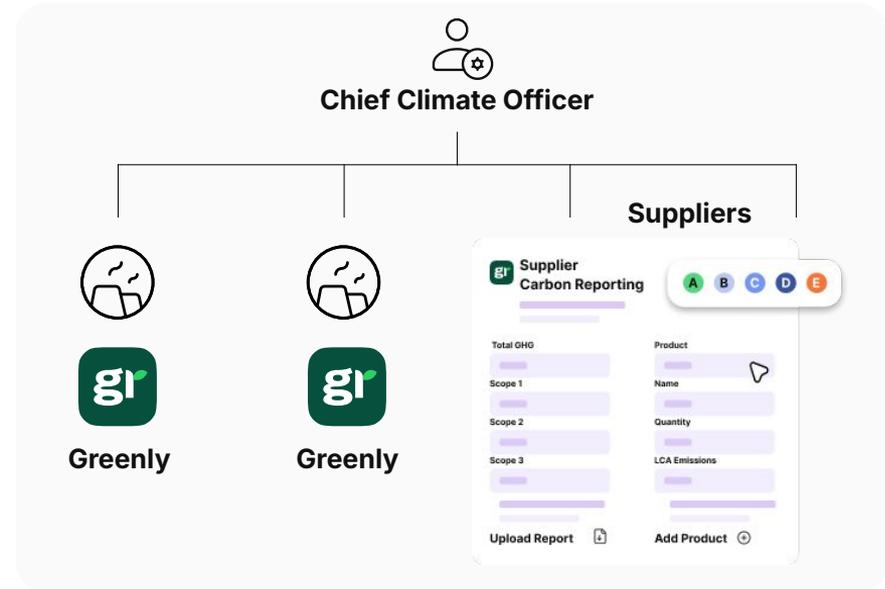
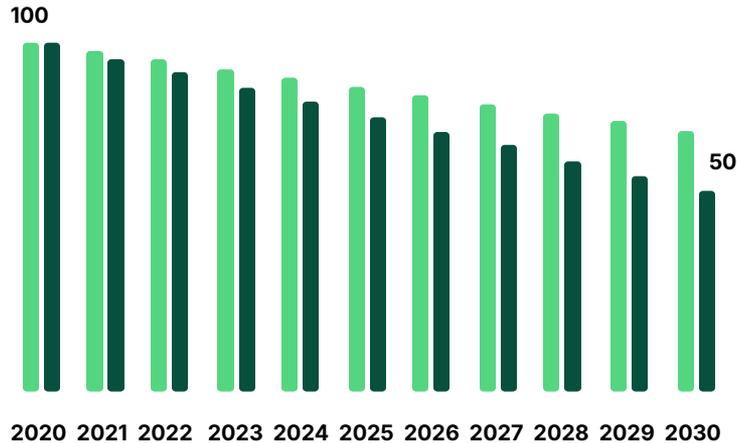


# Engaging suppliers to align with the company's Net Zero targets

ENGAGE SUPPLY CHAIN VIA A DEDICATED SUSTAINABLE PROCUREMENT STRATEGY



## Reduction Trajectory Science Based Targets Aligned with 1.5°C & Well below 2.0°C



# Engaging employees on Climate Change

## OUR MONTHLY TRAININGS



Month 1

Onboarding



Month 2

Quiz 1  
Climate  
Science



Month 3

Quiz 2  
IT



Month 4

Quiz 3  
Food



Month 5

Quiz 4  
Transport



Month 6

Quiz 5  
Energy



Month 7

And more..

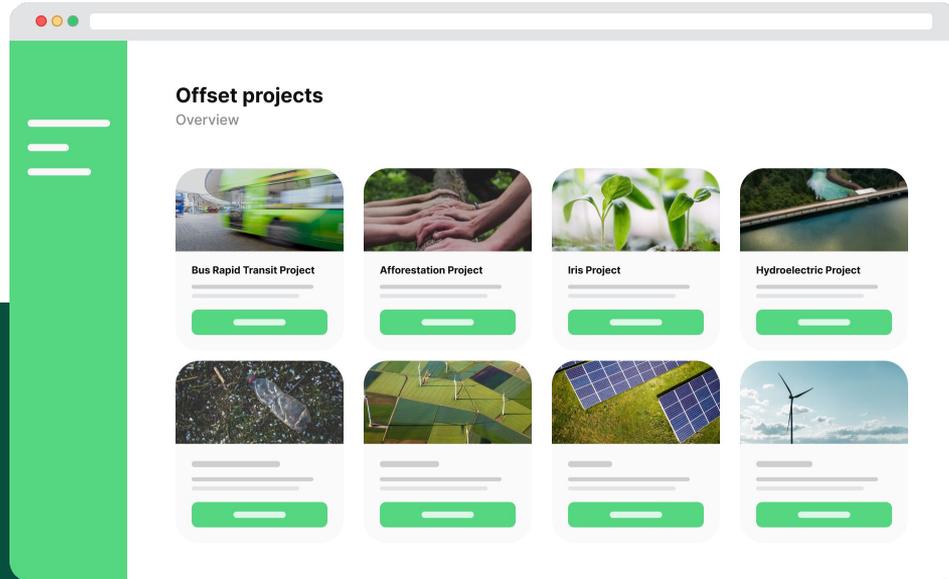


Month 12

A look back  
on the year

# Net Zero Contribution – What to Expect

SOURCING ONLY VERIFIED & CERTIFIED PROJECTS



## Ensure projects are certified

We source projects that meet criteria of additionality, permanence, auditability and measurability

## Contribute to Net Zero

Ensure you are responsible for more emissions capture that what your organization is emitting

LABEL BAS  
CARBONE

reverse

Gold Standard

PENTAX  
MEDICAL

greenly

# Become a Referral Partner

Refer customers to Greenly and use your commissions to reduce the cost of your future GHG reports.

~~10%~~ **15%**  
Commission or partner discounts directly more advantageous for Greenly customers.

1

## COMMUNICATE

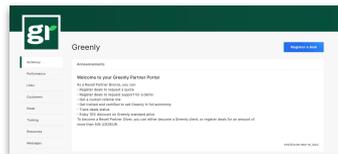
Leverage our resources to communicate to your network



2

## REFER LEADS

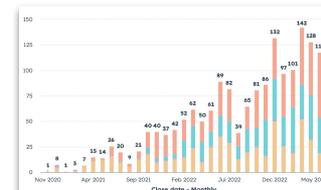
Send leads to the Greenly Sales Team



3

## EARN REVENUE

Receive quarterly payments for your business and amortize the cost of your future reports





# About Greenly

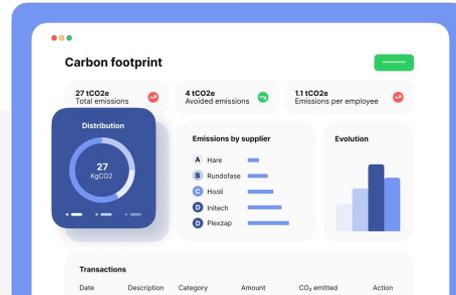
# The Greenly Vision

MAKING CARBON ANALYTICS UNIVERSAL



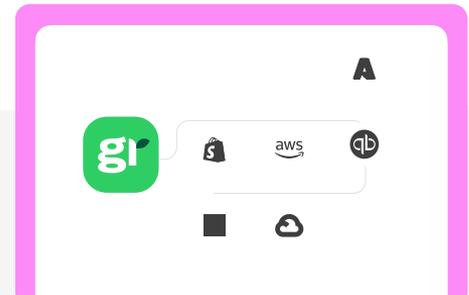
## CARBON FOOTPRINT APP & API

First carbon fintech app launched



## CARBON ACCOUNTING SOFTWARE

Launch B2B SaaS for SME Carbon Footprint (GHG Protocol)



## CLIMATE APP STORE

Introducing the first Climate App Store in 2023

# Building up a global tech leader to scale carbon accounting

FOUNDER VISION: HELPING ALL COMPANIES START THEIR CLIMATE JOURNEY TO FAST-TRACK THE ENERGY TRANSITION



**Arnaud Delubac**  
CMO & Co-Founder

INSEEC, Essec - Centrale  
Digital Comm at Prime Minister  
Office, & Ministry of Digital



2018-2019



**Alexis Normand**  
CEO & Co-Founder

HEC, Sciences-Po  
Ex Head of B2B & Boston  
Office at Withings, Techstar  
w/Embleema

withings 2013-2018



**Matthieu Vegreville**  
CTO & Co-Founder

Ecole Polytechnique -  
Telecom  
Ex Data Science  
& B2B SaaS at Withings

techstars 2018-2019

**Everyone should strive to achieve Net-Zero, not just the elite.**  
Consumers want all companies to implement sustainable changes

**Greenly is instigating a bottom-up climate revolution** making it simple for all companies & employees to start their climate journey

**Working with our initial 1,000 customers,** we see that early adoption of carbon initiatives boosts growth and profitability, while helping companies start their climate journey

**As regulations make carbon disclosure mandatory,** Greenly is building highly-scalable tech to address the enormous influx of mid-market businesses joining the energy transition.

**Greenly's product-led growth** rests on three pillars: 1- a tech-enabled end-to-end carbon platform ; 2- an outstanding UX to cultivate a growing community of climate leaders: 3- Lastly, a global ecosystem of partners who leverage Greenly to scale carbon accounting over their network.

# Greenly is the world's fastest growing carbon management platform

WE ARE SCALING OUR TECH, OUR CUSTOMERS BASE & CLIMATE TEAM

150+

Team with Climate Experts Data Scientists, Data analysts, Data Engineers, DevOps Engineers

1000+

Customers in Tech, Industry, Energy, Logistics, Construction, Real Estate etc.

50k

Emissions sources aggregated from customers & industry databases

10+

Geographies covered with customers in the US, UK, France, Italy, Germany, Nordics...

These companies are tracking their carbon footprint with Greenly

Industries

faurecia HUTCHINSON RENAULT TEVA Schlumberger

Tech

alma ZOOPLA TripAdvisor PayFit Konbini

Retail

bel for all good COURIR LVMH PETRUS PERNOD Ricard

Services

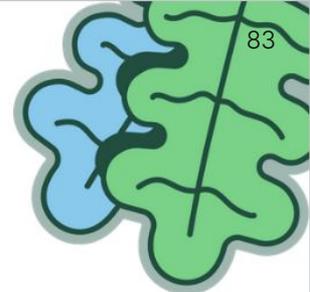
ACCOR Capgemini Kea Mediametrie econocom

Finance

COATUE Shell Ventures AXA EIFFEL INVESTMENT GROUP UNIPARIBAS

# Scientific council

INDUSTRY, AI & CLIMATE EXPERTS



**Pr. Michel  
BAUER**

**Sociologist**  
HEC  
-  
Corporate  
organisation



**Nicolas  
HOUDANT**

**CEO**  
Énergies demain  
Ex  
GreenNext



**Peter  
FOXPENNER**

**Professor**  
BU University  
-  
Electricity grids  
& Carbon expert



**Pr. Yann  
LEROY**

**Professor**  
CentraleSupélec  
-  
Carbon Product  
Life-Cycle



**Pr. Antoine  
DECHEZLEPRÊTRE**

**Professor**  
LSE  
-  
Climate change  
policies



**Pr. Rodolphe  
DURAND**

**Professor**  
HEC  
-  
Corporation  
transformation



# Appendix

# | Disclaimer – calculation assumptions

## Q Summary of hypothesis and assumptions underlying the GHG emission calculations in this report

- **Data not available for the current report:**
  - **Russian entity:** No data could not be collected for the entire division. This entity consists of only 7 employees, the main activity is service and repair of endoscopes. Emissions are expected to be negligible on the group level.
  - **Downstream emissions:** For most entities, data was not available in relevant downstream categories (3.9 Downstream Transportation and Distribution, 3.11 Use of Sold Products, 3.12 End of Life Treatment of Sold Products).
  - **Refrigerant gas reload:** Where primary data was not available and AC systems were included in the building, emissions in cat. 1.4 Fugitive Emissions have been estimated from the building square footage, assuming R-410A as refrigerant gas. Details of the conversion factors can be found on the Greenly platform.
- **Other gaps:**
  - **Waste data not available for:** PENTAX Medical Shanghai Co., Pentax Medical Singapore Pte. Ltd.. Waste emissions were estimated using FTE in occupied buildings for PENTAX Medical Canada Inc..
  - **Water data not available for:** PENTAX Medical Canada Inc., PENTAX Medical Shanghai Co., Pentax Brasil Materiais e Equipamentos Medicos Ltda., Pentax Italia S.R.L., Pentax Medical Singapore Pte. Ltd., Australia – Branch of PMS, PENTAX Medical Iberia S.A.U. (partially), Pentax Medical India Private Limited, Pentax Nederland B.V..
- **Note on RECs% for Market-Based calculations of Scope 2 emissions:** The figures provided for RECs% in the platform can refer to either actual RECs or to the % of renewable energy in the energy mix declared by suppliers (evidence can be provided upon request). To improve next year assessment, supplier-specific emission factors should be used in the second case.

## Disclaimer

These quality controls were not automatically passed by the current carbon footprint. However, PENTAX Medical reviewed them and decided to carry on with the generation of the carbon footprint. You can see the full detail on [the platform](#).



# Scope 1&2



Scope	Name	tCO2e	
1.1	Generation of electricity, heat or steam	120	
1.2	Transportation of materials, products, waste, and employees	947	
1.3	Physical or chemical processing	-	EXCLUDED : Category is not relevant for the company
1.4	Fugitive emissions	22	
2.1	Electricity related indirect emissions	4409	
2.2	Steam, heat and cooling related indirect emissions	-	EXCLUDED : Category is not relevant for the company

To see more details of the methodology for each regulatory entry please visit [Greenly!](#)

# Scope 3

100% accounted



Scope	Name	tCO2e
3.1	Purchased goods and services	90724
3.2	Capital goods	3920
3.3	Fuel- and energy- related activities not included in Scope 1 or Scope 2	1251
3.4	Upstream transportation and distribution	6296
3.5	Waste generated in operations	381
3.6	Business travel	3714
3.7	Employee commuting	1020
3.8	Upstream leased assets	2854
3.9	Downstream transportation and distribution	0
3.10	Processing of sold products	28
3.11	Use of sold products	0
3.12	End-of-life treatment of sold products	0.2
3.13	Downstream leased assets	0
3.14	Franchises	-
3.15	Investments	0
4.1	Other emissions - Emissions from biomass (soil and forests)	0

EXCLUDED : Category is not relevant for the company

# Scope 1&2



Scope	tCO2e	tCO2b	CO2f*	CH4f*	CH4b*	N2O*	Other GHGs*
1.1	120	0	82	9	3	26	0
1.2	947	0	648	71	24	204	0
1.3	-	-	-	-	-	-	-
1.4	22	0	0	0	0	0	22
2.1	4409	0	3747	231	220	211	0
2.2	-	-	-	-	-	-	-

\* Results expressed in tons of CO2e

# Scope 3



Scope	tCO2e	tCO2b	CO2f*	CH4f*	CH4b*	N2O*	Other GHGs <sup>90</sup>
3.1	90724	0.05	78531	8044	0	2984	1165
3.2	3920	0	3917	2	0	0.7	0.3
3.3	1251	0	866	263	16	106	0
3.4	6296	0	5466	431	0	399	0
3.5	381	2	279	29	0	72	0.04
3.6	3714	0	3224	255	0.1	235	0.1
3.7	1020	0.01	856	71	5	80	8
3.8	2854	0	2851	1	0.7	0.8	0.3
3.9	0	0	0	0	0	0	0
3.10	28	0	22	2	1	4	0
3.11	0	0	0	0	0	0	0
3.12	0.2	0	0.2	0.02	0	0.04	0
3.13	0	0	0	0	0	0	0
3.14	-	-	-	-	-	-	-
3.15	0	0	0	0	0	0	0
4.1	0	0	0	0	0	0	0

The logo for Greenly, featuring the word "greenly" in a white, lowercase, sans-serif font. The letter "e" is highlighted in a vibrant green color.

Contact us

[support@greenly.earth](mailto:support@greenly.earth)

[www.greenly.earth](http://www.greenly.earth)