YEAR
2021-2022

A Journey Through Emissions
Accountability and Conservation

Convelio's Carbon Emissions Report

Our emissions report: a key tool for environmental responsibility. We calculate and document our carbon footprint, gain insights for targeted reductions, aligning with our commitment to sustainable practices, preserving art and the planet for the future.

Contents

Convelio

Our Story

In 2017, Clément Ouizille and I co-founded Convelio, embarking on a remarkable journey that shaped the blueprint for the modern fine art shipper: one that is not only attuned to today's demands but also anticipates those of tomorrow. Starting as a humble team of 2, we have since grown to over 160+ strong and have earned the trust of our clients to transport artwork valued at billions USD annually.

At the heart of our mission is a deep-seated passion: combining our expertise in global art logistics with innovative technology. Acutely aware of the nuances and complexities in today’s art industry, our vast network is designed to provide you with the most trustworthy and secure transportation for your treasured pieces.

Every artwork, regardless of its origin, size, fragility, historical, or financial value, receives our utmost attention. This daily pursuit is more than a mission; it is our promise to safeguard the trust you have placed in us.

Through this document, I sincerely hope you will sense the unwavering dedication of my team, for whom I hold the deepest admiration, as well as my own commitment to continue to shape the future of art transportation.

With utmost respect,

Edouard Gouin
CEO, Convelio

Note from the founders

We are delighted to present Convelio's 2021-2022 emissions report. As a company, our core mission is to propel art logistics into the future, a goal inseparable from our commitment to addressing climate change and the environmental impact of our operations.

At Convelio, we wholeheartedly embrace the UN Sustainable Development Goal 13, a call for immediate action to combat climate change. In 2021, we introduced the Climate Care program, aligning our company with net zero targets grounded in the Paris Agreement. To further underscore our dedication, we joined Climate Act and the Gallery Climate Coalition, fostering a network of like-minded organizations and businesses sharing our vision for the future.

Our determination to understand and mitigate our environmental impact led us to conduct a comprehensive study on our CO_2 emissions. This analysis, built upon data from across our company, provides transparency in our operations and serves as a vital tool to set ambitious targets for reducing emissions.

We're committed to a continuous process of improvement, engaging with suppliers, investors, clients, and the wider Convelio network in our quest to shape a sustainable future. We recognize that managing what we know is pivotal, and we aim to make our study accessible for others looking to understand their business emissions.

- Edouard Gouin and Clément Ouizille, Convelio Co-Founders

What is Climate change?

The climate is changing as a result of human activity. We are now reaching a level of carbon dioxide concentration in the atmosphere that has never been seen before, and the more CO_2 we add, the warmer it gets. The result is affecting human life through extreme weather events, health crises, climate poverty and migration.

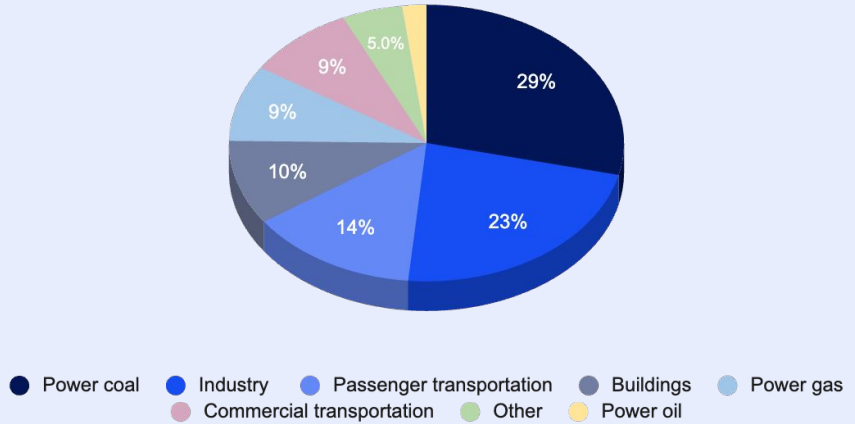
Growing demand for faster transport has significantly increased greenhouse gas emissions,

worsening climate change effects...

Global transport is set to double by 2050, unleashing a parallel surge in emissions without intervention.

- Carbon emissions from transport are responsible for around one-fifth of global carbon dioxide emissions.
- Transport as a whole can be divided into commercial transport and passenger.
- **Commercial freight** is responsible for 40% of total transportation emissions or about **9% of total global CO_2 emission**.

Global energy-related CO_2 emissions by sector (Source: IEA, 2022)

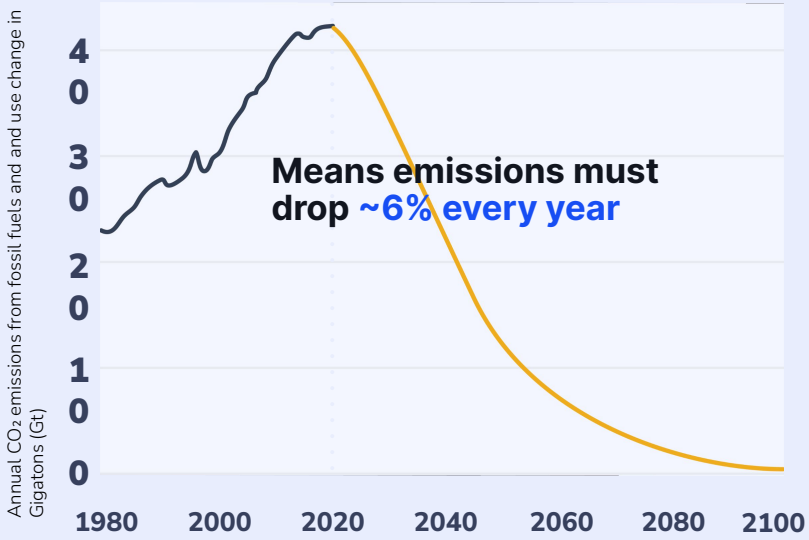


The global temperature will stabilise when carbon dioxide

emissions reach net zero.

Accelerated and robust actions are required to help tackle the climate crisis

Source: CO_2 and the Climate Curve, Climate Central



Source: Carbon Brief

The Convelio climate care CO_2 emission report

2021-2022

Calculating current carbon footprint for setting emissions reductions targets

Building an Emissions Report

An emissions report measures the relationship between any given an activity and its impact on global warming. You calculate this by assessing the greenhouse gas emissions produced.

AT CONVELIO we wanted to assess all business activity, to better understand our emissions both from our internal operations and external service offering.

This report measures in Carbon Dioxide Equivalent (CO_2e)

CO_2e converts the varying effects of different gases into the equivalent amount of carbon dioxide (CO_2) it would take to create the same greenhouse effect. By using this measure we are able to compare the impact across all types of business activities, such as crating, commuting, air freight or energy use in the office.

How is it calculated?

Activity data

X

EMISSION FACTOR

CO_2e of this activity

The emission factors come from databases
(ADEME “base carbone” in France, or DEFRA in the UK)

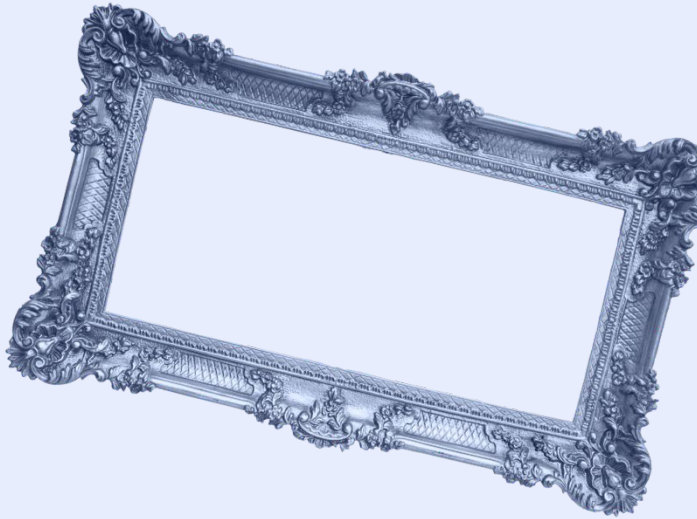
Convelio's emissions in two categories

Service Offering

This refers to the services our clients use that can be split into three: **Transportation**, **Packing**, and **Product** (our online booking platform).

Team Operations

This refers to all the activities that take place for the company to run. The categories are wide ranging, from energy related to the offices, laptops, employee commuting into work, and business travel.



The report is a study of Convelio's business activity and its impact on the planet, and indicates inclusions, exclusions and assumptions.

Inclusions

- Transportation
- Packing
- Website
- Offices
- Business travel
- Food
- Information Technology
- Purchasing of services

Assumptions

Exclusions

- Office waste
- Banking
- Employee healthcare
- Email activity
- Heating & cooling for WFH (Working From Home)

If the overall contribution to Convelio's emissions was negligible then we decided to exclude the calculation (for example with email activity). Other exclusions were made when the data was too difficult to obtain and assumptions would cause inaccuracies.

Assumptions

- Vehicle model
- Soft wrapping material
- Soft wrapping weight
- Crating material

Assumptions were made across these four categories.

Convelio's estimated total yearly carbon footprint

2021

5 856.36

tons of CO_2e

2022

6 541.62

tons of CO_2e

The increase in our emissions in 2022 is a direct result of our expanding global operations and team size across key offices. Our ongoing commitment remains to manage emissions proportionately to our business growth while actively striving to reduce our overall carbon footprint.

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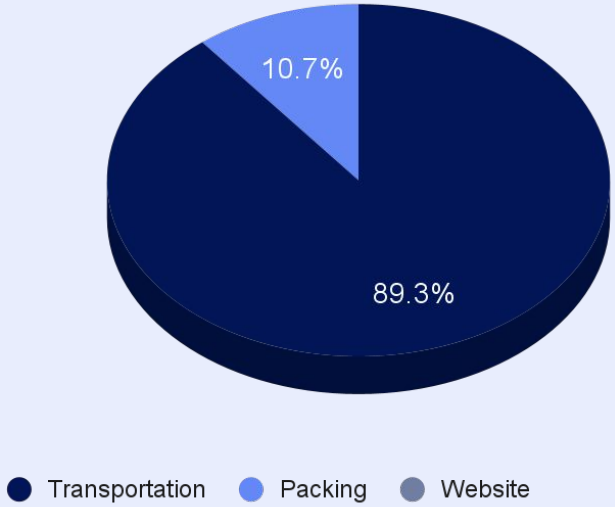
This category represented:

5 563.56 tCO_2e or 95% of Convelio's overall emissions in 2021

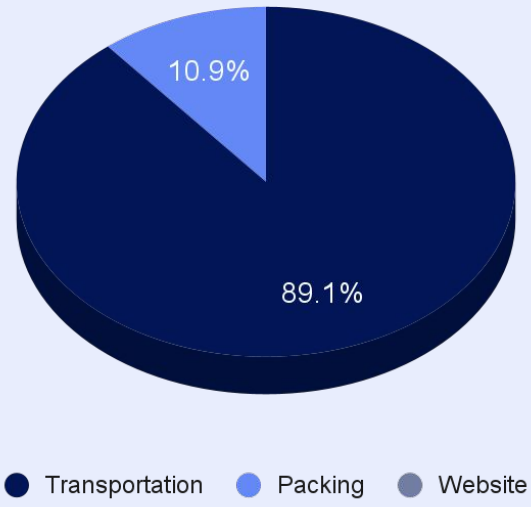
6 058.07 tCO_2e or 93% of Convelio's overall emissions in 2022

Convelio's **Service Offering** Emissions

2021



2022



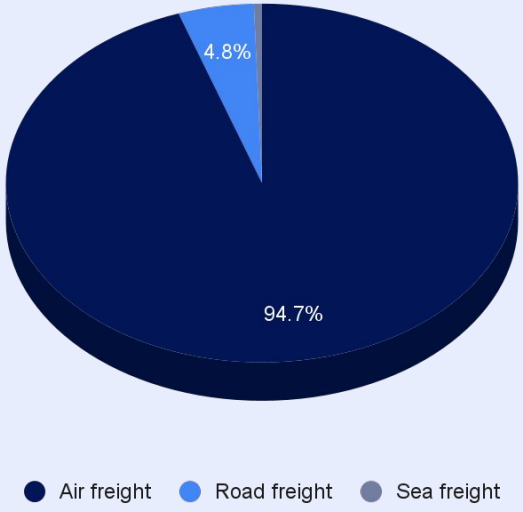
Emission source	tCO_2e 2021	tCO_2e 2022
Transportation	4,970.04	5,396.06
Packing	593.40	661.85
Website	0.13	0.15

Convelio’s highest impact area?

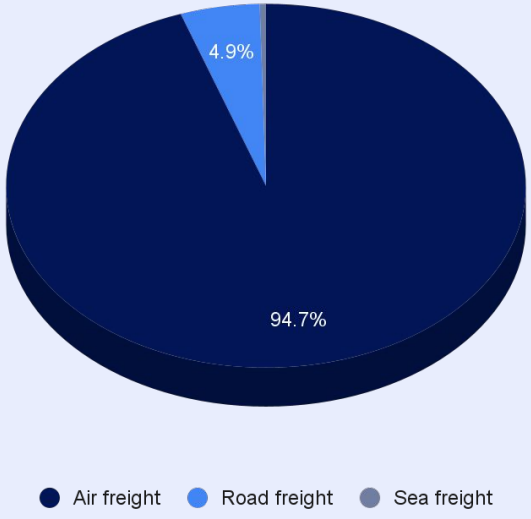
Transport emissions

Convelio's **Transportation** Emissions

2021



2022

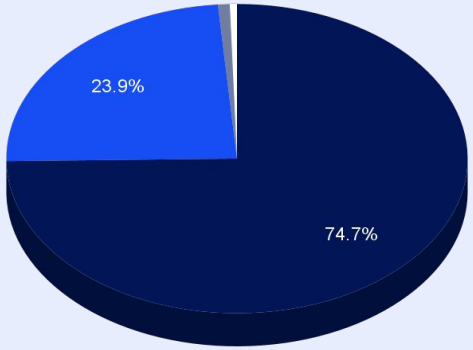


Emission source	tCO_2e 2021	tCO_2e 2022
Air freight	4,707.50	5,108.66
Road freight	237.29	266.43
Sea freight	25.25	20.97

Addressing emissions from wood procurement for Convelio crates and managing their end-of-use lifecycle.

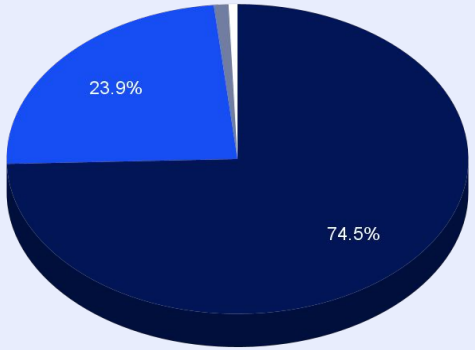
Convelio's Packing Emissions

2021



Wood crating - Production
Wood crating - End of life
Soft packing - Production
Soft packing - End of life

2022



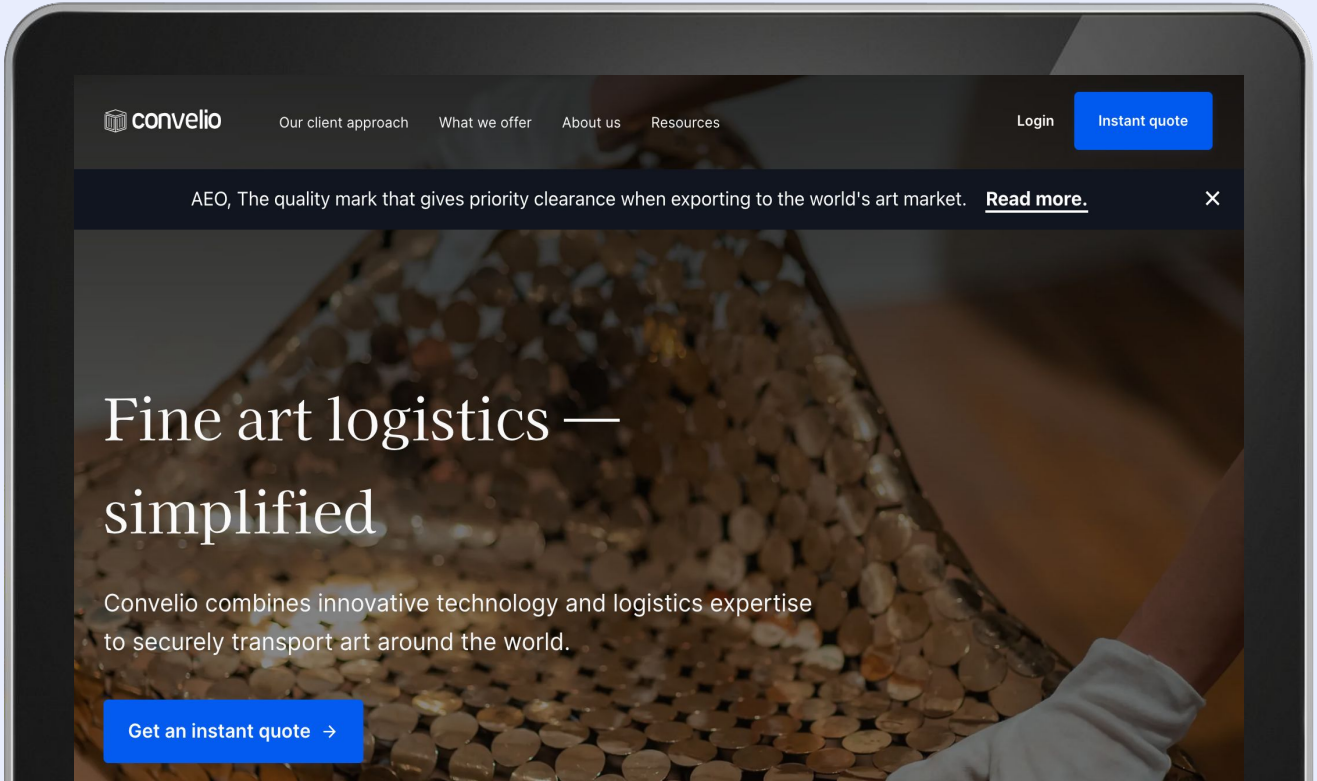
Wood crating - Production
Wood crating - End of life
Soft packing - Production
Soft packing - End of life

Emission source	tCO_2e 2021	tCO_2e 2022
Wood crating - Production	443.52	493.08
Wood crating - End of life	142.03	157.90
Soft packing - Production	4.88	6.76
Soft packing - End of life	2.97	4.11

Convelio's **Website** Emissions

Convelio website accounted for ~0.02% of service offering emissions in 2021 and ~0.03% of emissions in 2022

Emission source	tCO_2e 2021	tCO_2e 2022
Website	0.13	0.15



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Team Operations

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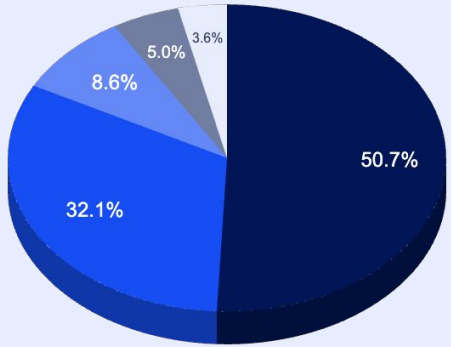
This category represented:

292.8 tCO_2e or 5% of Convelio's overall emissions in 2021

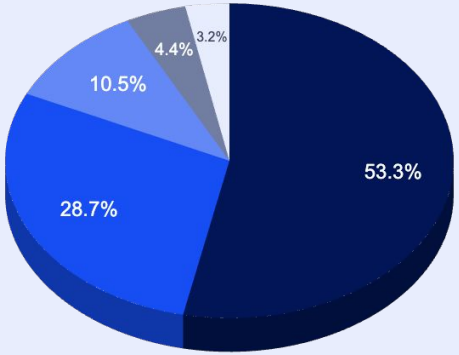
483.6 tCO_2e or 7% of Convelio's overall emissions in 2022

Convelio's Team Operations Emissions

5% in 2021

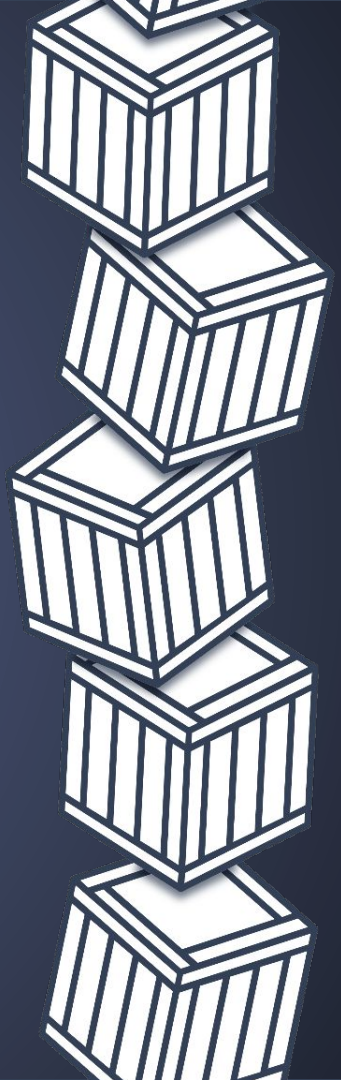


7% in 2022



Emissions source	tCO_2e 2021	tCO_2e 2022
Purchasing of services (consulting & fees, SaaS subscriptions, marketing expenses, team gathering etc.)	148.57	257.81
Food (vegetarian lunch and lunch with meat)	93.88	138.72
Business travel and employee commuting	25.26	50.61
IT (hardware and data usage)	14.58	21.13
Office (energy consumption across all office space)	10.52	15.29

Our sustainability vision



As a company, we're dedicated to advancing art logistics into the future while considering our environmental impact. We've committed to drive towards reaching Net Zero by 2050 and reducing emissions by 50% by 2030.

We have committed to

We have joined

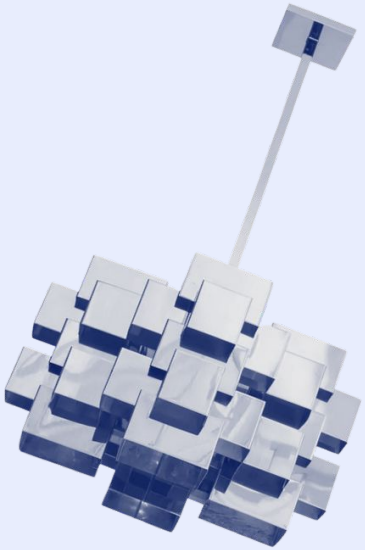
RACE TO ZERO

SME Climate HUB

GCC

CLIMATE ACT
Empreinte carbone

- We will **MEASURE** all emissions across the business
- We will **REPORT** on these scopes and **DRIVE** reduction projects
- We **COMMIT** to partnering with high impact compensation projects



Understanding where emissions come from is the first step in managing them.

We encourage reporting, analyze emissions for proactive change, and support climate projects.

While offsetting isn't a complete solution, Convelio is committed to advancing technologies for a greener art shipping industry.

We're devising strategies to both reduce and offset emissions in our most impactful business areas.

Measure. Report.

Emissions Report

Measure of the greenhouse gas emissions produced by any given activity.

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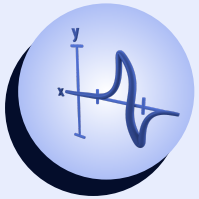
Reduction

Sea Freight

From EU to US: **regular sea freight consolidation service**, in a Convelio dedicated container (FCL basis).

- All other routes: on request LCL or FCL solutions.



Compensation

CO2 Calculator + Offset

With SQUAKE's API solution, Convelio clients can see the **calculated CO2e emissions on each individual order,** plus the opportunity to **donate to selected climate projects.**

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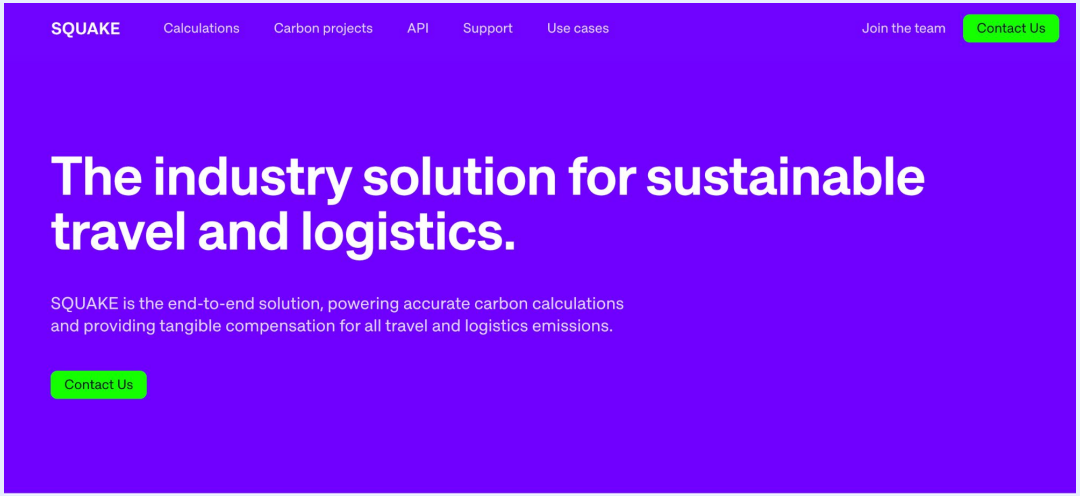
Convelio's CO_2e calculator and climate portfolio

With our partnership with SQUAKE, Convelio's clients are now able to compensate their emissions by donating to Convelio's climate portfolio.



- Market leading carbon calculations per **Greenhouse Gas Protocol** and the **Global Logistics Emissions Council framework**
- Accredited by **Smart Freight Center**
- Curated **portfolio of climate projects** (i.e., Sustainable Aviation Fuel immediately available)

We bring emissions transparency on each order, and after the compensation clients are able to follow the details of their contribution in the highest detail

Climate Care

The carbon emissions generated by your last shipment are estimated to represent **27.23 kgCO2e** (carbon dioxide equivalent).*

We have partnered with SQUAKE to curate climate projects focusing on working towards decarbonising transportation. For example, our portfolio includes Sustainable Aviation Fuel. SAF is a biofuel used to power aircraft that has similar properties to conventional jet fuel but with a smaller carbon footprint.

You can support our Climate Portfolio by adding **5.5 EUR** to your shipment cost. This sum has been calculated based on your last order.

DONATE NOW

We understand that compensation does not neutralise the emissions emitted from your shipment.

In 2020, 95% of Convelio's emissions were linked to air transportation. SAF can reduce carbon emissions by up to 80% compared to fossil-based kerosene, and its deployment at scale is crucial to reducing global transport emissions.

To learn more about the impact SAF can have on the transport industry, read the 2022 report from Intergovernmental Panel on Climate Change (IPCC).

*This estimation was calculated using a tool which is compliant with both the GLEC Framework and the GHG protocol. Please note that the CO2e calculation is an estimate and can change depending on a variety of factors for example vehicle model, or additional stops on the journey.

CLIMATE CARE

As a global logistics company modernizing transportation, we provide customers with environmental impact data

and offer an efficient way to offset emissions through our curated portfolio.

Convelio's climate portfolio - SAF

Technology-based project - carbon avoidance

Sustainable Aviation Fuel (SAF) is the first viable alternative to fossil-based jet fuel. It is the key to sustainable air travel as it can be used to power planes today without significant changes to existing infrastructure.

Compared to fossil fuels it **reduces carbon emissions up to 80%.** Our SAF partner calculates fuel consumption with transparent calculations and bring the respective amount of SAF into airline operations. **Guarantee use within 12 months, but average around 4 weeks.**

Convelio's climate portfolio - Reforestation

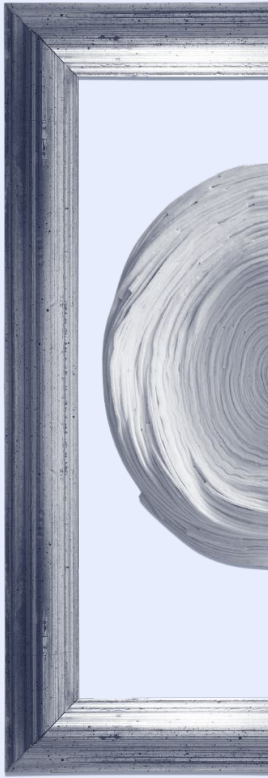
Nature-based reforestation project - carbon removal

The project will rehabilitate **300 hectares of the Manjarisoa tropical inland forest** in Eastern Madagascar by planting over **194k trees from 5 fast-growing endemic species.**

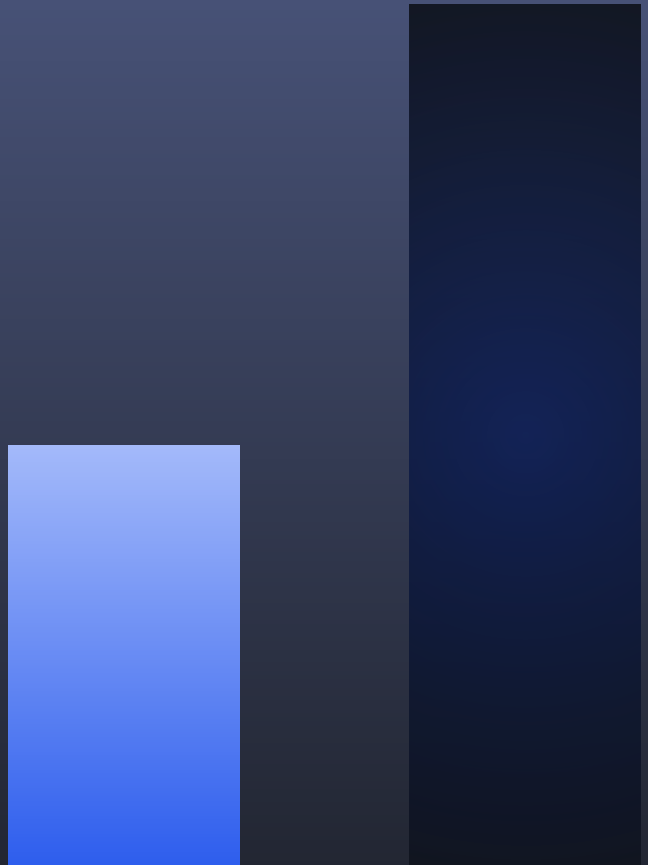
The project helps stop an industrial fishing project in the area, and will **reintroduce endangered lemurs to their native habitat.**

The project uses **satellite imagery** and **deep learning models** to map the projects' location history, its current land cover and to precisely estimate the carbon baseline and expected additionality.

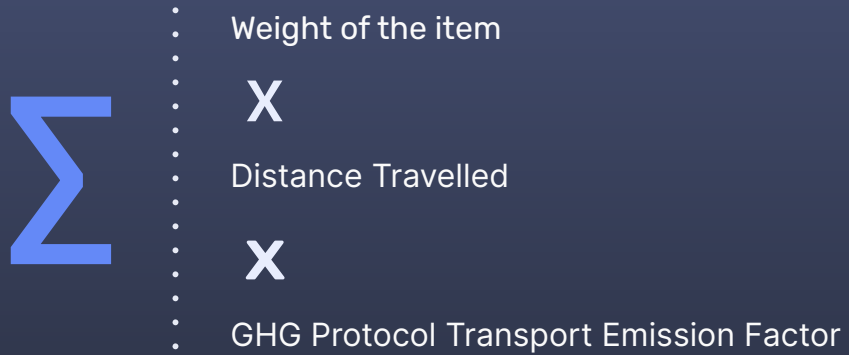
Appendices



1. CALCULATION
Methodology



Measuring CO_2e Emissions for Transportation



The conversion factor changes depending on the transportation mode

Source: GLEC framework

Measuring CO_2e Emissions for Packing

Understanding the lifecycle of a material

Weight

Weight is a defining factor used for calculating the emissions related to a material

Production

The emissions related to the production of the material

End of Life

The disposal of any material produces emissions. This can vary depending on the disposal method, for example when the material is taken to landfill, recycled or incinerated

Soft Wrapping and Wood Crating

at Convelio

Soft Wrap

The material for soft wrapping will vary depending on the piece, the distance and mode through which it is travelling (options include blanket wrapping, tyvek, bubble wrap...)

Wood Crates

When crating is required the work is taken to one of our supplier packing centres where a bespoke wooden crate is built.

* Typical option for a standard Convelio order

Wood Crating

Material

The exact wood sourced for packing can vary per supplier. We made an assumption and used the **emissions factor for plywood** for shipments that required wood crating.

Weight

As we do not weigh crates once they have been made (instead we weigh the total of the crate and the artwork), we calculated this using a formula using the **surface area** to get the **volume,** and then multiplying that by the **material density**.

Soft Packing

Material

We used the emissions factor related to **new plastic**.

Weight

We assumed that an average of **200g** of softwrap was used for each order.

Even with this high assumption the total emissions of soft packing came out **relatively low**.

This is because the emissions factor for plastic is low relative to the weight. There are other things to consider when assessing plastic's legacy — like near-permanent litter and health effects.

Measuring CO_2e Emissions for Team Operations

Purchasing of services

To calculate these emissions we applied the relative emissions factor to the expense line from our annual accounts - this is known as the monetary ratio calculation, which relies on a number of assumptions so is not as accurate as other methods.

Food

We were able to calculate employee food-related emissions by sending out a survey to better understand eating habits.

Business travel

To calculate these emissions we looked at a variety of emissions sources: taxi, car hire, train journeys and flights, as well as hotel bookings.

IT

To calculate these emissions we looked at two emissions sources: 1) hardware - laptops (both purchased and leased) and screens, 2) data usage - for example, use of videoconferencing tools.

Offices

In this section we accounted for energy consumption across all office space (heating, electricity, air conditioning), by gathering data directly from the providers.

2. Starting Out
Building your own report

How to build an Emission Report ?

Select reporting methodology

Map the boundaries

Collect the data

Select the Method

1

Select reporting methodology

GHG Protocol

Greenhouse Gas Protocol

Greenhouse Gas Protocol is a free resource providing standards, guidance, tools and training for business and government to measure and manage climate-warming emissions. Being aligned with GHG Protocol allows easy comparison across organisations, industries and countries.

This methodology is the most universally recognized and is used by organizations in our three home markets - France, UK and the US.

GLEC Framework

Global Logistics Emissions Council Framework

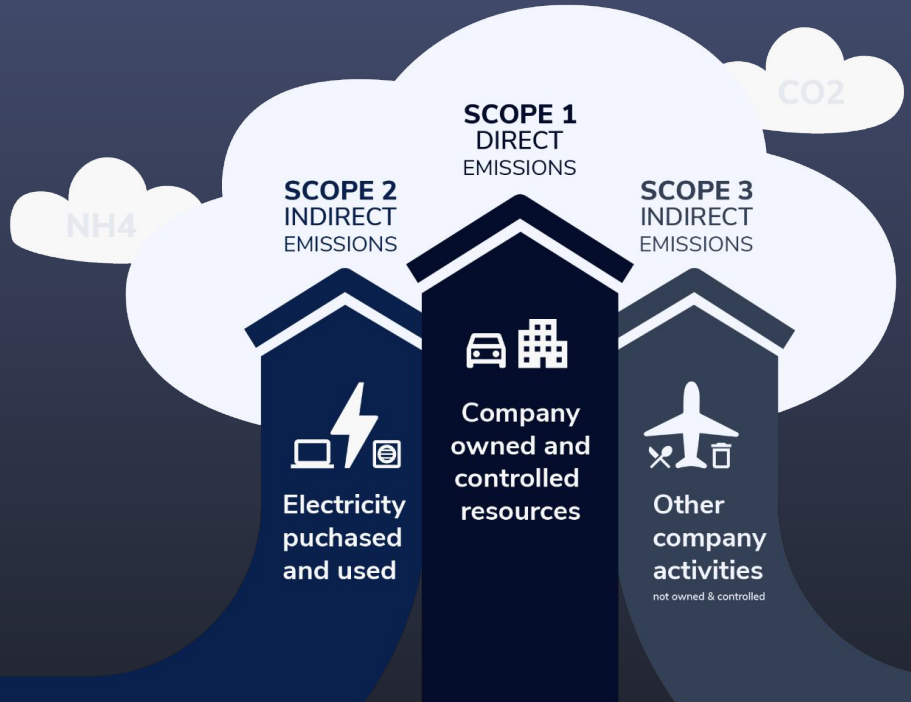
Global Logistics Emissions Council Framework is the only globally recognized methodology for harmonized calculation of logistics emissions across all transportation modes. It is in alignment with the GHG Protocol, but provides a framework specific to transportation emissions.

This methodology has been developed by industry specialists and is recommended by the Smart Freight Center.

Select the Method

GHG PROTOCOL

Emissions under the GHG Protocol are defined as belonging to three categories, or ‘Scopes’



1

Select reporting methodology

Place your activity into categories

We separated activities into the different Scopes of the GHG Protocol

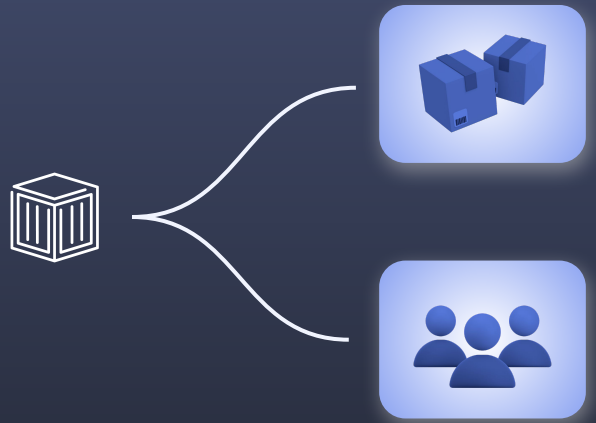
In 2021-2022, 100% of Convelio's emissions were indirect within the SCOPE 3 category

Map the boundaries

Building an Emissions Report

Set the Report Boundaries

After assessing all categories, we split the company into two sections. From this we were then able to pinpoint what data we needed to collect.



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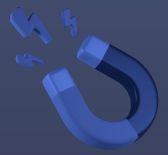
2

Map the boundaries

Ways to Collect Data

These methods are based on physical quantities resulting in a high level of accuracy.



Pulling data reports

From software such as Spendesk.

High level of accuracy

Building reports

Requesting information via internal surveys

Good level of accuracy

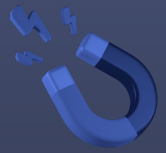
3

Collect the Data

** FEC is Fichier des Écritures Comptables, a compulsory auditing for France based companies*

Ways to Collect Data

This last method relies on monetary ratio emission factor resulting in a lower level of accuracy



Pulling data reports

From software such as Spendesk.

High level of accuracy

Building reports

Requesting information via internal surveys

Good level of accuracy

Accounting reports

Such as *FEC

Low level of accuracy

3

Collect the Data

Thank you!

Want to learn more? Please reach out to yauheni.biadulia@convelio.com