OlimatePartner

Results presentation

The Product Carbon Footprints of the detergent, a T-shirt respectively a T-shirt that has been restored 3 times

Alexandra Sundgren & Katrine Jørgensen 231123



Agenda



(2)

Methodology and system boundaries

Results



Climate projects and communication



ClimatePartner deep dives and academies



Agenda



Methodology and system boundaries

Results



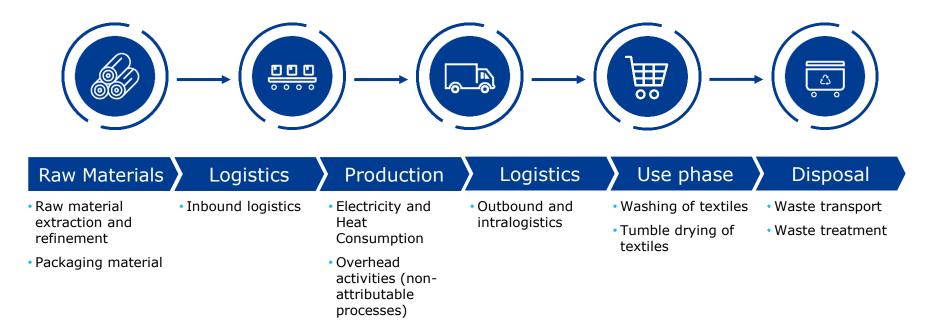
Climate projects and communication

ClimatePartner deep dives and academies



The System Boundaries Include Emissions Along the Product Value Chain

Accounting According to the Cradle-To-Grave Approach



ClimatePartner Validates the Data Input, Identifies the Appropriate Emission Factors and Calculates the CO₂ Emissions The Data Was Collected and Analyzed via Our Cloud-based Software

Data Validation

- Check the data for plausibility
- Validate against internal benchmarks
- Inquire in the event of irregularities
- Feedback on data quality and preparation for future data collection

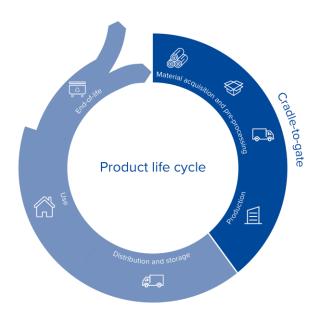


Selection of Emission Factors

- Identify emission factors
 - Utilize scientific LCA databases, including:
 - ClimatePartner databank
 - Ecoinvent
 - GEMIS

ClimatePartner's emission factors have cradle-to-gate system boundaries

Emission factors in our tools



Emission factors are cradle-to-gate

- Mining and extraction of materials or fossil fuels
- Preprocessing of (intermediate) material inputs
- All upstream transport
- Primary, secondary and tertiary packaging
- Production waste
- Heat and electricity consumption during the entire production process
- Sources: scientific life cycle assessment databases such as ecoinvent, GEMIS, ClimatePartner's database

Calculation of emissions based on consumption data and emission factors

From data collection to carbon footprint

Consumption data

- Quantification of the relevant activities
- e.g. usage of 100 kg cotton (woven) in China

Emission factors

- Quantification of greenhouse gas emissions per unit of activity
- e.g. cotton (woven) in China: 27 kg CO₂e/kg

Emissions in CO₂e

-

Х

e.g. cotton (woven): 2,700 kg CO₂e

The use phase calculations for textiles includes washing and drying (air drying as well as tumble drying) Use phase Calculation Assumptions

- Lifespan of a cotton T-shirt: 30 uses and 15 wash cycles (RISE, 2019*)
- The T-shirt is used in Sweden, i.e. Swedish electricity mix is used
- Normal washing procedure
- Washing temperature: 40 °C
- Tumble drying: 90% is air dried and 10% tumbled dried (PEFCR*)
- Prolonged lifespan through restoration with Biorestore 3 times: Additional 90 uses and 45 wash cycles (Biorestore, 2023)

References:

RISE, 2019: *Environmental assessment of Swedish clothing consumption*. Gustav Sandin, Sandra Roos & Björn

Spak (RISE) Bahareh Zamani & Greg Peters (Chalmers University of Technology). Mistra Future Fashion report number: 2019:05.

PEFCR: Product Environmental Footprint Category Rules (PEFCR), T-shirt.

() ClimatePartner

8

Agenda



Methodology and system boundaries

Results

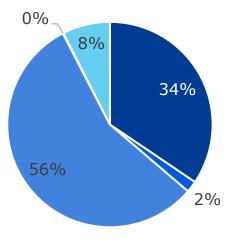
Climate projects and communication

ClimatePartner deep dives and academies



The Product Carbon Footprint of the Biorestore Detergent is 2.26 kg CO₂ per 1 box (3 sachets) Life Cycle Includes Cradle-to-Customer + End-of-Life

Percental division of the emissions



- Material acquisition and pre-processing
- Production
- Distribution and storage
- End-of-life
- Non-attributable processes

Findings

 Main emission sources: air transportation (0.93 kg CO₂) and the granulated enzymes (0.36 kg CO₂).

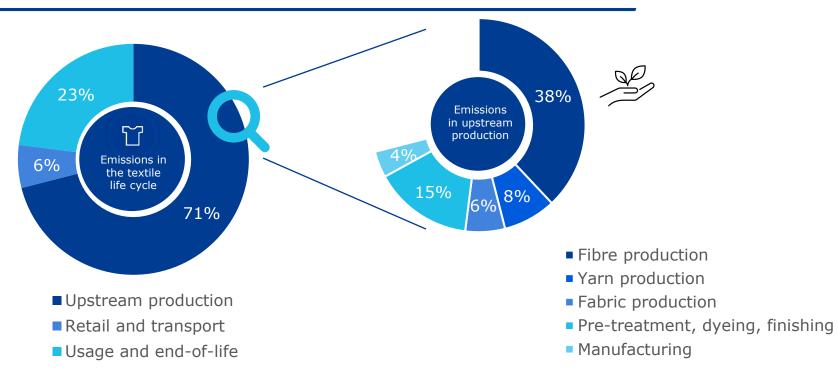
2.26 kg CO₂

Database

- Both primary and secondary data.
- Data gaps: default value for the pallet and Non-attributable emissions.
- Carbon footprint calculated according to Amazon requirements.

>70% of the emissions in the textile life cycle come from upstream activities¹

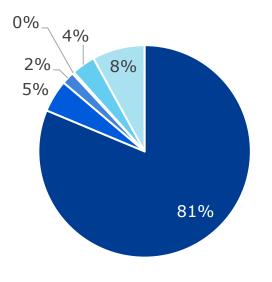
Raw material production is the source of 38% of the overall emissions



() ClimatePartner

The Product Carbon Footprint of the cotton T-shirt is 6.91 kg CO_2 Life Cycle Includes Cradle-to-Grave

Percental division of the emissions



- Material acquisition and pre-processing
- Production
- Distribution and storage
- Use phase
- End-of-life
- Non-attributable processes

Findings

 Largest emissions derive from the fibre production and pre-treatment, dyeing and finishing treatments.

6.91 kg CO₂

• Use phase emissions account for 0.3% (0.02 kg CO₂).

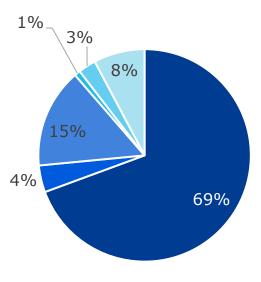
Database

Both primary and secondary data.



The Product Carbon Footprint of the same cotton T-shirt but it has been restored 3 times with Biorestore is 9.19 kg CO₂ Life Cycle Includes Cradle-to-Grave 9.19

Percental division of the emissions



- Material acquisition and pre-processing
- Production
- Distribution and storage
- Use phase
- End-of-life
- Non-attributable processes

Findings

• The relation between the categories has shifted as the carbon footprint of the detergent also is included.

kg CO_2

• Use phase emissions account for 0.9% (0.08 kg CO₂).

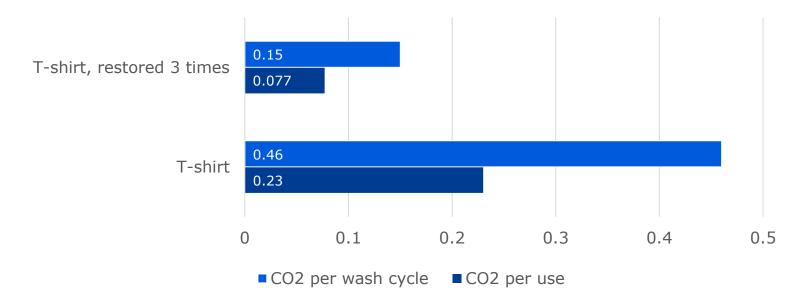
Database

• Both primary and secondary data.

A restored T-shirt causes 3 times less emissions in a life cycle perspective

A comparison of CO₂ emissions per wash cycle and use

Emissions per wash cycle, respectively per use



Agenda



Methodology and system boundaries

Results

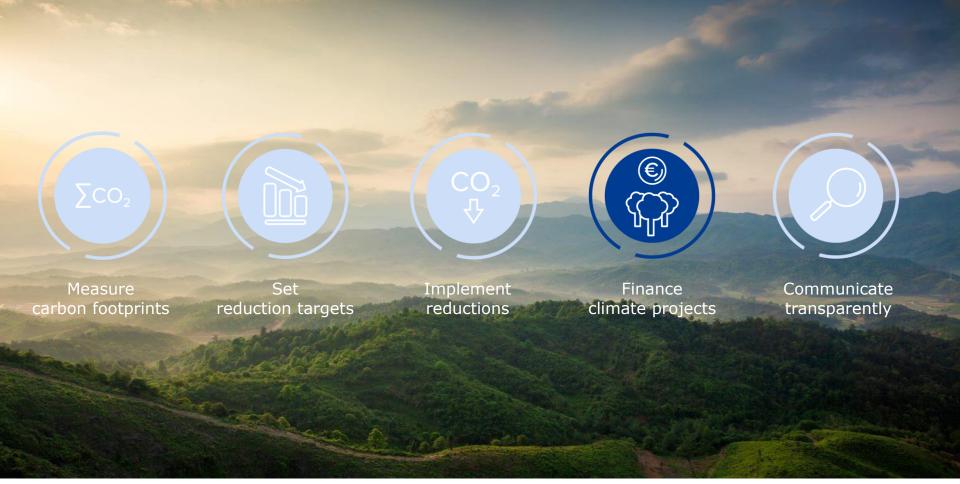


Climate projects and communication

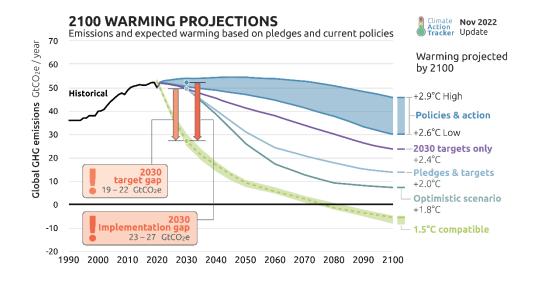
ClimatePartner deep dives and academies







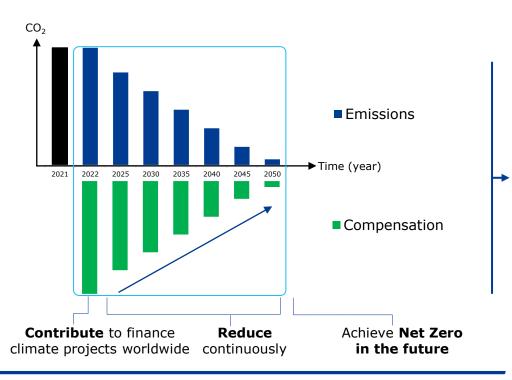
Climate change is humanity's most urgent challenge



 In order to achieve the Paris Agreement targets, a massive acceleration of absolute emission reductions is necessary

 The remaining carbon budget to limit global warming to below 1.5°C will be used up in less than 7 years

A comprehensive climate action strategy consists of measuring, reducing, and contributing





Companies should go further and invest in mitigation outside their value chains now to contribute towards reaching societal Net Zero – Beyond Value Chain Mitigation

() ClimatePartner

Climate projects mitigate emissions while promoting the SDG's

- Certified according to international standards (e.g. Gold Standard, VCS)
- Audited regularly (e.g. TÜV, SGS, PwC)
- Contributes to achieving the UN's sustainable development goals (SDGs)





Criteria for certified climate projects

ADDITIONALITY

A project must result in lower emissions than it would be the case without the project and/or rely on the additional financing from the sale of verified emission reductions.

EXCLUSION OF DOUBLE COUNTING

The CO_2 reduction may only be counted once and is not allowed to be counted again at any other point.

PERMANENCE

 CO_2 savings must not be a one-off effect, but have to have a long-term benefit for the climate.

AUDIT BY THIRD PARTIES

Climate projects must be regularly audited by independent auditors, such as TÜV Nord.

Climate projects enable CO₂ reductions and support local communities

Overview of certified technologies





WIND ENERGY



HYDROPOWER



SOLAR ENERGY



BIOGAS/BIOMASS



GEOTHERMAL ENERGY



REDD+



AFFORESTATION

BLUE CARBON



SOIL ORGANIC CARBON



IMPROVED FOREST MANAGEMENT





IMPROVED COOKSTOVES





SMALL BIOGAS PLANTS



AGRICULTURE

25



BIOCHAR



MOORS

COMBINED **PROJECTS**

() ClimatePartner



REGIONAL AFFORESTATION

PLASTIC BANK





Supporting indigenous peoples to avoid deforestation

www.climatepartner.com/1402

As the biggest REDD+ Project in Colombia, this initiative **protects 1,150,200 hectares of tropical forests**, safeguarding its biodiversity. It provides education, healthcare, sanitation, food security, nutrition, and further **social benefits for 16,000 indigenous people**.



3,622,000 t CO₂ Estimated Annual Emission Reductions







2 ZERD HUNGER

Verified Carbon Standard (VCS)













ClimatePartner

Clean solar energy for Namibia www.climatepartner.com/1404

The carbon offset project in Omaheke near the town of Gobabis in Namibia uses the sun as a climate-friendly energy source: The solar plants constructed in 2017 include 18,560 PV solar modules and have a total capacity of 12.064 MW. As a result, approximately 26.1 GWh of **clean electricity** is fed into the Namibian power grid annually.



25,760 t CO₂ **Estimated Annual** Emission Reductions



Verified Carbon Standard (VCS)





















Measure carbon footprints Set reduction targets Implement reductions

-

Finance climate projects Communicate transparently

 \mathcal{O}

The ClimatePartner certified label promotes holistic climate action, combined with full transparency

ClimatePartner certification provides **transparent disclosure of a company's entire climate action strategy** including carbon footprints, emissions reduction targets, implemented reductions, and financial contribution towards climate projects worldwide.



ClimatePartner enables transparency and credibility in your climate action communication

- Visible positioning of your brand in climate action
- Consumers can see the company's commitment to climate protection and obtain detailed information on its website.
- Climate labels serve as an orientation aid for purchasing decisions*

*60 % of respondents find a climate label important to very important when making purchases (Source: Climate Action Awareness Report 2022, Average for DACH, N = 2.513)



The ClimatePartner label enables transparency and credibility in communication to the end consumer

Find certified products via Amazon Climate Pledge Friendly

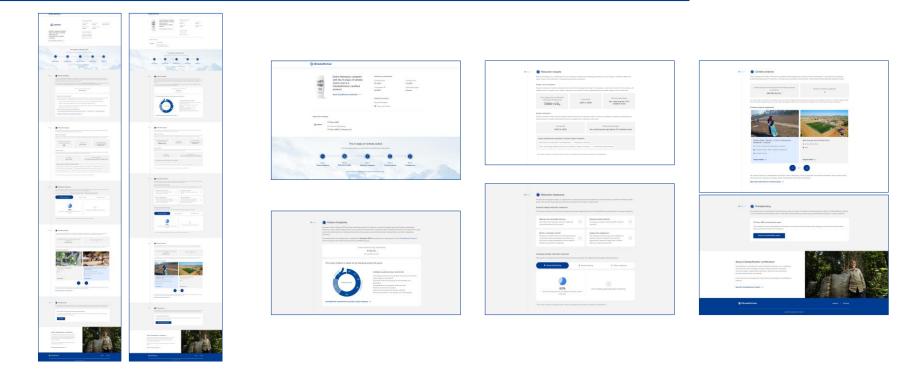








Your climate protection successes and goals can be transparently tracked on the climate-ID website



() ClimatePartner

The ClimatePartner certified label promotes holistic climate action combined with full transparency

Standard Example: ClimatePartner certified company

Optional Example: ClimatePartner certified product



ClimatePartner certified company climate-id.com/000000





ClimatePartner certified product climate-id.com/000002



CO₂ measure reduce contribute



ClimatePartner certified product climate-id.com/000002



measure reduce contribute



* Certified product: climate-id.com/000000

ClimatePartner certified *

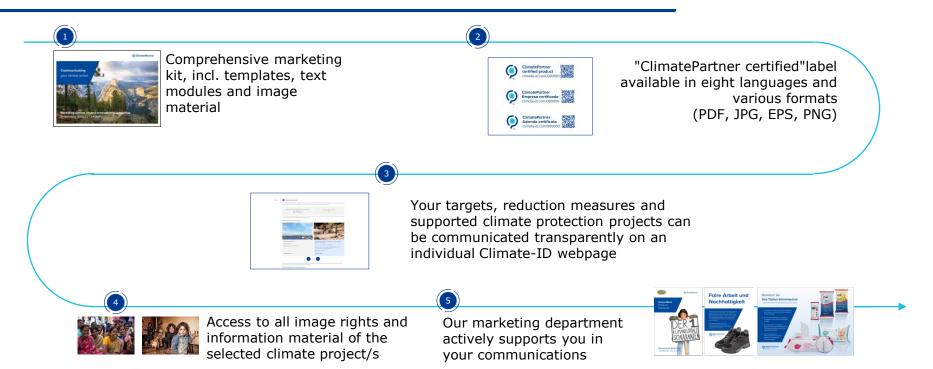
For each of the five steps we have defined requirements which every label user must fulfill to become ClimatePartner certified

	Step	ClimatePartner certified company	ClimatePartner certified product or service
1	Measure carbon footprints	Carbon footprint according to the ClimatePartner Protocol, including regular updates	
2	Set reduction targets	Set company related reduction targets (covering at least scope 1 and 2) within 12 months	
3	Implement reductions	 Company related reductions Reductions are implemented 80% renewable electricity procurement latest by 2025 and 100% latest by 2030 Continuous reductions to achieve reduction targets 	 Product related reductions Reductions with direct influence on the certified product or service are implemented Company related reductions Implement company related reductions within 12 months Continuous reductions to achieve reduction targets
4	Finance climate projects	Contribute to finance certified climate projects	
5	Communicate transparently	Disclose climate action measures regarding the steps 1 t	to 4 within the individual climate-ID page.

() ClimatePartner

We support you in effective and credible communication of your climate action commitments

https://www.climatepartner.com/en/success-stories#customers



() ClimatePartner

The Financial climate contribution label provides transparent disclosure on the financial contribution towards climate projects



- "Carbon neutral" becomes "climate contribution"
- Consistency in the use of our tools and service offering in the market
- The label users should also be **encouraged** to report about their targets and **reduction** measures

The Financial climate contribution label is a tool for communicating financing of climate projects





Customer and order.

FCC Limited

Print product with financial climate contribution 04/2023-03/2024

Tap here to get more information about the order.



Agenda



Methodology and system boundaries

Results



Climate projects and communication



ClimatePartner deep dives and academies



A company-wide understanding of climate change and possible climate action is essential for success Awareness building and training for employees



ClimatePartner Academy	ClimatePartner Deep Dives	Tailored I nhouse trainings	
 Free online seminars on the essential steps for corporate climate action 	 Free online seminars providing deep insights on selected 	 We offer tailor made support for your team 	
Climate Action Climate Change Basics	• Supply Chain	 Complexity and depth according to the target group 	
 Climate Strategy 	 Targets 	• We support your sales and	
 Reduction Initiatives 	Green Energy	marketing team effectively communicate to clients	
 Best Practices etc. 	 Communication etc. 		
 Available in many languages 	Available in many languages		
 Duration: 1½ - 2h 	Duration: 60 - 90min		
Link	Link		
For free	For free		

() ClimatePartner

Office

ClimatePartner AB

Grev Turegatan 30

114 38 Stockholm

Telefon +49 89 1222875-0

www.climatepartner.com

Your contact person

Alexandra Sundgren alexandra.sundgren@climatepartner.com

