A-GAIN GUIDE

CO_2-Calculator

Explore how our GUIDE Tool has been enriched – and how we can help you to extend the lifetime of your garments!

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circular BERLIN

Circular City - Zirkuläre Stadt e.V. (Circular Berlin) is an open, non-profit initiative that accelerates the transition of the Berlin metropolitan region to a circular economy. Through knowledge and community building activities, pilot projects, and educational programmes, the local circular economy agenda is shaped and material flows within the region are redeveloped. Circular Berlin works very closely and mostly in cooperation with the Berlin federal Ministries for the Environment and for Economics as well as with the local ecosystem of enterprises and start-ups involved in the local Circular Economy - with focus on sectors with high resource consumption and circular potential: textiles and fashion, construction, urban development, product and material design, technologies, as well as food and biomass.

looplook

LoopLook is a B2C online marketplace for textile reuse services and products. As a social business case and local community platform, it promotes the visibility of repair and upcycling offers from small businesses and gives consumers easy access to revitalize their closets.

Climate impact through Reuse: How CO_2e- emissions are calculated

Imagine a world in which used textiles don‘t end up in the bin but are given a second chance - that‘s exactly our goal!

With funding from the Berlin Senate Department for Urban Mobility, Transport, Climate Action and the Environment the A-Gain Guide team is committed to cutting CO_2e emissions by reusing more used textiles and reducing waste.

In Germany, around 30% of CO_2e emissions in the textile sector are caused by trade, logistics and disposal. In Berlin, 30,778 tons of textile waste and 37,177 tons from used clothing collections are generated every year.[1] Our platform helps to reuse old textiles through repair and upcycling.

The new CO_2e calculator helps consumers and other (public) decision-makers to rethink and consciously adapt their behavior with regard to extending their own reuse or sensibly passing on discarded clothing. This activates the potential for savings in their own actions, which makes a positive contribution to meeting climate targets.

1. The idea of the CO_2e-calculator

What is the best way to dispose of old clothes or reuse them?

This decision not only affects your personal preferences, but also impacts the environment - from the life cycle of an individual item of clothing to the fashion industry as a whole. During the production of clothing, vast amounts of water and natural resources are consumed, and significant CO_2e emissions are generated - both due to the high energy consumption and the use of petroleum-based raw materials such as polyester. These emissions drive global warming and exacerbate the climate crisis that increasingly threatens our life on earth.

By using clothes for longer and avoiding textile waste, we can significantly reduce CO_2e emissions. However, many people do not know how textiles can be recycled or reused in an environmentally friendly way - even though this can make an important contribution to reducing global warming. Which ‘reuse channels’ are best for the climate?

The A-Gain Guide will support you! With our CO_2e calculator, you can easily understand how many CO2 emissions are generated or can be saved during production, use and, above all, through the reuse or disposal of your clothing. Choose from predefined garments or enter the weight of your unused textiles and playfully compare CO_2e values for repairing, upcycling, selling, donating and more. Our guide can be flexibly adapted at any time and takes individual components into account.

Our MAP tool also shows you offers in your area that match your selection - so you can put your new knowledge into practice immediately. Climate progress is just one step away

2. Why is CO_2e- measurement so complex – and what does it mean for us?

What impact do clothing and fashion really have on the environment?

Currently, the data required to accurately calculate the carbon footprint of an item of clothing is often lacking. Specialized software and databases that make this possible are usually complicated, expensive and difficult to access. Public studies do provide information, but often only on individual life cycle phases - and the values vary greatly. This is due, for example, to different production methods, energy sources, transportation routes or manufacturing locations. In addition, not all aspects of the supply chain are always included in the calculations, as is the case with the cradle-to-gate approach.[2]

Our approach (↪ section 4) supplements this with the concept of "displacement or replacement potential". This describes how likely it is that repaired, upcycled or reused clothing can replace the purchase of a new item and thus save emissions. However, there have only been a few studies to date, most of which provide estimates based on small surveys. This shows how complex this topic is - and how much potential there still is to develop more sustainable solutions.

3. Results & findings from our research

Our results are based on well-founded assumptions and average values that have been verified through research and comparison with external data sources. The CO_2e measures? values primarily offer you guidance without guaranteeing scientific accuracy.

1. Our tool focuses on CO_2e, but pollution, water and land use are also important - take a holistic approach when making decisions.

For an introduction to this complex topic, it is a good idea to look at the impact of fashion consumption on the climate. Data on cotton and climate change is more readily available than on other fibers and impact categories, which is reflected in LCA studies that often focus on cotton products such as T-shirts and jeans. Over its entire life cycle, a T-shirt causes an average of 4.85 kg of CO_2e, while a pair of jeans causes around 13.65 kg of CO_2e.[3] Polyester causes more emissions than cotton, while nylon and acrylic perform even worse. However, cotton, for example, has the highest land and water consumption, which is why all ecological factors should be taken into account.

2. The biggest contribution to reducing CO_2e emissions lies in avoiding newly produced clothing and using it for as long as possible. Make sure you shop consciously and reuse more to extend their life cycle.

Most CO_2e emissions (71%) are generated during production, while transportation[4], trade, use and disposal account for a smaller proportion (Fashion on Climate Report, 2020)[5]. Washing your clothes accounts for around 10% of total CO_2e emissions. End-of-life processes such as incineration and landfill cause around 0.5 kg of CO_2e per item of clothing, which corresponds to around 3%. Logistics for reuse causes an average of 1.15 kg CO_2e.[6]

To begin exploring this complex topic, it makes sense to consider the impact of fashion consumption on the climate.

The negative environmental impacts of textile production and consumption mainly affect:

- Climate
- Resources
- Environmental pollution

The main focus of the calculator is on greenhouse gas emissions (CO_2e), which contribute to global warming and thus to the climate crisis. However, fibers or garments with relatively low CO_2e emissions may have higher negative impacts in other areas, such as land and water use.

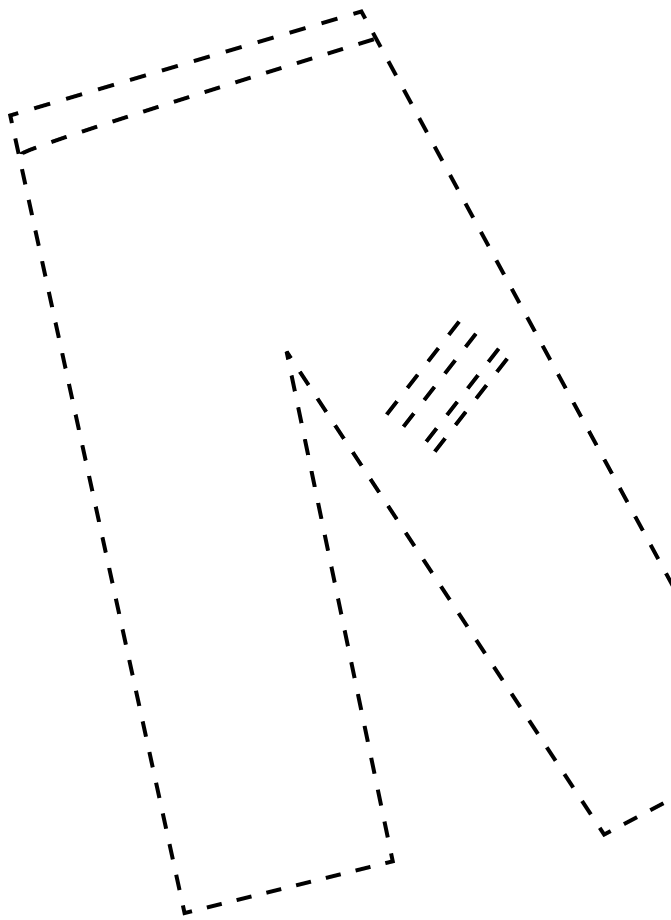
Tip

The more often you wear an item of clothing, the lower the CO_2e impact per use. Complex material blends, elaborate embellishments or special coatings increase the environmental impact and make recycling almost impossible, so go for uncomplicated, long-lasting pieces!

3. Reuse solutions prevent new purchases with varying degrees of effectiveness. With our GUIDE, you can pay attention to the respective CO_2e savings potential and then decide more consciously which channel makes the most sense for your garment.

The displacement rate (↪ section 2) shows how much CO_2e is saved by reusing an item of clothing compared to buying or producing a new item. It also depends on the quality and use of the product.

Buying second-hand saves an average of 62% of emissions. Repair and upcycling are around 67% and 57% respectively (Wrap UK, Citizen Insights, 2022 and Displacement Rates Untangled, 2025).[7] However, these values were determined in the UK; there is not yet enough data available for Germany.



4. Methodology

The CO_2e calculator is part of our GUIDE tool. Previously, it displayed selected local reuse offers on a map in the individual result. New questions have now been added to highlight the CO_2e impact for each reuse solution. Your choices that influence the CO_2e result are as follows:

Guide Selection with CO_2e impacts

No effect on calculation

1. Impacts of production

a) Single garment or **b) Kilogram of textiles (0,5-50 kg)**

a) with predefined average material composition
↪ s. graphic 3

Trousers | Pullover/Sweater | Top/Blouse/Shirt | Jeans | Dress | T-shirt | Jacket/Coat | Bag | Shoes | Swimwear/Sportswear | Other

b) with predefined average material composition

Adult Clothing | Baby & Children's Clothing | Shoes | Bags | Other

c) Material choice

Textile | Leather

2. Impact of the life cycle phase

at the time of purchase (also referred to as origin / quality / brand type) as a comparison between new vs. second-hand purchase:

a) Vintage b) Second-Hand c) New purchase (from designer/luxury brand or other)

New: Designer/Luxury Brands | New: Other Brands | Used: Vintage | Used: Second-Hand

3. Impact of use

a) Frequency of use

Not specified | Regularly (> 1x per month) | Occasionally (> 1x in 3 months) | Almost never (< 2x) | Seldom (< 1x in 3 months)

b) Duration of use

Not specified | Less than 1 year | 1-3 years | More than 3 years

4. Impacts of the Reuse channel

based on a predefined selection of 9 categories in 3 superior categories

a) Reuse yourself (direct)

1. Restyle | 2. Repair | 3. Upcycle | 4. Clean

With tutorials | With a professional stylist | In a sewing café | In workshops | Through a service or designer

b) Passing on (indirect)

5. Sell / Swap / Share | 6. Take-back / In-store | 7. Donate

Flea market | Second-hand or vintage store | Lend online | Sell online (by somebodyelse) | Sell online yourself | Local swap event | Online swap service | Loan store | Take-back / In-store | Used clothing container | Charity organization / NGO | Second-hand store | Upcycling designer or project | Material depot | Online platform | Art or cultural projects

c) Dispose

8. Dumpster | 9. On the street

Graphic 1

The 'Current CO_2e footprint', which is added up continuously along the questions, shows the previous CO_2e emissions of the selected item of clothing and is calculated as follows:

Formula + example calculation:

CO2e footprint
(building up to the choice of Reuse channel)

= CO_2e emissions from production ↪ s. graphic 3 * quality factor[8] + CO_2e- emissions from washing & drying per use ↪ s. graphic 6 * number of uses + Reuse/EoL operating emissions[9] ↪ s. graphic 5

e.g.: 20 kg CO_2e * 1 + 0.017 kg CO_2e * 45 + 0.5 kg CO_2e = 21.27 kg CO_2e

4.1 Impact of clothing and material categories

Each predefined garment and kilogram of textile has a CO_2e value based on a composition of the most common fibers such as cotton, polyester, viscose and wool, with leather as an alternative for products such as shoes and jackets having even higher emissions.

Defined CO_2e emissions from production per fiber/material (cradle-to-gate)[10] (kg CO_2e / kg)

Cotton	Polyester	Viscose	Wool	Leader
21.60	23.49	19.99	41.51	47.92

Graphic 2

Defined CO_2e emissions from production per garment type (cradle-to-gate) (kg CO_2e)

CO = Cotton; PET = Polyester; CV = Viscose; WO = Wool

Garment type for adults	Defined weight (kg)	Defined textile (fibre composition)		Leather
Trousers	0.300	50% CO; 35% PET; 10% CV; 5% WO	6.93	32.35
Jeans	0.450	90% CO; 10% PET	9.80	-
Pullover / Sweater	0.381	30% CO; 30% PET; 40% WO	11.48	-
Dress	0.300	40% CO; 50% PET; 10% CV	6.72	33.50
Top / Blouse / Shirt	0.163	40% CO; 45% PET; 15% CV	3.62	15.62
T-Shirt	0.155	75% CO; 20% PET; 5% CV	3.39	-
Jacket / Coat	0.527	30% CO; 60% PET; 10% WO	13.03	64.40
Bag	0.377	50% CO; 50% PET	8.50	36.13
Shoes	0.410	25% CO; 75% PET	9.44	37.13
Swim & Sports wear	0.188	100% PET	4.42	-
Other	0.325	45% CO; 45% PET; 10% WO	7.95	35.05

Defined CO_2e-emissions per kg textile / leather (kg CO_2e / kg)

On average	23.49	47.92

Graphic 3

4.2 Impact of Reuse categories

The 'displacement rate' mentioned above (↪ section 3.3.) has a significant influence on the impact potential of the reuse channels that consumers choose for discarded clothing. It is used to calculate savings through direct reuse.[11] From the research, they can be roughly defined or assumed as follows:

Defined displacement rates for re-use categories

Reuse- Channel		Displacement rate Buy new or Vintage (similar to new)	Sub-channels	Displacement rate Buy new or Vintage (similar to new)
Reuse yourself	Restyle	70.00 %	Styling-Tutorials	50.00 %
			Professional stylist	75.00 %
	Repair	67.00 %	Local repair through service, designer, workshop	51.00 %
			Send-In Repair (Online)	82.20 %
			Repair by yourself (Tutorials)	51.00 %
	Upcycle	57.00 %	Local upcycling through service, designer, workshop	57.00 %
			DIY Upcycling (Tutorials)	57.00 %
	Cleaning	85.00 %	Professional cleaning service	85.00 %
Pass further	Sell / Swap / Share	63.00 %	Local swap event	64.00 %
			Online Swap-Service	64.00 %
			Flea market sales	64.00 %
			Second-Hand/Vintage Shop	62.00 %
			Online sales / Individual sales	62.00 %
			Borrow / Borrow online	-
	Take-Back / In-Store	63.00 %	Take-Back In-Store	63.00 %
	Donate	63.00 %	Clothing Collection Container	63.00 %
			Charity organization / NGO, Upcycling-designer	63.00 %
			Other (e.g. art- or cultural project, material store)	-
Throw away	Trash container	0.00 %	Trash container	0.00 %
	On the streets		On the streets	0.00 %

Graphic 4

The CO_2e emissions of various reuse or disposal processes were determined for each channel on the basis of comparative values and hypothetical transportation routes. The calculation basis and the assumptions made show that take-back programs of fashion brands generate comparatively high CO_2e emissions:

Calculated Reuse-/End-of-Life-operating emissions per Reuse channel (kg CO_2e)

	per garment	per kg textile
Restyle	0.551	0.551
Repair	0.679	0.679
Upcycle	0.714	0.714
Cleaning (dry cleaning)	1.219	1.219
Sell/ Swap / Repair	1.090	1.090
Take-Back / In-Store	2.391	2.539
Donate	1.408	1.434
Trash container	0.465	0.815
On the streets	0.369	0.819

Graphic 5

4.3 Integration of the results

Various additional factors are included in the final calculation of CO_2e savings in the CO_2 calculator:

1. Ownership guarantee factor

A distinction is made between direct (own) and indirect (third-party) reuse. When textiles are passed on to reuse channels such as “sell/exchange/share”, “take-back/in-store” and “donate”, a lower probability of actual reuse is assumed. For used clothing collection and take-back systems in particular, the research revealed a guarantee of ownership of only 33%, as the majority of garments are either downcycled, incinerated or disposed of in some other way.[12]
As a result, direct reuse by the original owner achieves the greatest CO2e savings, while collection systems are less effective (see example calculation).

2. Second-hand factor

If an item of clothing has previously been purchased as second-hand goods (instead of new or vintage[13]), the savings rate is reduced by 10% (factor 0.9), as it can be assumed to be in a slightly worse condition.[14] Nevertheless, even in this case, reusing items yourself still leads to a significant reduction in CO_2e (of 57% instead of 62% ↪ s. graphic 4).

Our ‘new purchase avoidance rate’ (also known as the ‘reuse savings factor’) per reuse channel is made up as follows:

Formula+calculation example:

New purchase avoidance rate
= Displacement rate ∗ ownership guarantee factor (∗ second-hand factor)

e.g.: 60 % ∗ 0.33 ∗ 0.9 = 17.82 % (bzw. 0.178 reuse savings factor)

To calculate the final CO_2e savings potential of a Reuse channel compared to an avoided new purchase, our formula is as follows:

Formula+calculation example:

CO_2e savings
= CO_2e emissions from production * Reuse savings factor - Reuse/EoL operating emissions

e.g.: 20 kg CO2e * 0.178 – 0.5 kg CO2e = 3.06 kg CO2e (compared to new purchase)

CO_2 savings potential
= CO_2e savings / CO_2e emissions from production * 100

e.g. 3.06 kg CO2e / 20 kg CO2e * 100 = 15.32 % (compared to new purchase)

The impact of use is presented separately at the moment between production and reuse by asking about the individual frequency of wear and the duration of the current use cycle. On average, consumers wear their clothes around 64 times (Greenpeace, Nachhaltigkeit ist tragbar, 2022)[15], with pants being worn the most frequently (around 83 times) and dresses the least frequently (around 26 times), as can be seen from various sources. Depending on the information provided, the CO_2e emissions for washing and drying are calculated per use and displayed chronologically in the questionnaire. At this point, users are also presented with their personal 'CO_2e footprint per use' to emphasize the importance of intensity of use.

Calculated CO_2e emissions for washing and drying

Clothing type (adults)	CO_2e-emissions from washing & drying per use (kg CO_2e)
Trousers	0.012
Jeans	0.017
Pullover / Sweater	0.016
Dress	0.015
Top / Blouse / Shirt	0.009
T-Shirt	0.008
Jacket / Coat	0.017
Bag	0.000
Shoes	0.000
Swim & sports wear	0.012
Other	0.013
Per kg textile mix	0.041

Graphic 6

The final result of the GUIDE represents the following values with equivalent reference points:

Total CO_2 footprint in:
XX kg CO_2e

CO_2 footprint per use
(to date): XX kg CO_2e

CO_2 saving in: XX %

Potential CO_2-saving in:
XX kg CO_2e =

XX h	XX	XX	XX km	XX
Full HD Streaming[16]	Emails with attachment	Cup of coffee	km with the car	return shipment

5. Bibliografie / Quellen

1

Vogt, Harju, Gonser, Barfried (2021). SKU-Bilanz für das Land Berlin 2020. IFEU. https://www.ifeu.de/publikation/stoffstrom-klimagas-und-umweltbilanz-2020-fuer-das-land-berlin; Aktualisierte Auflage: Vogt, Harju (2023). SKU-Bilanz für das Land Berlin 2022. IFEU. https://www.berlin.de/sen/uvk/_assets/umwelt/kreislaufwirtschaft/abfallbehoerde/abfallbilanzen/stoffstrom_klimagas_umweltbilanz_2022.pdf?ts=1710413359 Seite 86

36.274 t Container-Sammlung Alttextilien + 30.778 t Menge im Restmüll; die Daten sind jedoch lückenhaft; weiterhin auch in der aktualisierten Auflage von 2022 nur für die Container-Sammlung: "Die Erfassungsmenge für 2022 berechnet sich (...) zu 37.177 Tonnen. Analog dem leichten Bevölkerungsanstieg liegt diese Menge 2% höher als für 2020. (...) Für 2022 gibt es keine neue Hausmüllsortieranalyse für Berlin, so dass hieraus keine Informationen für eine mögliche Änderungen des Pro-Kopf-Aufkommens für die getrennte Sammlung vorliegen. (...) Der Verbleib der Alttextilien war für 2020 aus den Angaben von vier Unternehmen berechnet worden. Diese vier Unternehmen wurden auch für 2022 befragt. Von einem dieser Unternehmen, das für 2020 etwa 45% der gemeldeten Mengen verantwortet hatte, wurde keine Rückmeldung erhalten."

2

Die Lebenszyklusanalyse (LCA) bewertet die Umweltauswirkungen eines Produkts – von der Rohstoffgewinnung bis zur Entsorgung. Sie erfasst Treibhausgase, Energie- und Wasserverbrauch sowie Ressourcenbedarf. Unternehmen nutzen LCAs, um den ökologischen Fußabdruck zu analysieren und nachhaltiger zu produzieren. Tools wie GaBi, Ecoinvent oder OpenLCA erfordern jedoch Spezialwissen und liefern keine einheitlichen Werte. Der Cradle-to-Gate-Ansatz betrachtet nur die Phase bis zum „Werkstor" des Herstellers – ohne Nutzung und Entsorgung. Was als „Gate" gilt, ist unterschiedlich: Es kann die Fertigstellung eines Materials, das Lager der Marke oder der Einzelhandel sein. Die „letzte Meile" zählt zur Nutzungsphase, da sie individuell entschieden wird.

3

Diese Daten sind Durchschnittswerte aus mehreren Quellen, die wir untersucht haben. Für mehr Informationen kontaktieren Sie uns gerne.

4

As the supply chain of conventionally manufactured clothing for Germany usually passes through many stopovers across several countries and continents, the transport route - according to various sources - stretches between 20,000 and 60,000 km in total, including sea freight (90%) to Europe.China, now the world's largest exporter of clothing, is also the most important country of origin for textile imports to Germany, far ahead of Bangladesh and Turkey (Statista, 2023). A route defined by us for an average transport route from China to Germany (and within both countries) of 33,000 km* to the doorstep would result in CO2e emissions of 1.11 kg per kg of textile.

*Within China: approx. 5,000 km by truck (not included: probably more routes between countries outside Asia); from Asia to Germany (90% by container, 10% by aircraft) = 20,000 km average sea route + 7,300 km air route; within Germany: from Hamburg to warehouse (350 km by truck) + from warehouse to customer (350 km by DHL) = approx. 700 km (not included: return packages)

5

Berg, Magnus (2020). Fashion On Climate Report - How the fashion industrie can urgently act to reduce its greenhouse gas emissions. McKinsey & Company, Global Fashion Agenda. https://www.mckinsey.com/~/media/mckinsey/industries/retail/our%20insights/fashion%20on%20climate/fashion-on-climate-full-report.pdf

6

These data are average values from several sources that we have examined. For more information, please contact us.

7

Cf. Gray, Sabaiduc, Salvidge, Doriza, Downing (2022). Citizen Insights: Clothing Longevity and Circular Business Models Receptivity in the UK. Wrap UK. https://www.wrap.ngo/sites/default/files/2023-05/Citizen%20Insights%20-%20Clothing%20Longevity%20and%20CBM%20Receptivity%20in%20the%20UK.pdf and Wrap (2025) Displacement Rates Untangled: A Standardised Methodology / The Environmental Benefit of Clothing Circular Business Models. Textiles 2030. https://www.wrap.ngo/sites/default/files/2025-02/WRAP-Textiles-2030-Displacement-rate-report-REV1.pdf

8

Der Qualitätsfaktor wurde festgelegt, um aufzuzeigen, dass für ein ursprünglich neu gekauftes - also neu hergestelltes Kleidungsstück die bei der Produktion entstandenen CO_2e-Emissionen zu 100% (= Faktor 1) angerechnet werden, während für den ursprünglichen Kauf eines Second-Hand-Kleidungsstücks diese Emissionen entsprechend nur anteilig angerechnet, also reduziert werden. Hier liegt der Faktor bei circa 0,4 - was mit der Verdrängungsrate zusammenhängt.

9

EoL stands for end-of-life processes in the final disposal of clothing, for example through incineration, landfilling or rotting. This not only generates CO_2e emissions from the decomposition process itself, but also from transportation and other necessary processing steps.

10

An attempt was made to consider the entire cradle-to-gate process until the customer receives the finished garment, i.e. not just the processing of the fiber material. The defined CO2e values per kg for four fibers and for leather are based on a comparison of several research data: 1) eco-balances with a focus on the fiber type and 2) eco-balances/LCAs with a focus on the garment type made from the respective fiber. The former tend to show higher values, presumably because they are more comprehensive and include more processes and other ingredients. To compensate for this discrepancy, we have adjusted and increased the defined CO2e average per kg for fiber categories as a basis for calculation. This means that these data are defined average values from several sources that we have examined. For more information, please contact us.

11

Subramanian, Bajpai, Johnson, Gungor (2022). A Comparative Life Cycle Assessment (LCA) of Resale vs Linear Clothing Systems. Green Story, ThredUp. https://cf-assets-tup.thredup.com/about/pwa/LCAReport-ResaleTextiles-ThredUP-101022.pdf

Die Studie von Green Story im Auftrag von ThredUp setzt dafür folgende Formel an: Potential savings from reusing a product = (Production impact + Retail impact + End of life impact) * Replacement rate* Displacement rate – Resale operations. Dies ist sinnvoll, wenn auch die Unterscheidung zwischen Ersatz- und Verdrängungsrate schwer verständlich bzw. noch nicht einheitlich definiert ist. In den meisten Studien wird Ersatz- mit Verdrängungsrate gleich gesetzt oder ist die Ersatz-Frequenz schon in der Verdrängungsrate enthalten.

12

Die Untersuchungen von Changing Markets (s.u.) und Greenpeace (s.u.) bestätigen, dass etwa 33 % der in Europa gesammelten Altkleider tatsächlich als Second-Hand-Waren weiterverkauft werden (sowohl im Inland als auch im Export). Ob diese Kleidung letztlich getragen wird, lässt sich jedoch nicht validieren und wird daher nicht berücksichtigt. Vereinheitlicht man die Studienergebnisse von o.g. Quellen sowie der Berliner SKU-Bilanz 2020 (s.u.) und dem BVSE (s.u.), landen etwa 14 % der Altkleider im Müll (In- und Ausland), 45 % im Downcycling (z. B. zu Dämmstoff oder Putztüchern) und 8 % werden verbrannt. Der Exportanteil liegt bei etwa 38-43 %.

Trunk, Harding-Rolls, Urbancic (2023). Take-Back Trickery: an investigation into clothing take-back schemes. Changing Markets Foundation. https://changingmarkets.org/wp-content/uploads/2023/07/Take-back-trickery.pdf

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Forbrig, Fischer, Heinz (2015, 2020 (Neuauflage)). BVSE - Studie Konsum, Bedarf und Wiederverwendung von Bekleidung und Textilien in Deutschland. BVSE, FTR. https://www.bvse.de/dateien2020/1-Bilder/03-Themen_Ereignisse/06-Textil/2020/studie2020/bvse%20Alttextilstudie%202020.pdf

13

Die Annahme ist, dass Vintage-Artikel teurer, qualitativ hochwertiger und besser gepflegt / erhalten wurden als „Fast-Fashion“ Second-Hand-Waren; vermutlich kaufen Verbraucher:innen in diesem Fall also bewusster „wie neu“.

14

Basiert auf dem Baseline vs. Resale Model von Green Story, wonach sich die Tragehäufigkeit für gebraucht gekaufte Kleidungsstücke um etwa 10% verschlechtert, vgl. z.B. Jeanshosen: 60 Nutzungen (Baseline) vs. 54 Nutzungen (Resale)

Subramanian, Bajpai, Johnson, Gungor (2022). A Comparative Life Cycle Assessment (LCA) of Resale vs Linear Clothing Systems. Green Story, ThredUp. https://cf-assets-tup.thredup.com/about/pwa/LCAReport-ResaleTextiles-ThredUP-101022.pdf

15

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16

The recalculation in everyday examples is based on:

ÖkoMedia GmbH (2022 (2. Auflage)). Klima-Sparbüchle - Jede Tat zählt CO2 und Energie sparen. Ministerium für Umwelt, Klima und Energiewirtschaft Baden-Württemberg. https://um.baden-wuerttemberg.de/fileadmin/redaktion/m-um/intern/Dateien/Dokumente/2_Presse_und_Service/Publikationen/Klima/Klima-Sparbuechle-barrierefrei.pdf

Closing words

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Do you have any further questions, or would you like more background information on our methodological approach and the CO_2e calculation of reuse channels?

We are always happy to answer critical questions and exchange ideas at

hello@a-gain.guide!

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