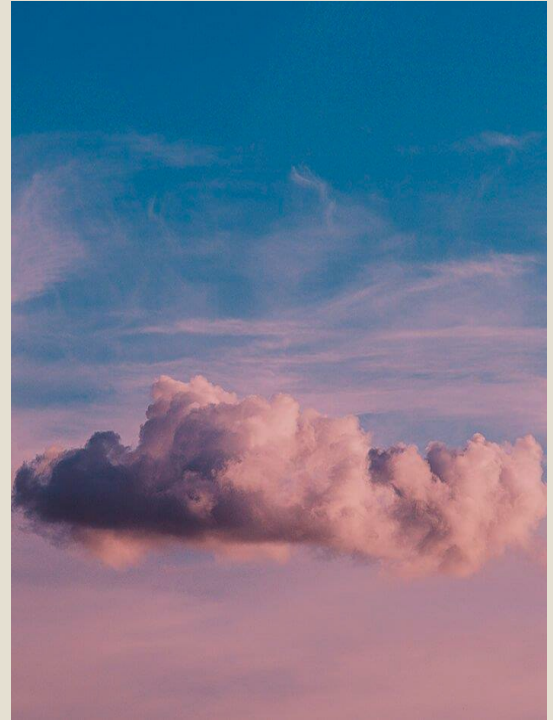# NA-KD
CLIMATE ACTION ROADMAP

For period 2020 -2030

Sustainability Dept

December 2022

INDEX

INTRODUCTION

The fashion industry has a substantial environmental impact. Our customers want climate action now and demand a more sustainable approach. To address this request, for the sake of future generations, and to keep global warming below 1.5 degrees, we have an ambitious plan to reduce absolute climate emissions by 50% by 2030 across our value chain. To achieve this goal, we have developed this climate action roadmap. Should any changes occur that affect the results, the report shall be updated accordingly.

Baseline carbon footprint
The baseline period of this climate action roadmap corresponds to the full year of 2020. A roadmap for reducing the carbon footprint to the year 2030 has been established as a part of this report. The total carbon footprint of NA-KD's 2020 operations amounted to 69 514 tons of CO2e.

Table 1 – Total carbon footprint divided by scope

GHG-scope	Carbon footprint (t CO2e)	Share of total emissions
Scope 1	10	0.02 %
Scope 2	177	0.25 %
Scope 3	69 327	99.73 %
Total	69 514	100 %

Scope 1 activities include refrigerants and vehicles operated by NA-KD. Scope 2 activities include the consumption of electricity and heating (i.e. energy use) within   NA-KD's operations. Scope 3 activities include purchased goods and services, transport and distribution (upstream and downstream), and business travel. The contribution per activity is shown in Table 2 below.

Table 2 – Total carbon footprint divided by activities

Main activity	Contribution to total emissions (%)
Business travel	0.8 %
Energy use within own operations	0.3%
Purchased goods and services	83.4 %
Transport and distribution	14.2 %
Other	1.4 %
Total	100.0 %

METHODOLOGY

Methodology
The carbon footprint for the baseline period has been quantified and reported in line with the Greenhouse gas (GHG) protocol reporting standards:

- GHG protocol Corporate Standard
- GHG Protocol Scope 2 Guidance
- GHG Protocol Corporate Value Chain (scope 3)

Our climate calculation is also based on and aligned with the standards set for the Swedish Textile Initiative for Climate Action. The STICA guidelines differ from other standards and have for example a higher emission factor for air shipment with an RFI of 2.7.

All transport emission calculations are done according to the GLEC framework. The GLEC (Global Logistics Emission Council) framework is an international standard for the emission calculation of transports.

Our tier 1 supplier data is based on self-assessments done in the Higg FEM data, both verified and non-verified. Our tier 2-4 material and production data are based on Higg MSI data, which is global average data and not specific data from our own production. You can read more about the Higg index tools here.

Furthermore, the organizational boundaries are set based on an operational control approach and Scope 2 emissions are calculated using a market-based approach.

All relevant greenhouse gases are included in the calculations. Total emissions are measured in CO_2 equivalents (CO2e). Our yearly emission calculations and results are reported in our sustainability report here.
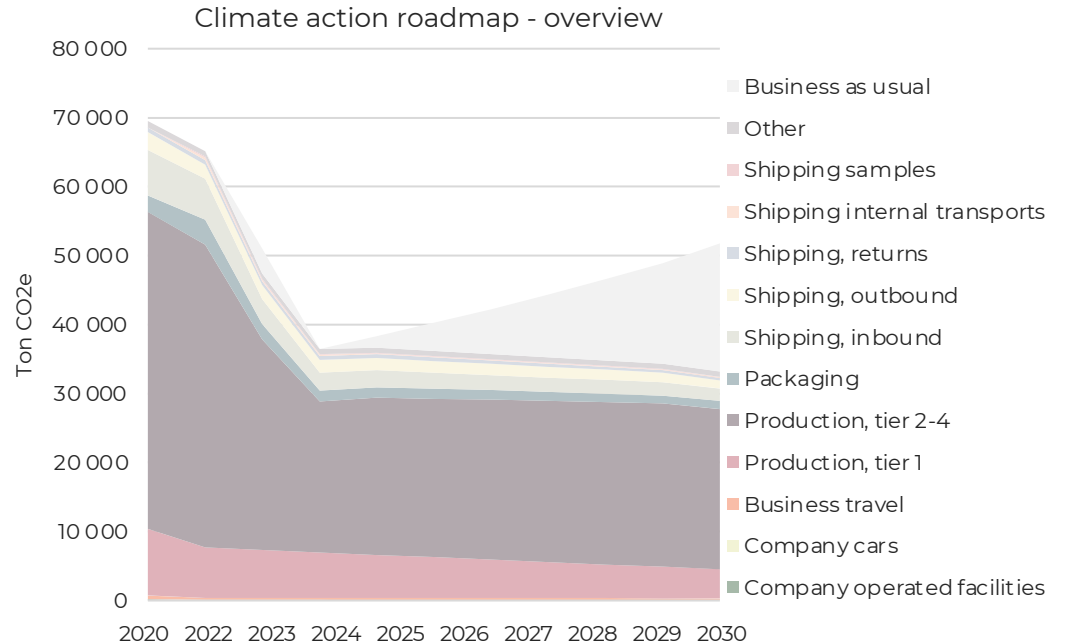
REDUCTION PLAN

EXECUTIVE SUMMARY

We had two important goals to consider when creating our climate action roadmap: our financial goal and our emission reduction goal. Looking at different growth and emission reduction scenarios it became clear that we need to decouple growth from volume if we are to reach our goals. Briefly, we need to earn more money for each CO2e that we use. There are four important parameters for this roadmap: increase our full-price sell-through rate, lower our emissions in the production of new products, increase our circular business solutions, and lower our overstock. To summarize, we need to make more money on every piece we produce.

Table 3 – Overview of reduction plan 2020 to 2030

Climate action roadmap - overview

Legend:
- Business as usual
- Other
- Shipping samples
- Shipping internal transports
- Shipping, returns
- Shipping, outbound
- Shipping, inbound
- Packaging
- Production, tier 2-4
- Production, tier 1
- Business travel
- Company cars
- Company operated facilities

2030 SCENARIO SCOPE 1, 2 AND 3

Below is an overview of the potential reductions and the 2030 scenario for each scope and business area. The potential actions and reduction scenarios for each business area are further described in the sections below.

Table 4 – Reduction plan Scope 1,2 and 3 per business area

SCOPES	Business area	2020 Baseline (ton CO2e)	2030 Scenario (ton CO2e)	Reduction	Reduction %
Scope 1&2	Company operated facilities	177	44	-133	-75%
	Company cars	5	1	-4	-80%
Scope 3	Business travel	530	272	-259	-49%
	Production, tier 1	9 668	4 207	-5 461	-56%
	Production, tier 2-4 Purchased material	45 975	23 234	-22 741	-49%
	Packaging	2 353	1 183	-1 170	-50%
	Shipping, inbound	6 604	1 817	-4 787	-72%
	Shipping, outbound	2 579	1 154	-1 425	-55%
	Shipping, returns	660	333	-327	-50%
	Shipping internal transports		108	-248	
	Shipping samples		66	-149	
	Other	963	761	-	-
	Total	69 514	33 180	-36 704	-53%
	Goal 2030		34 757	34 757	

SCOPE 1 AND 2

In scope 1 and 2 we have our own emissions. These stand for less than 0,1% of our total emissions, but regardless it is important that we reduce all of our emissions if we are to reach our goals.

Company cars

Potential actions:
Replace petrol and diesel business cars with fossil-free alternatives.

Scenario description:
We will move over to fossil-free alternatives as old leasing agreements are replaced.

Company operated facilities

Potential actions:
Change to renewable electricity and heating sources in our own facilities.

Scenario description:
We will change to certified renewable electricity and heating sources for, at least, 75% of our own facilities.

Table 5 – Overview of reduction plan 2020 to 2030

Business area	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2 030
Company operated facilities CO2e	177	41	41	42	42	42	43	43	43	44	44
Company cars CO2e	5	9	8	7	6	5	5	4	3	2	1

NA-KD

SCOPE 3

In scope 3 we have our value chain emissions. These stand for the main part of our total emissions, over 99%, where raw materials and the making of materials is the biggest source on NA-KD's emissions.

Business travel

Potential actions:
Reduce air travel and replace it with train rides. No flights within Sweden.

Scenario description:
With production in Turkey and Asia we will always need to travel in order to work closely with our suppliers, but in this post-pandemic world, we have all learned new ways of communicating. That is why we believe that we can work closely with our suppliers even on a digital scale and therefore decrease the need for travels. We also see a big potential to decrease our air travel when it comes to our marketing department. We will find new ways of planning photo shoots that can decrease both the need for air travel and the use of other transportation, i.e. trains
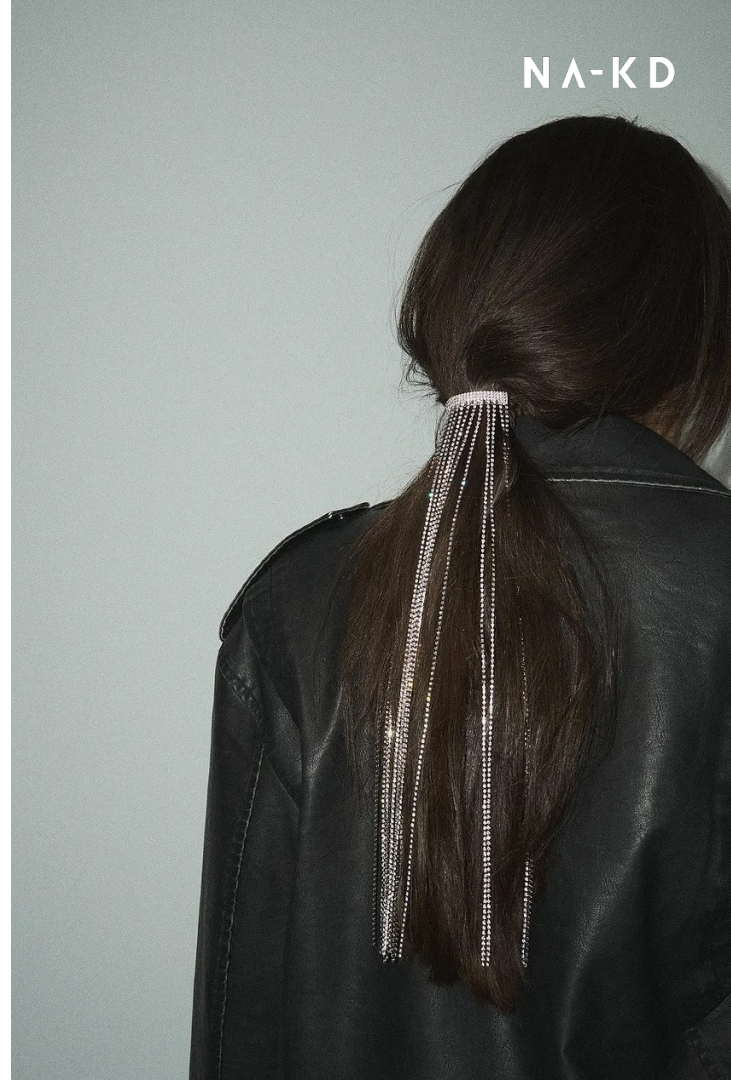
SCOPE 3

Production – Tier 1

Potential actions:
Change supplier localization to grids with lower emissions. Support tier 1 suppliers to change to renewable electricity. Reduce virgin production.
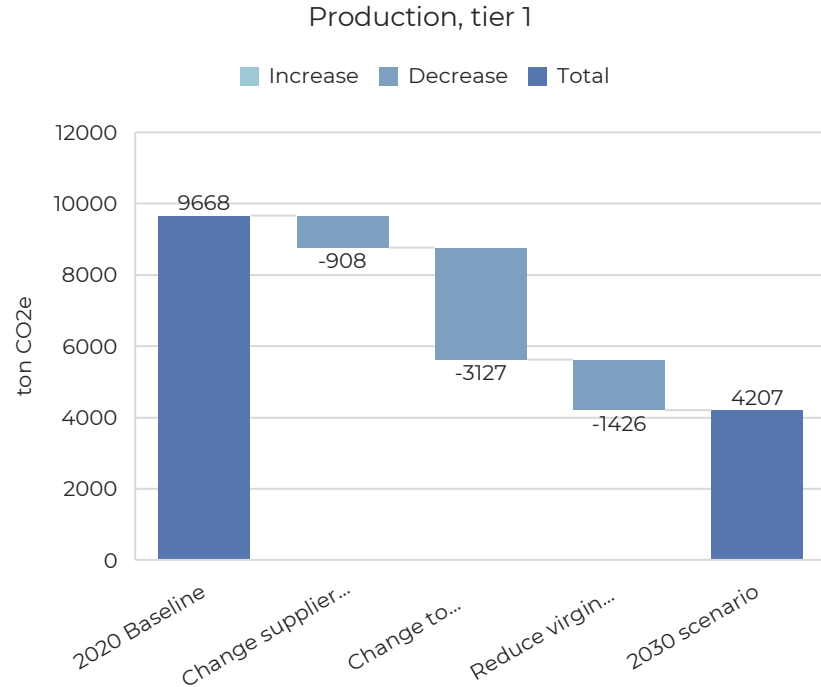
Scenario description:
For tier 1 we will be able to reduce our emissions due to three different actions. The first one is to change the location of the production to countries with grids with lower emissions. The goal is that 75% of the production will be placed in countries with lower grid emissions. The second one is to support our tier 1 facilities to change to renewable energy. Our goal is that 75% of our volume in tier 1 production will be produced with renewable energy. The third action is to reduce our volumes, which will reduce the virgin production and the emissions connected.

Table 7 – Production, tier 1 reduction scenario

Production, tier 1

Table 6 – Produced volume with renewable energy, tier 1

Business area - Production tier 1	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2 030
Produced volume with RE in tier 1 in %	0,6	1,4	3	8	12	20	30	40	50	60	75%

SCOPE 3

Production – Tier 2-4 Overview

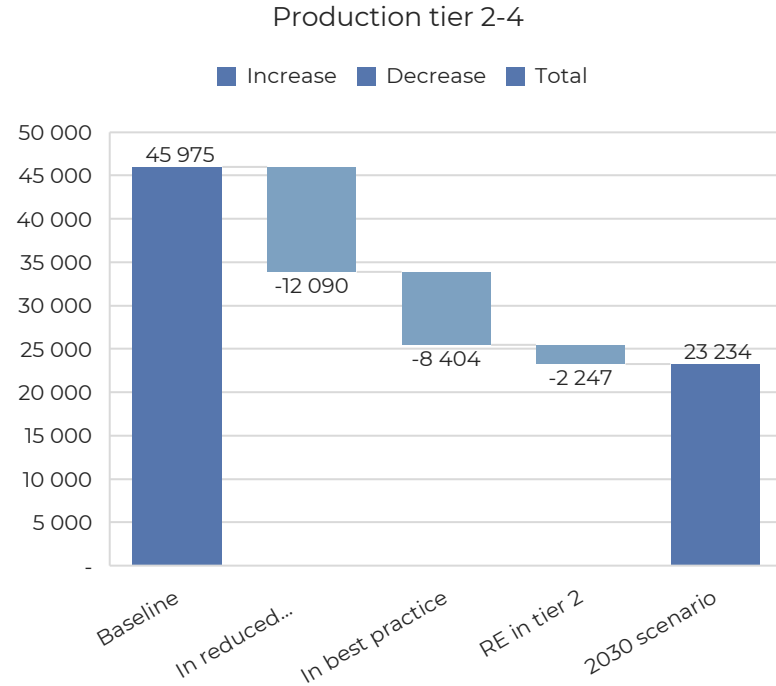**Potential actions:**
Reduce our volumes. Increase low-impact fibers. Increase solution-dyed fibers. Support tier 1 suppliers to change to renewable electricity.

Scenario description:
For tier 2-4 we will be able to reduce our emissions due to three different actions. The first one is to reduce our volumes. This will give the highest reduction in emissions. The second one is to use a higher amount of "best practice" materials, i.e. low impact fibers and solution-dyed fibers. The third one is to increase the use of renewable energy in our tier 2 facilities, i.e. the fabric mills.

Table 8 – Overview reductions for tier 2-4

Production tier 2-4

■ Increase ■ Decrease ■ Total

SCOPE 3

Production – Tier 2-4 Purchased Material

Potential actions:
Reduce volumes. Increase low-impact fibers.

Scenario description:
Our biggest reduction of emissions will come from reduced volumes. An area where we have already made huge reductions. This will mean that we have room for increasing our volumes by 5% yearly from 2024. A prerequisite for this is that we increase the share of low-impact fibers, such as organic, recycled, and FSC-certified fibers as well as move towards better dyeing processes such as continuous and solution dyeing. We also need to increase the share of fabric mills using renewable energy. The goal is to have 26% of the volume made with renewable energy by 2030.

Table 9 – Produced volume with renewable energy, tier 2

Business area Production -tier 2	2024	25	26	27	28	29	2030
Produced volume with RE in tier 2 in %	2	5	8	12	15	20	27

Table 10 – Overview reductions for our biggest materials volumes and low-impact fibers.

Reduction for biggest materials until 2030

■ Base year Co2e
■ Goal after volume redcution in Co2e
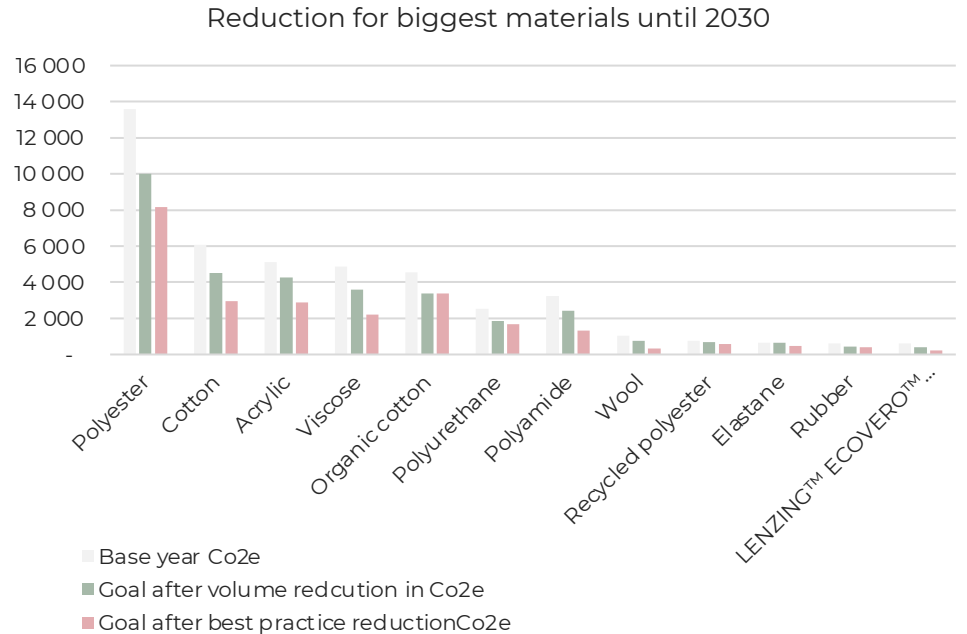■ Goal after best practice reductionCo2e

Table 11 – Reductions for purchased materials

Climate action roadmap - Purchased materials CO_2e ton

NA·KD
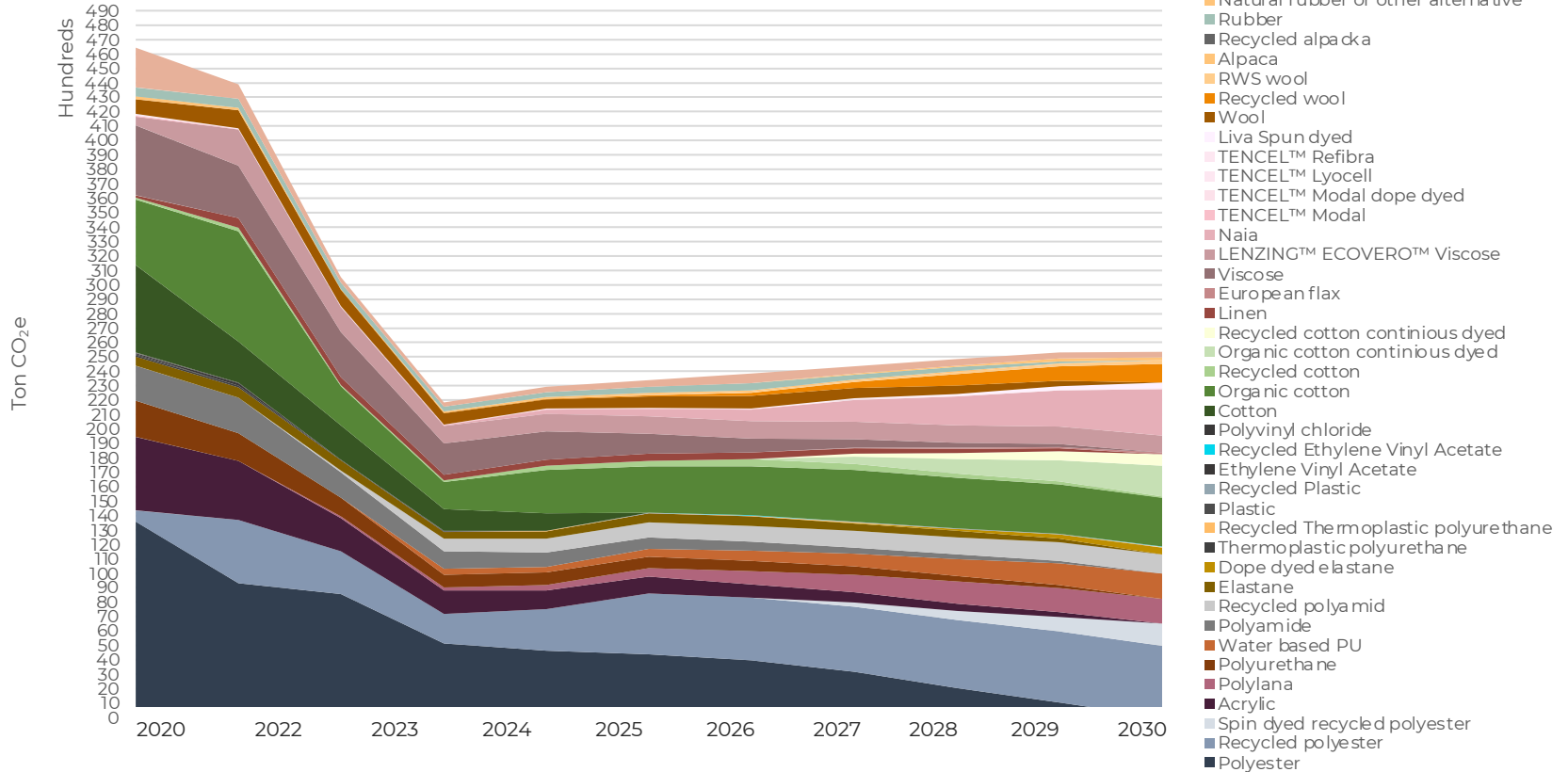
Table 12 – Reductions for biggest synthetic materials

Ton CO2e Synthetic material

Legend (right of chart):
- Dope dyed elastane
- Elastane
- Recycled polyamid
- Polyamide
- Water based PU
- Polyurethane
- Polylana
- Acrylic
- Spin dyed recycled polyester
- Recycled polyester
- Polyester
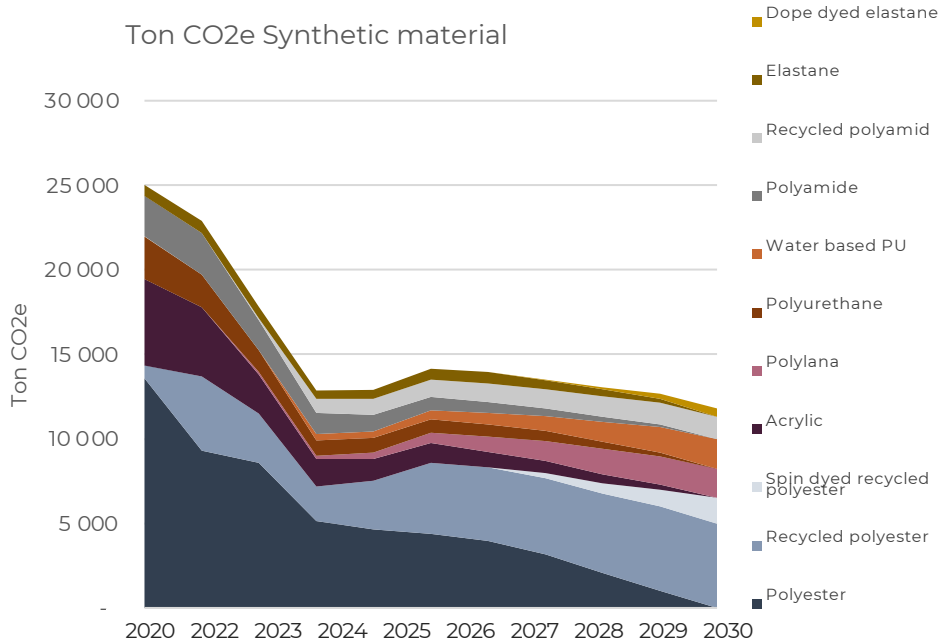
Table 13 – Reductions for cotton

Ton CO2e for Cotton

Legend (right of chart):
- Recycled cotton continious dyed
- Organic cotton continious dyed
- Recycled cotton
- Organic cotton
- Conventional cotton
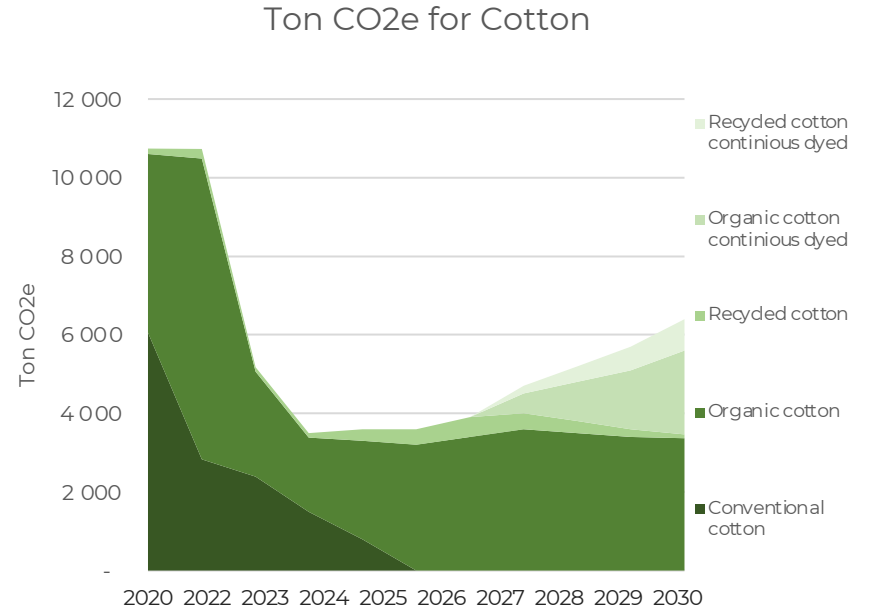
Table 14 – Reductions for man-made cellulosic materials

Ton CO2e Man made cellulosics

Legend:
- Liva Spun dyed
- TENCEL™ Refibra
- TENCEL™ Lyocell
- TENCEL™ Modal dope dyed
- TENCEL™ Modal
- Naia
- LENZING™ ECOVERO™ Viscose
- Viscose

NA-KD
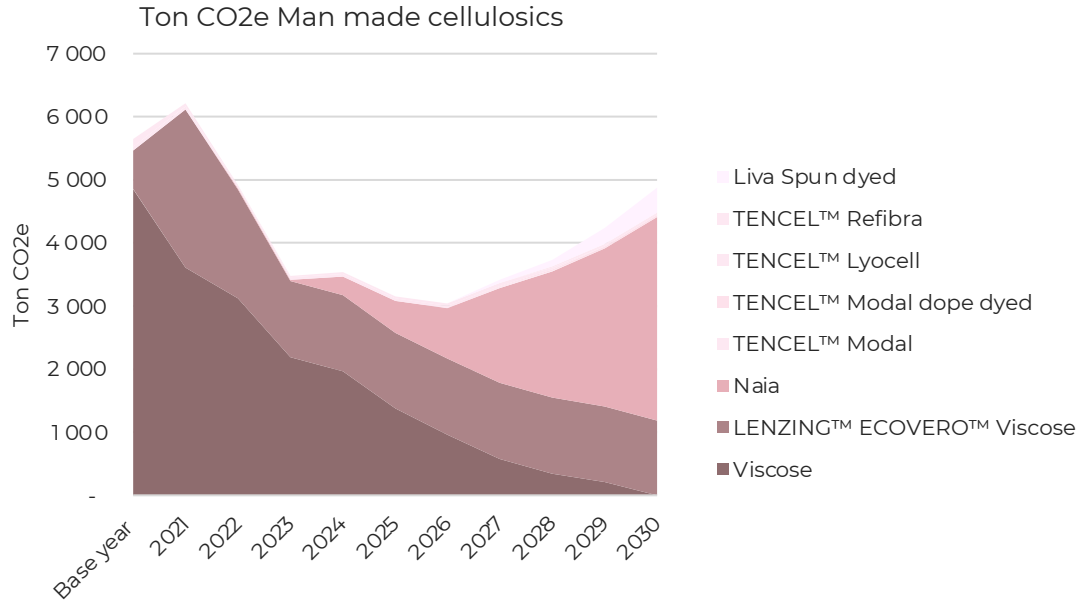
Production – Packaging material

Potential actions:
Reduce volumes. Increase low-impact fibers.

Scenario description:
Our focus will be to change virgin material to recycled content for plastic and cardboard. This will have the biggest impact on reducing the emissions for our packaging.

Table 15 – Reductions for purchased packaging materials

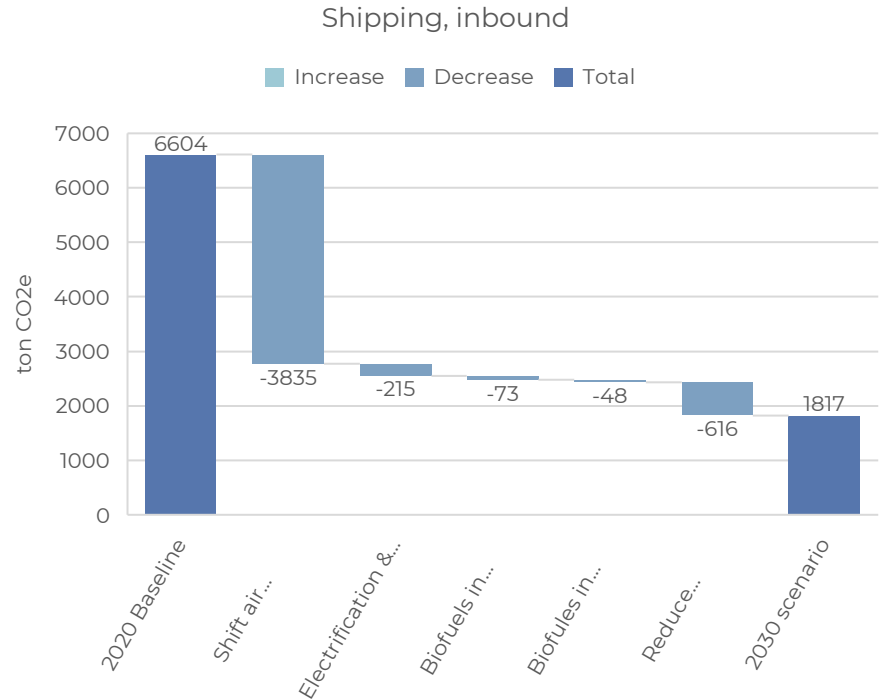| Business area - Packaging	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Plastic recycled in %	62	63	65	70	75	80	85	90	95	100	100
Cardboard recycled in %	16	4	20	30	40	50	60	70	80	90	100

SCOPE 3

Shipping – Inbound

Potential Actions:
Shift air transport to sea transport. Electrification and biofuels in truck-, air- and sea freight. Localization and near-shoring.

Scenario description:
Our biggest reduction will be made by shifting air transportation to boat (to 50% or 75%) for the countries of origin where both boat and air transport flows are accessible during the base year. The use of fossil fuels in truck, boat, and air transport will be reduced in line with the respective transport sector's global goals for 2030 (IEA, 2022). The number of shipments will automatically decrease in line with the reduced amount of purchased virgin produced. Transport flows will also be adjusted as we shift more of our production to Turkey.

https://www.iea.org/reports/trucks-and-buses
https://www.iea.org/reports/aviation
https://www.iea.org/reports/international-shipping

Table 16 – Overview for reductions for shipping, inbound

Shipping, inbound

Legend: Increase, Decrease, Total

ton CO2e

6604, -3835, -215, -73, -48, -616, 1817

2020 Baseline, Shift air..., Electrification &..., Biofuels in..., Biofules in..., Reduce..., 2030 scenario

SCOPE 3

Shipping – Inbound

Table 17 – Reduction actions for shipping, inbound

Business area - Shipping inbound	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2 030
Total air transports CMB in %	7,8	4,1	4,5	4	4	3	2	2	2	2	2
Warehouse hub in USA											In use
Fossil free deliveries truck in %							5	10	15	20	25
Fossil free deliveries air in %							2	4	6	8	10
Fossil free deliveries sea in %							5	7	10	12	15

Shipping – Outbound

Potential Actions:
Shift air transport to truck transport. Electrification and biofuels in truck and air freight. Localization and near-shoring.

Scenario description:
Transport flows via air to Oceania (i.e. Australia and New Zealand) are exchanged to North America (i.e. USA). This will be made possible by the assumption that we become more established in the US market and phase out sales to Australia and New Zealand due to high emissions in distribution. The use of fossil fuels in trucks will be reduced in line with our internal goal of achieving 75% fossil-free transport by 2030. The number of shipments will increase in line with the projection for an increase in sold volumes by approximately 6%.
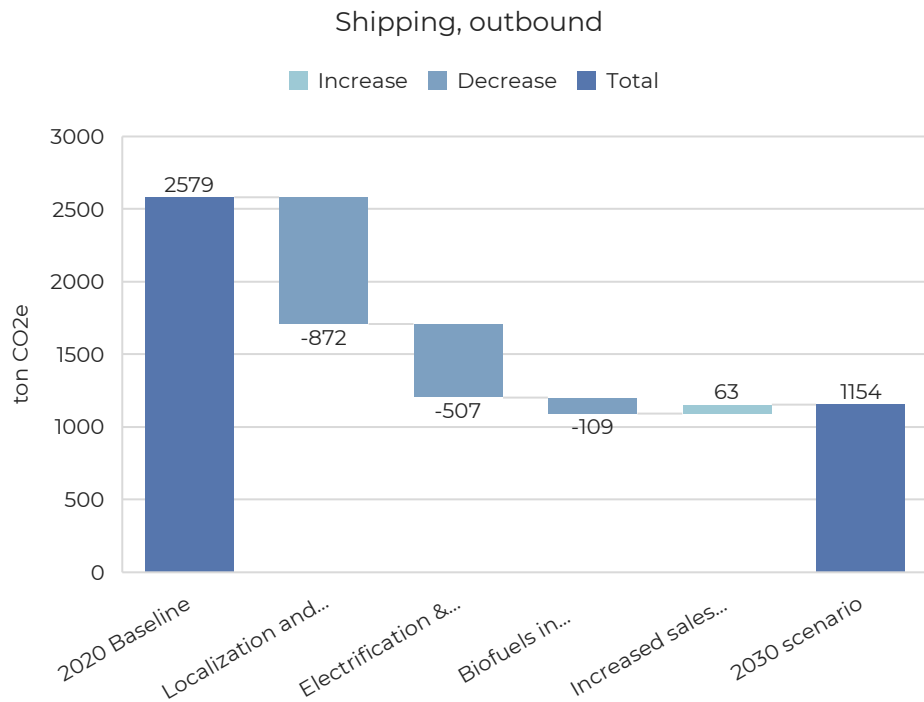

Table 18 – Reduction actions for shipping, outbound

Business area - Shipping outbound	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2 030
Warehouse hub in USA											In use
Fossil free delivieries truck in %	7	15	20	25	30	35	40	50	60	70	75
Fossil free delivieries air in %							2	4	6	8	10

Table 19 – Overview for reductions for shipping, outbound

Shipping, outbound

- Increase
- Decrease
- Total

Waterfall chart — ton CO2e (y-axis from 0 to 3000):
- 2020 Baseline: 2579
- Localization and…: −872
- Electrification &…: −507
- Biofuels in…: −109
- Increased sales…: 63
- 2030 scenario: 1154

Shipping – Samples and internal transfers

Potential Actions:
Shift air transport to truck transport. Electrification and biofuels in Electrification and biofuels in truck-, air- and sea freight. Localization and near-shoring.

Scenario description:
The use of fossil fuels in truck and air transport will be reduced in line with the respective transport sector's global goals for 2030 (IEA, 2022). We will also reduce the emissions from shipping samples by focusing on different projects for digitalizing the sample process. This will decrease the number of samples needed.
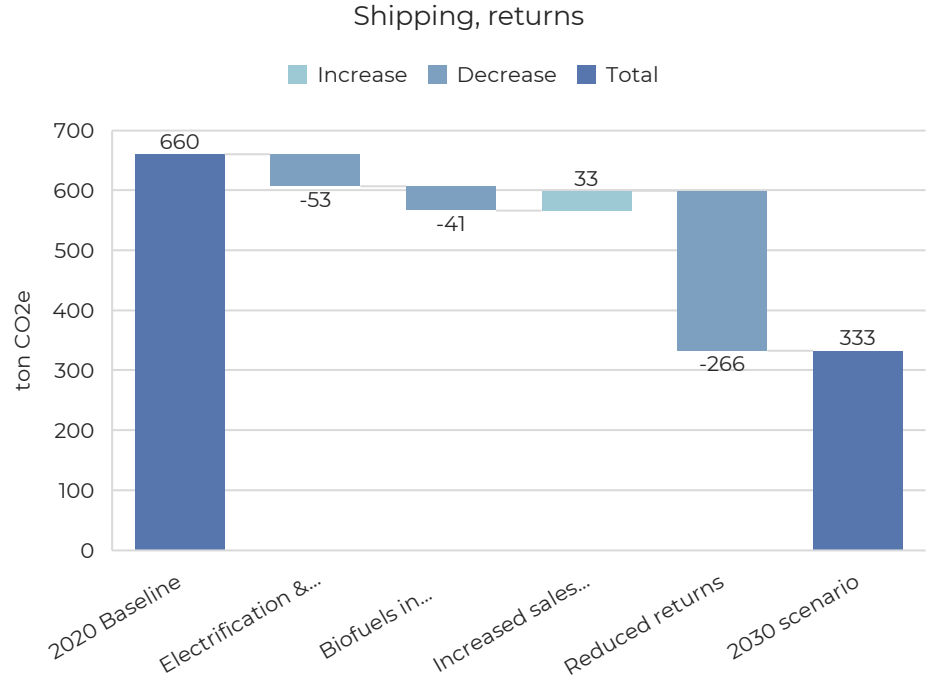
Shipping – Returns

Potential Actions:
Shift air transport to sea transport. Electrification and biofuels in truck-, air- and sea freight. Localization and near-shoring.

Scenario description:
The use of fossil fuels in truck and air transport will be reduced in line with the respective transport sector's global goals for 2030 (IEA, 2022). As an increase of approx. 6% is projected for our sold volumes, including Circle, the number of shipments will increase accordingly. The number of returns will decrease to 30%.

Table 20 – Overview for reductions for shipping, outbound

Shipping, returns

Legend: Increase, Decrease, Total

Category	Value
2020 Baseline	660
Electrification &...	-53
Biofuels in...	-41
Increased sales...	33
Reduced returns	-266
2030 scenario	333

ton CO2e

CIRCULAR BUSINESS MODELS

Circular business is an important part of this climate action roadmap as it is an enabler to reduce a large part of our emissions and at the same time increase our growth. Our goal is that circular business models should stand for 20% of our GMV by 2030.
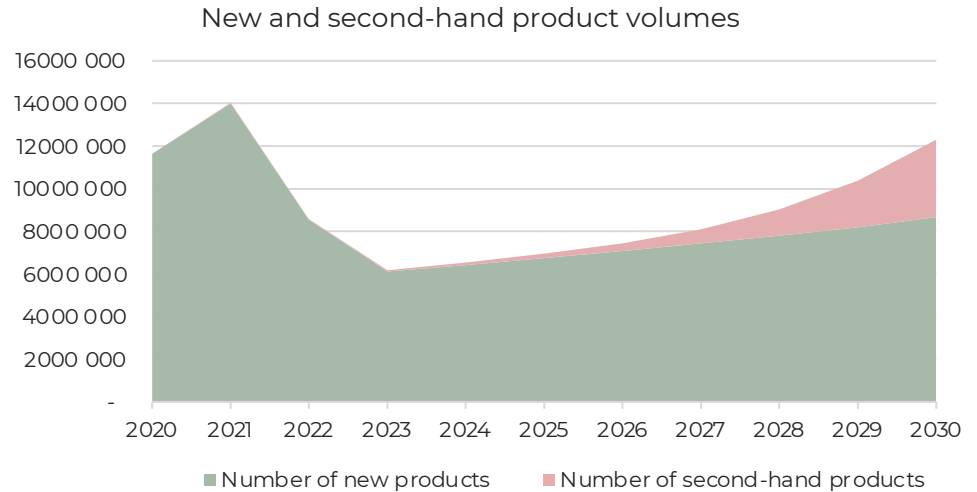
Potential Actions:
Increase circular business solutions for second-hand items.

Scenario description:
For second-hand products, we only have emissions from handling, transporting and packaging.

Table 21 – Overview of new and second-hand products in pcs

New and second-hand product volumes

■ Number of new products   ■ Number of second-hand products

This document is made in collaboration
with Atmoz Consulting AB.

Sustainability Dept
December 2022

NA-KD