QES Report

Carbon neutrality of operations and value chain

Nordströms

2022

In collaboration with

ATMOZ

CONTENTS

Introduction 1

General information 1

Declaration of Carbon Neutrality 2

Carbon Footprint Quantification 3

Methodology 3

Scope and Data 3

Results 4

Assumptions and Uncertainties 5

Carbon Management Plan 6

Carbon Offsetting Plan 7

References 8

Annex A – Scope and Data i

Annex B – Detailed results ii

Annex C – Carbon Neutral Assurance Letter ..... **Fel! Bokmärket är inte definierat.**

Introduction

Nordströms was established in 1914 and is a builders merchant, based in Sweden, that specializes in supplying lumber and building materials to professional customers. Today, Nordströms consists of 13 facilities – from Uppsala in the north to Linköping in the south – and has 345 employees.

Together with Atmoz Consulting AB (Atmoz), Nordströms has quantified and reported all greenhouse gas (GHG) emissions from Nordströms operations and value chain during the period January 1st 2022 – December 31st 2022. This report, referred to as the Qualifying Explanatory Statement (QES) contains all the relevant documentation to support Nordströms's commitment to and claim of achieved carbon neutrality, as defined in PAS 2060, for this period and coming periods.

General information

Table 1: General information about Nordströms.

PAS 2060 introductory information	
Entity making PAS 2060 declaration	Nordströms (Nordströms Bygghandel AB and Nordström & Co Trävaror KB, which make up Nordströms entire organization)
Subject of PAS 2060 declaration	Total operations during 2022
Function of subject	Nordströms is a builders merchant that specializes in supplying lumber and building materials to professional customers.
System boundaries	The activities required for Nordströms to fulfil its function include all upstream, core and relevant downstream activities of their operations and value chain. See section Scope and Data for further information.
Rationale for the selection of subject	Pursuing carbon neutrality is part of Nordströms's broader commitment to sustainability. To achieve carbon neutrality in 2022, Nordströms measures its total carbon footprint using the GHG Protocol standards and supplements (see section Methodology). This approach covers all relevant activities and enables Nordströms to measure 100% of its carbon footprint.
Control Approach	Operational control approach
Type of conformity assessment undertaken	OPV-3, Other Party Validated by Atmoz - unified
Baseline date for PAS 2060	1 January 2022
Achievement period	1 January 2022 – 31 December 2022
Commitment period	1 January 2023 – 31 December 2023
Individuals responsible for evaluation and provision pf data necessary	Gustav Nordströms, CEO, Nordströms David Lindén, LCA Expert, Atmoz

Declaration of Carbon Neutrality

Table 2: Declaration of Carbon Neutrality for the achievement period 2022.01.01-2022.12.31.

PAS 2060 Declaration	
Declaration of achievement	Carbon neutrality of total operations achieved by Nordströms in accordance with PAS 2060 at 2022.12.31 with commitment to maintain to 2023.12.31 for the period commencing 2022.01.01, Atmoz Consulting AB certified.
Reported carbon footprint of subject during period stated above	64 793 tCO_2e (market-based method)
Amount of carbon offset of subject during period stated above (105%)	68 033 tCO_2e
Location of GHG emissions report supporting this claim	See section Carbon Footprint Quantification
Location of the Carbon Footprint Management Plan	See section Carbon Management Plan
Location of the details describing of the carbon offsets	See section Carbon Offsetting Plan
Name of Senior Representative	**Signature of Senior Representative**
Name: Gustav Nordström Role: CEO Date: 2023.05.08	G t Nordström

Carbon Footprint Quantification

Methodology

The method for quantification of the carbon footprint is based on the below listed documents.

- PAS 2060:2014
- GHG Protocol Corporate Standard
- GHG Protocol Scope 2 Guidance
- GHG Protocol Corporate Value Chain (scope 3)

The GHG protocol has been selected because it is one of the most recognized and frequently applied standards to quantify climate impact of corporations and as such is explicitly endorsed by PAS 2060. The carbon footprint of the selected subject is calculated based on the operational control approach. GHG emissions from electricity have been calculated using the market-based approach.

The following greenhouse gases have been included in the calculations.

- Carbon dioxide (CO_2)
- Methane (CH_4)
- Nitric Oxide (N_2O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur hexafluoride (SH_6)
- Nitrogen triflourid (NF_3)

Each gas's corresponding global warming potential is obtained from the IPCC Assessment report 5 (2014). Total emissions are measured in CO_2 equivalents (CO_2e).

Scope and Data

The scope of Nordströms's carbon footprint quantification includes all GHG emissions from operations and across the value-chain, from acquisition of materials to end-of-life of sold products. No exclusions have been made.

In the quantification of Nordströms's carbon footprint, both primary and secondary sources of data have been used. Secondary data based on averages or estimates has only been used in cases where primary data was unavailable or could not reasonably be obtained. All activity data has been reported by Nordströms.

Emission factors are primarily selected from reputable sources, including national statistics and recognized emissions databases. Geographical, technological and temporal aspects have been considered when selecting emission factors. The emission factors are regularly reviewed and updated.

See Annex A – Scope and Data for further details regarding scope, data quality and source of emission factors per category.

Results

Table 3 shows the total carbon footprint of Nordströms's 2022 operations, which amounts to 64 793 tCO_2e. Nordströms have measured GHG emissions from their operations and value chain since the 2019, see Annex B – Detailed results for comparison with previous years and further breakdown of results**Fel! Hittar inte referenskälla.**.

Table 3: Results from quantified carbon footprint for Nordströms 2022 per scope and activity.

Scope / Category	Emissions **(ton CO_2e)**	**% of total**
Scope 1	**13,4**	**0,0%**
Vehicles	13,4	0,0%
Refrigerants*	-	
Scope 2	**68,0**	**0,1%**
Electricity	0,5	0,0%
District heating	67,5	0,1%
Scope 3	**64 711,6**	**99,9%**
Employee commuting	459,1	0,7%
Waste	22,0	0,0%
Fuel- and energy related activities	43,5	0,1%
Capital goods	1 166,7	1,8%
Purchased services	229,9	0,4%
Purchased goods	55 999,4	86,4%
Downstream leased assets	10,0	0,0%
End-of-life treatment of sold products	2 000,1	3,1%
Business travels	0,5	0,0%
Upstream transportation and distribution	4 780,5	7,4%
Total	**64 793,0**	**100,0%**

**No leakage of refrigerants has been reported 2022.*

In Table 4 below, relevant key figures for follow-ups can be found.

Table 4: Key figures for Nordströms 2022.

Description	**Amount**	**Unit**
Climate impact per revenue	29,7	Kg CO_2e / MSEK
Climate impact per employee	187,8	Kg CO_2e / FTE

Assumptions and Uncertainties

The assumptions with the biggest potential influence on the quantified carbon footprint are stated below.

- An estimation approach is used to account for GHG emissions associated with approximately 1% of purchased and sold goods, where primary data coverage is not available (see Table 5). For these goods, the carbon intensity is assumed to be similar to that of the goods for which primary data is available. Thus, extrapolation is applied to determine the total GHG emissions for the goods, as well as for the subsequent transportation and end-of-life activities. This approach is considered an acceptable and reasonable approximation of the emissions associated with the goods in question. However, given the uncertainties associated with extrapolation and assumptions about carbon intensity, such estimates should be viewed with caution and should be subject to ongoing review and refinement.

- Transport mode and distances of purchased goods have been estimated based on production country and/or supplier country. This could be improved by collecting supplier specific data.

The uncertainty in the quantification of the carbon footprint mainly stems from the assumptions above and estimates made where actual activity data was not available. About 2% of the calculated climate impact is estimated.

Table 5: Coverage (%) of purchased goods calculated with given activity data.

Category	Description	Primary activity data (%)	Secondary activity data (%)
Warehouse goods	Share of total mass	99	1
Procurement goods and direct deliveries	Share of total spend	99	1

Furthermore, the use of average emission factors yields some uncertainty as actual emissions may differ from averages. Wherever there is uncertainty, efforts have been made not to underestimate the actual carbon footprint of the given activity. To limit the uncertainty of average emission factors, Nordströms is actively working on improving coverage of supplier specific emissions data for their largest emission source, purchased goods (see Table 6).

Table 6: Coverage (%) of purchased goods calculated with supplier specific emissions data.

Category	Description	Supplier emissions data (%)	Average emissions data (%)
Warehouse goods	Share of total mass	85	15
Procurement goods and direct deliveries	Share of total spend	66	34

Carbon Management Plan

Table 7 specifies the activities Nordströms plans to undertake to reduce their carbon footprint during the coming periods of carbon neutrality. The plan is further detailed in Nordströms's policy document (Environmental policy). Nordströms's carbon management plan spans the period 2023 - 2030. The plan will be reviewed annually.

Table 7: Planned reduction measures

Activity	Reduction measure action
Company cars and other vehicles	Promote fossil-free fuel alternatives for company cars and other vehicles.
	Phase out diesel driven forklifts in favor for electric.
Company operated facilities	Improve energy efficiency and reduce energy consumption within company operated facilities.
	Continue to purchase certified electricity from non-fossil energy sources and explore the possibility to also do this for district heating.
Purchased goods	Set climate-related requirements for suppliers during procurement.
	Educate employees and customers about products that have better climate performance.
	Explore new circular business opportunities, such as the sale of reused building materials.
Transportation from company warehouses to customer	Optimization by improved transportation planning (shorter driving distances), higher load utilization, and the use of lighter trucks where possible.
	Increase use of fossil-free fuels (such as HVO100) for all shipments from warehouse to customers.
Waste generated in operations	Take necessary precautions on sites to reduce the amount of breakage, for example by exercising caution when handling goods with trucks.
	Advocate for careful sorting of waste to enable maximum recycling.
	Return wrongly ordered goods to the supplier, despite the cost, instead of discarding them.

Carbon Offsetting Plan

For the first year of carbon neutrality cycle, Nordströms will offset the total carbon footprint of the selected entity. Because of excluded emissions, an additional five (5) percent of the total carbon footprint will be offset. The total volume that will be offset is thus 68 033 tCO_2e.

Nordströms has chosen to offset through three projects, see Table 8 below. All carbon credits are ex post.

Table 8. Carbon offsetting plan for Nordströms 2022.

Project and ID	Verification body	Offset volume (tCO_2e)	Vintage	Description	Link to project
ADES Solar and Efficient Stoves in Madagascar **ID: 464**	Gold Standard	27 000	2019	The project aims to replace the need for wood and coal with efficient stoves, which are partly powered by solar energy.	Read more here.
Khasi Hills Community REDD+ India **ID: PV_2012_009**	Plan Vivo	9 773	2019	The project protects unique rainforests from deforestation. The project also contributes to preserving water courses and biodiversity, as well as educate the local population.	Read more here.
Tambopata REDD+ Peru **ID: 1067**	Verra	31 260	2019	The project protects the invaluable rainforest of the Amazon from deforestation, and thus contributes to keeping carbon in the trees and soil. The project enables patrolling of the forest while contributing to social initiatives and local entrepreneurship.	Read more here.

The offsets will be retired in their respective registries within 12 months from the date of declaration of achievement. This can be tracked via the following URL-links,

Gold Standard: https://registry.goldstandard.org/credit-blocks

Plan Vivo: https://www.planvivo.org/markit-registry

Verra: https://registry.verra.org/

References

BSI, 2014, PAS 2060 Specification for the demonstration of Carbon Neutrality.

WRI/WBCSD, 2004. Greenhouse Gas Protocol Corporate Standard, Revised edition.

WRI/WBCSD, 2011. Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

WRI/WBCSD, 2015. Greenhouse Gas Protocol Scope 2 Guidance

Annex A – Scope and Data

Table A 1: Scope of Nordströms 2022, data type and quality and emission factor source per activity.

	Scope/ category emission source	Inclusion	Activity data	Data quality	Emission factor sources
	Scope 1				
1	Vehicles	Included	Fuel consumption (liter)	Primary	Swedish Energy Agency 2022
2	Refrigerants	Included	Consumption data (kg)	Primary	DEFRA 2022
	Scope 2				
1	Electricity	Included	Energy consumption (kWh)	Primary	Swedish Energy Markets Inspectorate 2022
2	District heating	Included	Energy consumption (kWh)	Primary	Swedenergy 2022
	Scope 3				
1	Purchased goods and services	Included	Consumption data (Mass and spend)	Primary and secondary	Supplier data (EPD), Boverket 2022 and SCB 2022
2	Capital goods	Included	Consumption data (Spend)	Primary	SCB 2022
3	Fuel and other energy-related activities	Included	See Scope 1 and 2	Primary	See Scope 1 and 2
4	Upstream transportation and distribution	Included	Fuel consumption (liter) and payload-distance (tkm)	Primary and secondary	Swedish Energy Agency 2022 and DEFRA 2022
5	Waste generated in operations	Included	Amount of waste (Mass)	Primary	DEFRA 2022
6	Business travel	Included	Means of travel and distance (pkm)	Primary	SJ 2022 and Atmoz 2022
7	Employee commuting	Included	Number of employees (FTE)	Secondary	Atmoz 2022
8	Upstream leased assets	NA	-	-	-
9	Downstream transportation and distribution	NA	-	-	-
10	Processing of sold products	NA	-	-	-
11	Use of sold products	NA	-	-	-
12	End of life treatment of sold products	Included	Sales volumes (Mass and spend)	Primary and secondary	DEFRA 2022
13	Downstream leased assets	Included	Energy consumption (kWh)	Primary	Swedenergy 2022
14	Franchises	NA	-	-	-
15	Investments	NA	-	-	-

Annex B – Detailed results

Table A 2 shows the carbon footprint results for previous years. Nordströms have quantified GHG emissions from their operations and value chain since the years 2019 but were not climate neutral according to PAS 2060. The scope has been expanded in 2022, with the following categories added: employees' commuting, capital goods, purchased services, and office consumption (purchased goods). These categories add up to 1938 tCO_2e.

Table A 2: Detailed results from previous and current years, 2019-2022.

Scope (ton CO_2e)	2019	2020	2021	2022	% of total 2022	Change 2021 - 2022	Change % 2021 - 202
Scope 1	**57,2**	**49,4**	**25,3**	**13,4**	**0,0%**	**- 11,9**	**-47,1%**
Vehicles	52,0	49,4	25,3	13,4	0,0%	- 11,9	-47,1%
Company cars	*50,5*	*49,4*	*25,3*	*8,3*	*0,0%*	*- 17,0*	*-67,2%*
Other vehicles	*1,5*	-	-	*5,1*	*0,0%*	*5,1*	
Refrigerants	5,2	0,0	0,0	0,0		0,0	
Scope 2	**74,8**	**187,0**	**52,6**	**68,0**	**0,1%**	**15,4**	**29,4%**
Electricity	0,0	141,2	0,0	0,5	0,0%	0,5	
District heating	74,8	45,8	52,6	67,5	0,1%	14,9	28,4%
Scope 3	**63 173,4**	**66 635,3**	**63 228,1**	**64 711,6**	**99,9%**	**1 483,5**	**2,3%**
Employee commuting	-	-	-	459,1	0,7%	459,1	
Waste	39,4	34,7	25,6	22,0	0,0%	- 3,6	-14,2%
Fuel- and energy related activities	50,5	56,4	45,8	43,5	0,1%	- 2,3	-5,0%
Capital goods	-	-	-	1 166,7	1,8%	1 166,7	
Purchased services	-	-	-	229,9	0,4%	229,9	
Purchased goods	54 758,4	58 486,1	55 967,6	55 999,4	86,4%	31,8	0,1%
Procurement goods and direct deliveries	*17 111,2**	*19 308,1**	*16 317,5**	*16 059,0*	*24,8%*	*- 258,5*	*-1,6%*
Consumables	*159,0*	*187,7*	*84,8*	*109,7*	*0,2%*	*24,9*	*29,4%*
Office supplies	-	-	-	*81,8*	*0,1%*	*81,8*	
Warehouse goods	*37 488,2*	*38 990,3*	*39 565,2*	*39 748,8*	*61,3%*	*183,5*	*0,5%*
Downstream leased assets	9,7	6,1	7,3	10,0	0,0%	2,6	36,1%
End-of-life treatment of sold products	2 059,1*	2 123,4*	2 051,8*	2 000,1	3,1%	- 51,7	-2,5%
Business travels	8,3	1,1	0,6	0,5	0,0%	- 0,1	-17,1%
Upstream transportation and distribution	6 248,1	5 927,4	5 129,4	4 780,5	7,4%	- 348,9	-6,8%
Supplier to Nordströms	*5 815,3**	*5 789,6**	*5 064,3**	*4 700,3*	*7,3%*	*- 364,0*	*-7,2%*
Nordströms to customer	*432,8*	*137,8*	*65,1*	*80,2*	*0,1%*	*15,1*	*23,2%*
Total	**63 305,4**	**66 871,6**	**63 306,0**	**64 793,0**	**100,0%**	**1 487,0**	**2,3%**

*The results have been recalculated due to an error detected in the calculation of GHG emissions associated with the production, transportation, and end-of-life management of the goods procured and directly delivered in 2019, 2020, and 2021. These values have been corrected as part of the 2022 reporting, resulting in a reduction of emissions from these activities compared to the previously reported values.