

Carbon neutrality of operations and value chain

Nordströms

2023

In collaboration with



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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 315 employees.

Nordströms achieved carbon neutrality for their baseline period January 1st 2022 – December 31st 2022 (Period 1). Together with Atmoz Consulting AB (Atmoz), Nordströms has quantified and reported all greenhouse gas (GHG) emissions from their operations and value chain during the period January 1st 2023 – December 31st 2023 (Period 2). This report, referred to as the Qualifying Explanatory Statement (QES) contains all the relevant documentation to support Nordströms 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 2023
Function of subject	Nordströms is a builder's 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 for 2023, 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. Furthermore, Nordströms is committed to reducing their carbon footprint annually.
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 2023 – 31 December 2023
Commitment period	1 January 2024 – 31 December 2024
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 2023.01.01-2023.12.31.

PAS 2060 Declaration	
Declaration of achievement	Carbon neutrality of total operations achieved by Nordströms in accordance with PAS 2060 at 2023.12.31 with commitment to maintain to 2024.12.31 for the period commencing 2022.01.01, Atmoz Consulting AB certified.
Reported carbon footprint of subject during period stated above	55 775 tCO ₂ e (market-based method)
Amount of carbon offset of subject during period stated above (105%)	58 564 tCO ₂ e
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	g t Nowlote
Date: 2024.03.25	



Carbon Footprint Quantification

Methodology

The method for quantification of the carbon footprint is based on the following documents: PAS 2060:2014, GHG Protocol Corporate Standard, GHG Protocol Scope 2 Guidance and 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 carbon footprint 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 (CO₂)
- Methane (CH₄)
- Nitric Oxide (N₂O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur hexafluoride (SH₆)
- Nitrogen triflourid (NF₃)

Each gas's corresponding global warming potential is obtained from the IPCC Assessment report 5 (2013) except for product specific supplier data from EPDs developed according to EN 15804+A2, which are based on the IPCC Assessment report 6 (2021). Total emissions are measured in CO_2 equivalents (CO_2 e).

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 2023 operations, which amounts to 55 775,3 tCO₂e, and is a reduction of 9 017,7 tCO₂e compared with the baseline period 2022. Nordströms have measured GHG emissions from their operations and value chain since 2019, see Annex B – Detailed results for comparison with previous years and further breakdown of results. In Table 4 below, relevant key figures for follow-ups can be found.

Table 3: Results from quantified carbon footprint for Nordströms 2023 per scope and activity, and comparison with baseline period 2022.

Scope / Category	2022 (ton CO ₂ e)	2023 (ton CO ₂ e)	% of total 2023	Change 2022-2023	Change % 2022-2023
Scope 1	13,4	11,6	0,02%	- 1,8	-13,3%
Vehicles	13,4	11,6	0,02%	- 1,8	-13,3%
Refrigerants*	-	-	-	-	-
Scope 2	68,0	103,5	0,2%	35,5	52,2%
Electricity	0,5	0,5	0,001%	0,02	3,4%
District heating	67,5	103,0	0,2%	35,5	52,6%
Scope 3	64 711,6	55 660,2	99,8%	- 9 051,4	-14,0%
Employee commuting	459,1	419,2	0,8%	- 39,9	-8,7%
Waste	22,0	20,8	0,04%	- 1,2	-5,4%
Fuel- and energy related activities	43,5	43,5	0,1%	0,0	0,0%
Capital goods	1 166,7	723,4	1,3%	- 443,3	-38,0%
Purchased services	229,9	292,1	0,5%	62,2	27,0%
Purchased goods	55 999,4	48 467,7	86,9%	- 7 531,6	-13,4%
Downstream leased assets	10,0	12,9	0,02%	2,9	29,0%
End-of-life treatment of sold products	2 000,1	1 771,6	3,2%	- 228,5	-11,4%
Business travels	0,5	2,6	0,005%	2,1	392,5%
Upstream transportation and distribution	4 780,5	3 906,4	7,0%	- 874,0	-18,3%
Total	64 793,0	55 775,3	100,0%	- 9 017,7	-13,9%

^{*}No leakage of refrigerants has been reported 2022 or 2023.

Table 4: Key figures for Nordströms 2022 and 2023.

Description	2022	2023	Change 2022-2023	Change % 2022-2023	Unit
Carbon footprint per revenue	29,69	29,70	0,005	0,02%	Kg CO₂e / MSEK
Carbon footprint per employee	187,81	177,06	-10,74	-5,72%	Kg CO₂e / FTE



Assumptions and Uncertainties

The uncertainty in the quantification of the carbon footprint mainly stems from the estimates made where primary activity data was not available. About 3,2% of the calculated carbon footprint is based on estimates (i.e. secondary activity data). The estimates with the biggest potential influence on the quantified carbon footprint are stated below.

- GHG emissions from capital goods and purchased services are estimated based on spend-data. Together, these activities account for about 1,8% of total emissions.
- A calculation approach based on number of employees (FTE) is used to estimate the GHG emissions associated with the consumption of office supplies and employee commuting. Together, these activities account for less than 1% of total emissions.
- An estimation approach is used to account for GHG emissions associated with 0,3% of purchased warehouse goods and 1% of purchased goods via procurement and direct deliveries, where primary data coverage is not available (see Table 5). For these goods, extrapolation is applied to determine the GHG emissions from their production, as well as for the subsequent transportation and end-of-life activities. Together, these extrapolations account for less than 1% of total emissions.

The above-mentioned estimates are considered an acceptable and reasonable approximation of the emissions associated with the activities in question. Nevertheless, such estimates should be viewed with caution and should be subject to ongoing review and refinement. The accuracy of the results could be improved by collecting primary activity data for these activities.

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	99,7	0,3%
Procurement goods and direct deliveries	Share of total spend	99,0	1,0%

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	91,3	8,7	
Procurement goods and direct deliveries	Share of total spend	62,6	37,4	



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 2024 - 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.			
	Improve energy efficiency and reduce energy consumption within company operated facilities.			
Company operated facilities	Continue to purchase certified electricity from non- fossil energy sources and explore the possibility to also do this for district heating.			
	Set climate-related requirements for suppliers during procurement.			
Purchased goods	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.			
Manual distribution of the second of the sec	Take necessary precautions on sites to reduce the amount of breakage, for example by exercising caution when handling goods with trucks.			
Waste generated in operations	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 second year of carbon neutrality cycle, in addition to reducing their footprint, 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 $58564 \text{ tCO}_{2}e$.

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

Table 8. Carbon offsetting plan for Nordströms 2023.

Project and ID	Verification body	Offset volume (tCO₂e)	Vintage	Description	Link to project
20 MW Biomass Power Project at Godawari Power and Ispat Limited, Chhattisgarh	Gold Standard	29 155	2021	The project aims to reduce GHG emissions by generating electricity using renewable biomass residues, thereby replacing fossil fuel intensive based power generation in India.	Read more <u>here</u> .
Solar Thermal Power Plant by Godawari Green Energy Limited ID: 3429	Gold Standard	29 409	2020	The project aims to reduce GHG emissions by generating thermal energy using renewable solar power, thereby replacing fossil fuel intensive based power generation in India.	Read more <u>here</u> .

The credits have been retired in their respective registries. This can be tracked via the following URL-links,

https://registry.goldstandard.org/batch-retirements/details/122209

https://registry.goldstandard.org/batch-retirements/details/122206



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 2023, data type and quality and emission factor source per activity.

	Scope/ category emission source	Inclusion	Activity data	Activity data quality	Emission factor sources
	Scope 1				
1	Vehicles	Included	Fuel consumption (liter)	Primary	Swedish Energy Agency 2023
2	Refrigerants	Included	Emissions data (kg CO ₂ e)	Primary	-
	Scope 2				
1	Electricity	Included	Energy consumption (kWh)		
2	District heating	Included	Energy consumption (kWh)	Primary	Swedenergy 2023
	Scope 3				
1	Purchased goods and services	Included	Amount of product (kg), spend data (SEK), number of employees (FTE) and extrapolation	kg), spend data SEK), number of bloyees (FTE) and secondary	
2	Capital goods	Included	Spend data (SEK)	Secondary	SCB 2023
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 2023 and DEFRA 2023
5	Waste generated in operations	Included	Amount of waste (kg)	Primary	DEFRA 2023
6	Business travel	Included	Means of travel and distance (pkm)	Primary	SJ 2023 and Atmoz 2023
7	Employee commuting	Included	Number of employees (FTE)	Secondary	Atmoz 2023
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 (kg) and extrapolation	Primary and secondary	DEFRA 2023
13	Downstream leased assets	Included	Energy consumption (kWh)	Primary	Swedenergy 2023
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. Note that the scope was expanded in 2022, with the following categories added: employees' commuting, capital goods, purchased services, and office consumption (purchased goods). Hence, there is no result for these activities for the period 2019-2021.

Table A 2: Detailed results from previous and current years, 2019-2023.

Scope/Category (ton CO₂e)	2019	2020	2021	2022	2023
Scope 1	57,2	49,4	25,3	13,4	11,6
Vehicles	52,0	49,4	25,3	13,4	11,6
Company cars	50,5	49,4	25,3	8,3	9,1
Other vehicles	1,5	-	-	5,1	2,6
Refrigerants	5,2	0,0	0,0	0,0	0,0
Scope 2	74,8	187,0	52,6	68,0	103,5
Electricity	0,0	141,2	0,0	0,5	0,5
District heating	74,8	45,8	52,6	67,5	103,0
Scope 3	63 173,4	66 635,3	63 228,1	64 711,6	55 660,2
Employee commuting	-	-	-	459,1	419,2
Waste	39,4	34,7	25,6	22,0	20,8
Fuel- and energy related activities	50,5	56,4	45,8	43,5	43,5
Capital goods	-	-	-	1 166,7	723,4
Purchased services	-	-	-	229,9	292,1
Purchased goods	54 758,4	58 486,1	55 967,6	55 999,4	48 467,7
Procurement goods and direct deliveries	17111,2	19 308,1	16 317,5	16 059,0	13 066,4
Consumables	159,0	187,7	84,8	109,7	98,5
Office supplies	-	-	-	81,8	74,7
Warehouse goods	37 488,2	38 990,3	39 565,2	39 748,8	35 228,1
Downstream leased assets	9,7	6,1	7,3	10,0	12,9
End-of-life treatment of sold products	2 059,1	2 123,4	2 051,8	2 000,1	1 771,6
Business travels	8,3	1,1	0,6	0,5	2,6
Upstream transportation and distribution	6 248,1	5 927,4	5 129,4	4 780,5	3 906,4
Supplier to Nordströms	5 815,3	5 789,6	5 064,3	4 700,3	3 842,2
Nordströms to customer	432,8	137,8	65,1	80,2	64,2
Total	63 305,4	66 871,6	63 306,0	64 793,0	55 775,3

Annex C – Carbon Neutral Assurance Letter

Statement No.: CN-OPV 24-019

Issuance Date: 2024.03.25

Valid until: 2025.03.25

This letter of assurance affirms that the Qualifying Explanatory Statement entitled:

Carbon neutrality of operations and value chain, Nordströms, 2023

Issued by the organization

Nordströms

aimed to demonstrate carbon neutrality as defined in PAS 2060:2014 Specification for the demonstration of carbon neutrality, has been verified in accordance with the requirements specified for other party validation (OPV-3).

Based on the process and procedures conducted, and the information provided, Atmoz Consulting AB confirms that Nordströms has achieved carbon neutrality for the period 2023.01.01-2023.12.31 and is committed to on-going carbon neutrality of their total carbon footprint in accordance with PAS 2060:2014.

Place and date:

Stockholm, 2024.03.25

For Atmoz Consulting AB

Joel Nord

Head of analysis