

Environmental Product Declaration



In accordance with ISO 14025 and EN 15804:2012+A2:2019 for:

SS and SSdr Pile steel components

from

Scandia Steel Sweden AB



Programme:	The International EPD® System, www.environdec.com
Programme operator:	EPD International AB
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An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com



General information

Programme information

Programme:	The International EPD® System
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
Website:	www.environdec.com
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Accountabilities for PCR, LCA and independent, third-party verification

Product Category Rules (PCR)

CEN standard EN 15804 serves as the Core Product Category Rules (PCR)

Product Category Rules (PCR): *PCR 2019:14 Construction products, version 1.11.*

PCR review was conducted by: Claudia A. Peña, University of Concepción, Chile. The review panel may be contacted via the Secretariat www.environdec.com/contact.

Life Cycle Assessment (LCA)

LCA accountability: Tyréns Sweden AB

Third-party verification

Independent third-party verification of the declaration and data, according to ISO 14025:2006, via:

EPD verification by individual verifier

Third-party verifier: Dr Hudai Kara, Metsims Sustainability Consulting, www.metsims.com, Oxford, U.K.

Approved by: The International EPD® System

Procedure for follow-up of data during EPD validity involves third party verifier:

Yes No

The EPD owner has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programmes may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804. For further information about comparability, see EN 15804 and ISO 14025.

Company information

Owner of the EPD: Scandia Steel Sweden AB

Contact: Marcus Eriksson

Description of the organisation: Scandia Steel is a leading supplier of steel piling pipes. Our piles are supplied to the Scandinavian building industry and used by well-known construction companies.

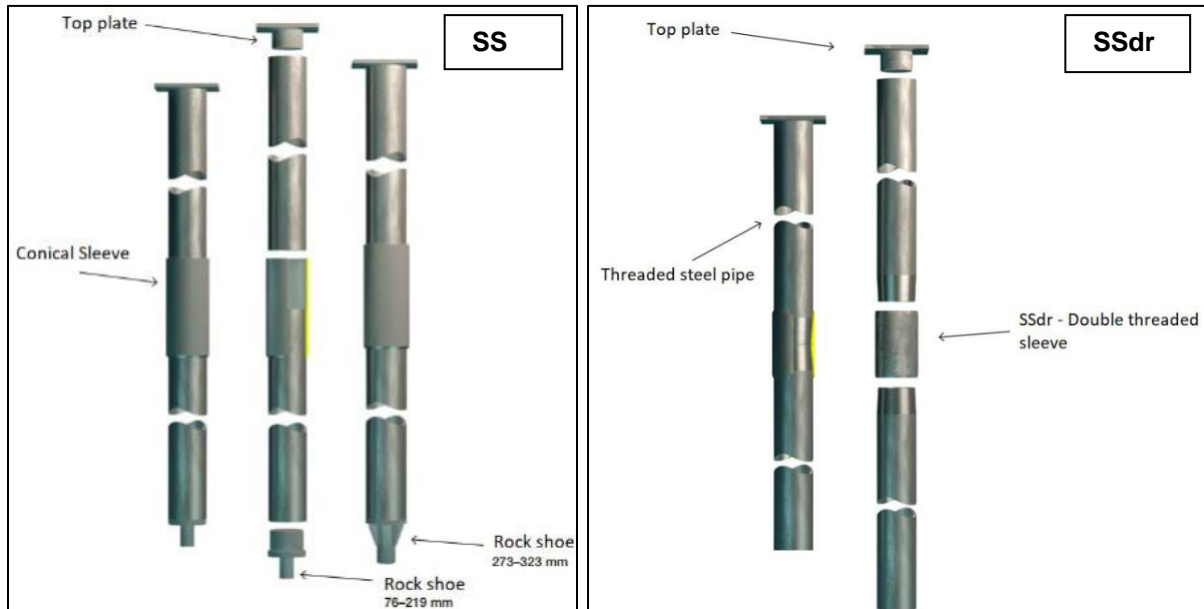
Product-related or management system-related certifications: ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, EN 1090-1:2009+A1:2012, EN ISO 3834-2:2006, ETA and ETA 15/0029.

Product information

Product name: SS Pile, SSdr Pile

Product description:

SS Pile is a straight steel pipe with a top plate, conical sleeve and rock shoe. SSdr Pile is a straight steel tube with a top plate, sleeve and a threading at the end. The sleeves of SS and SSdr are slightly different in their designs as the SS Pile is mechanically jointed with an external friction splice sleeve while the SSdr Pile is mechanically jointed with a threaded splice sleeve. A picture of the different components of the SS and SSdr piles can be seen in the figure below.



The potential environmental impact is reported separately for each component of the SS and SSdr piles. In this way, users can sum up the environmental impact of different length and with different rock shoes for SS and SSdr piles. The potential environmental impact is reported for:

- *Steel pipe*
- *Top plate*
- *SS Sleeve*
- *SSdr Sleeve*
- *Rock shoe small*
- *Rock shoe large*

The steel grade used for the steel pipes are S460MH, S550MH and S550J2H. The steel grade used for the sleeves are S460/E470 and E590K2. The steel grade for the dub in the small rock shoe is 27MnCrB5-2. The SS Piles are either drilled or rammed into place, either with a driving shoe or a ring set. After ramming pipes are normally emptied and reinforced using steel and concrete. Typical applications are foundations for (houses) dwellings, offices and commercial buildings as well as refurbishing existing foundations and for infrastructure.

The diameter of the SS and SSdr piles included in this EPD can be seen in the table below. The diameter of pipes each has a corresponding size of top plate and sleeve. The SS Pile also has a rock shoe that comes in two different designs depending on the pipe dimension.

		Diameter (mm)
Steel pipe	SS, SSdr	114,3x6,3
		168,3x10,0
		323,9x10,0
Top plate	SS, SSdr	114,3x6,3
		168,3x10,0
		323,9x10,0
Sleeve (for SS Pile)	SS	114,3x6,3
		168,3x10,0
		323,9x10,0
Sleeve (for SSdr Pile)	SSdr	114,3x6,3
		168,3x10,0
		323,9x10,0
Rock shoe small	SS	114,3x6,3
		168,3x10,0
Rock shoe large	SS	323,9x10,0

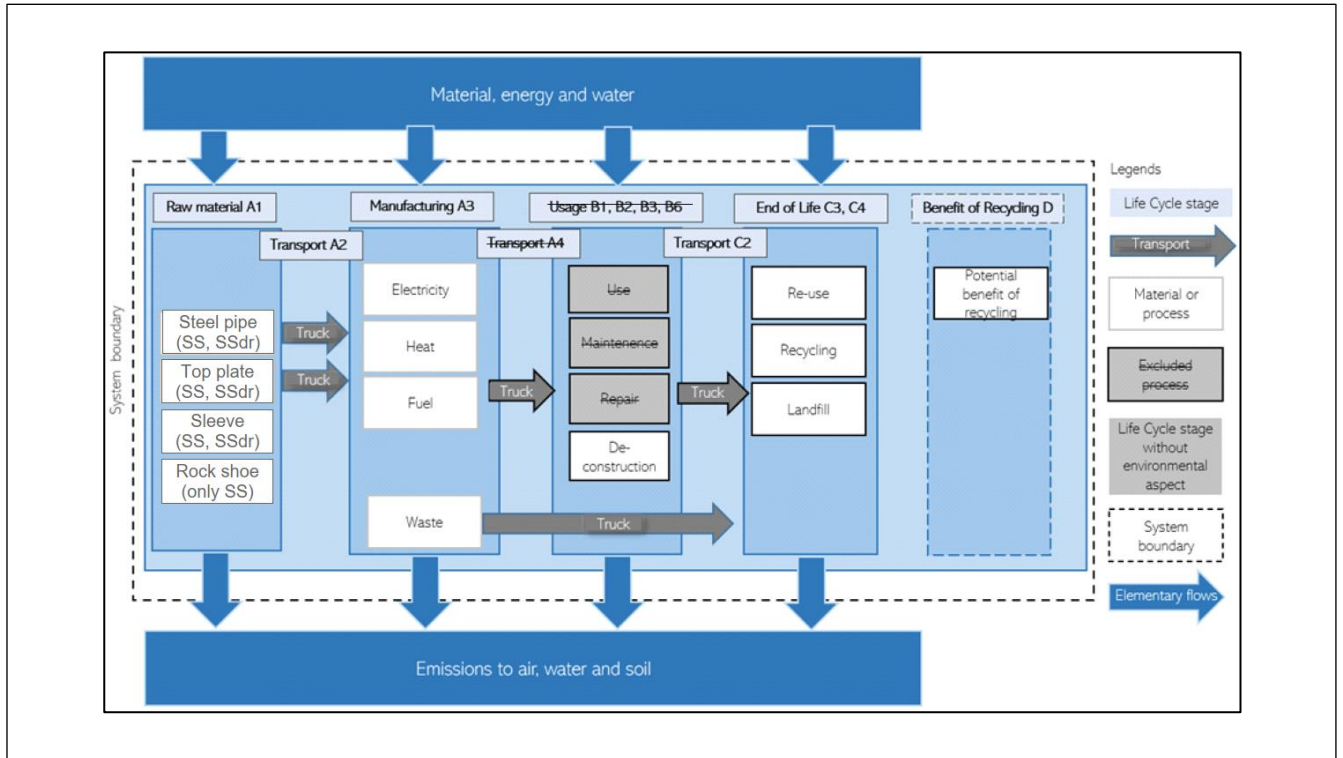
LCA information

Declared unit	1 tonne of finished product
Reference service life:	Not applicable
Time representativeness:	For specific data the reference year is 2021.
Database(s) and LCA software used:	The software SimaPro 9.3.0.3 was used during the completion of this study. All background data comes from Ecoinvent 3.8.
Description of system boundaries:	Cradle to gate with modules C1–C4 and module D (A1–A3 + C + D).
Manufacturing Site	UAB Scandia Steel Baltic Vytauto 151 97133 Kretinga Lithuania
Geographical Area	Europe
Compliant with	This EPD follow the “Book-keeping“ LCA approach which is defined as attributional LCA in the ISO 14040 standard. In accordance with ISO 14025 and EN 15804:2012+A2:2019 <i>PCR 2019:14 Construction products, version 1.11.</i>
Cut-Off Rules	For this LCA study a 1 % cut off rule was applied.
Allocations	Polluter Pays / Allocation by Classification Two allocation rules are applied: 1) the raw material necessary for the manufacture is allocated by mass of the declared unit 2) the energy necessary for the manufacture is allocated in MJ by production of the declared unit
Electricity data	Electricity consumption in the A3 module comes from 100% renewable energy by wind power.

Products contain no substances in the REACH Candidate list. Products contain no substances in the Norwegian priority list.

The estimated impact results are only relative statements which do not indicate the end points of the impact categories, exceeding threshold values, safety margins or risks.

System diagram:



More information: LCA practitioners: Anna Pantze, Ida Adolfsson and Jorunn Falkenhaug at Tyréns Sverige AB

Included	Excluded
Production (A1-A3) <ul style="list-style-type: none"> Raw materials and production and processing of raw materials Transport of raw materials to Scandia Steel's factory in Lithuania Energy use in Scandia Steel's factory in Lithuania Production and treatment of material that becomes waste in the manufacturing process by, for example, cutting or turning. Production of packaging material Transport of recyclable waste material to recycling facilities 	Production (A1-A3) <ul style="list-style-type: none"> The packaging materials in A2 is not included.
	Installation (A4-A5)
	Use phase (B1-B7)
End of life (C1-C4) <ul style="list-style-type: none"> Disassembly of SS pile and SSdr Pile and transportation to waste management facilities. 	
Benefits and loads beyond the system boundary (D) <ul style="list-style-type: none"> Steel recycling 	

Main assumptions:

- All transport in A2 is made by EURO V trucks.
- For suppliers with a high recycling's range, above 90%, the steel mill is assumed to be electric arc furnace (EAF). For the suppliers with a lower recycling range the steel mill is assumed to be a basic oxidation furnace (BOF), i.e., converter.
- Module C and is assumed to have the same environmental impact for all six components.
- It is assumed that a diesel-powered machinery is used for deconstruction of SS and SSdr pile. The diesel-powered machine is assumed to use 85 kWh per tonne product.
- Transport distance of dismantled post (module C2) is assumed to be 25 km
- It is assumed that 92% of the product can be recycled, in C3, and 8% is landfilled, in C4.

Modules declared, geographical scope, share of specific data (in GWP-GHG indicator) and data variation:

	Product stage			Construction process stage		Use stage							End of life stage				Resource recovery stage		
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential		
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D		
Modules declared	x	x	x	ND	ND	ND	ND	ND	ND	ND	ND	ND	x	x	x	x	x		
Geography	EU RU TR	EU	LT	ND	ND	ND	ND	ND	ND	ND	ND	ND	SE	SE	SE	SE	SE		
Specific data used	>90 %					-	-	-	-	-	-	-	-	-	-	-	-	-	
Variation – products	<10 %					-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	Not relevant					-	-	-	-	-	-	-	-	-	-	-	-	-	-

Content information

Product name	Product components	Weight, kg	Post-consumer material, weight-%	Renewable material, weight-%
Steel pipe	Hot rolled steel	1000	32.18%	0
Top plate	Hot rolled steel	1000	38.89%	0
Sleeve (for SS Pile)	Hot rolled steel	1000	44.01%	0
Sleeve (for SSdr Pile)	Hot rolled steel	1000	51.81%	0
Rock shoe small	Hot rolled steel	1000	28.36%	0
Rock shoe large	Hot rolled steel	1000	52.31 %	0
	Packaging materials	Weight, kg	Weight-% (versus the product)	
Steel pipe, Rock shoes and sleeves	Steel	10.07	1.01%	
Steel pipe, Rock shoe and sleeves	Wood	1.36	0.14%	
Steel pipe, Rock shoe and sleeves	Plastic	1.71	0.17%	
Steel pipe, Rock shoe and sleeves	TOTAL	13.14	1.31%	

The steel piles do not contain substances which exceed the limits for registration with the European Chemicals Agency regarding the “Candidate List of Substances of Very High Concern for Authorization”.

Environmental Information

Potential environmental impact – mandatory indicators according to EN 15804

Results per 1 tonne												
Indicator	Unit	A1-A3						C**				
		Steel Pipe	Top Plate	SS Sleeve	SSdr Sleeve	Rock shoe small	Rock shoe large	C1	C2	C3	C4	C1-C4
GWP-fossil	kg CO ₂ eq.	2.41 E+03	2.27 E+03	2.04 E+03	1.91 E+03	1.16 E+03	2.33 E+03	2.81 E+01	4.07 E+00	3.70 E+00	4.21 E-01	3.63 E+01
GWP-biogenic	Kg CO ₂ eq.	-7.84 E-01	4.31 E+00	1.51 E-01	-1.48 E+00	5.73 E+00	-1.52 E+00	2.43 E-02	1.09 E-02	6.59 E-02	1.48 E-03	1.03 E-01
GWP-luluc	Kg CO ₂ eq.	2.09 E+00	1.06 E+00	1.82 E+00	1.64 E+00	2.51 E+00	1.82 E+00	2.81 E-03	1.63 E-03	3.61 E-03	3.98 E-04	8.44 E-03
GWP-total	Kg CO ₂ eq.	2.41 E+03	2.27 E+03	2.04 E+03	1.91 E+03	1.17 E+03	2.33 E+03	2.82 E+01	4.08 E+00	3.77 E+00	4.23 E-01	3.64 E+01
ODP	kg CFC 11 eq.	1.74 E-04	1.35 E-04	1.75 E-04	1.68 E-04	1.20 E-04	1.53 E-04	6.01 E-06	9.43 E-07	6.6 3E-07	1.70 E-07	7.79 E-06
AP	Mol H ⁺ eq.	1.16 E+01	9.94 E+00	1.11 E+01	1.03 E+01	1.21 E+01	1.02 E+01	2.92 E-01	1.16 E-02	2.25 E-02	3.96 E-03	3.30 E-01
EP-freshwater	kg P eq.	3.87 E+00	1.18 E+00	2.29 E+00	2.06 E+00	7.49 E-01	9.75 E-01	8.72 E-04	2.67 E-04	1.17 E-03	3.86 E-05	2.34 E-03
EP-marine	kg N eq.	2.73 E+00	2.16 E+00	2.69 E+00	2.48 E+00	2.84 E+00	2.59 E+00	1.30 E-01	2.35 E-03	7.28 E-03	1.38 E-03	1.41 E-01
EP-terrestrial	mol N eq.	2.68 E+01	2.26 E+01	2.66 E+01	2.45 E+01	2.88 E+01	2.33 E+01	1.42 E+00	2.56 E-02	7.76 E-02	1.51 E-02	1.54 E+00
POCP	kg NMVOC eq.	1.23 E+01	9.72 E+00	1.12 E+01	1.02 E+01	1.19 E+01	9.98 E+00	3.90 E-01	9.84 E-03	2.20 E-02	4.39 E-03	4.26 E-01
ADP-minerals & metals*	Kg Sb eq.	3.11 E-02	3.06 E-02	8.24 E-03	8.08 E-03	1.79 E-02	2.05 E-02	1.45 E-05	1.44 E-05	1.86 E-05	9.61 E-07	4.84 E-05
ADP-fossil*	MJ	2.73 E+04	2.47 E+04	2.43 E+04	2.31 E+04	3.12 E+04	2.68 E+04	3.86 E+02	6.17 E+01	6.11 E+01	1.18 E+01	5.21 E+02
WDP	m ³	7.84 E+02	4.87 E+02	7.42 E+02	6.66 E+02	1.50 E+02	6.95 E+02	5.50 E-01	1.82 E-01	3.85 E-01	5.29 E-01	1.65 E+00
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential. Accumulated Exceedance; EP-freshwater = Eutrophication potential. fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential. fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential. Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential. deprivation-weighted water consumption											

* Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.

** Module C is the same for all six components

Results per 1 tonne							
Indicator	Unit	D					
		Steel Pipe	Top Plate	SS Sleeve	SSdr Sleeve	Rock shoe small	Rock shoe large
GWP-fossil	kg CO ₂ eq.	-1.00 E+03	-8.92 E+02	-8.07 E+02	-6.76 E+02	-1.07 E+03	-6.67 E+02
GWP-biogenic	kg CO ₂ eq.	3.94 E+00	3.50 E+00	3.17 E+00	2.65 E+00	4.20 E+00	2.62 E+00
GWP-luluc	kg CO ₂ eq.	-2.63 E-01	-2.34 E-01	-2.11 E-01	-1.77 E-01	-2.80 E-01	-1.75 E-01
GWP-total	kg CO ₂ eq.	-1.00 E+03	-8.89 E+02	-8.04 E+02	-6.73 E+02	-1.06 E+03	-6.65 E+02
ODP	kg CFC 11 eq.	-4.05 E-05	-3.59 E-05	-3.25 E-05	-2.72 E-05	-4.31 E-05	-2.69 E-05
AP	mol H ⁺ eq.	-3.55 E+00	-3.15 E+00	-2.85 E+00	-2.38 E+00	-3.77 E+00	-2.36 E+00
EP-freshwater	kg P eq.	-3.91 E-01	-3.47 E-01	-3.14 E-01	-2.63 E-01	-4.16 E-01	-2.59 E-01
EP-marine	kg N eq.	-8.51 E-01	-7.55 E-01	-6.83 E-01	-5.72 E-01	-9.05 E-01	-5.65 E-01
EP-terrestrial	mol N eq.	-9.01 E+00	-8.00 E+00	-7.23 E+00	-6.06 E+00	-9.58 E+00	-5.98 E+00
POCP	kg NMVOC eq.	-5.02 E+00	-4.46 E+00	-4.03 E+00	-3.37 E+00	-5.34 E+00	-3.33 E+00
ADP-minerals & metals*	kg Sb eq.	9.66 E-04	8.58 E-04	7.76 E-04	6.50 E-04	1.03 E-03	6.42 E-04
ADP-fossil*	MJ	-1.02 E+04	-9.02 E+03	-8.15 E+03	-6.83 E+03	-1.08 E+04	-6.74 E+03
WDP	m ³	-5.02 E+01	-4.46 E+01	-4.03 E+01	-3.38 E+01	-5.34 E+01	-3.33 E+01
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential. Accumulated Exceedance; EP-freshwater = Eutrophication potential. fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential. fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential. Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential. deprivation-weighted water consumption						

* Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.

Potential environmental impact – additional mandatory and voluntary indicators

Results per 1 tonne												
		A1-A3						C1-C4*				
Indicator	Unit	Steel Pipe	Top Plate	SS Sleeve	SSdr Sleeve	Rock shoe small	Rock shoe large	C1	C2	C3	C4	C1-C4
GWP-GHG	kg CO ₂ eq.	2.39 E+03	2.20 E+03	2.02 E+03	1.89 E+03	1.15 E+03	2.27 E+03	2.79 E+01	4.04 E+00	3.67 E+00	4.14 E-01	3.60 E+01

* Module C is the same for all six components.

Results per 1 tonne							
		D					
Indicator	Unit	Steel Pipe	Top Plate	SS Sleeve	SSdr Sleeve	Rock shoe small	Rock shoe large
GWP-GHG	kg CO ₂ eq.	-9.59 E+02	-8.51 E+02	-7.70 E+02	-6.45 E+02	-1.02 E+03	-6.37 E+02

Use of resources

Results per 1 tonne												
Indicator	Unit	A1-A3						C1-C4*				
		Steel Pipe	Top Plate	SS Sleeve	SSdr Sleeve	Rock shoe small	Rock shoe large	C1	C2	C3	C4	C1-C4
PERE	MJ	2.42 E+03	2.32 E+03	6.06 E+03	5.50 E+03	1.89 E+03	2.04 E+03	2.20 E+00	8.80 E-01	4.60 E+00	1.00 E-01	7.70 E+00
PERM	MJ	4.24 E+02	1.18 E+02	1.18 E+02	1.18 E+02	1.18 E+02	1.18 E+02	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
PERT	MJ	2.84 E+03	2.44 E+03	6.18 E+03	5.62 E+03	2.01 E+03	2.16 E+03	2.20 E+00	8.80 E-01	4.60 E+00	1.00 E-01	7.70 E+00
PENRE	MJ	3.12 E+04	2.62 E+04	2.54 E+04	2.42 E+04	1.68 E+04	2.84 E+04	4.10 E+02	6.60 E+01	6.50 E+01	1.30 E+01	5.50 E+02
PENRM	MJ	1.19 E+03	0.00 E+00	2.76 E-01	2.38 E-01	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
PENRT	MJ	3.24 E+04	2.62 E+04	2.54 E+04	2.42 E+04	1.68 E+04	2.84 E+04	4.10 E+02	6.60 E+01	6.50 E+01	1.30 E+01	5.50 E+02
SM	kg	3.22 E+02	3.89 E+02	4.40 E+02	5.18 E+02	2.84 E+02	5.23 E+02	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
RSF	MJ	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
NRSF	MJ	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
FW	m ³	1.43 E+01	1.43 E+01	1.43 E+01	1.43 E+01	1.43 E+01	1.43 E+01	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Acronyms	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water											

* Module C is the same for all six components.

Results per 1 tonne							
Indicator	Unit	D					
		Steel Pipe	Top Plate	SS Sleeve	SSdr Sleeve	Rock shoe small	Rock shoe large
PERE	MJ	-1.80E+02	-1.60E+02	-1.50E+02	-1.20E+02	-1.90E+02	-1.20E+02
PERM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	-1.80E+02	-1.60E+02	-1.50E+02	-1.20E+02	-1.90E+02	-1.20E+02
PENRE	MJ	-1.10E+04	-9.50E+03	-8.60E+03	-7.20E+03	-1.10E+04	-7.10E+03
PENRM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	-1.10E+04	-9.50E+03	-8.60E+03	-7.20E+03	-1.10E+04	-7.10E+03
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m ³	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Acronyms	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water						

Waste production and output flows

Waste production

Results per 1 tonne									
		A1-A3						C1-C4*	D*
Indicator	Unit	Steel Pipe	Top Plate	SS Sleeve	SSdr Sleeve	Rock shoe small	Rock shoe large		
Hazardous waste disposed	kg	1.16E+02	3.62E-05	8.77E+01	7.55E+01	3.96E+00	3.62E-05	0.00E+00	0.00E+00
Non-hazardous waste disposed	kg	4.32E+02	1.67E-01	9.45E+02	8.14E+02	5.89E-01	1.67E-01	0.00E+00	0.00E+00
Radioactive waste disposed	kg	3.63E-01	1.39E-04	2.73E-02	2.35E-02	1.45E-02	1.39E-04	0.00E+00	0.00E+00

* Module C and module D are the same for all six components.

Output flows

Results 1 tonne				
Indicator	Unit	A1-A3*	C1-C4*	D*
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00
Material for recycling	kg	1.36E+01	9.20E+02	0.00E+00
Materials for energy recovery	kg	0.00E+00	0.00E+00	0.00E+00
Exported energy. electricity	MJ	0.00E+00	0.00E+00	0.00E+00
Exported energy. thermal	MJ	0.00E+00	0.00E+00	0.00E+00

* Module A, C and module D are the same for all six components for output flows.

Information on biogenic carbon content

Results per 1 tonne		
BIOGENIC CARBON CONTENT	Unit	QUANTITY
Biogenic carbon content in product	kg C	0
Biogenic carbon content in packaging	kg C	4.43

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO₂.

Additional information

Climate impact for SS and SSdr piles

In order to help users of this EPD to compare climate impact from a complete SS or SSdr Pile, climate impacts have been summarized per product.

The results are reported as averages of GWP-total and GWP-GHG according to the table below.

The averages for SS Piles are based on one complete product including one rock shoe, one 6-meter pile with sleeve and one top plate.

The averages for SSdr Piles are based on one complete product including one 6-meter pile, one sleeve and one top plate.

Results per 1 tonne of complete SS or SSdr Pile (GWP-tot)				
Diameter	Unit	A1-A3	C1-C4	D
SS-Pile	kg CO ₂ eq	2.32E+03	3.64E+01	-9.69E+02
SSdr-Pile	kg CO ₂ eq	2.38E+03	3.64E+01	-9.79E+02

Results per 1 tonne of complete SS or SSdr Pile (GWP-GHG)				
Diameter	Unit	A1-A3	C1-C4	D
SS-Pile	kg CO ₂ eq	2.29E+03	3.60E+01	-9.28E+02
SSdr-Pile	kg CO ₂ eq	2.35E+03	3.60E+01	-9.38E+02

A4 transport

A4 transport has been modelled for 10 km transport by truck and 10 km transport by sea:

A4			
Impact category	Unit	Transport by truck	Transport by sea
GWP-total	kg CO ₂ eq / ton*10 km	8.72E-01	9.42E-02
GWP-GHG	kg CO ₂ eq / ton*10 km	8.63E-01	9.36E-02

Differences versus previous versions

This EPD is an update of the EPD's S-P-01160 *SSdr Piles UAB Scandia Steel Baltic* and S-P-01159 *SS Piles UAB Scandia Steel Baltic*. The declared unit has been changed from 6 meter pile to one tonne component of SS pile and SS Dr pile. The earlier EPD's were based on EN 15804:2012+ A12013 and this EPD is based on EN 15804:2019+ A2.

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