I. SUMMARY

I General information about the CNP

(a) About the operator

Operator Name	Nordkalk Köping	
Member State	Sweden	
Emissions trading permit number	member state/CA prefix	
Competent Authority	Naturvårdsverket	
CNP submitted by DH company at company level		

The operator of this installation confirms that this plan may be used by the competent authority and the European Commission.
The operator of this installation confirms the conformity of the system boundaries of emissions.

(b) About the installation(s)

No.	Installation Name	Registry ID (as in NIMs)	Unique ID	Address	City	State/Province/Region	Postcode/ZIP	Country
1	Nordkalk Köping	410	SE000000000000410	Kungsängsvägen 22	Köping	Västmanlands län	73136	Sweden
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

II Historical emissions

No.	Product type	Unit	2019	2020	2021	2022	2023	Estimate
1	Lime	t CO2e / t	0,000	0,000	0,000	0,000	0,000	0,000
2								
3								
4								
5								
6								
7								
8								
9								
10								
11	Heat benchmark sub-installation, CL, non-CBAM	TJ						
12	Heat benchmark sub-installation, non-CL, non-CBAM	TJ						
13	Heat benchmark sub-installation, CBAM	TJ						
14	District heating sub-installation	TJ	40,50	40,50	40,50	40,50	40,50	0,00
15	Fuel benchmark sub-installation, CL, non-CBAM	TJ						
16	Fuel benchmark sub-installation, non-CL, non-CBAM	TJ						
17	Fuel benchmark sub-installation, CBAM	TJ						
18	Process emissions sub-installation, CL, non-CBAM	t CO2e						
19	Process emissions sub-installation, non-CL, non-CBAM	t CO2e						
20	Process emissions sub-installation, CBAM	t CO2e						
21								
22								
23								

III Specific targets relative to the relevant benchmark and to the baseline value

(a) Specific targets relative to the relevant benchmark values

No.	Product type	BM value	2025	2030	2035	2040	2045	2050
1	Lime	0,7250	0%	0%	0%	0%	0%	0%
2								
3								
4								
5								
6								
7								
8								
9								
10								
11	Heat benchmark sub-installation, CL, non-CBAM							
12	Heat benchmark sub-installation, non-CL, non-CBAM							
13	Heat benchmark sub-installation, CBAM							
14	District heating sub-installation	47,30	0%	0%	0%	0%	0%	0%
15	Fuel benchmark sub-installation, CL, non-CBAM							
16	Fuel benchmark sub-installation, non-CL, non-CBAM							
17	Fuel benchmark sub-installation, CBAM							
18	Process emissions sub-installation, CL, non-CBAM							
19	Process emissions sub-installation, non-CL, non-CBAM							
20	Process emissions sub-installation, CBAM							
21								
22								
23								

(b) Specific targets relative to the average specific emissions during the baseline

No.	Product type	Baseline	2025	2030	2035	2040	2045	2050
1	Lime	0,0000	0%	0%	0%	0%	0%	0%
2								
3								
4								
5								
6								
7								
8								
9								

10								
11	Heat benchmark sub-installation, CL, non-CBAM							
12	Heat benchmark sub-installation, non-CL, non-CBAM							
13	Heat benchmark sub-installation, CBAM							
14	District heating sub-installation	40,50	0%	0%	0%	0%	0%	0%
15	Fuel benchmark sub-installation, CL, non-CBAM							
16	Fuel benchmark sub-installation, non-CL, non-CBAM							
17	Fuel benchmark sub-installation, CBAM							
18	Process emissions sub-installation, CL, non-CBAM							
19	Process emissions sub-installation, non-CL, non-CBAM							
20	Process emissions sub-installation, CBAM							
21								
22								
23								

III Gantt charts for measures, investments & milestones

(a)	Measures	<= 2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

(b)	Investments	<= 2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

(c)	Milestones	<= 2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050
1							
2							
3							
4							
5							
6							
7							
8							
9							
30							

IV Details for measures, investments & milestones

(a) Measures

No.	Period	Short name or internal ID	Detailed description
ME1		CC in Köping kiln	Carbon Capture installed to capture Köping lime kiln CO2 emission, production of fossile neutral lime
ME2			
ME3			
ME4			
ME5			
ME6			
ME7			
ME8			
ME9			
ME10			

No.	Detailed description of enabling conditions	Reasons for measure decision	Qualitative impacts
ME1	Investments decission, updated permit, CC infrastucture and	Eliminating emission from chemical reaction	Climat neutrality
ME2			
ME3			
ME4			
ME5			
ME6			
ME7			
ME8			
ME9			
ME10			

No.	(i) switch to low- or zero-emission technologies	(ii) energy efficiency and energy savings	(iii) (1) hydrogen	(iii) (2) electricity	(iii) (3) sust. Biomass	(iii) (4) to alternative fuels	(iii) (5) other sources of renewable energy	(iv) resource efficiency, etc.	(v) carbon capture utilisation and storage	(vi) other
ME1									SANT	
ME2										
ME3										
ME4										
ME5										
ME6										
ME7										
ME8										
ME9										
ME10										

(b) Investments

No.	Year	Short name or internal ID	Costs in M€	Detailed description of investments
IN1		Install CC		Installation of CC in lime kiln
IN2				
IN3				
IN4				
IN5				
IN6				
IN7				
IN8				
IN9				
IN10				

Period	<= 2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050

Annualised M€		N.A.					

(c) Milestones

No.	Period	Detailed description of the milestones	Measure(s)
MI1		Piloting, CC test	ME1: CC in Köping kiln
MI2		Final investment decision for CC	ME1: CC in Köping kiln
MI3		Necessary permits obtained of CC installation	ME1: CC in Köping kiln
MI4		Realisation of investment to install CC	ME1: CC in Köping kiln
MI5			
MI6		#REFERENS!	
MI7			
MI8			
MI9			
MI10			
MI11			
MI12			
MI13			
MI14			
MI15			
MI16			
MI17			
MI18			
MI19			
MI20			
MI21			
MI22			
MI23			
MI24			
MI25			
MI26			
MI27			
MI28			
MI29			
MI30			

V Sub-installation data

1 Sub-installation with product benchmark: Lime

		Reference value t CO2e / t	2025	2030	2035	2040	2045	2050
i.	Targets relative to baseline value		N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
ii.	Targets relative to relevant BM value	0,7250				0%	0%	0%

		Reference value t CO2e / t	2025	2030	2035	2040	2045	2050
iii.	Absolute specific reduction versus baseline					N.A.	N.A.	N.A.

iv. Impact share of each measure (100% = value under point iii.)

	Measure	Investments	2025	2030	2035	2040	2045	2050
1	ME1: CC in Köping kiln	IN1: CC	0%	0%	0%	100%	100%	100%
2								
3								
4								
5								
6								
7								
8								
9								
10								
		TOTAL	0%	0%	0%	100%	100%	100%

v. Impact share of each measure (100% = reference value during baseline, point i.)

	Measure	Investments	2025	2030	2035	2040	2045	2050
1	ME1: CC in Köping kiln	IN1: CC	#VÄRDEFEL!	#VÄRDEFEL!	#VÄRDEFEL!	#VÄRDEFEL!	#VÄRDEFEL!	#VÄRDEFEL!
2								
3								
4								
5								
6								
7								
8								
9								
10								
		TOTAL						

2 Sub-installation with product benchmark:

11 Fall-back sub-installation: Heat benchmark sub-installation, CL, non-CBAM — not relevant

12 Fall-back sub-installation: Heat benchmark sub-installation, non-CL, non-CBAM — not relevant

14 Fall-back sub-installation: District heating sub-installation — relevant

		Reference value t CO2e / TJ	2025	2030	2035	2040	2045	2050
i.	Targets relative to baseline value	40,5000				0%	0%	0%
ii.	Targets relative to relevant BM value	47,3000				0%	0%	0%

		Reference value t CO2e / TJ	2025	2030	2035	2040	2045	2050
iii.	Absolute specific reduction versus baseline	40,5000				-40,500	-40,500	-40,500

iv. Impact share of each measure (100% = value under point iii.)

	Measure	Investments	2025	2030	2035	2040	2045	2050
1	ME1: CC in Köping kiln	IN1: Install CC	0%	0%	0%	100%	100%	100%
2								
3								
4								
5								

6								
7								
8								
9								
10								
		TOTAL	0%	0%	0%	100%	100%	100%

v. Impact share of each measure (100% = reference value during baseline, point i.)

	Measure	Investments	2025	2030	2035	2040	2045	2050
1	ME1: CC in Köping kiln	IN1: Install CC	0%	0%	0%	-100%	-100%	-100%
2								
3								
4								
5								
6								
7								
8								
9								
10								
		TOTAL	0%	0%	0%	-100%	-100%	-100%

15 Fall-back sub-installation:

Fuel benchmark sub-installation, CL, non-CBAM	not relevant

21 Other processes:

not relevant

		Reference value	2025	2030	2035	2040	2045	2050
i.	Targets relative to baseline value							
ii.	Targets relative to relevant BM value	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

		Reference value	2025	2030	2035	2040	2045	2050
iii.	Absolute specific reduction versus baseline		N.A.	N.A.	N.A.	N.A.		

iv. Impact share of each measure (100% = value under point iii.)

	Measure	Investments	2025	2030	2035	2040	2045	2050
1								
2								
3								
4	ME1: New electric furnaces	IN1: test investment	0%	100%	100%	100%	0%	0%
5								
6								
7								
8								
9								
10								
		TOTAL	0%	100%	100%	100%	0%	0%

v. Impact share of each measure (100% = reference value during baseline, point i.)

	Measure	Investments	2025	2030	2035	2040	2045	2050
1								
2								
3								
4	ME1: New electric furnaces	IN1: test investment	#VÄRDEFEL!	#VÄRDEFEL!	#VÄRDEFEL!	#VÄRDEFEL!	#VÄRDEFEL!	#VÄRDEFEL!
5								
6								
7								
8								
9								
10								
		TOTAL						

22 Other processes:

not relevant

		Reference value	2025	2030	2035	2040	2045	2050
i.	Targets relative to baseline value							
ii.	Targets relative to relevant BM value	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

		Reference value	2025	2030	2035	2040	2045	2050
iii.	Absolute specific reduction versus baseline		N.A.	N.A.	N.A.	N.A.		

iv. Impact share of each measure (100% = value under point iii.)

	Measure	Investments	2025	2030	2035	2040	2045	2050
1								
2								
3								
4	ME1: New electric furnaces	IN1: test investment	0%	100%	100%	100%	0%	0%
5								
6								
7								
8								
9								
10								
		TOTAL	0%	100%	100%	100%	0%	0%

v. Impact share of each measure (100% = reference value during baseline, point i.)

	Measure	Investments	2025	2030	2035	2040	2045	2050
1								
2								
3								
4	ME1: New electric furnaces	IN1: test investment	#VÄRDEFEL!	#VÄRDEFEL!	#VÄRDEFEL!	#VÄRDEFEL!	#VÄRDEFEL!	#VÄRDEFEL!
5								
6								
7								
8								
9								
10								
		TOTAL						

23 Other processes:

							not relevant	
		Reference value	2025	2030	2035	2040	2045	2050
i.	Targets relative to baseline value							
ii.	Targets relative to relevant BM value	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

		Reference value	2025	2030	2035	2040	2045	2050
iii.	Absolute specific reduction versus baseline		N.A.	N.A.	N.A.	N.A.		

iv. Impact share of each measure (100% = value under point iii.)

	Measure	Investments	2025	2030	2035	2040	2045	2050
1								
2								
3								
4	ME1: New electric furnaces	IN1: test investment	0%	100%	100%	100%	0%	0%
5								
6								
7								
8								
9								
10								
		TOTAL	0%	100%	100%	100%	0%	0%

v. Impact share of each measure (100% = reference value during baseline, point i.)

	Measure	Investments	2025	2030	2035	2040	2045	2050
1								
2								
3								
4	ME1: New electric furnaces	IN1: test investment	#VÄRDEFEL!	#VÄRDEFEL!	#VÄRDEFEL!	#VÄRDEFEL!	#VÄRDEFEL!	#VÄRDEFEL!
5								
6								
7								
8								
9								
10								
		TOTAL						