

CLIMATE NEUTRALITY PLAN

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Reference filename:	CNP Template COM en 210224.xls

Information about this file:	
Installation name:	Saint-Gobain Sweden AB, Isover
Unique Installation Identifier:	SE000000000000414
Reference date of the CNP:	8/23/2024

If your competent authority requires you to hand in a signed paper copy of the climate-neutrality plan, please use the space below for signature:

Date

Name and Signature of
legally responsible person

GUIDELINES AND CONDITIONS

General Information on this Template

- 1 Directive 2003/87/EC, as amended most recently by Directive 2023/959/EU (hereinafter "the EU ETS Directive") requires Member States to allocate allowances for free to installations based on Community-wide and fully-harmonised rules (Article 10a(1)). The Directive can be downloaded from: <https://eur-lex.europa.eu/eli/dir/2003/87/2023-06-05>
- 2 These Free Allocation Rules (hereinafter "the FAR") are contained in the Commission Delegated Regulation (EU) 2019/331. The FAR can be downloaded from: http://data.europa.eu/eli/reg_del/2019/331/oj
- 3 Article 10a(5) of the EU ETS Directive, together with Article 22b of the FAR, stipulates that the level of free allocation shall be reduced by 20 % if operators of installations whose greenhouse gas emission levels are higher than the 80th percentile of emission levels for the relevant product benchmarks (in 2016/2017) have not established a climate-neutrality plan (CNP) by May 2024 in accordance with Article 10b(4).
- 4 Furthermore, Article 10b(4) grants an additional 30% of free allocation to district heating in certain Member States, provided they also establish a CNP and that an investment volume equivalent to the value of that additional free allocation is invested to significantly reduce emissions before 2030
- 5 Pursuant to Article 10b(4), of the EU ETS Directive the Commission adopted the Implementing Regulation (EU) 2023/2441 (hereinafter "the CNP Regulation"), which specifies the minimum content and format of the CNP. The Regulation can be downloaded from: https://eur-lex.europa.eu/eli/reg_impl/2023/2441/oj
- 6 This is a template for the CNP and has been developed on behalf of the Commission by its consultants (Umweltbundesamt GmbH Austria). The views expressed in this file represent the views of the authors and not necessarily those of the European Commission.
- 7 **This is the final version of the CNP template, version of 21 February 2024.**

How to use this file

- 7 Automatic calculation (to be found in the menu Formula/Calculation options) must be turned on.
It is recommended that you go through the file from start to end. There are a few functions which will guide you through the form which depend on previous input, such as cells changing colour if an input is not needed (see colour codes below).
In several fields you can choose from predefined inputs. For selecting from such a "drop-down list" either click with the mouse on the small arrow appearing at the right border of the cell, or press "Alt-CursorDown" when you have selected the cell. Some fields allow you to input your own text even if such a drop-down list exists. This is the case when drop-down lists contain empty list entries.
- 8 Colour codes and fonts:

Black bold text:	This is text describing the input required.
<i>Smaller italic text:</i>	This text gives further explanations.
	Yellow fields indicate mandatory inputs. However, if the topic is not relevant for the installation, no input is required.
	Light yellow fields indicate that an input is optional.
	Green fields show automatically calculated results. Red text indicates error messages (missing data etc).
	Shaded fields indicate that an input in another field makes the input here irrelevant.
	Grey shaded areas should be filled by Member States before publishing customized version of the template.
	Light grey areas are dedicated for navigation and hyperlinks.
- 9 Navigation panels on top of each sheet provide hyperlinks for quick jumps to individual input sections.
- 10 This template has been locked against data entry except for yellow fields. However, for transparency reasons, no password has been set. This allows for complete viewing of all formulae. When using this file for data entry, it is recommended to keep the protection in force. The sheets should only be unprotected for checking the validity of formulae. It is recommended to do this in a separate file.
- 11 **In order to protect formulae against unintended modifications, which usually lead to wrong and misleading results, it is of utmost importance NOT TO USE the CUT & PASTE.**
If you want to move data, first COPY and PASTE them, and thereafter delete the unwanted data in the old (wrong) place.
- 12 Data fields have not been optimized for numerical and other formats. However, sheet protection has been limited so as to allow you to use your own formats. In particular, you may decide about the number of decimal places displayed. The number of places is in principle independent from the precision of calculation. In principle the option "Precision as displayed" of MS Excel should be deactivated. For more details, consult MS Excel's "Help" function on this topic.
- 13 **DISCLAIMER: All formulae have been developed carefully and thoroughly. However, mistakes cannot be fully excluded. As described above, full transparency for checking the validity of calculations is ensured. Neither the authors of this file nor the European Commission can be held liable for eventual damages resulting from wrong or misleading results of the provided calculations. It is the full responsibility of the user of this file (i.e. the operator of an ETS installation) to ensure that correct data is reported to the competent authority.**

Member State specific information:

This Report must be submitted to your Competent Authority to the following address:

Detail address to be provided by the Member State

Information sources:

EU Websites:

EU-Legislation: <http://eur-lex.europa.eu/en/index.htm>
EU ETS general: https://climate.ec.europa.eu/eu-action/eu-emissions-trading-system-eu-ets_en

Other Websites:

<to be provided by Member State>

Helpdesk:

<to be provided by Member State, if relevant>

Further guidance as provided by the Member State:

Periods at which the effectiveness of the climate neutrality plan is evaluated regarding greenhouse gas emissions reductions:						5 Years
Year of next effectiveness evaluations:	2029	2034	2039	2044	2049	

B. INSTALLATION DATA**I Consent to use the data contained in this file**

The information contained in this file will be used by the competent authority for determining the fulfilment of the climate neutrality plan conditionality of free allocation pursuant to Article 10b of the EU ETS Directive and Article 22b of the FAR Regulation. Furthermore this information might be notified to the European Commission in part or as a whole, if requested so, for the purpose of scrutinising the national implementation measures pursuant to Article 11(1) of the EU ETS Directive.

Please confirm consent to use information contained in this climate neutrality plan.

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

The system boundaries and types of greenhouse gases covered by historical emissions, emissions levels and specific targets are consistent with the greenhouse gas emissions permit of the installation and the requirements laid down in the Monitoring and Reporting Regulation (EU) 2018/2066 (MRR) and in the FAR. This also applies when applying for additional allocation for district heating pursuant to Article 22b of the FAR.

The scope of emissions do not include any carbon removals or emission reductions outside the system boundaries of the installation and acquired via carbon offset credits.

Please confirm that the emissions entered comply with the conditions described above.

The operator of this installation confirms the conformity of the system boundaries of emissions.

II Identification of the Installation(s)**1 About the operator**

- (a) Operator Name: Saint-Gobain Sweden AB
- (b) Member State: Sweden
- (c) Emissions trading permit number: member state/CA prefix SE-414
- (d) Competent Authority: Naturvårdsverket
- (e) Is the climate neutrality plan submitted by a district heating company at company level? ☒ FALSE

Point (e) is only relevant for district heating companies in Bulgaria, Czechia, Latvia or Poland.

If the climate neutrality plan is submitted at company level, historical emissions and targets are to be summed up over all installations covered by the climate neutrality plan and the totals are to be entered in sheets D_HistoricalEmissions and G_FallBackBM and H_OtherProcesses.

2 About your installation(s)

- (a) Name of the installation and ID
- i. Installation name: Saint-Gobain Sweden AB, Isover
- ii. Registry ID of the installation (as in NIMs): 414
- This is usually a natural number, i.e. a code different from the Permit identifier used in the Registry (EUTL).
- For example, if the Registry ID is BE000000000123456, please enter here 123456. Together with the Member State selected under (c), this Registry ID (unique ID) will be displayed automatically in (f)
- iii. Unique ID: SE000000000000414

Include any Member State specific guidance on naming of installations.

(b) Address / location of the site of the installation

- i. Address Line 1: Storgatan 29
- ii. Address Line 2:
- iii. City: Billsholm
- iv. State/Province/Region: Sverige
- v. Postcode/ZIP: 267 82
- vi. Country: Sweden

The following table is only relevant for district heating companies in Bulgaria, Czechia, Latvia or Slovakia, that submit the climate neutrality plan at company level.

Please list all additional installations linked to and operated by the operator and covered by the climate neutrality plan.

No.	Installation Name	Registry ID (as in NIMs)	Unique ID	Address	City	State/Pro- vince/Region	Postcode/ZIP	Country
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

III Contact details

Who can we contact about your climate neutrality plan?

It will help us to have someone who we can contact directly with any questions about your climate neutrality plan. The persons you name should have the authority to act on behalf of the operator.

- (a) Authorised representative:
- Title: EHS Manager
- First Name: Patricia
- Surname: Ambäck
- Job title:
- Organisation name (if different from the operator):
- Telephone number: 46738512916
- Email address: patricia.amback@saint-gobain.com
- (b) Primary contact:
- Title: Environmental coordinator
- First Name: Bernt
- Surname: Hermansen
- Job title:
- Organisation name (if different from the operator):
- Telephone number: 46703694350
- Email address: bernt.hermansen@saint-gobain.com

C. INSTALLATION DESCRIPTION

I List of sub-installations

1 Product benchmark sub-installations

Please select here all relevant product benchmark sub-installations, consistent with the ones provided in the baseline data report.

Please also list here any sub-installations that are planned to start operating after the submission of the CNP.

Where a sub-installation is planned to start operating or to cease operations after the submission of the CNP, please select the relevant period from the drop-down list, respectively. In case no entries are made, it is assumed that the sub-installation is already existing and will remain operational at least until 2050.

No.	Product type	Starting	Cessation?	CL exposed?	CBAM?	Unit
1	Mineral wool	<= 2023	None	TRUE	FALSE	tonnes
2						
3						
4						
5						
6						
7						
8						
9						
10						

2 Sub-installations with fall-back approaches

Please select here all relevant sub-installations with fall-back approaches, consistent with the ones provided in the baseline data report.

Please also list here any sub-installations that are planned to start operating after the submission of the CNP.

Where a sub-installation is planned to start operating or to cease operations after the submission of the CNP, please select the relevant period from the drop-down list, respectively. In case no entries are made, it is assumed that the sub-installation is already existing and will remain operational at least until 2050.

According to the Annex of the CNP Regulation, you may provide specific emissions in later sheets of this template relative to other units than the default units of the relevant activity, where more appropriate. For instance, you may want to provide specific emissions for a heat benchmark sub-installation per tonne of (aggregated) production, instead of per TJ.

Please enter the relevant unit of production in column N. If no entries are made there, the default units of TJ will be used for the heat and fuel benchmark sub-installations. For process emissions the default units will be tonnes of (aggregated) production.

No.	Sub-installation type	Relevant?	Starting	Cessation?	CL exposed?	CBAM?	Unit
11	Heat benchmark sub-installation, CL, non-CBAM	FALSE			TRUE	FALSE	
12	Heat benchmark sub-installation, non-CL, non-CBAM	FALSE			FALSE	FALSE	
13	Heat benchmark sub-installation, CBAM	FALSE			TRUE	TRUE	
14	District heating sub-installation	FALSE			FALSE	FALSE	
15	Fuel benchmark sub-installation, CL, non-CBAM	FALSE			TRUE	FALSE	
16	Fuel benchmark sub-installation, non-CL, non-CBAM	FALSE			FALSE	FALSE	
17	Fuel benchmark sub-installation, CBAM	FALSE			TRUE	TRUE	
18	Process emissions sub-installation, CL, non-CBAM	FALSE			TRUE	FALSE	
19	Process emissions sub-installation, non-CL, non-CBAM	FALSE			FALSE	FALSE	
20	Process emissions sub-installation, CBAM	FALSE			TRUE	TRUE	

3 Other processes not covered by sub-installations

The CNP Regulation requires the system boundaries to cover all relevant emissions of the installation determined in accordance with the Monitoring & Reporting Regulation (EU) 2018/2066. This means that emissions may be relevant that are not eligible for free allocation, e.g. electricity production or non-safety flaring.

Therefore, please provide here a short description of each process not covered by sub-installations and enter the relevant units of production. For example, for electricity production, you may want to enter production expressed as "MWh" of net electricity produced.

Where a process is planned to start operating or to cease operations after the submission of the CNP, please select the relevant period from the drop-down list, respectively. In case no entries are made, it is assumed that the sub-installation is already existing and will remain operational at least until 2050.

The processes identified here will be treated similarly to all other sub-installations above in subsequent sheets concerning measures, investments, milestones, targets and impacts.

No.	Short name or ID	Description of the process	Starting	Cessation?	CL exposed?	CBAM?	Units
21					N.A.	N.A.	
22					N.A.	N.A.	
23					N.A.	N.A.	

D. HISTORICAL EMISSIONS

I Specific historical emissions

1 Product benchmark sub-installations

Please enter here the specific historical emissions (consistent with the attributed emission pursuant to the FAR rules and the MRR) for each product benchmark sub-installation for each year of the baseline period.

The average of the specific historical emissions during 2019-2023 will be used as the baseline for setting (intermediate) targets in sheets F to H.

The specific emissions shall be calculated by dividing the attributed emissions by the activity level in each year, both based on the corresponding rules of the FAR in consistency with the data entered in the baseline data report used for calculation of free allocation for 2026-2030.

Years in which the sub-installation did not operate should be left empty, including for cases of new sub-installation planned to start operating only after the submission of the CNP. In the case of the later, please provide an estimate of the specific emissions at the future start of operations.

No.	Product type	Unit	2019	2020	2021	2022	2023	Estimate
1	Mineral wool	t CO ₂ e / t	0.433	0.455	0.405	0.395	0.238	
2								
3								
4								
5								
6								
7								
8								
9								
10								

2 Sub-installations with fall-back approaches

Please enter here the specific historical emissions (consistent with the attributed emission pursuant to the FAR rules and the MRR) for each fall-back benchmark sub-installation for each year of the baseline period, taking into consideration the guidance provided for product benchmark sub-installations above.

However, where other units of production levels than the units for the relevant activity level were chosen in section C.I.2 (note, that the default unit for process emissions is tonnes of production), the emissions shall be expressed relative to those relevant (aggregated) production levels. The attributed emissions should however still be calculated in accordance with the corresponding FAR rules, consistent with the data provided in the baseline data report.

No.	Sub-installation type	Unit	2019	2020	2021	2022	2023	Estimate
11	Heat benchmark sub-installation, CL, non-CBAM	t CO ₂ e / TJ						
12	Heat benchmark sub-installation, non-CL, non-CBAM	t CO ₂ e / TJ						
13	Heat benchmark sub-installation, CBAM	t CO ₂ e / TJ						
14	District heating sub-installation	t CO ₂ e / TJ						
15	Fuel benchmark sub-installation, CL, non-CBAM	t CO ₂ e / TJ						
16	Fuel benchmark sub-installation, non-CL, non-CBAM	t CO ₂ e / TJ						
17	Fuel benchmark sub-installation, CBAM	t CO ₂ e / TJ						
18	Process emissions sub-installation, CL, non-CBAM	t CO ₂ e / t						
19	Process emissions sub-installation, non-CL, non-CBAM	t CO ₂ e / t						
20	Process emissions sub-installation, CBAM	t CO ₂ e / t						

3 Specific emissions not covered by sub-installations

Please enter here the specific historical emissions (consistent with the attributed emission pursuant to the FAR rules and the MRR) for each process not covered by a benchmarked sub-installation for each year of the baseline period, taking into consideration the guidance provided for product benchmark sub-installations above.

Please ensure that the emissions are specific to the relevant units of production chosen in section C.I.3. The attributed emissions should be calculated in accordance with the corresponding FAR rules, consistent with the data provided in the baseline data report.

No.	Emission source description	Unit	2019	2020	2021	2022	2023	Estimate
21								
22								
23								

II Absolute historical emissions (optional)

1 Product benchmark sub-installations absolute emissions

Please enter here the historical absolute emissions, expressed as t CO₂e, for each sub-installation for each year of the baseline period. Entries here are optional.

No.	Product type	Unit	2019	2020	2021	2022	2023	Estimate
1	Mineral wool	t CO ₂ e	25,620	22,493	23,174	22,564	11,293	
2								
3								
4								
5								
6								
7								
8								
9								
10								

2 Sub-installations with fall-back approaches absolute emissions

Please enter here the historical absolute emissions, expressed as t CO₂e, for each sub-installation for each year of the baseline period. Entries here are optional.

No.	Sub-installation type	Unit	2019	2020	2021	2022	2023	Estimate
11	Heat benchmark sub-installation, CL, non-CBAM	t CO ₂ e						
12	Heat benchmark sub-installation, non-CL, non-CBAM	t CO ₂ e						
13	Heat benchmark sub-installation, CBAM	t CO ₂ e						
14	District heating sub-installation	t CO ₂ e						
15	Fuel benchmark sub-installation, CL, non-CBAM	t CO ₂ e						
16	Fuel benchmark sub-installation, non-CL, non-CBAM	t CO ₂ e						
17	Fuel benchmark sub-installation, CBAM	t CO ₂ e						
18	Process emissions sub-installation, CL, non-CBAM	t CO ₂ e						
19	Process emissions sub-installation, non-CL, non-CBAM	t CO ₂ e						
20	Process emissions sub-installation, CBAM	t CO ₂ e						

3 Specific emissions not covered by sub-installations

Please enter here the historical absolute emissions, expressed as t CO₂e, for each sub-installation for each year of the baseline period. Entries here are optional.

No.	Emission source description	Unit	2019	2020	2021	2022	2023	Estimate
21								
22								
23								

E. MEASURES, INVESTMENTS AND MILESTONES

I Measures

1 Measure description and reasons

Please list here all relevant planned measures (e.g. electrification of fossil-powered furnaces) until 2050, providing for each measure the following information:

- the period during which the measure is planned to be taken. If a measure has impacts in more than one period, please select the period in which it will be first implemented;
- a short name or internal ID for each measure in order to facilitate making reference to each measure later in this template;
- a detailed description of each measure. It is possible to refer to an attached document file, if the description exceeds the space provided here (then please list the exact file name here and in sheet K_Comments).

Measures should be entered as aggregated as possible. E.g. process optimisations over different periods can be entered as one measure with the period of the first optimisation.

No.	Period	Short name or internal ID	Detailed description
Ex.1	2031-2035	Hydrogen steel	Replacement of BF/BOF with DRI using green hydrogen (further details see separate file 'CNP file.docx')
Ex.2	2025-2030	Measures AB.5 to 7	Process optimisations over different periods starting from 2027
ME1	<= 2025	P20220473416	Since start of 2023, change of energy mix
ME2	2026-2030	P20230497639	Electrification of process equipment
ME3	2026-2030	P20230497640	Electrification of process equipment
ME4	2026-2030	P20230497641	Changing technology to be more energy efficient
ME5	2031-2035	Electrification of process	Electrification of process equipment
ME6	2031-2035	Electrification of process	Electrification of process equipment
ME7	2036-2040	Energy mix	Change of remaining energy mix
ME8	2041-2045	Emission-optimized glass	New recipe with lower CO2 emission
ME9	2041-2045	Research project raw materials	Replacing batch raw materials with CO2-free raw materials
ME10	2041-2045	CCS or carbon removal	Storage of carbon/carbon removal with biochar or equivalent technology

2 Enabling conditions and qualitative impacts

Please provide for each measure identified under 1) above the following information:

- a detailed description of enabling conditions and infrastructure needs (e.g. CO2 pipeline infrastructure, green hydrogen infrastructure, H2 costs below "x" €/MWh);
- a comprehensive reasoning for measure decision why the measures were chosen rather than other potential measures for decarbonisation;
- a qualitative assessment of the impacts of each measure (e.g. where this installation is the worldwide first to implement a certain decarbonisation technology, it demonstrates the feasibility of wider uptake by other installations). The quantitative assessment will be done later in the template in sheets F to H.

It is possible to refer to an attached document file, if the description exceeds the space provided here (then please list the exact file name here and in sheet K_Comments).

No.	Detailed description of enabling conditions	Reasons for measure decision	Qualitative impacts
ME1	Since start of 2023, change of energy mix	Fastest way to reduce CO2 emissions from fuel by 50%.	50% CO2 emissions from fuel use
ME2	Electrification of process equipment	Existing technology	Less CO2 emissions
ME3	Electrification of process equipment	Existing technology	Less CO2 emissions
ME4	Changing technology to be more energy efficient	New technique	More energy efficient, saves gas.
ME5	Electrification of process equipment	New process equipment	Less CO2 emissions
ME6	Electrification of process equipment	Existing technology	Less CO2 emissions
ME7	Change of remaining energy mix	No CO2 emissions from fuel use	Eliminate CO2 emissions from fuel
ME8	New recipe with lower CO2 emission	Eliminate CO2 emissions from glass raw materials	Less CO2 emissions from glass raw materials
ME9	Replacing batch raw materials with CO2-free raw materials	Eliminate CO2 emissions from glass raw materials	Less CO2 emissions from glass raw materials
ME10	Storage of carbon/carbon removal with biochar or equivalent technology	A way to get down to net zero CO2 emissions	A way to get down to zero CO2 emissions

3 Categorisation of measures

Please attribute each measure to one or more of the following types of GHG savings or decarbonisation technologies, as applicable:

- (i) switch to low- or zero-emission technologies
- (ii) energy efficiency and energy savings
- (iii) switch from fossil fuels to:
 - (1) hydrogen
 - (2) electricity
 - (3) biomass fulfilling the sustainability and greenhouse gas savings criteria referred to in Article 38(5) of Implementing Regulation (EU) 2018/2066
 - (4) alternative fuels from waste streams
 - (5) other sources of renewable energy
- (iv) resource efficiency, including reduced consumption of materials and recycling
- (v) carbon capture utilisation and storage
- (vi) other

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	TRUE				TRUE					
ME2	TRUE	TRUE		TRUE						
ME3	TRUE	TRUE		TRUE						
ME4		TRUE								
ME5	TRUE	TRUE		TRUE						
ME6	TRUE	TRUE		TRUE						
ME7	TRUE		TRUE	TRUE	TRUE					
ME8	TRUE	TRUE						TRUE		
ME9								TRUE		
ME10	TRUE								TRUE	TRUE

II Investments

1 Investment

Please list here all investments providing the following information:

- the year in which the investment is planned to be taken (where appropriate, investments may be combined as 5-year averages will be calculated under point 2. below);
- a short name or internal ID for each investment in order to facilitate making reference to each investment later in this template;
- the corresponding investment costs in mio. € (best estimate at the time of preparing the CNP). This value should be expressed as the one-off investment costs, annualising will be done automatically under point 2) below;
- a detailed description of each investment. It is possible to refer to an attached document file, if the description exceeds the space provided here (then please list the exact file name here and in sheet K_Comments).

No.	Year	Short name or internal ID	Costs in M€	Detailed description of investments
Ex.1	2032	New electric furnaces	152	Purchase and installation of electric furnaces (further details see separate file 'CNP file.docx')
IN1	<= 2025	P20220473416	3	Since start of 2023, change of energy mix
IN2	2028	P20230497639	2	Electrification of process equipment
IN3	2027	P20230497640	2	Electrification of process equipment
IN4	2030	P20230497641	3	Changing technology to be more energy efficient
IN5	2035	Electrification of process	8	Electrification of process equipment
IN6	2035	Electrification of process	3	Electrification of process equipment
IN7	2038	Change of remaining energy	3	Change of remaining energy mix
IN8	2043	Emission-optimized glass	2	New recipe with lower CO2 emission
IN9	2041	Research project raw materials	4	Replacing batch raw materials with CO2-free raw materials
IN10	2044	CCS or carbon removal	5	Storage of carbon/carbon removal with biochar or equivalent technology

2 Investments annualised Euros

The annualised Euros per year for each five-year period are automatically calculated based on the inputs under point 1) above.

Period	<= 2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050
Annualised M€	N.A.	1.36	2.20	0.60	2.20	0.00

III Milestones

Please list here all milestones providing the following information:

- the year in which the milestone is planned to be reached;
- a detailed description of each milestone;
- the relevant measure for each milestone. Please select them from the drop-down list or, where more than one measure is relevant, enter corresponding information in the form of "ME1, ME3", etc.

It is possible to refer to an attached document file, if the description exceeds the space provided here (then please list the exact file name here and in sheet K_Comments).

Milestones shall be commensurate to the targets entered in the following sheets.

No.	Period	Detailed description of the milestones	Measure(s)
Ex 1	2031-2035	Final investment decision taken (further details see separate file 'CNP file.docx')	ME1: New electric furnaces
Ex 2	2031-2035	Dismantling of old furnaces (further details see separate file 'CNP file.docx')	ME1, ME3
MI1	2036-2040	Change of energy mix	ME1, ME7
MI2	2041-2045	All glass raw materials with carbon dioxide emissions replaced with new raw materials with no or low carbon	ME8, ME9
MI3	2041-2045	Storage of carbon/carbon removal with biochar or equivalent technology	ME10
MI4	2026-2030	Electrification of process equipment	ME2, ME3
MI5	2031-2035	Electrification of process equipment	ME5, ME6
MI6	2026-2030	Changing technology to be more energy efficient	ME4
MI7			
MI8			
MI9			
MI10			
MI11			
MI12			
MI13			
MI14			
MI15			
MI16			
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MI27			
MI28			
MI29			
MI30			

IV Measures and investments prior to submission of the CNP (optional)

Optionally, you may list and describe all measures and investments already implemented prior to the submission of the climate-neutrality plan.

1	Green electricity since 2018
2	50 % of biogas since 2023
3	
4	
5	
6	
7	
8	
9	
10	

F. Targets & Impacts ProdBM

I Quantitative impact assessment product BM sub-installations

1 Sub-installation with product benchmark:		Mineral wool						
The name of the product benchmark sub-installation is displayed automatically based in the inputs in sheet "C_InstallationDescription".								
(a) Specific emission targets								
Please enter here the intermediate targets, expressed as specific emissions consistent with the historical emissions (baseline), for the end of each five year period. Additionally absolute emission targets can be entered optionally.								
The baseline is automatically calculated based on the input of historical emissions in sheet D_HistoricalEmissions.								
	Baseline	Unit	2025	2030	2035	2040	2045	2050
i. Specific emission targets	0.385	t CO2e / t	0.224	0.179	0.159	0.047	0.000	0.000
ii. Absolute emission targets	21,029	t CO2e	12,195	10,733	9,494	2,794	0	0
(b) Relative emission targets								
The reduction of specific emissions relative to the baseline (average historic emissions or estimate in sheet D) and the relevant benchmark value are automatically calculated, based on the inputs for the specific emission targets under point (a) above.								
	Reference value		2025	2030	2035	2040	2045	2050
i. Relative to baseline value	0.3850	t CO2e / t	58%	47%	41%	12%	0%	0%
ii. Relative to relevant BM value	0.5360	t CO2e / t	42%	33%	30%	9%	0%	0%
(c) Split of specific emission reduction by measure and investment								
Please select from the drop-down list each measure that has an impact on the targets specified above for this sub-installation.								
For each measure please select from the drop-down list the relevant investments. Where no investment is related to the measure, e.g. only process optimisation, please select "no investments". Where more than one investment relates to a certain measure, please enter corresponding information in the form of "IN1, IN4", etc.								
Subsequently, please provide for each period the percentage to which each measure and investments contributes to the specific emission reduction displayed under i. The sum of all measures should equal 100% (consistency check under iv.), in which case the total emission reduction displayed under iii. equals the specific reduction under i.								
Following the entries made in sections C.I and E.I.1, years prior to the period in which the measures are implemented or prior and after the sub-installation is operational are greyed out.								
The consistency check under v. will prompt an error message in the following cases:								
- no targets are set before a cessation or targets are set after a cessation;								
- impacts are entered for years where there are either no targets set or the targets are equal to the baseline, i.e. reduction under i. equals zero;								
- the impacts do not add up to 100%.								
	Reference value		2025	2030	2035	2040	2045	2050
i. Specific reduction (target versus baseline)	0.3850	t CO2e / t	-0.161	-0.205	-0.226	-0.338	-0.385	-0.385
ii. Measure	Investment		2025	2030	2035	2040	2045	2050
Ex.1 ME1: Process optimisations over	IN1: IN3			100%	100%	30%	20%	
Ex.2 ME2: New furnace	IN2: New furnace					70%	80%	100%
1 ME1: P20220473416	IN1: P20220473416	100%						
2 ME2: P20230497639	IN2: P20230497639			15%				
3 ME3: P20230497640	IN3: P20230497640			65%				
4 ME4: P20230497641	IN4: P20230497641			20%				
5 ME5: Electrification of process	IN5: Electrification of process e				40%			
6 ME6: Electrification of process	IN6: Electrification of process e				60%			
7 ME7: Energy mix	IN7: Change of remaining ener					100%		
8 ME8: Emission-optimized glass	IN8: Emission-optimized glass						25%	
9 ME9: Research project raw mat	IN9: Research project raw mate						55%	
10 ME10: CCS or carbon removal	IN10: CCS or carbon removal						20%	100%
iii. Reduction compared to baseline (100% = values under i.)			-0.161	-0.205	-0.226	-0.338	-0.385	-0.385
iv. Consistency check (= iii. / i.)			100%	100%	100%	100%	100%	100%
v. Consistency check (error message)								
(d) Any further comments								

2 Sub-installation with product benchmark:								
The name of the product benchmark sub-installation is displayed automatically based in the inputs in sheet "C_InstallationDescription".								
(a) Specific emission targets								
Please enter here the intermediate targets, expressed as specific emissions consistent with the historical emissions (baseline), for the end of each five year period. Additionally absolute emission targets can be entered optionally.								
The baseline is automatically calculated based on the input of historical emissions in sheet D_HistoricalEmissions.								
	Baseline	Unit	2025	2030	2035	2040	2045	2050
i. Specific emission targets								
ii. Absolute emission targets		t CO2e						
(b) Relative emission targets								
The reduction of specific emissions relative to the baseline (average historic emissions or estimate in sheet D) and the relevant benchmark value are automatically calculated, based on the inputs for the specific emission targets under point (a) above.								
	Reference value		2025	2030	2035	2040	2045	2050
i. Relative to baseline value								
ii. Relative to relevant BM value								
(c) Split of specific emission reduction by measure and investment								
Please select from the drop-down list each measure that has an impact on the targets specified above for this sub-installation.								
For each measure please select from the drop-down list the relevant investments. Where no investment is related to the measure, e.g. only process optimisation, please select "no investments". Where more than one investment relates to a certain measure, please enter corresponding information in the form of "IN1, IN4", etc.								
Subsequently, please provide for each period the percentage to which each measure and investments contributes to the specific emission reduction displayed under i. The sum of all measures should equal 100% (consistency check under iv.) in which case the total emission reduction displayed under iii. equals the specific reduction under i.								
Following the entries made in sections C.I and E.I.1, years prior to the period in which the measures are implemented or prior and after the sub-installation is operational are greyed out.								
The consistency check under v. will prompt an error message in the following cases:								
- no targets are set before a cessation or targets are set after a cessation;								
- impacts are entered for years where there are either no targets set or the targets are equal to the baseline, i.e. reduction under i. equals zero;								
- the impacts do not add up to 100%.								
	Reference value		2025	2030	2035	2040	2045	2050
i. Specific reduction (target versus baseline)								
ii. Measure	Investment		2025	2030	2035	2040	2045	2050
Ex.1 ME1: Process optimisations over	IN1: IN3			100%	100%	30%	20%	
Ex.2 ME2: New furnace	IN2: New furnace					70%	80%	100%

3

Sub-installation with product benchmark

The name of the product benchmark sub-installation is displayed automatically based on the inputs in sheet "C_InstallationDescription"

(a) Specific emission targets

Please enter here the intermediate targets, expressed as specific emissions consistent with the historical emissions (baseline), for the end of each five year period. Additionally absolute emission targets can be entered optionally.

The baseline is automatically calculated based on the input of historical emissions in sheet D_HistoricalEmissions.

	Baseline	Unit	2025	2030	2035	2040	2045	2050
i. Specific emission targets								
ii. Absolute emission targets		t CO2e						

(b) Relative emission targets

The reduction of specific emissions relative to the baseline (average historic emissions or estimate in sheet D) and the relevant benchmark value are automatically calculated, based on the inputs for the specific emission targets under point (a) above.

	Reference value	2025	2030	2035	2040	2045	2050
i. Relative to baseline value							
ii. Relative to relevant BM value							

(c) Split of specific emission reduction by measure and investment

Please select from the drop-down list each measure that has an impact on the targets specified above for this sub-installation.

For each measure please select from the drop-down list the relevant investments. Where no investment is related to the measure, e.g. only process optimisation, please select "no investments". Where more than one investment relates to a certain measure, please enter corresponding information in the form of "IN1, IN4", etc.

Subsequently, please provide for each period the percentage to which each measure and investments contributes to the specific emission reduction displayed under i. The sum of all measures should equal 100% (consistency check under iv.) in which case the total emission reduction displayed under iii. equals the specific reduction under i.

Following the entries made in sections C.I and E.I.1, years prior to the period in which the measures are implemented or prior and after the sub-installation is operational are greyed out.

The consistency check under v. will prompt an error message in the following cases:

- no targets are set before a cessation or targets are set after a cessation;
- impacts are entered for years where there are either no targets set or the targets are equal to the baseline, i.e. reduction under i. equals zero;
- the impacts do not add up to 100%.

	Reference value	2025	2030	2035	2040	2045	2050
i. Specific reduction (target versus baseline)							
ii. Measure	Investment	2025	2030	2035	2040	2045	2050
EX.1	ME1: Process optimisations over IN1, IN3		100%	100%	80%	20%	
EX.2	ME2: New furnace IN2: New furnace				70%	80%	100%
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
iii. Reduction compared to baseline (100% = values under i.)							
iv. Consistency check (= iii. / i.)							
v. Consistency check (error message)							

(d) Any further comments

4 Sub-installation with product benchmark:

The name of the product benchmark sub-installation is displayed automatically based on the inputs in sheet "C_InstallationDescription".

(a) Specific emission targets

Please enter here the intermediate targets, expressed as specific emissions consistent with the historical emissions (baseline), for the end of each five year period. Additionally absolute emission targets can be entered optionally.

The baseline is automatically calculated based on the input of historical emissions in sheet D_HistoricalEmissions.

	Baseline	Unit	2025	2030	2035	2040	2045	2050
i. Specific emission targets								
ii. Absolute emission targets		t CO2e						

(b) Relative emission targets

The reduction of specific emissions relative to the baseline (average historic emissions or estimate in sheet D) and the relevant benchmark value are automatically calculated, based on the inputs for the specific emission targets under point (a) above.

	Reference value	2025	2030	2035	2040	2045	2050
i. Relative to baseline value							
ii. Relative to relevant BM value							

(c) Split of specific emission reduction by measure and investment

Please select from the drop-down list each measure that has an impact on the targets specified above for this sub-installation.

For each measure please select from the drop-down list the relevant investments. Where no investment is related to the measure, e.g. only process optimisation, please select "no investments". Where more than one investment relates to a certain measure, please enter corresponding information in the form of "I1; I4", etc.

Subsequently, please provide for each period the percentage to which each measure and investments contributes to the specific emission reduction displayed under i. The sum of all measures should equal 100% (consistency check under iv.) in which case the total emission reduction displayed under iii. equals the specific reduction under i.

Following the entries made in sections C.1 and E.1.1, years prior to the period in which the measures are implemented or prior and after the sub-installation is operational are greyed out.

The consistency check under v. will prompt an error message in the following cases:

- no targets are set before a cessation or targets are set after a cessation;
- impacts are entered for years where there are either no targets set or the targets are equal to the baseline, i.e. reduction under i. equals zero;
- the impacts do not add up to 100%.

	Reference value	2025	2030	2035	2040	2045	2050
i. Specific reduction (target versus baseline)							
ii. Measure	Investment	2025	2030	2035	2040	2045	2050
Ex.1 ME1: Process optimisations over IN1: IN4			100%	100%	50%	20%	
Ex.2 ME2: New furnace	IN2: New furnace				70%	60%	100%
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
iii. Reduction compared to baseline (100% = values under i.)							
iv. Consistency check (= iii. / i.)							
v. Consistency check (error message)							
(d) Any further comments							

5 Sub-installation with product benchmark:

The name of the product benchmark sub-installation is displayed automatically based on the inputs in sheet "C_installationDescription".

(a) **Specific emission targets**
Please enter here the intermediate targets, expressed as specific emissions consistent with the historical emissions (baseline), for the end of each five year period. Additionally absolute emission targets can be entered optionally.
The baseline is automatically calculated based on the input of historical emissions in sheet D_HistoricalEmissions.

	Baseline	Unit	2025	2030	2035	2040	2045	2050
i. Specific emission targets								
ii. Absolute emission targets		t CO2e						

(b) **Relative emission targets**
The reduction of specific emissions relative to the baseline (average historic emissions or estimate in sheet D) and the relevant benchmark value are automatically calculated, based on the inputs for the specific emission targets under point (a) above.

	Reference value	2025	2030	2035	2040	2045	2050
i. Relative to baseline value							
ii. Relative to relevant BM value							

(c) **Split of specific emission reduction by measure and investment**
Please select from the drop-down list each measure that has an impact on the targets specified above for this sub-installation.
For each measure please select from the drop-down list the relevant investments. Where no investment is related to the measure, e.g. only process optimisation, please select "no investments". Where more than one investment relates to a certain measure, please enter corresponding information in the form of "IN1, IN4", etc.
Subsequently, please provide for each period the percentage to which each measure and investments contributes to the specific emission reduction displayed under i. The sum of all measures should equal 100% (consistency check under iv.) in which case the total emission reduction displayed under iii. equals the specific reduction under i.
Following the entries made in sections C.1 and E.1.1, years prior to the period in which the measures are implemented or prior and after the sub-installation is operational are greyed out.

The consistency check under v. will prompt an error message in the following cases:

- no targets are set before a cessation or targets are set after a cessation;
- impacts are entered for years where there are either no targets set or the targets are equal to the baseline, i.e. reduction under i. equals zero;
- the impacts do not add up to 100%.

	Reference value	2025	2030	2035	2040	2045	2050
i. Specific reduction (target versus baseline)							
ii. Measure	Investment	2025	2030	2035	2040	2045	2050
Ex.1 ME1: Process optimisations over	IN1: IN4		100%	100%	50%	20%	
Ex.2 ME2: New furnace	IN2: New furnace				70%	60%	100%
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
iii. Reduction compared to baseline (100% = values under i.)							
iv. Consistency check (= iii. / i.)							
v. Consistency check (error message)							
(d) Any further comments							

6 Sub-installation with product benchmark:

The name of the product benchmark sub-installation is displayed automatically based on the inputs in sheet "C_installationDescription".

(a) **Specific emission targets**
Please enter here the intermediate targets, expressed as specific emissions consistent with the historical emissions (baseline), for the end of each five year period. Additionally absolute emission targets can be entered optionally.
The baseline is automatically calculated based on the input of historical emissions in sheet D_HistoricalEmissions.

	Baseline	Unit	2025	2030	2035	2040	2045	2050
i. Specific emission targets								
ii. Absolute emission targets		t CO2e						

(b) **Relative emission targets**

The reduction of specific emissions relative to the baseline (average historic emissions or estimate in sheet D) and the relevant benchmark value are automatically calculated, based on the inputs for the specific emission targets under point (a) above.

	Reference value	2025	2030	2035	2040	2045	2050
i. Relative to baseline value							
ii. Relative to relevant BM value							

(c) Split of specific emission reduction by measure and investment
Please select from the drop-down list each measure that has an impact on the targets specified above for this sub-installation.
For each measure please select from the drop-down list the relevant investments. Where no investment is related to the measure, e.g. only process optimisation, please select "no investments". Where more than one investment relates to a certain measure, please enter corresponding information in the form of "IN1, IN4", etc.
Subsequently, please provide for each period the percentage to which each measure and investments contributes to the specific emission reduction displayed under i. The sum of all measures should equal 100% (consistency check under iv.) in which case the total emission reduction displayed under ii. equals the specific reduction under i.
Following the entries made in sections C I and E I 1, years prior to the period in which the measures are implemented or prior and after the sub-installation is operational are greyed out.

The consistency check under v. will prompt an error message in the following cases:

- no targets are set before a cessation or targets are set after a cessation;
- impacts are entered for years where there are either no targets set or the targets are equal to the baseline, i.e. reduction under i. equals zero;
- the impacts do not add up to 100%.

	Reference value	2025	2030	2035	2040	2045	2050
i. Specific reduction (target versus baseline)							
ii. Measure	Investment	2025	2030	2035	2040	2045	2050
Ex.1 ME1: Process optimisations over	IN1, IN3		100%	100%	30%	20%	
Ex.2 ME2: New furnace	IN2: New furnace				70%	80%	100%
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
iii. Reduction compared to baseline (100% = values under i.)							
iv. Consistency check (= iii. / i.)							
v. Consistency check (error message)							

(d) Any further comments

7 Sub-installation with product benchmark:

The name of the product benchmark sub-installation is displayed automatically based in the inputs in sheet "C_InstallationDescription".

(a) Specific emission targets
Please enter here the intermediate targets, expressed as specific emissions consistent with the historical emissions (baseline), for the end of each five year period. Additionally absolute emission targets can be entered optionally.
The baseline is automatically calculated based on the input of historical emissions in sheet D, Historical Emissions.

	Baseline	Unit	2025	2030	2035	2040	2045	2050
i. Specific emission targets								
ii. Absolute emission targets		t CO2e						

(b) Relative emission targets
The reduction of specific emissions relative to the baseline (average historic emissions or estimate in sheet D) and the relevant benchmark value are automatically calculated, based on the inputs for the specific emission targets under point (a) above.

	Reference value	2025	2030	2035	2040	2045	2050
i. Relative to baseline value							
ii. Relative to relevant BM value							

(c) Split of specific emission reduction by measure and investment
Please select from the drop-down list each measure that has an impact on the targets specified above for this sub-installation.
For each measure please select from the drop-down list the relevant investments. Where no investment is related to the measure, e.g. only process optimisation, please select "no investments". Where more than one investment relates to a certain measure, please enter corresponding information in the form of "IN1, IN4", etc.
Subsequently, please provide for each period the percentage to which each measure and investments contributes to the specific emission reduction displayed under i. The sum of all measures should equal 100% (consistency check under iv.) in which case the total emission reduction displayed under iii. equals the specific reduction under i.
Following the entries made in sections C I and E I 1, years prior to the period in which the measures are implemented or prior and after the sub-installation is operational are greyed out.

The consistency check under v. will prompt an error message in the following cases:

- no targets are set before a cessation or targets are set after a cessation;
- impacts are entered for years where there are either no targets set or the targets are equal to the baseline, i.e. reduction under i. equals zero;
- the impacts do not add up to 100%.

	Reference value	2025	2030	2035	2040	2045	2050
i. Specific reduction (target versus baseline)							
ii. Measure	Investment	2025	2030	2035	2040	2045	2050
Ex.1 ME1: Process optimisations over	IN1, IN3		100%	100%	30%	20%	
Ex.2 ME2: New furnace	IN2: New furnace				70%	80%	100%
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
iii. Reduction compared to baseline (100% = values under i.)							
iv. Consistency check (= iii. / i.)							
v. Consistency check (error message)							

(d) Any further comments

8 Sub-installation with product benchmark:

The name of the product benchmark sub-installation is displayed automatically based in the inputs in sheet "C_InstallationDescription".

(a) Specific emission targets
Please enter here the intermediate targets, expressed as specific emissions consistent with the historical emissions (baseline), for the end of each five year period. Additionally absolute emission targets can be entered optionally.
The baseline is automatically calculated based on the input of historical emissions in sheet D_HistoricalEmissions.

	Baseline	Unit	2025	2030	2035	2040	2045	2050
i. Specific emission targets								
ii. Absolute emission targets		t CO2e						

(b) Relative emission targets
The reduction of specific emissions relative to the baseline (average historic emissions or estimate in sheet D) and the relevant benchmark value are automatically calculated, based on the inputs for the specific emission targets under point (a) above.

	Reference value	2025	2030	2035	2040	2045	2050
i. Relative to baseline value							
ii. Relative to relevant BM value							

(c) Split of specific emission reduction by measure and investment
Please select from the drop-down list each measure that has an impact on the targets specified above for this sub-installation.
For each measure please select from the drop-down list the relevant investments. Where no investment is related to the measure, e.g. only process optimisation, please select "no investments". Where more than one investment relates to a certain measure, please enter corresponding information in the form of "IN1, IN4", etc.
Subsequently, please provide for each period the percentage to which each measure and investments contributes to the specific emission reduction displayed under i. The sum of all measures should equal 100% (consistency check under iv.) in which case the total emission reduction displayed under ii. equals the specific reduction under i.
Following the entries made in sections C I and E I 1, years prior to the period in which the measures are implemented or prior and after the sub-installation is operational are greyed out.

The consistency check under v. will prompt an error message in the following cases:
- no targets are set before a cessation or targets are set after a cessation;
- impacts are entered for years where there are either no targets set or the targets are equal to the baseline, i.e. reduction under i. equals zero;
- the impacts do not add up to 100%.

	Reference value	2025	2030	2035	2040	2045	2050
i. Specific reduction (target versus baseline)							
ii. Measure	Investment	2025	2030	2035	2040	2045	2050
Ex 1 ME1: Process optimisations over	IN1, IN3		100%	100%	30%	20%	
Ex 2 ME2: New furnace	IN2: New furnace				70%	80%	100%
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
iii. Reduction compared to baseline (100% = values under i.)							
iv. Consistency check (= iii. / i.)							
v. Consistency check (error message)							

(d) Any further comments

9 Sub-installation with product benchmark:

The name of the product benchmark sub-installation is displayed automatically based in the inputs in sheet "C_InstallationDescription".

(a) Specific emission targets
Please enter here the intermediate targets, expressed as specific emissions consistent with the historical emissions (baseline), for the end of each five year period. Additionally absolute emission targets can be entered optionally.
The baseline is automatically calculated based on the input of historical emissions in sheet D_HistoricalEmissions.

	Baseline	Unit	2025	2030	2035	2040	2045	2050
i. Specific emission targets								
ii. Absolute emission targets		t CO2e						

(b) Relative emission targets
The reduction of specific emissions relative to the baseline (average historic emissions or estimate in sheet D) and the relevant benchmark value are automatically calculated, based on the inputs for the specific emission targets under point (a) above.

	Reference value	2025	2030	2035	2040	2045	2050
i. Relative to baseline value							
ii. Relative to relevant BM value							

(c) Split of specific emission reduction by measure and investment
Please select from the drop-down list each measure that has an impact on the targets specified above for this sub-installation.
For each measure please select from the drop-down list the relevant investments. Where no investment is related to the measure, e.g. only process optimisation, please select "no investments". Where more than one investment relates to a certain measure, please enter corresponding information in the form of "IN1, IN4", etc.
Subsequently, please provide for each period the percentage to which each measure and investments contributes to the specific emission reduction displayed under i. The sum of all measures should equal 100% (consistency check under iv.) in which case the total emission reduction displayed under ii. equals the specific reduction under i.
Following the entries made in sections C I and E I 1, years prior to the period in which the measures are implemented or prior and after the sub-installation is operational are greyed out.

The consistency check under v. will prompt an error message in the following cases:
- no targets are set before a cessation or targets are set after a cessation;
- impacts are entered for years where there are either no targets set or the targets are equal to the baseline, i.e. reduction under i. equals zero;
- the impacts do not add up to 100%.

	Reference value	2025	2030	2035	2040	2045	2050
i. Specific reduction (target versus baseline)							
ii. Measure	Investment	2025	2030	2035	2040	2045	2050
Ex 1 ME1: Process optimisations over	IN1, IN3		100%	100%	30%	20%	
Ex 2 ME2: New furnace	IN2: New furnace				70%	80%	100%
1							
2							
3							
4							
5							

10

Sub-installation with product benchmark:

The name of the product benchmark sub-installation is displayed automatically based on the inputs in sheet "C_InstallationDescription"

(a)

Specific emission targets

Please enter here the intermediate targets, expressed as specific emissions consistent with the historical emissions (baseline), for the end of each five year period. Additionally absolute emission targets can be entered optionally.

The baseline is automatically calculated based on the input of historical emissions in sheet D_HistoricalEmissions

	Baseline	Unit	2025	2030	2035	2040	2045	2050
i. Specific emission targets								
ii. Absolute emission targets		t CO2e						

(b)

Relative emission targets

The reduction of specific emissions relative to the baseline (average historic emissions or estimate in sheet D) and the relevant benchmark value are automatically calculated, based on the inputs for the specific emission targets under point (a) above.

	Reference value	2025	2030	2035	2040	2045	2050
i. Relative to baseline value							
ii. Relative to relevant BM value							

(c)

Split of specific emission reduction by measure and investment

Please select from the drop-down list each measure that has an impact on the targets specified above for this sub-installation.

For each measure please select from the drop-down list the relevant investments. Where no investment is related to the measure, e.g. only process optimisation, please select "no investments". Where more than one investment relates to a certain measure, please enter corresponding information in the form of "IN1, IN4", etc.

Subsequently, please provide for each period the percentage to which each measure and investments contributes to the specific emission reduction displayed under i. The sum of all measures should equal 100% (consistency check under iv.) in which case the total emission reduction displayed under iii. equals the specific reduction under i.

Following the entries made in sections C.I and E.I.1, years prior to the period in which the measures are implemented or prior and after the sub-installation is operational are greyed out.

The consistency check under v. will prompt an error message in the following cases:

- no targets are set before a cessation or targets are set after a cessation;
- impacts are entered for years where there are either no targets set or the targets are equal to the baseline, i.e. reduction under i. equals zero;
- the impacts do not add up to 100%.

	Reference value	2025	2030	2035	2040	2045	2050
i. Specific reduction (target versus baseline)							
ii. Measure	Investment	2025	2030	2035	2040	2045	2050
Ex.1 IN1: Process optimisations over	IN1: IN1	100%	100%	100%	100%	100%	100%
Ex.2 IN2: New turbine	IN2: New turbine				75%	65%	100%
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
iii. Reduction compared to baseline (100% = values under i.)							
iv. Consistency check (= iii. / i.)							
v. Consistency check (error message)							

(d)

Any further comments

2								
3								
4								
5								
6								
7								
8								
9								
10								
iii	Reduction compared to baseline (100% = values under i.)							
iv	Consistency check (= iii. / i.)							
v	Consistency check (error message)							
(d)	Any further comments							

3	Fall-back sub-installation:	Heat benchmark sub-installation, CBAM	not relevant					
The name of the product benchmark sub-installation is displayed automatically based on the inputs in sheet "C_InstallationDescription".								
(a) Specific emission targets Please enter here the intermediate targets, expressed as specific emissions consistent with the historical emissions (baseline), for the end of each five year period. Additionally absolute emission targets can be entered optionally. The baseline is automatically calculated based on the input of historical emissions in sheet D_HistoricalEmissions.								
	Baseline	Unit	2025	2030	2035	2040	2045	2050
i.	Specific emission targets	t CO2e / TJ						
ii.	Absolute emission targets	t CO2e						
(b) Relative emission targets The reduction of specific emissions relative to the baseline (average historic emissions or estimate in sheet D) and the relevant benchmark value are automatically calculated, based on the inputs for the specific emission targets under point (a) above.								
		Reference value t CO2e / TJ	2025	2030	2035	2040	2045	2050
i.	Relative to baseline value							
ii.	Relative to relevant BM value							
(c) Split of specific emission reduction by measure and investment Please select from the drop-down list each measure that has an impact on the targets specified above for this sub-installation. For each measure please select from the drop-down list the relevant investments. Where no investment is related to the measure, e.g. only process optimisation, please select "no investments". Where more than one investment relates to a certain measure, please enter corresponding information in the form of "IN1, IN4", etc. Subsequently, please provide for each period the percentage to which each measure and investments contributes to the specific emission reduction displayed under i. The sum of all measures should equal 100% (consistency check under iv.) in which case the total emission reduction displayed under ii. equals the specific reduction under i. Following the entries made in sections C.1 and E.1.1, years prior to the period in which the measures are implemented or prior and after the sub-installation is operational are greyed out. The consistency check under v. will prompt an error message in the following cases: - no targets are set before a cessation or targets are set after a cessation; - impacts are entered for years where there are either no targets set or the targets are equal to the baseline, i.e. reduction under i. equals zero; - the impacts do not add up to 100%.								
		Reference value t CO2e / TJ	2025 t CO2e / TJ	2030 t CO2e / TJ	2035 t CO2e / TJ	2040 t CO2e / TJ	2045 t CO2e / TJ	2050 t CO2e / TJ
i.	Specific reduction (target versus baseline)							
ii.	Measure	Investment	2025	2030	2035	2040	2045	2050
Ex.1	ME1: Process optimisations over	IN1, IN3		100%	100%	50%	20%	
Ex.2	ME2: New furnace	IN2: New furnace				70%	80%	100%
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
iii	Reduction compared to baseline (100% = values under i.)							
iv	Consistency check (= iii. / i.)							
v	Consistency check (error message)							
(d)	Any further comments							

4	Fall-back sub-installation:	District heating sub-installation	not relevant					
The name of the product benchmark sub-installation is displayed automatically based on the inputs in sheet "C_InstallationDescription".								
(a) Specific emission targets Please enter here the intermediate targets, expressed as specific emissions consistent with the historical emissions (baseline), for the end of each five year period. Additionally absolute emission targets can be entered optionally. The baseline is automatically calculated based on the input of historical emissions in sheet D_HistoricalEmissions.								
	Baseline	Unit	2025	2030	2035	2040	2045	2050
i.	Specific emission targets	t CO2e / TJ						
ii.	Absolute emission targets	t CO2e						
(b) Relative emission targets The reduction of specific emissions relative to the baseline (average historic emissions or estimate in sheet D) and the relevant benchmark value are automatically calculated, based on the inputs for the specific emission targets under point (a) above.								
		Reference value t CO2e / TJ	2025	2030	2035	2040	2045	2050
i.	Relative to baseline value							
ii.	Relative to relevant BM value							
(c) Split of specific emission reduction by measure and investment Please select from the drop-down list each measure that has an impact on the targets specified above for this sub-installation. For each measure please select from the drop-down list the relevant investments. Where no investment is related to the measure, e.g. only process optimisation, please select "no investments". Where more than one investment relates to a certain measure, please enter corresponding information in the form of "IN1, IN4", etc. Subsequently, please provide for each period the percentage to which each measure and investments contributes to the specific emission reduction displayed under i. The sum of all measures should equal 100% (consistency check under iv.) in which case the total emission reduction displayed under ii. equals the specific reduction under i.								

Following the entries made in sections C.1 and E.1.1, years prior to the period in which the measures are implemented or prior and after the sub-installation is operational are greyed out.

The consistency check under v. will prompt an error message in the following cases:

- no targets are set before a cessation or targets are set after a cessation;
- impacts are entered for years where there are either no targets set or the targets are equal to the baseline, i.e. reduction under i. equals zero;
- the impacts do not add up to 100%.

	Reference value t CO ₂ e / TJ	2025 t CO ₂ e / TJ	2030 t CO ₂ e / TJ	2035 t CO ₂ e / TJ	2040 t CO ₂ e / TJ	2045 t CO ₂ e / TJ	2050 t CO ₂ e / TJ
i. Specific reduction (target versus baseline)							
ii. Measure	Investment	2025	2030	2035	2040	2045	2050
Ex.1 ME1: Process optimisations over IN1, IN3			100%	100%	50%	20%	
Ex.2 ME2: New furnace	IN2: New furnace				70%	60%	100%
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
iii. Reduction compared to baseline (100% = values under i.)							
iv. Consistency check (= iii. / i.)							
v. Consistency check (error message)							
(d) Any further comments							

5 Fall-back sub-installation: Fuel benchmark sub-installation, CL, non-CBAM not relevant

The name of the product benchmark sub-installation is displayed automatically based in the inputs in sheet "C_installationDescription".

(a) **Specific emission targets**
Please enter here the intermediate targets, expressed as specific emissions consistent with the historical emissions (baseline), for the end of each five year period. Additionally absolute emission targets can be entered optionally.
The baseline is automatically calculated based on the input of historical emissions in sheet D_HistoricalEmissions.

	Baseline	Unit	2025	2030	2035	2040	2045	2050
i. Specific emission targets		t CO ₂ e / TJ						
ii. Absolute emission targets		t CO ₂ e						

(b) **Relative emission targets**
The reduction of specific emissions relative to the baseline (average historic emissions or estimate in sheet D) and the relevant benchmark value are automatically calculated, based on the inputs for the specific emission targets under point (a) above.

	Reference value t CO ₂ e / TJ	2025	2030	2035	2040	2045	2050
i. Relative to baseline value							
ii. Relative to relevant BM value							

(c) **Split of specific emission reduction by measure and investment**
Please select from the drop-down list each measure that has an impact on the targets specified above for this sub-installation.
For each measure please select from the drop-down list the relevant investments. Where no investment is related to the measure, e.g. only process optimisation, please select "no investments". Where more than one investment relates to a certain measure, please enter corresponding information in the form of "IN1, IN4", etc.
Subsequently, please provide for each period the percentage to which each measure and investments contributes to the specific emission reduction displayed under i. The sum of all measures should equal 100% (consistency check under iv.) in which case the total emission reduction displayed under iii. equals the specific reduction under i.
Following the entries made in sections C.1 and E.1.1, years prior to the period in which the measures are implemented or prior and after the sub-installation is operational are greyed out.

The consistency check under v. will prompt an error message in the following cases:

- no targets are set before a cessation or targets are set after a cessation;
- impacts are entered for years where there are either no targets set or the targets are equal to the baseline, i.e. reduction under i. equals zero;
- the impacts do not add up to 100%.

	Reference value t CO ₂ e / TJ	2025 t CO ₂ e / TJ	2030 t CO ₂ e / TJ	2035 t CO ₂ e / TJ	2040 t CO ₂ e / TJ	2045 t CO ₂ e / TJ	2050 t CO ₂ e / TJ
i. Specific reduction (target versus baseline)							
ii. Measure	Investment	2025	2030	2035	2040	2045	2050
Ex.1 ME1: Process optimisations over IN1, IN3			100%	100%	50%	20%	
Ex.2 ME2: New furnace	IN2: New furnace				70%	60%	100%
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
iii. Reduction compared to baseline (100% = values under i.)							
iv. Consistency check (= iii. / i.)							
v. Consistency check (error message)							
(d) Any further comments							

6 Fall-back sub-installation: Fuel benchmark sub-installation, non-CL, non-CBAM not relevant

The name of the product benchmark sub-installation is displayed automatically based in the inputs in sheet "C_installationDescription".

(a) **Specific emission targets**
Please enter here the intermediate targets, expressed as specific emissions consistent with the historical emissions (baseline), for the end of each five year period. Additionally absolute emission targets can be entered optionally.
The baseline is automatically calculated based on the input of historical emissions in sheet D_HistoricalEmissions.

	Baseline	Unit	2025	2030	2035	2040	2045	2050
i. Specific emission targets		t CO ₂ e / TJ						
ii. Absolute emission targets		t CO ₂ e						

(b) **Relative emission targets**

The reduction of specific emissions relative to the baseline (average historic emissions or estimate in sheet D) and the relevant benchmark value are automatically calculated, based on the inputs for the specific emission targets under point (a) above.

	Reference value t CO ₂ e / TJ	2025	2030	2035	2040	2045	2050
i. Relative to baseline value							
ii. Relative to relevant BM value							

(c) Split of specific emission reduction by measure and investment
Please select from the drop-down list each measure that has an impact on the targets specified above for this sub-installation.
For each measure please select from the drop-down list the relevant investments. Where no investment is related to the measure, e.g. only process optimisation, please select "no investments". Where more than one investment relates to a certain measure, please enter corresponding information in the form of "IN1, IN4", etc.
Subsequently, please provide for each period the percentage to which each measure and investments contributes to the specific emission reduction displayed under i. The sum of all measures should equal 100% (consistency check under iv.) in which case the total emission reduction displayed under ii. equals the specific reduction under i.
Following the entries made in sections C I and E I 1, years prior to the period in which the measures are implemented or prior and after the sub-installation is operational are greyed out.

The consistency check under v. will prompt an error message in the following cases:

- no targets are set before a cessation or targets are set after a cessation;
- impacts are entered for years where there are either no targets set or the targets are equal to the baseline, i.e. reduction under i. equals zero;
- the impacts do not add up to 100%.

	Reference value t CO ₂ e / TJ	2025	2030	2035	2040	2045	2050
i. Specific reduction (target versus baseline)							
ii. Measure	Investment	2025	2030	2035	2040	2045	2050
Ex.1 ME1: Process optimisations over	IN1, IN3		100%	100%	30%	20%	
Ex.2 ME2: New furnace	IN2: New furnace				70%	80%	100%
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
iii. Reduction compared to baseline (100% = values under i.)							
iv. Consistency check (= iii. / i.)							
v. Consistency check (error message)							

(d) Any further comments

7 Fall-back sub-installation:

	Fuel benchmark sub-installation, CBAM	not relevant						
The name of the product benchmark sub-installation is displayed automatically based on the inputs in sheet "C_InstallationDescription".								
(a) Specific emission targets Please enter here the intermediate targets, expressed as specific emissions consistent with the historical emissions (baseline), for the end of each five year period. Additionally absolute emission targets can be entered optionally. The baseline is automatically calculated based on the input of historical emissions in sheet D_HistoricalEmissions.								
	Baseline	Unit	2025	2030	2035	2040	2045	2050
i. Specific emission targets		t CO ₂ e / TJ						
ii. Absolute emission targets		t CO ₂ e						
(b) Relative emission targets The reduction of specific emissions relative to the baseline (average historic emissions or estimate in sheet D) and the relevant benchmark value are automatically calculated, based on the inputs for the specific emission targets under point (a) above.								
	Reference value t CO ₂ e / TJ	2025	2030	2035	2040	2045	2050	
i. Relative to baseline value								
ii. Relative to relevant BM value								
(c) Split of specific emission reduction by measure and investment Please select from the drop-down list each measure that has an impact on the targets specified above for this sub-installation. For each measure please select from the drop-down list the relevant investments. Where no investment is related to the measure, e.g. only process optimisation, please select "no investments". Where more than one investment relates to a certain measure, please enter corresponding information in the form of "IN1, IN4", etc. Subsequently, please provide for each period the percentage to which each measure and investments contributes to the specific emission reduction displayed under i. The sum of all measures should equal 100% (consistency check under iv.) in which case the total emission reduction displayed under iii. equals the specific reduction under i. Following the entries made in sections C I and E I 1, years prior to the period in which the measures are implemented or prior and after the sub-installation is operational are greyed out.								
	Reference value t CO ₂ e / TJ	2025	2030	2035	2040	2045	2050	
i. Specific reduction (target versus baseline)								
ii. Measure	Investment	2025	2030	2035	2040	2045	2050	
Ex.1 ME1: Process optimisations over	IN1, IN3		100%	100%	30%	20%		
Ex.2 ME2: New furnace	IN2: New furnace				70%	80%	100%	
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
iii. Reduction compared to baseline (100% = values under i.)								
iv. Consistency check (= iii. / i.)								
v. Consistency check (error message)								
(d) Any further comments								

6							
7							
8							
9							
10							
iii	Reduction compared to baseline (100% = values under i.)						
iv	Consistency check (= iii. / i.)						
v	Consistency check (error message)						
(d)	Any further comments						

10	Fall-back sub-installation:	Process emissions sub-installation, CBAM	not relevant
The name of the product benchmark sub-installation is displayed automatically based in the inputs in sheet "C_installationDescription".			
(a) Specific emission targets Please enter here the intermediate targets, expressed as specific emissions consistent with the historical emissions (baseline), for the end of each five year period. Additionally absolute emission targets can be entered optionally. The baseline is automatically calculated based on the input of historical emissions in sheet D_historicalEmissions.			
	Baseline	Unit	2025 2030 2035 2040 2045 2050
i.	Specific emission targets	t CO2e / t	
ii.	Absolute emission targets	t CO2e	
(b) Relative emission targets The reduction of specific emissions relative to the baseline (average historic emissions or estimate in sheet D) and the relevant benchmark value are automatically calculated, based on the inputs for the specific emission targets under point (a) above.			
		Reference value t CO2e / t	2025 2030 2035 2040 2045 2050
i.	Relative to baseline value		
ii.	Relative to relevant BM value		
(c) Split of specific emission reduction by measure and investment Please select from the drop-down list each measure that has an impact on the targets specified above for this sub-installation. For each measure please select from the drop-down list the relevant investments. Where no investment is related to the measure, e.g. only process optimisation, please select "no investments". Where more than one investment relates to a certain measure, please enter corresponding information in the form of "IN1, IN4", etc. Subsequently, please provide for each period the percentage to which each measure and investments contributes to the specific emission reduction displayed under i. The sum of all measures should equal 100% (consistency check under iv.) in which case the total emission reduction displayed under ii. equals the specific reduction under i. Following the entries made in sections C.I and E.I.1, years prior to the period in which the measures are implemented or prior and after the sub-installation is operational are greyed out. The consistency check under v. will prompt an error message in the following cases: - no targets are set before a cessation or targets are set after a cessation; - impacts are entered for years where there are either no targets set or the targets are equal to the baseline, i.e. reduction under i. equals zero; - the impacts do not add up to 100%.			
		Reference value t CO2e / t	2025 2030 2035 2040 2045 2050
i.	Specific reduction (target versus baseline)		
ii.	Measure	Investment	2025 2030 2035 2040 2045 2050
Ex. 1	ME1: Process optimisations over	IN1: IN3	100%
Ex. 2	ME2: New furnace	IN2: New furnace	30%
1			100%
2			20%
3			70%
4			80%
5			100%
6			
7			
8			
9			
10			
iii	Reduction compared to baseline (100% = values under i.)		
iv	Consistency check (= iii. / i.)		
v	Consistency check (error message)		
(d)	Any further comments		

H. Targets & Impacts other processes

I Quantitative impact assessment other processes

1 Other processes:

The name of the product benchmark sub-installation is displayed automatically based in the inputs in sheet "C_InstallationDescription".

(a) Specific emission targets
Please enter here the intermediate targets, expressed as specific emissions consistent with the historical emissions (baseline), for the end of each five year period. Additionally absolute emission targets can be entered optionally.
The baseline is automatically calculated based on the input of historical emissions in sheet D_HistoricalEmissions.

	Baseline	Unit	2025	2030	2035	2040	2045	2050
i. Specific emission targets								
ii. Absolute emission targets		t CO2e						

(b) Relative emission targets
The reduction of specific emissions relative to the baseline (average historic emissions or estimate in sheet D) and the relevant benchmark value are automatically calculated, based on the inputs for the specific emission targets under point (a) above.

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

(c) Split of specific emission reduction by measure and investment
Please select from the drop-down list each measure that has an impact on the targets specified above for this sub-installation.
For each measure please select from the drop-down list the relevant investments. Where no investment is related to the measure, e.g. only process optimisation, please select "no investments". Where more than one investment relates to a certain measure, please enter corresponding information in the form of "IN1, IN4", etc.
Subsequently, please provide for each period the percentage to which each measure and investments contributes to the specific emission reduction displayed under i. The sum of all measures should equal 100% (consistency check under iv.) in which case the total emission reduction displayed under ii. equals the specific reduction under i.
Following the entries made in sections C.I and E.I.1, years prior to the period in which the measures are implemented or prior and after the sub-installation is operational are greyed out.

The consistency check under v. will prompt an error message in the following cases:
- no targets are set before a cessation or targets are set after a cessation;
- impacts are entered for years where there are either no targets set or the targets are equal to the baseline, i.e. reduction under i. equals zero;
- the impacts do not add up to 100%.

	Reference value	2025	2030	2035	2040	2045	2050
i. Specific reduction (target versus baseline)							
ii. Measure	Investment	2025	2030	2035	2040	2045	2050
Ex.1 ME1: Process optimisations over	IN1: IN4		100%	100%	30%	20%	
Ex.2 ME2: New furnace	IN2: New furnace				70%	80%	100%
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
iii. Reduction compared to baseline (100% = values under i.)							
iv. Consistency check (= iii. / I.)							
v. Consistency check (error message)							

(d) Any further comments

2 Other processes:

The name of the product benchmark sub-installation is displayed automatically based in the inputs in sheet "C_InstallationDescription".

(a) Specific emission targets
Please enter here the intermediate targets, expressed as specific emissions consistent with the historical emissions (baseline), for the end of each five year period. Additionally absolute emission targets can be entered optionally.
The baseline is automatically calculated based on the input of historical emissions in sheet D_HistoricalEmissions.

	Baseline	Unit	2025	2030	2035	2040	2045	2050
i. Specific emission targets								
ii. Absolute emission targets		t CO2e						

(b) Relative emission targets
The reduction of specific emissions relative to the baseline (average historic emissions or estimate in sheet D) and the relevant benchmark value are automatically calculated, based on the inputs for the specific emission targets under point (a) above.

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

(c) Split of specific emission reduction by measure and investment
Please select from the drop-down list each measure that has an impact on the targets specified above for this sub-installation.
For each measure please select from the drop-down list the relevant investments. Where no investment is related to the measure, e.g. only process optimisation, please select "no investments". Where more than one investment relates to a certain measure, please enter corresponding information in the form of "IN1, IN4", etc.
Subsequently, please provide for each period the percentage to which each measure and investments contributes to the specific emission reduction displayed under i. The sum of all measures should equal 100% (consistency check under iv.) in which case the total emission reduction displayed under ii. equals the specific reduction under i.
Following the entries made in sections C.I and E.I.1, years prior to the period in which the measures are implemented or prior and after the sub-installation is operational are greyed out.

The consistency check under v. will prompt an error message in the following cases:
- no targets are set before a cessation or targets are set after a cessation;
- impacts are entered for years where there are either no targets set or the targets are equal to the baseline, i.e. reduction under i. equals zero;
- the impacts do not add up to 100%.

	Reference value	2025	2030	2035	2040	2045	2050
i. Specific reduction (target versus baseline)							
ii. Measure	Investment	2025	2030	2035	2040	2045	2050
Ex.1 ME1: Process optimisations over	IN1: IN4		100%	100%	30%	20%	
Ex.2 ME2: New furnace	IN2: New furnace				70%	80%	100%
1							

3

Other processes:

The name of the product benchmark sub-installation is displayed automatically based in the inputs in sheet "C_InstallationDescription".

(a)

Specific emission targets

Please enter here the intermediate targets, expressed as specific emissions consistent with the historical emissions (baseline), for the end of each five year period. Additionally absolute emission targets can be entered optionally.

The baseline is automatically calculated based on the input of historical emissions in sheet D_HistoricalEmissions.

	Baseline	Unit	2025	2030	2035	2040	2045	2050
i. Specific emission targets								
ii. Absolute emission targets		t CO2e						

(b)

Relative emission targets

The reduction of specific emissions relative to the baseline (average historic emissions or estimates in sheet D) and the relevant benchmark value are automatically calculated, based on the inputs for the specific emission targets under point (a) above.

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

(c)

Split of specific emission reduction by measure and investment

Please select from the drop-down list each measure that has an impact on the targets specified above for this sub-installation.

For each measure please select from the drop-down list the relevant investments. Where no investment is related to the measure, e.g. only process optimisation, please select "no investments". Where more than one investment relates to a certain measure, please enter corresponding information in the form of "IN1, IN4", etc.

Subsequently, please provide for each period the percentage to which each measure and investments contributes to the specific emission reduction displayed under i. The sum of all measures should equal 100% (consistency check under iv.) in which case the total emission reduction displayed under ii. equals the specific reduction under i.

Following the entries made in sections C.1 and E.1.1, years prior to the period in which the measures are implemented or prior and after the sub-installation is operational are greyed out.

The consistency check under v. will prompt an error message in the following cases:

- no targets are set before a cessation or targets are set after a cessation;
- impacts are entered for years where there are either no targets set or the targets are equal to the baseline, i.e. reduction under i. equals zero;
- the impacts do not add up to 100%.

	Reference value	2025	2030	2035	2040	2045	2050
i. Specific reduction (target versus baseline)							
ii. Measure	Investment	2025	2030	2035	2040	2045	2050
Ex1 ME1: Process optimisations over	IN1: IN3		100%	100%	100%	100%	100%
Ex2 ME2: New furnace	IN2: New furnace				70%	80%	100%
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
iii.	Reduction compared to baseline (100% = values under i.)						
iv.	Consistency check (= iii. / i.)						
v.	Consistency check (error message)						

(d)

Any further comments

I. SUMMARY

I General information about the CNP

(a) About the operator

Operator Name	Saint-Gobain Sweden AB	
Member State	Sweden	
Emissions trading permit number	member state/CA prefix	SE-414
Competent Authority	Naturvårdsverket	
CNP submitted by DH company at company level	FALSE	
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/Pro- vince/Region	Postcode/ZIP	Country
1	Saint-Gobain Sweden AB,	414	SE0000000000000414	Storgatan 29	Billesholm	Sverige	267 82	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	Mineral wool	t CO ₂ e / t	0.433	0.455	0.405	0.395	0.238	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						
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 CO ₂ e						
19	Process emissions sub-installation, non-CL, non-CBAM	t CO ₂ e						
20	Process emissions sub-installation, CBAM	t CO ₂ e						
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	Mineral wool	0.5360	42%	33%	30%	9%	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							
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	Mineral wool	0.3850	58%	47%	41%	12%	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						
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 ME1: P20220473416						
2 ME2: P20230497639						
3 ME3: P20230497640						
4 ME4: P20230497641						
5 ME5: Electrification of process equipment						
6 ME6: Electrification of process equipment						
7 ME7: Energy mix						
8 ME8: Emission-optimized glass recipe						
9 ME9: Research project raw materials						
10 ME10: CCS or carbon removal						
(b) Investments	<= 2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050
1 IN1: P20220473416						
2 IN2: P20230497639						
3 IN3: P20230497640						
4 IN4: P20230497641						
5 IN5: Electrification of process equipment						
6 IN6: Electrification of process equipment						
7 IN7: Change of remaining energy mix						
8 IN8: Emission-optimized glass recipe						
9 IN9: Research project raw materials						
10 IN10: CCS or carbon removal						
(c) Milestones	<= 2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050
1 M1: Change of energy mix						
2 M2: All glass raw materials with carbon dioxide emissions repla						
3 M3: Storage of carbon/carbon removal with biochar or equivalent						
4 M4: Electrification of process equipment						
5 M5: Electrification of process equipment						
6 M6: Changing technology to be more energy efficient						
7						
8						
9						
10						
11						
12						
13						
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15						
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17						
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20						
21						
22						
23						
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26						
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28						
29						
30						

IV Details for measures, investments & milestones

(a) Measures

No.	Period	Short name or internal ID	Detailed description
ME1	<= 2025	P20220473416	Since start of 2023, change of energy mix
ME2	2026-2030	P20230497639	Electrification of process equipment
ME3	2026-2030	P20230497640	Electrification of process equipment
ME4	2026-2030	P20230497641	Changing technology to be more energy efficient
ME5	2031-2035	Electrification of process	Electrification of process equipment
ME6	2031-2035	Electrification of process	Electrification of process equipment
ME7	2036-2040	Energy mix	Change of remaining energy mix
ME8	2041-2045	Emission-optimized glass	New recipe with lower CO2 emission
ME9	2041-2045	Research project raw materials	Replacing batch raw materials with CO2-free raw materials
ME10	2041-2045	CCS or carbon removal	Storage of carbon/carbon removal with biochar or equivalent technology

No.	Detailed description of enabling conditions	Reasons for measure decision	Qualitative impacts
ME1	Since start of 2023, change of energy mix	Fastest way to reduce CO2 emissions from	50% CO2 emissions from fuel use
ME2	Electrification of process equipment	Existing technology	Less CO2 emissions
ME3	Electrification of process equipment	Existing technology	Less CO2 emissions
ME4	Changing technology to be more energy efficient	New technique	More energy efficient, saves gas.
ME5	Electrification of process equipment	New process equipment	Less CO2 emissions
ME6	Electrification of process equipment	Existing technology	Less CO2 emissions
ME7	Change of remaining energy mix	No CO2 emissions from fuel use	Eliminate CO2 emissions from fuel
ME8	New recipe with lower CO2 emission	Eliminate CO2 emissions from glass raw	Less CO2 emissions from glass raw materials
ME9	Replacing batch raw materials with CO2-free raw materials	Eliminate CO2 emissions from glass raw	Less CO2 emissions from glass raw materials
ME10	Storage of carbon/carbon removal with biochar or equivalent	A way to get down to net zero CO2 emissions	A way to get down to zero CO2 emissions

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	TRUE			TRUE	TRUE					
ME2	TRUE	TRUE		TRUE						
ME3	TRUE	TRUE		TRUE						
ME4		TRUE								
ME5	TRUE	TRUE		TRUE						
ME6	TRUE	TRUE		TRUE						

ME7	TRUE		TRUE		TRUE				
ME8	TRUE	TRUE					TRUE		
ME9							TRUE		
ME10	TRUE							TRUE	TRUE

(b) Investments

No.	Year	Short name or internal ID	Costs in M€	Detailed description of investments					
IN1	<= 2025	P20220473416	2.9	Since start of 2023, change of energy mix					
IN2	2028	P20230497639	2.1	Electrification of process equipment					
IN3	2027	P20230497640	1.7	Electrification of process equipment					
IN4	2030	P20230497641	3	Changing technology to be more energy efficient					
IN5	2035	Electrification of process	8	Electrification of process equipment					
IN6	2035	Electrification of process	3	Electrification of process equipment					
IN7	2038	Change of remaining energy	3	Change of remaining energy mix					
IN8	2043	Emission-optimized glass	2	New recipe with lower CO2 emission					
IN9	2041	Research project raw materials	4	Replacing batch raw materials with CO2-free raw materials					
IN10	2044	CCS or carbon removal	5	Storage of carbon/carbon removal with biochar or equivalent technology					
Period				<= 2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050
Annualised M€				N.A.	1.36	2.20	0.60	2.20	0.00

(c) Milestones

No.	Period	Detailed description of the milestones	Measure(s)
M11	2036-2040	Change of energy mix	ME1, ME7
M12	2041-2045	All glass raw materials with carbon dioxide emissions replaced with new raw materials with no or low carbon dioxide emissions	ME8, ME9
M13	2041-2045	Storage of carbon/carbon removal with biochar or equivalent technology	ME10
M14	2026-2030	Electrification of process equipment	ME2, ME3
M15	2031-2035	Electrification of process equipment	ME5, ME6
M16	2026-2030	Changing technology to be more energy efficient	ME4
M17			
M18			
M19			
M110			
M111			
M112			
M113			
M114			
M115			
M116			
M117			
M118			
M119			
M120			
M121			
M122			
M123			
M124			
M125			
M126			
M127			
M128			
M129			
M130			

V Sub-installation data

1 Sub-installation with product benchmark:

Mineral wool

	Reference value	2025	2030	2035	2040	2045	2050
i. Targets relative to baseline value	0.3850	58%	47%	41%	12%	0%	0%
ii. Targets relative to relevant BM value	0.5360	42%	33%	30%	9%	0%	0%
	Reference value	2025	2030	2035	2040	2045	2050
iii. Absolute specific reduction versus baseline	0.3850	-0.161	-0.205	-0.226	-0.338	-0.385	-0.385
iv. Impact share of each measure (100% = value under point iii.)							
Measure	Investments	2025	2030	2035	2040	2045	2050
1 ME1: P20220473416	IN1: P20220473416	100%	0%	0%	0%	0%	0%
2 ME2: P20230497639	IN2: P20230497639	0%	15%	0%	0%	0%	0%
3 ME3: P20230497640	IN3: P20230497640	0%	65%	0%	0%	0%	0%
4 ME4: P20230497641	IN4: P20230497641	0%	20%	0%	0%	0%	0%
5 ME5: Electrification of process	IN5: Electrification of process e	0%	0%	40%	0%	0%	0%
6 ME6: Electrification of process	IN6: Electrification of process e	0%	0%	60%	0%	0%	0%
7 ME7: Energy mix	IN7: Change of remaining energy	0%	0%	0%	100%	0%	0%
8 ME8: Emission-optimized glass	IN8: Emission-optimized glass	0%	0%	0%	0%	25%	0%
9 ME9: Research project raw materials	IN9: Research project raw materials	0%	0%	0%	0%	55%	0%
10 ME10: CCS or carbon removal	IN10: CCS or carbon removal	0%	0%	0%	0%	20%	100%
TOTAL		100%	100%	100%	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: P20220473416	IN1: P20220473416	-42%	0%	0%	0%	0%	0%
2 ME2: P20230497639	IN2: P20230497639	0%	-8%	0%	0%	0%	0%
3 ME3: P20230497640	IN3: P20230497640	0%	-35%	0%	0%	0%	0%
4 ME4: P20230497641	IN4: P20230497641	0%	-11%	0%	0%	0%	0%
5 ME5: Electrification of process	IN5: Electrification of process e	0%	0%	-24%	0%	0%	0%
6 ME6: Electrification of process	IN6: Electrification of process e	0%	0%	-35%	0%	0%	0%
7 ME7: Energy mix	IN7: Change of remaining energy	0%	0%	0%	-88%	0%	0%
8 ME8: Emission-optimized glass	IN8: Emission-optimized glass	0%	0%	0%	0%	-25%	0%
9 ME9: Research project raw materials	IN9: Research project raw materials	0%	0%	0%	0%	-55%	0%
10 ME10: CCS or carbon removal	IN10: CCS or carbon removal	0%	0%	0%	0%	-20%	-100%
TOTAL		-42%	-58%	-59%	-88%	-100%	-100%

2 Sub-installation with product benchmark:

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

iii. Absolute specific reduction versus baseline							
iv. Impact share of each measure (100% = value under point iii.)							
Measure	Investments	2025	2030	2035	2040	2045	2050
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
TOTAL							
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							
5							
6							
7							
8							
9							
10							
TOTAL							

3 Sub-installation with product benchmark:

	Reference value	2025	2030	2035	2040	2045	2050
i. Targets relative to baseline value							
ii. Targets relative to relevant BM value							
	Reference value	2025	2030	2035	2040	2045	2050
iii. Absolute specific reduction versus baseline							
iv. Impact share of each measure (100% = value under point iii.)							
Measure	Investments	2025	2030	2035	2040	2045	2050
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
TOTAL							
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							
5							
6							
7							
8							
9							
10							
TOTAL							

4 Sub-installation with product benchmark:

	Reference value	2025	2030	2035	2040	2045	2050
i. Targets relative to baseline value							
ii. Targets relative to relevant BM value							
	Reference value	2025	2030	2035	2040	2045	2050
iii. Absolute specific reduction versus baseline							
iv. Impact share of each measure (100% = value under point iii.)							
Measure	Investments	2025	2030	2035	2040	2045	2050
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
TOTAL							
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							
5							
6							
7							

8							
9							
10							
	TOTAL						

5 Sub-installation with product benchmark:

	Reference value	2025	2030	2035	2040	2045	2050
i. Targets relative to baseline value							
ii. Targets relative to relevant BM value							
	Reference value	2025	2030	2035	2040	2045	2050
iii. Absolute specific reduction versus baseline							
iv. Impact share of each measure (100% = value under point iii.)							
Measure	Investments	2025	2030	2035	2040	2045	2050
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
TOTAL							
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							
5							
6							
7							
8							
9							
10							
TOTAL							

6 Sub-installation with product benchmark:

	Reference value	2025	2030	2035	2040	2045	2050
i. Targets relative to baseline value							
ii. Targets relative to relevant BM value							
	Reference value	2025	2030	2035	2040	2045	2050
iii. Absolute specific reduction versus baseline							
iv. Impact share of each measure (100% = value under point iii.)							
Measure	Investments	2025	2030	2035	2040	2045	2050
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
TOTAL							
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							
5							
6							
7							
8							
9							
10							
TOTAL							

7 Sub-installation with product benchmark:

	Reference value	2025	2030	2035	2040	2045	2050
i. Targets relative to baseline value							
ii. Targets relative to relevant BM value							
	Reference value	2025	2030	2035	2040	2045	2050
iii. Absolute specific reduction versus baseline							
iv. Impact share of each measure (100% = value under point iii.)							
Measure	Investments	2025	2030	2035	2040	2045	2050
1							
2							
3							
4							
5							

6							
7							
8							
9							
10							
		TOTAL					

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							
5							
6							
7							
8							
9							
10							
		TOTAL					

8 Sub-installation with product benchmark:

		Reference value	2025	2030	2035	2040	2045	2050
i.	Targets relative to baseline value							
ii.	Targets relative to relevant BM value							
		Reference value	2025	2030	2035	2040	2045	2050
iii.	Absolute specific reduction versus baseline							

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

Measure	Investments	2025	2030	2035	2040	2045	2050
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
		TOTAL					

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							
5							
6							
7							
8							
9							
10							
		TOTAL					

9 Sub-installation with product benchmark:

		Reference value	2025	2030	2035	2040	2045	2050
i.	Targets relative to baseline value							
ii.	Targets relative to relevant BM value							
		Reference value	2025	2030	2035	2040	2045	2050
iii.	Absolute specific reduction versus baseline							

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

Measure	Investments	2025	2030	2035	2040	2045	2050
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
		TOTAL					

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							
5							
6							
7							
8							
9							
10							
		TOTAL					

10 Sub-installation with product benchmark:

	Reference value	2025	2030	2035	2040	2045	2050
i. Targets relative to baseline value							
ii. Targets relative to relevant BM value							
	Reference value	2025	2030	2035	2040	2045	2050
iii. Absolute specific reduction versus baseline							
iv. Impact share of each measure (100% = value under point iii.)							
Measure	Investments	2025	2030	2035	2040	2045	2050
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
TOTAL							
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							
5							
6							
7							
8							
9							
10							
TOTAL							

11 Fall-back sub-installation:

		Heat benchmark sub-installation, CL, non-CBAM				not relevant	
	Reference value	2025	2030	2035	2040	2045	2050
i. Targets relative to baseline value	t CO ₂ e / TJ						
ii. Targets relative to relevant BM value							
	Reference value	2025	2030	2035	2040	2045	2050
iii. Absolute specific reduction versus baseline	t CO ₂ e / TJ						
iv. Impact share of each measure (100% = value under point iii.)							
Measure	Investments	2025	2030	2035	2040	2045	2050
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
TOTAL							
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							
5							
6							
7							
8							
9							
10							
TOTAL							

12 Fall-back sub-installation:

		Heat benchmark sub-installation, non-CL, non-CBAM				not relevant	
	Reference value	2025	2030	2035	2040	2045	2050
i. Targets relative to baseline value	t CO ₂ e / TJ						
ii. Targets relative to relevant BM value							
	Reference value	2025	2030	2035	2040	2045	2050
iii. Absolute specific reduction versus baseline	t CO ₂ e / TJ						
iv. Impact share of each measure (100% = value under point iii.)							
Measure	Investments	2025	2030	2035	2040	2045	2050
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
TOTAL							
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							
5							
6							
7							
8							
9							
10							
TOTAL							

Measure	Investments	2025	2030	2035	2040	2045	2050
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
TOTAL							

13 Fall-back sub-installation:

		Heat benchmark sub-installation, CBAM				not relevant	
	Reference value t CO ₂ e / TJ	2025	2030	2035	2040	2045	2050
i. Targets relative to baseline value							
ii. Targets relative to relevant BM value							
	Reference value t CO ₂ e / TJ	2025	2030	2035	2040	2045	2050
iii. Absolute specific reduction versus baseline							
iv. Impact share of each measure (100% = value under point iii.)							
Measure	Investments	2025	2030	2035	2040	2045	2050
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
TOTAL							

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							
5							
6							
7							
8							
9							
10							
TOTAL							

14 Fall-back sub-installation:

		District heating sub-installation				not relevant	
	Reference value t CO ₂ e / TJ	2025	2030	2035	2040	2045	2050
i. Targets relative to baseline value							
ii. Targets relative to relevant BM value							
	Reference value t CO ₂ e / TJ	2025	2030	2035	2040	2045	2050
iii. Absolute specific reduction versus baseline							
iv. Impact share of each measure (100% = value under point iii.)							
Measure	Investments	2025	2030	2035	2040	2045	2050
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
TOTAL							

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							
5							
6							
7							
8							
9							
10							
TOTAL							

15 Fall-back sub-installation:

		Fuel benchmark sub-installation, CL, non-CBAM				not relevant	
	Reference value t CO ₂ e / TJ	2025	2030	2035	2040	2045	2050
i. Targets relative to baseline value							
ii. Targets relative to relevant BM value							
	Reference value t CO ₂ e / TJ	2025	2030	2035	2040	2045	2050
iii. Absolute specific reduction versus baseline							

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

Measure	Investments	2025	2030	2035	2040	2045	2050
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
TOTAL							

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							
5							
6							
7							
8							
9							
10							
TOTAL							

16 Fall-back sub-installation:**Fuel benchmark sub-installation, non-CL, non-CBAM****not relevant**

	Reference value	2025	2030	2035	2040	2045	2050
	t CO ₂ e / TJ						
i. Targets relative to baseline value							
ii. Targets relative to relevant BM value							
	Reference value						
	t CO ₂ e / TJ						
iii. Absolute specific reduction versus baseline							

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

Measure	Investments	2025	2030	2035	2040	2045	2050
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
TOTAL							

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							
5							
6							
7							
8							
9							
10							
TOTAL							

17 Fall-back sub-installation:**Fuel benchmark sub-installation, CBAM****not relevant**

	Reference value	2025	2030	2035	2040	2045	2050
	t CO ₂ e / TJ						
i. Targets relative to baseline value							
ii. Targets relative to relevant BM value							
	Reference value						
	t CO ₂ e / TJ						
iii. Absolute specific reduction versus baseline							

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

Measure	Investments	2025	2030	2035	2040	2045	2050
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
TOTAL							

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							
5							
6							
7							
8							

9							
10							
	TOTAL						

18 Fall-back sub-installation:

		Process emissions sub-installation, CL, non-CBAM				not relevant	
	Reference value t CO ₂ e / t	2025	2030	2035	2040	2045	2050
i. Targets relative to baseline value							
ii. Targets relative to relevant BM value							
	Reference value t CO ₂ e / t	2025	2030	2035	2040	2045	2050
iii. Absolute specific reduction versus baseline							
iv. Impact share of each measure (100% = value under point iii.)							
Measure	Investments	2025	2030	2035	2040	2045	2050
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
TOTAL							
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							
5							
6							
7							
8							
9							
10							
TOTAL							

19 Fall-back sub-installation:

		Process emissions sub-installation, non-CL, non-CBAM				not relevant	
	Reference value t CO ₂ e / t	2025	2030	2035	2040	2045	2050
i. Targets relative to baseline value							
ii. Targets relative to relevant BM value							
	Reference value t CO ₂ e / t	2025	2030	2035	2040	2045	2050
iii. Absolute specific reduction versus baseline							
iv. Impact share of each measure (100% = value under point iii.)							
Measure	Investments	2025	2030	2035	2040	2045	2050
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
TOTAL							
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							
5							
6							
7							
8							
9							
10							
TOTAL							

20 Fall-back sub-installation:

		Process emissions sub-installation, CBAM				not relevant	
	Reference value t CO ₂ e / t	2025	2030	2035	2040	2045	2050
i. Targets relative to baseline value							
ii. Targets relative to relevant BM value							
	Reference value t CO ₂ e / t	2025	2030	2035	2040	2045	2050
iii. Absolute specific reduction versus baseline							
iv. Impact share of each measure (100% = value under point iii.)							
Measure	Investments	2025	2030	2035	2040	2045	2050
1							
2							
3							
4							
5							
6							

7							
8							
9							
10							
TOTAL							

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							
5							
6							
7							
8							
9							
10							
TOTAL							

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							

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

Measure	Investments	2025	2030	2035	2040	2045	2050
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
TOTAL							

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							
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							

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

Measure	Investments	2025	2030	2035	2040	2045	2050
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
TOTAL							

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							
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							

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

Measure	Investments	2025	2030	2035	2040	2045	2050
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
TOTAL							

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							
5							
6							
7							
8							
9							
10							
TOTAL							

I. MS specific	Navigation area:	Table of contents			

I. ADDITIONAL DATA REQUIREMENTS BY THE MEMBER STATE

I To be defined by the Member State

K. COMMENTS AND FURTHER INFORMATION

I Documents supporting this report

Please list here all relevant documents which are submitted together with this plan

Please provide file name(s) (if in an electronic format) or document reference number(s) (if hard copy) below:

File name/Reference	Document description

II Free space for all kinds of supplemental information

In space below you can enter all information which was not suitable for input in other sheets and which you consider important for the competent authority