# Opstellen BDR over 2019-2023 n.a.v. gewijzigde FAR

***Infosessie voor exploitanten***

***21 maart 2024***

# Inleiding

- Informatie gebaseerd op de laatste versie van de FAR en het bijhorende (Engelstalig) sjabloon voor het BDR dd. 5 mrt 2024.
- BDR19-23 dient tegen uiterlijk 30/06 geverifieerd bij VEKA te worden ingediend door elke exploitant die aanspraak wenst te maken op kosteloze toewijzing
- Focus op wijzigingen t.o.v. BDR14-18

# Identificatie van de installatie (1/9)

- Tabblad A_InstallationData: meerdere wijzigingen
- Rubriek I 1 (g) v. : versie MMP invullen (zal voor iedereen vs1 zijn; dus volgende invullen: xxx-MMP26-30-vs1 of xxx-MMP24-30-vs1

| | | |
|---|---|---|
| **(g)** | **Information on the greenhouse gas emissions permit:** | |
| | *Please provide here information on the greenhouse gas emissions permit (=permit issued in accordance with Articles 5 and 6 of the EU ETS Directive).* | |
| | *Member States may make this information optional if the competent authority is in possession of this information already.* | |
| | Name of Competent authority: | |
| | **First GHG permit received when the installation was included in the ETS for the first time:** | |
| i. | Permit-ID: | |
| ii. | Date of issuance: | |
| | **Most recent update of the permit, if applicable:** | |
| iii. | Permit-ID: | |
| iv. | Date of issuance: | |
| | **Latest version of the Monitoring Methodology Plan used for this application:** | |
| v. | Version of the Monitoring Methodology Plan: | xxx-MMP26-30-vs1 |

# Identificatie van de installatie (2/9)

- Rubriek I 4 (a) : Annex I activiteiten invullen
  - indien relevant, bijkomende activiteit(en) toevoegen (ook het therm. ingangsvermogen wordt gevraagd)

**4 Further installation data:**

**(a) Activities according to Annex I of the EU ETS Directive:**

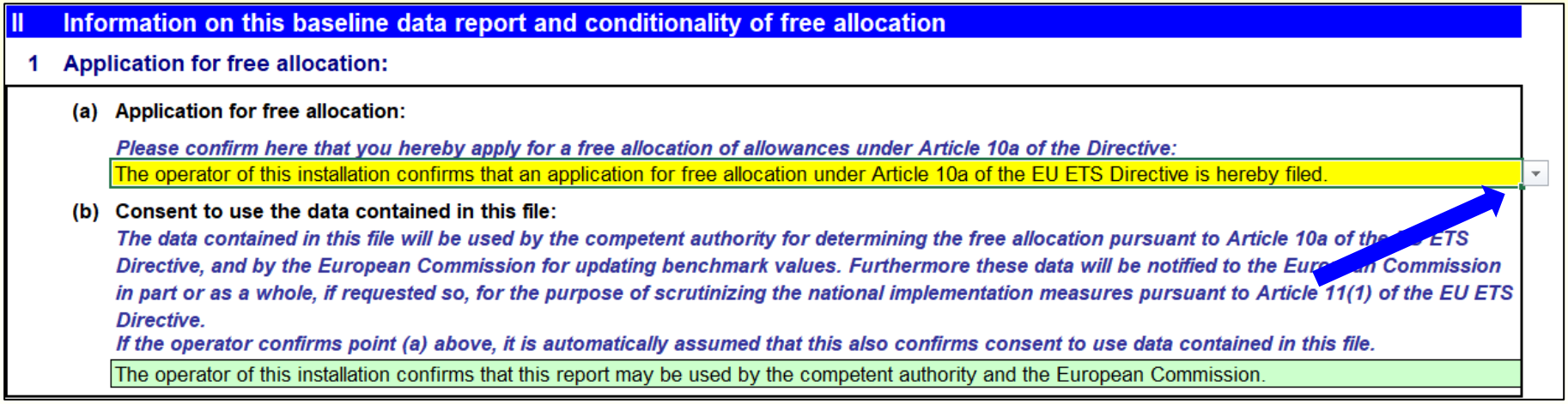
*This information is important for the competent authorities because changes compared to previous ETS phases may have taken place.*

*To the extent feasible, please sort the list with regard to the direct emissions, starting with the activity causing the highest direct emissions.*

| Number | Name of activity (Annex I of the ETS Directive) | Total rated thermal input (MW) |
|---|---|---|
| 1 | Production of bulk organic chemicals by cracking, reforming, partial or full oxidation or by similar processes. | 250 |
| 2 | Production of hydrogen (H2) and synthesis gas with a production capacity exceeding 5 tonnes per day | 10 |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |

# Identificatie van de installatie (3/9)

- Rubriek II 1: enkel rubriek (a) in te vullen; (b) volgt autom.
  - vervangen rubriek (f) en (g) uit vorig BDR
  - rubriek (a) t.e.m. (e) uit vorig BDR zijn weggevallen.



**II Information on this baseline data report and conditionality of free allocation**

**1 Application for free allocation:**

**(a) Application for free allocation:**

***Please confirm here that you hereby apply for a free allocation of allowances under Article 10a of the Directive:***

The operator of this installation confirms that an application for free allocation under Article 10a of the EU ETS Directive is hereby filed.

**(b) Consent to use the data contained in this file:**

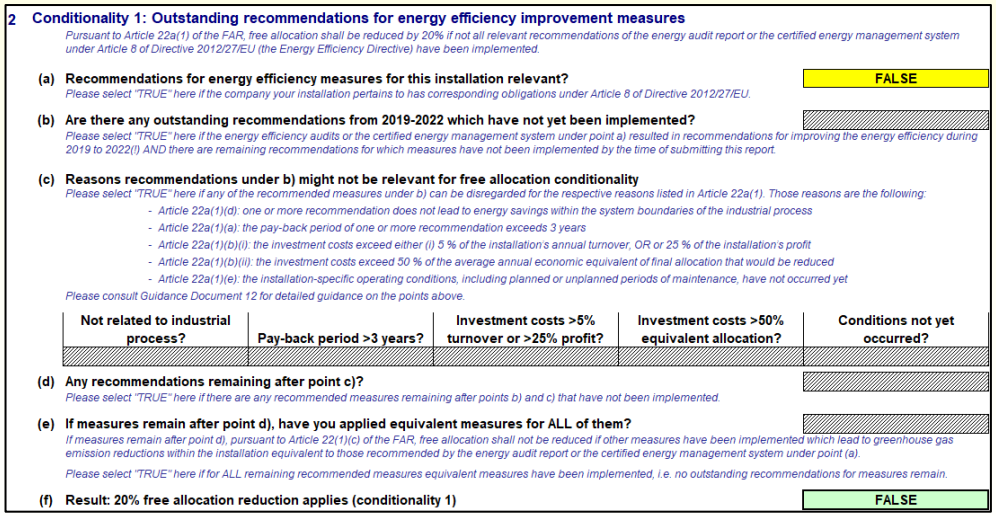
***The data contained in this file will be used by the competent authority for determining the free allocation pursuant to Article 10a of the EU ETS Directive, and by the European Commission for updating benchmark values. Furthermore these data will be notified to the European Commission in part or as a whole, if requested so, for the purpose of scrutinizing the national implementation measures pursuant to Article 11(1) of the EU ETS Directive.***

***If the operator confirms point (a) above, it is automatically assumed that this also confirms consent to use data contained in this file.***

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

# Energie-efficiëntie conditionaliteit (4/9)

- Rubriek II 2 (a): is dit relevant?
  - had het bedrijf verplichtingen onder de EED (Energie Efficiëntie Richtlijn? → False (Onwaar) invullen indien Art 8 van EED niet van toepassing is; zie Toelichting VEKA
  - Andere cellen worden automatisch grijs gearceerd (niet relevant)



**2 Conditionality 1: Outstanding recommendations for energy efficiency improvement measures**

*Pursuant to Article 22a(1) of the FAR, free allocation shall be reduced by 20% if not all relevant recommendations of the energy audit report or the certified energy management system under Article 8 of Directive 2012/27/EU (the Energy Efficiency Directive) have been implemented.*

(a) **Recommendations for energy efficiency measures for this installation relevant?** — FALSE

*Please select "TRUE" here if the company your installation pertains to has corresponding obligations under Article 8 of Directive 2012/27/EU.*

(b) **Are there any outstanding recommendations from 2019-2022 which have not yet been implemented?**

*Please select "TRUE" here if the energy efficiency audits or the certified energy management system under point a) resulted in recommendations for improving the energy efficiency during 2019 to 2022(!) AND there are remaining recommendations for which measures have not been implemented by the time of submitting this report.*

(c) **Reasons recommendations under b) might not be relevant for free allocation conditionality**

*Please select "TRUE" here if any of the recommended measures under b) can be disregarded for the respective reasons listed in Article 22a(1). Those reasons are the following:*

- *Article 22a(1)(d): one or more recommendation does not lead to energy savings within the system boundaries of the industrial process*
- *Article 22a(1)(a): the pay-back period of one or more recommendation exceeds 3 years*
- *Article 22a(1)(b)(i): the investment costs exceed either (i) 5 % of the installation's annual turnover, OR or 25 % of the installation's profit*
- *Article 22a(1)(b)(ii): the investment costs exceed 50 % of the average annual economic equivalent of final allocation that would be reduced*
- *Article 22a(1)(e): the installation-specific operating conditions, including planned or unplanned periods of maintenance, have not occurred yet*

*Please consult Guidance Document 12 for detailed guidance on the points above.*

| Not related to industrial process? | Pay-back period >3 years? | Investment costs >5% turnover or >25% profit? | Investment costs >50% equivalent allocation? | Conditions not yet occurred? |
|---|---|---|---|---|
| | | | | |

(d) **Any recommendations remaining after point c)?**

*Please select "TRUE" here if there are any recommended measures remaining after points b) and c) that have not been implemented.*

(e) **If measures remain after point d), have you applied equivalent measures for ALL of them?**

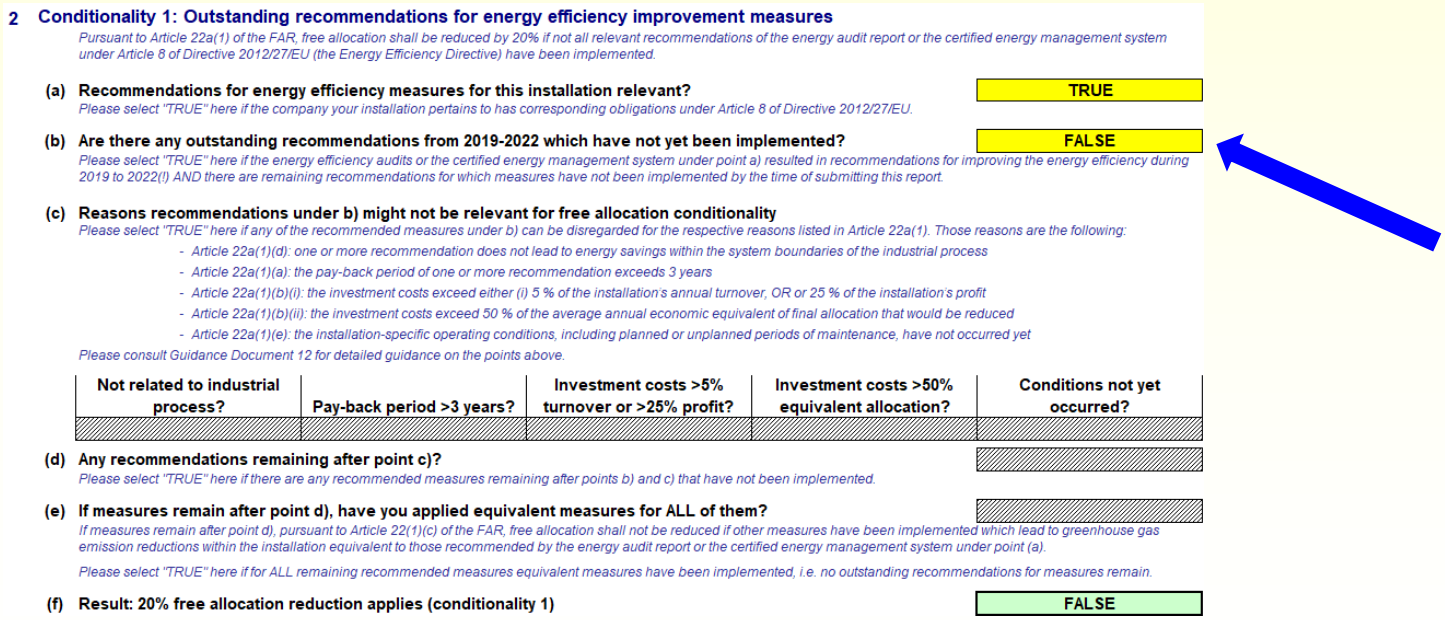
*If measures remain after point d), pursuant to Article 22(1)(c) of the FAR, free allocation shall not be reduced if other measures have been implemented which lead to greenhouse gas emission reductions within the installation equivalent to those recommended by the energy audit report or the certified energy management system under point (a).*

*Please select "TRUE" here if for ALL remaining recommended measures equivalent measures have been implemented, i.e. no outstanding recommendations for measures remain.*

(f) **Result: 20% free allocation reduction applies (conditionality 1)** — FALSE

# Energie-efficiëntie conditionaliteit (5/9)

- Rubriek II 2 (b): niet uitgevoerde “aanbevelingen” uit energie-audit over 2019-2022?
  - (b ) : indien alle rendabele (IRR>=24%) en studiemaatregelen van het 2de EBO plan of alle maatregelen uit audit GO uitgevoerd
    → False (Onwaar) invullen; verder geen input vereist



**2 Conditionality 1: Outstanding recommendations for energy efficiency improvement measures**

*Pursuant to Article 22a(1) of the FAR, free allocation shall be reduced by 20% if not all relevant recommendations of the energy audit report or the certified energy management system under Article 8 of Directive 2012/27/EU (the Energy Efficiency Directive) have been implemented.*

**(a) Recommendations for energy efficiency measures for this installation relevant?** — TRUE

*Please select "TRUE" here if the company your installation pertains to has corresponding obligations under Article 8 of Directive 2012/27/EU.*

**(b) Are there any outstanding recommendations from 2019-2022 which have not yet been implemented?** — FALSE

*Please select "TRUE" here if the energy efficiency audits or the certified energy management system under point a) resulted in recommendations for improving the energy efficiency during 2019 to 2022(!) AND there are remaining recommendations for which measures have not been implemented by the time of submitting this report.*

**(c) Reasons recommendations under b) might not be relevant for free allocation conditionality**

*Please select "TRUE" here if any of the recommended measures under b) can be disregarded for the respective reasons listed in Article 22a(1). Those reasons are the following:*

- *Article 22a(1)(d): one or more recommendation does not lead to energy savings within the system boundaries of the industrial process*
- *Article 22a(1)(a): the pay-back period of one or more recommendation exceeds 3 years*
- *Article 22a(1)(b)(i): the investment costs exceed either (i) 5 % of the installation's annual turnover, OR or 25 % of the installation's profit*
- *Article 22a(1)(b)(ii): the investment costs exceed 50 % of the average annual economic equivalent of final allocation that would be reduced*
- *Article 22a(1)(e): the installation-specific operating conditions, including planned or unplanned periods of maintenance, have not occurred yet*

*Please consult Guidance Document 12 for detailed guidance on the points above.*

| Not related to industrial process? | Pay-back period >3 years? | Investment costs >5% turnover or >25% profit? | Investment costs >50% equivalent allocation? | Conditions not yet occurred? |
|---|---|---|---|---|
| | | | | |

**(d) Any recommendations remaining after point c)?**

*Please select "TRUE" here if there are any recommended measures remaining after points b) and c) that have not been implemented.*

**(e) If measures remain after point d), have you applied equivalent measures for ALL of them?**

*If measures remain after point d), pursuant to Article 22(1)(c) of the FAR, free allocation shall not be reduced if other measures have been implemented which lead to greenhouse gas emission reductions within the installation equivalent to those recommended by the energy audit report or the certified energy management system under point (a).*

*Please select "TRUE" here if for ALL remaining recommended measures equivalent measures have been implemented, i.e. no outstanding recommendations for measures remain.*

**(f) Result: 20% free allocation reduction applies (conditionality 1)** — FALSE

# Energie-efficiëntie conditionaliteit (6/9)

- Rubriek II 2 (c) t.e.m. (f):
  - (c) : 5 randvoorwaarden die één of meerdere maatregelen uitsluiten
  - (d) : blijven er nog niet uitgevoerde maatregelen over?
  - (e) : alle maatregel gecompenseerd door een equival. maatregel?
    - True (Waar) : 20% reductie is nog van toepassing
    - False (Onwaar) : 20% reductie niet van toepassing

**(c) Reasons recommendations under b) might not be relevant for free allocation conditionality**

*Please select "TRUE" here if any of the recommended measures under b) can be disregarded for the respective reasons listed in Article 22a(1). Those reasons are the following:*

- *Article 22a(1)(d): one or more recommendation does not lead to energy savings within the system boundaries of the industrial process*
- *Article 22a(1)(a): the pay-back period of one or more recommendation exceeds 3 years*
- *Article 22a(1)(b)(i): the investment costs exceed either (i) 5 % of the installation's annual turnover, OR or 25 % of the installation's profit*
- *Article 22a(1)(b)(ii): the investment costs exceed 50 % of the average annual economic equivalent of final allocation that would be reduced*
- *Article 22a(1)(e): the installation-specific operating conditions, including planned or unplanned periods of maintenance, have not occurred yet*

*Please consult Guidance Document 12 for detailed guidance on the points above*

VBBV

| Not related to industrial process? | Pay-back period >3 years? | Investment costs >5% turnover or >25% profit? | Investment costs >50% equivalent allocation? | Conditions not yet occurred? |
|---|---|---|---|---|
| FALSE | FALSE | FALSE | FALSE | FALSE |

**(d) Any recommendations remaining after point c)?** TRUE

*Please select "TRUE" here if there are any recommended measures remaining after points b) and c) that have not been implemented.*

**(e) If measures remain after point d), have you applied equivalent measures for ALL of them?** TRUE

*If measures remain after point d), pursuant to Article 22(1)(c) of the FAR, free allocation shall not be reduced if other measures have been implemented which lead to greenhouse gas emission reductions within the installation equivalent to those recommended by the energy audit report or the certified energy management system under point (a).*

Bedrijf

*Please select "TRUE" here if for ALL remaining recommended measures equivalent measures have been implemented, i.e. no outstanding recommendations for measures remain.*

**(f) Result: 20% free allocation reduction applies (conditionality 1)** FALSE

*This is an automatic result based on entries above.*

# Identificatie van de installatie (7/9)

- Rubriek II 5:
  - Baseline periode 2019-2023 selecteren
  - Operationele jaren aanduiden (vanaf 1 dag)

**5 Baseline period chosen**

**(a) Please select the baseline period for this report:** 2019-2023

*This is the baseline period pursuant to Article 2(14) of the FAR.*

**(b) Years in which the installation was operating:**

*According to the first sub-paragraph of Article 15(7) of the FAR, for the purpose of the determination of the median for historical activity levels only calendar years during wh has been operating for at least one day shall be taken into account.*

*Please enter in the table below for each year if the installation was operating at least one day per calendar year. Don't leave yellow cells empty.*

| Confirm: | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|
| Installation was operating in this year: | TRUE | TRUE | TRUE | TRUE | TRUE |
| Error messages: | | | | | |

# Identificatie van de installatie (8/9)

- Rubriek III: lijst subinstallaties
  - Voor PBM subinstallaties

| No. | Product type | <average of 10% best? | >80% performer? | Start of operation | CL exposed? | CBAM? |
|---|---|---|---|---|---|---|
| 1 | Hydrogen | | | | TRUE | TRUE |
| 2 | | | | | N.A. | N.A. |
| 3 | | | | | N.A. | N.A. |

  - Voor fall-back subinstallaties

Later in te vullen

| No. | Sub-installation type | <average of 10% best? | relevant? | Start of operation | CL exposed? | CBAM? |
|---|---|---|---|---|---|---|
| 11 | Heat benchmark sub-installation (CL \| non-CBAM) | | TRUE | | TRUE | FALSE |
| 12 | Heat benchmark sub-installation (non-CL \| non-CBAM) | | FALSE | | FALSE | FALSE |
| 13 | Heat benchmark sub-installation (CL \| CBAM) | | FALSE | | TRUE | TRUE |
| 14 | District heating sub-installation | | FALSE | | FALSE | FALSE |
| 15 | Fuel benchmark sub-installation (CL \| non-CBAM) | | TRUE | | TRUE | FALSE |
| 16 | Fuel benchmark sub-installation (non-CL \| non-CBAM) | | FALSE | | FALSE | FALSE |
| 17 | Fuel benchmark sub-installation (CL \| CBAM) | | FALSE | | TRUE | TRUE |
| 18 | Process emissions sub-installation (CL \| non-CBAM) | | TRUE | | TRUE | FALSE |
| 19 | Process emissions sub-installation (non-CL \| non-CBAM) | | FALSE | | FALSE | FALSE |
| 20 | Process emissions sub-installation (CL \| CBAM) | | FALSE | | TRUE | TRUE |

# Identificatie van de installatie (9/9)

- Rubriek IV: technische connecties
  - Over te nemen uit MMP (zo nodig info opvragen bij de connectie)

| No. | Name of installation or entity | Type of entity | Type of connection | Flow direction |
|---|---|---|---|---|
| 1 | Bedrijf B | Installation covered by ETS | Measurable heat | Export |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 | | | | |
| 10 | | | | |

**(b) Please enter here further information regarding those connected installations, if relevant:**

*Installation ID is mandatory if the connected installation is covered by the EU ETS, and if it has already been covered by the EU ETS before 30 June 2019 for the first allocation period, and before 30 June 2024 for the second allocation period.*

*For entities not covered by the EU ETS, contact details are mandatory, but the Registry ID is not required.*

| No. | Installation ID used in Registry | Name of contact person | email address | phone number |
|---|---|---|---|---|
| 1 | **BE000000000000125** | Jan Piet | jan.piet@bedrijfB.com | 0475123456 |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 | | | | |
| 10 | | | | |

**Niet het VER-nr voor Vlaanderen**

# Emissies v/d installatie (1/2)

- Tab D_Emissions: rubriek D I 2 - totale emissies worden voor elk jaar ingevuld (niet in Tabbladen B+C_Emissions_Y1 t.e.m.Y5)

**2 Input if Member State allows aggregated reporting at installation level**

*If according to section B.I. you are allowed to enter emission totals instead of detailed source stream data, then input in this section is mandatory.*

*In such case, please enter below in line with the principles of the M&R Regulation:*

- *Total CO2 emissions: the verified CO2 emissions from source streams and emission sources including from any non-sustainable biomass*
- *Biomass emissions: emissions from biomass, either sustainable or for which sustainability criteria do not apply, as if they were non-zero rated*
- *Total N2O emissions from emission sources*
- *Total PFC emissions from primary aluminium production*
- *Transferred amount of CO2 exported from the installation, reported as negative values*
- *Total energy input from fuels including from biomass and waste gases*

| Installation level data: | Unit | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|
| Total CO2 emissions | t CO2 / year | | | | | |
| *Zero-rated biomass emissions* | *t CO2 / year* | | | | | |
| Total N2O emissions | t CO2e/year | | | | | |
| Total PFC emissions | t CO2e/year | | | | | |
| Sum of direct emissions | t CO2e/year | | | | | |
| Transferred CO2 exported | t CO2 / year | | | | | |
| **Total direct emissions of the installation** | **t CO2e/year** | | | | | |
| **Total energy input from fuels** | **TJ / year** | | | | | |

is de som van de bronstromen uit MP en/of de totale netto energie-input bij gebruik van een massabalans (cfr. Guidance document n° 3 - p. 34)

# Emissies v/d installatie (2/2)

- Geen wijzigingen aan:
  - Rubriek D III – WKK-tool
  - Rubriek D IV – Waste gas tool

# De energiebalans (1/2)

- Tab E_Energyflows:
  - Rubriek E I 1 (a): Total Energy input

| | | Unit | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|---|
| i. | Energy input from fuels (from D.I) | TJ / year | | | | | |
| ii. | Electricity input for heat production | TJ / year | | | | | |
| iii. | Other energy input (e.g. exothermic heat) | TJ / year | | | | | |
| iv. | Total energy input (sum of the above) | TJ / year | | | | | |

  - (ii) nieuw: elektriciteit voor warmteproductie (in geval van WKK de brandstof in (i) toevoegen)
  - Belangrijke noot: “for the primary purpose of the generation of heat” (zie definitie FBM subinstallatie)
  - (iii) ‘andere input’ (bv. uit exothermie of omgevingslucht W-pomp)

    tenzij reeds ingevuld in (i) wat bij exoth. proces en ingave volgens massabalans-methode het geval kan zijn is (zie tab D)

# De energiebalans (2/2)

- Tab E_Energyflows:
  - Rubriek E I 1 (c): verdeling van de totale energie input en toewijzing voor de FBM – subinstallatie

| | Usage type of fuel input | Unit | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|---|
| i. | Energy input to product BM sub-installations | TJ / year | | | | | |
| ii. | Energy input for production of measurable heat | TJ / year | | | | | |
| iii. | **Fuel benchmark sub-installation (CL \| non-CBAM)** | **TJ / year** | | | | | |
| iv. | **Fuel benchmark sub-installation (non-CL \| non-CE** | **TJ / year** | | | | | |
| v. | **Fuel benchmark sub-installation (CL \| CBAM)** | **TJ / year** | | | | | |
| vi. | Energy input for electricity production | TJ / year | | | | | |
| vii. | Rest | TJ / year | | | | | |

  - lijn (iii) t.e.m. (v): opsplitsing FBM subinstallatie in CBAM en non-CBAM

# De (meetbare) warmtebalans (1/2)

- Rubriek E II (a) t.e.m. (p): verdeling van de totale energie input en toewijzing voor de HBM – subinstallatie
- Enkel gewijzigd voor warmte uit elektriciteit die nu in aanmerking komt voor toewijzing (volgorde input is gewijzigd: (d) is (b) geworden!!!)

BDR19-23

**Heat Inputs**

**(a) Total net amount of measurable heat produced in the installation:**

*All heat data should refer to "net amount of measurable heat" (i.e. heat content of heat flow to user minus heat content of the return flow). Where heat relevant, please ensure consiste[ncy] with data entries in section D.III.*

*Note that heat produced from nitric acid sub-installations has to be reported under point (c) as "non-ETS import".*

*As a memo item and part to be included under point i., the sum of the amounts of measurable heat exported from the fuel benchmark sub-installations is displayed und information is taken from section G.(5).e.*

| | Unit | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|
| i. Measurable heat produced | TJ / year | | | | | |
| ii. *Memo-item: heat exported from fuel BM* | TJ / year | | | | | |

**(b) Measurable heat produced from electricity**

*This includes heat from any electric boilers, heat pumps, etc. This amount of heat is to be included in the data given under point (a) above and only to be entered here reasons.*

| | Unit | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|
| Heat from electricity | TJ / year | | | | | |

**(c) Measurable heat imported from installations covered by the EU ETS:**

*Installation names in the drop down list are taken from Section A.IV. Therefore you must ensure that you have entered complete data there.*

| Name of installation | Unit | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|
| i. | TJ / year | | | | | |
| ii. | TJ / year | | | | | |
| iii. | TJ / year | | | | | |
| iv. Sub-total | TJ / year | | | | | |

**(d) Measurable heat imported from installations and entities not covered by the EU ETS (not eligible for heat benchmark):**

*This includes the nitric acid producing sub-installations (select "Within installation" as name of installation, if the nitric acid production is part of this installation) and municipal waste incineration.*

*Note that the data entered here is to be checked for double counting with deductions under product benchmark sub-installations (see sheet "F_ProductBM").*

| Name of installation or entity | Unit | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|
| i. | TJ / year | | | | | |
| ii. | TJ / year | | | | | |
| iii. | TJ / year | | | | | |
| iv. Sub-total | TJ / year | | | | | |

**(e) Sum of measurable heat available at installation (=a+c+d)**

| | Unit | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|
| Total measurable heat | TJ / year | | | | | |

BDR14-18

**Heat Inputs**

**(a) Total net amount of measurable heat produced in the installation:**

*All heat data should refer to "net amount of measurable heat" (i.e. heat content of heat flow to user minus heat content of the return*

*Note that heat produced from nitric acid sub-installations has to be reported under point (c) as "non-ETS import".*

| | Unit | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|
| Measurable heat produced | TJ / year | | | | | |

**(b) Measurable heat imported from installations covered by the EU ETS:**

*Installation names in the drop down list are taken from Section A.IV. Therefore you must ensure that you have entered complete data there.*

| Name of installation | Unit | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|
| i. | TJ / year | | | | | |
| ii. | TJ / year | | | | | |
| iii. | TJ / year | | | | | |
| iv. Sub-total | TJ / year | | | | | |

**(c) Measurable heat imported from installations and entities not covered by the EU ETS (not eligible for heat benchmark):**

*This includes the nitric acid producing sub-installations (select "Within installation" as name of installation, if the nitric acid production is part of this installati*

*Note that the data entered here is to be checked for double counting with deductions under product benchmark sub-installations (see sheet "F_ProductBM").*

| Name of installation or entity | Unit | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|
| i. | TJ / year | | | | | |
| ii. | TJ / year | | | | | |
| iii. | TJ / year | | | | | |
| iv. Sub-total | TJ / year | | | | | |

**(d) Measurable heat produced from electricity**

*This includes heat from any electric pumps, electric boilers, etc. This amount of heat is to be included in the data given under point (c) above. It is only [for] completeness but not included in the balance below as this heat is non-eligible.*

| | Unit | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|
| Heat from electricity | TJ / year | | | | | |

**(e) Sum of measurable heat available at installation (=a+b+c)**

| | Unit | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|
| Total measurable heat | TJ / year | | | | | |

# De (meetbare) warmtebalans (2/2)

- Rubriek E II (r): toewijzing van de toewijsbare warmte uit (p) aan de diverse HBM-subinstallaties (3 types t.g.v. CBAM)

**(r) Attribution of heat sub-installations to Carbon Leakage exposure levels:**

*Please identify here the amount of measurable heat which is consumed by each sub-installation, where 100% refers to the sum calculated under point (p) above.*

*Heat benchmark sub-installation "CL" (exposed to a significant risk of Carbon Leakage), "non-CL" (not exposed to carbon leakage risk; which includes heat exported to installations and entities but not for district heating) and district heating sub-installation "non-CL".*

***The data is automatically used again in sheet "G_Fall-back". Therefore data entry is mandatory here, if this tool is used.***

| | Measurable heat | Unit | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|---|
| i. | Heat benchmark sub-installation (CL \| non-CBAM) | % or TJ / year | | | | | |
| ii. | Heat benchmark sub-installation (non-CL \| non-CBAM) | % or TJ / year | | | | | |
| iii. | Heat benchmark sub-installation (CL \| CBAM) | % or TJ / year | | | | | |
| iv. | District heating sub-installation | % or TJ / year | | | | | |
| | **Figures for control:** | | | | | | |
| v. | Heat benchmark sub-installation (CL \| non-CBAM) | % or TJ / year | | | | | |
| vi. | Heat benchmark sub-installation (non-CL \| non-CBAM) | % or TJ / year | | | | | |
| vii. | Heat benchmark sub-installation (CL \| CBAM) | % or TJ / year | | | | | |
| viii. | District heating sub-installation | % or TJ / year | | | | | |
| | **Consistency check:** | | | | | | |
| ix. | Percentage attributed to sub-installations | % | | | | | |

- Rubriek E III: Waste gas balans – geen wijzigingen behalve CBAM

# De elektriciteitsbalans (1/1)

– Rubriek E IV: men mag ‘FALSE’ invullen indien enkel elektriciteit opgewekt wordt met noodgenerator(en)

**Complete balance of electricity at the installation**

**(a) Does the installation produce electricity?** FALSE

*If the answer here is "FALSE", entries below are optional, except for point f) which is always mandatory. You may enter "FALSE" here if electricity is only produced from emergency power units.*

**(b) Total net amount of electricity produced in the installation**

*Other electricity production includes e.g. hydro, wind, solar power, from expansion turbines and other non-ETS processes.*

| | Unit | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|
| i. Net electricity produced from fuels | MWh / year | | | | | |
| ii. Other electricity produced | MWh / year | | | | | |

**(c) Total electricity imported from the grid or from other installations**

| | | | | | | |
|---|---|---|---|---|---|---|
| Electricity imported | MWh / year | | | | | |

**(d) Total electricity exported to the grid or to other installations**

| | | | | | | |
|---|---|---|---|---|---|---|
| Electricity exported | MWh / year | | | | | |

**(e) Total electricity available for use in the installation (= b+c-d)**

| | | | | | | |
|---|---|---|---|---|---|---|
| Electricity useable | MWh / year | | | | | |

**(f) Total electricity consumed in the installation**

| | | | | | | |
|---|---|---|---|---|---|---|
| Electricity consumed in the installation | MWh / year | | | | | |

(f) elektr. verbruik verplicht in te vullen door elke exploitant

# PBM-subinstallaties

- Tabblad F_ProductBM:
  - Rubriek F 1 (c): enkel elektriciteitsverbruik binnen PBM nog in te vullen (geen directe emissies meer wegens schrapping uitwisselbaarheid van brandstoffen en elektriciteit)

**(c) Electricity consumption**

*Please enter here the electricity consumed within the system boundaries of this sub-installation. For product benchmarks listed in section 2 of Annex I of the F*
*here are mandatory and have to correspond to the related system boundaries indicated in that section*

| Parameter | Unit | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|
| Relevant electricity consumption | MWh / year | | | | | |

  - Naast PRODCOM ook de CN-codes toevoegen
    idem voor de fall-back subinstallaties; telkens in rubriek (b); in te vullen door alle exploitanten!!

**(f) Individual production levels of products included in this product benchmark sub-installation**

| | PRODCOM 2010 | Name of product or group of products | Unit | 2019 | 2020 | 2021 | 2022 | 2023 | CN codes |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |

# HBM-subinstallaties

- Tabblad G_Fall-back: enkel wijzigingen in blauwe blok
  - Rubriek G I 1 (t.e.m. 4) (d): energie-input voor deze subinstallatie
    - Elektriciteitsverbruik voor meetbare warmte

| | | Unit | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|---|
| i. | Total fuel input | TJ / year | | | | | |
| ii. | Weighted emission factor | t CO2 / TJ | | | | | |
| iii. | Fuel input from waste gases | TJ / year | | | | | |
| iv. | Specific EF (waste gas) | t CO2 / TJ | | | | | |
| v. | Electricity input for heat production | TJ / year | | | | | |
| vi. | Weighted emission factor | t CO2 / TJ | | | | | |
| vii. | Other energy input (e.g. exothermic heat) | TJ / year | | | | | |
| viii. | Weighted emission factor | t CO2 / TJ | | | | | |
| ix. | Total energy input (= i. + v. + vii.) | TJ / year | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 |

    - Andere energie input (bv. exotherme warmte)
  - Rubriek G I (e): geproduceerde meetbare warmte

| | Measurable heat produced | Unit | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|---|
| i. | Total amount produced (incl. electricity) | TJ / year | | | | | |
| ii. | Heat produced from electricity | TJ / year | | | | | |

    - Warmte geproduceerd uit elektriciteit

# FBM-subinstallaties

- Tabblad G_Fall-back: enkel wijzigingen in blauwe blok
  - Rubriek G I 5 (t.e.m. 7) (d): energie-input voor deze subinstallatie
    - Elektriciteitsverbruik voor niet-meetbare warmte

**(d) Energy input to this sub-installation and relevant emission factor**

*Values for i. and ii. are automatically generated based on entries under (a) and (c) above.*

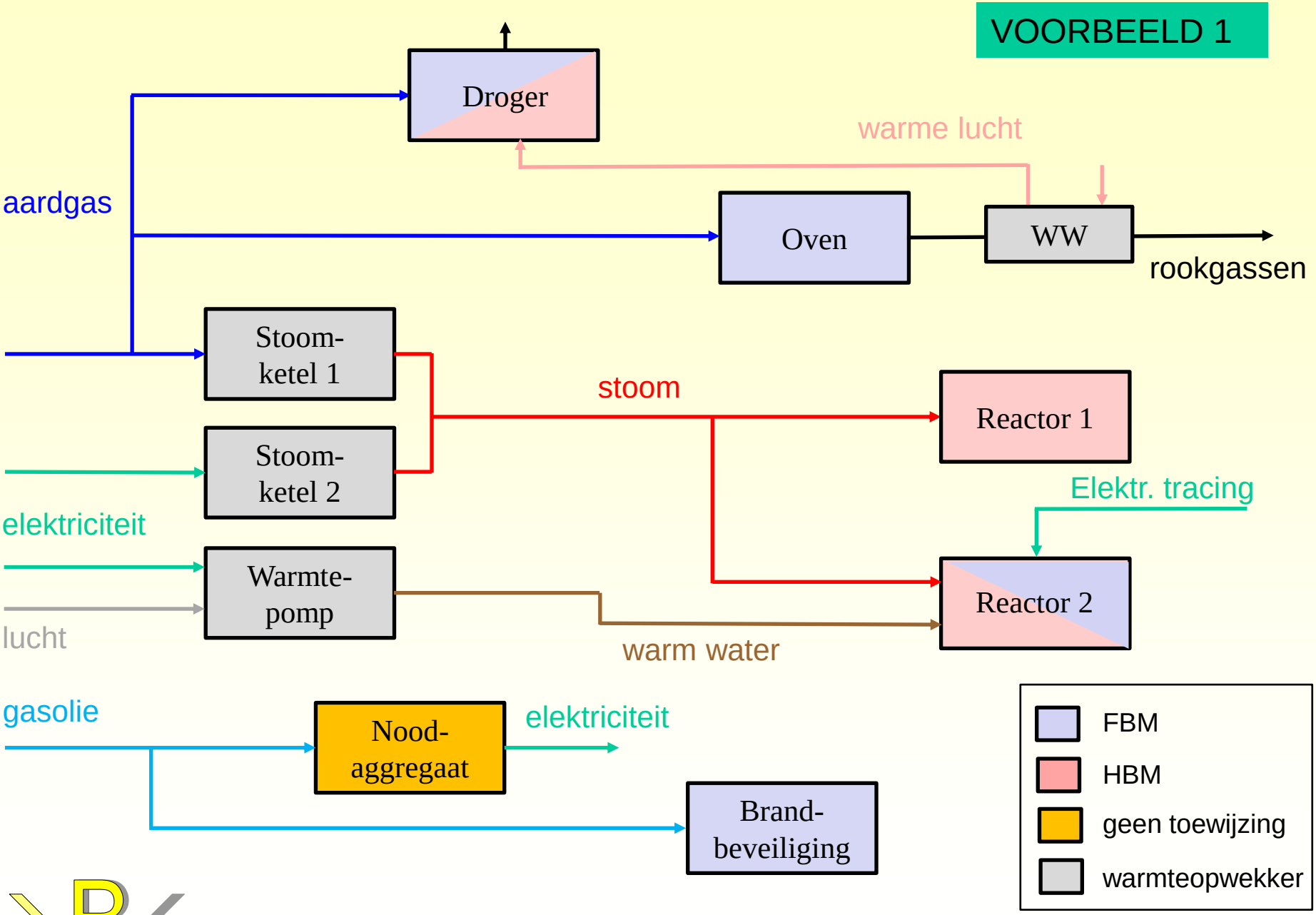
*Under iii. and iv. the fuel input from waste gases and the corresponding emission factor has to be entered, respectively.*

*Under iv. and vi. the electricity input for the primary purpose of heat production and the corresponding emission factor has to be entered, respectively. The EF may however usuall defined or is not known. Corresponding entries are therefore optional here.*

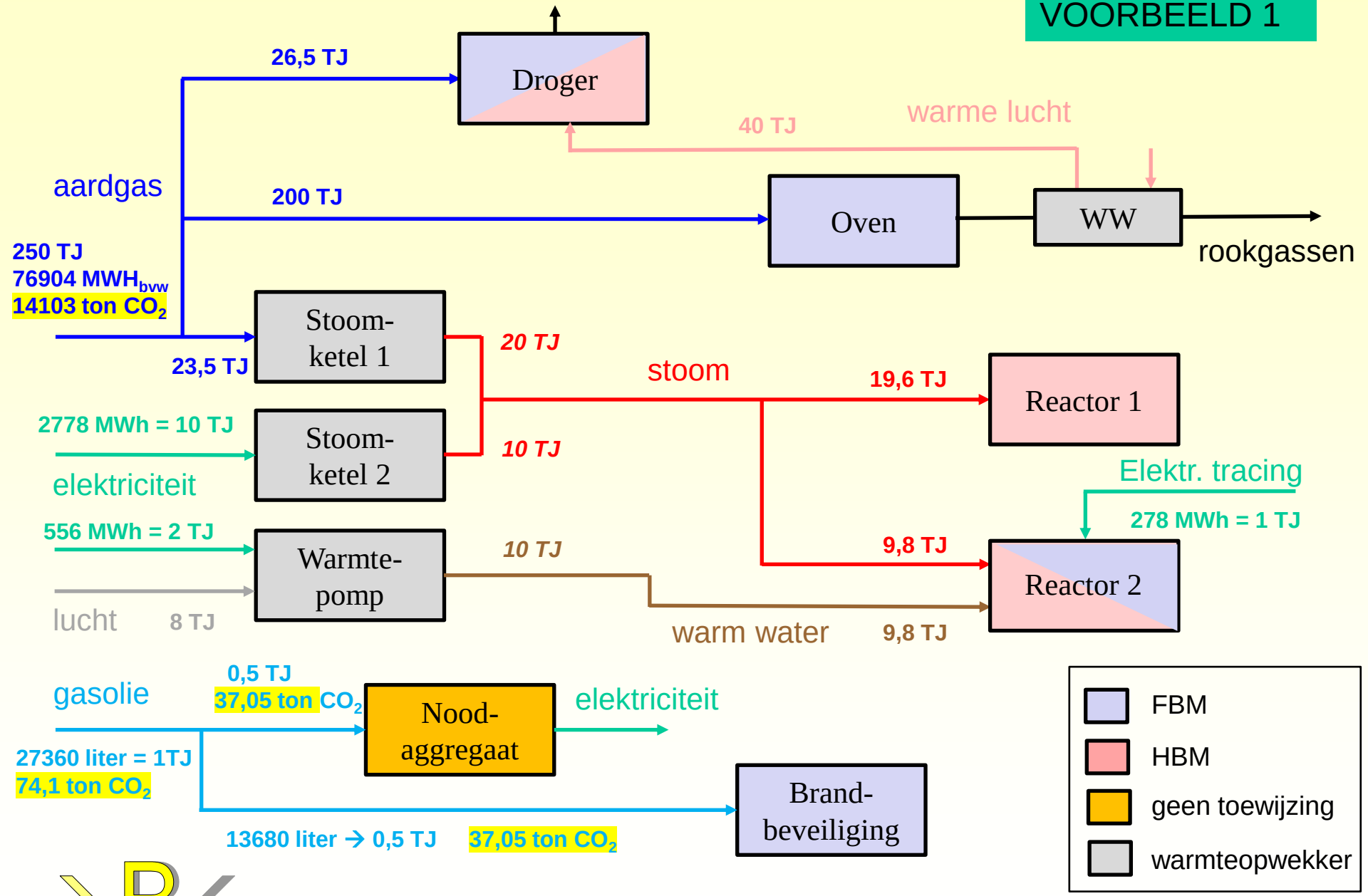
| | | Unit | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|---|
| i. | Energy input entered under (a) | TJ / year | E.I.1.c ! | E.I.1.c ! | E.I.1.c ! | E.I.1.c ! | E.I.1.c ! |
| ii. | Weighted emission factor (=c./d.) | t CO2 / TJ | | | | | |
| iii. | Fuel input from waste gases | TJ / year | | | | | |
| iv. | Specific EF (waste gas) | t CO2 / TJ | | | | | |
| v. | Electricity input for heat production | TJ / year | | | | | |
| vi. | Weighted emission factor | t CO2 / TJ | | | | | |
| **(e)** | **Net heat exported** | TJ / year | | | | | |
| | Specific EF (heat export) | t CO2 / TJ | | | | | |

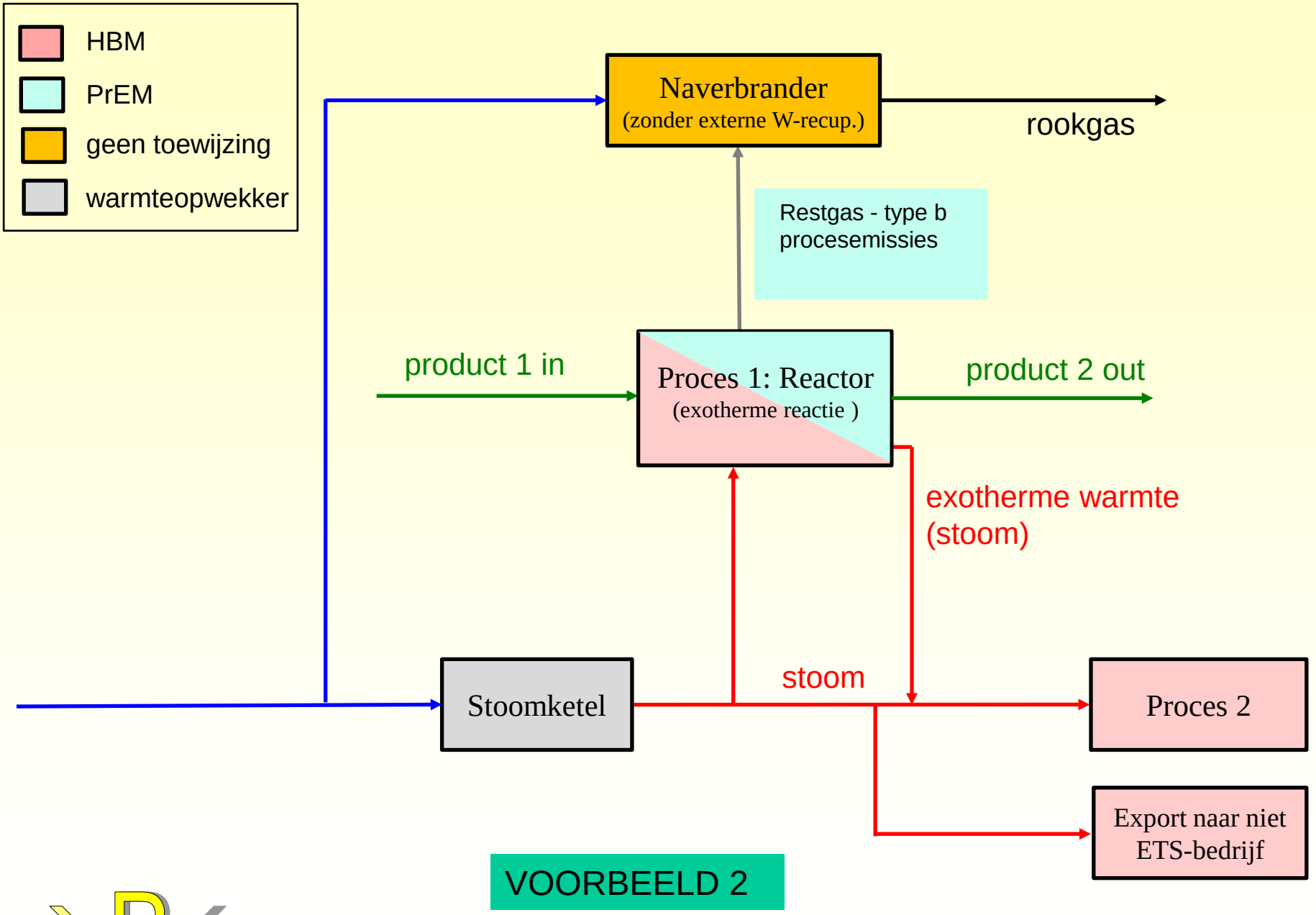
  - Rubriek G I 5 (t.e.m. 7) (e): uitgevoerde warmte (geen wijziging)

# Voorbeelden

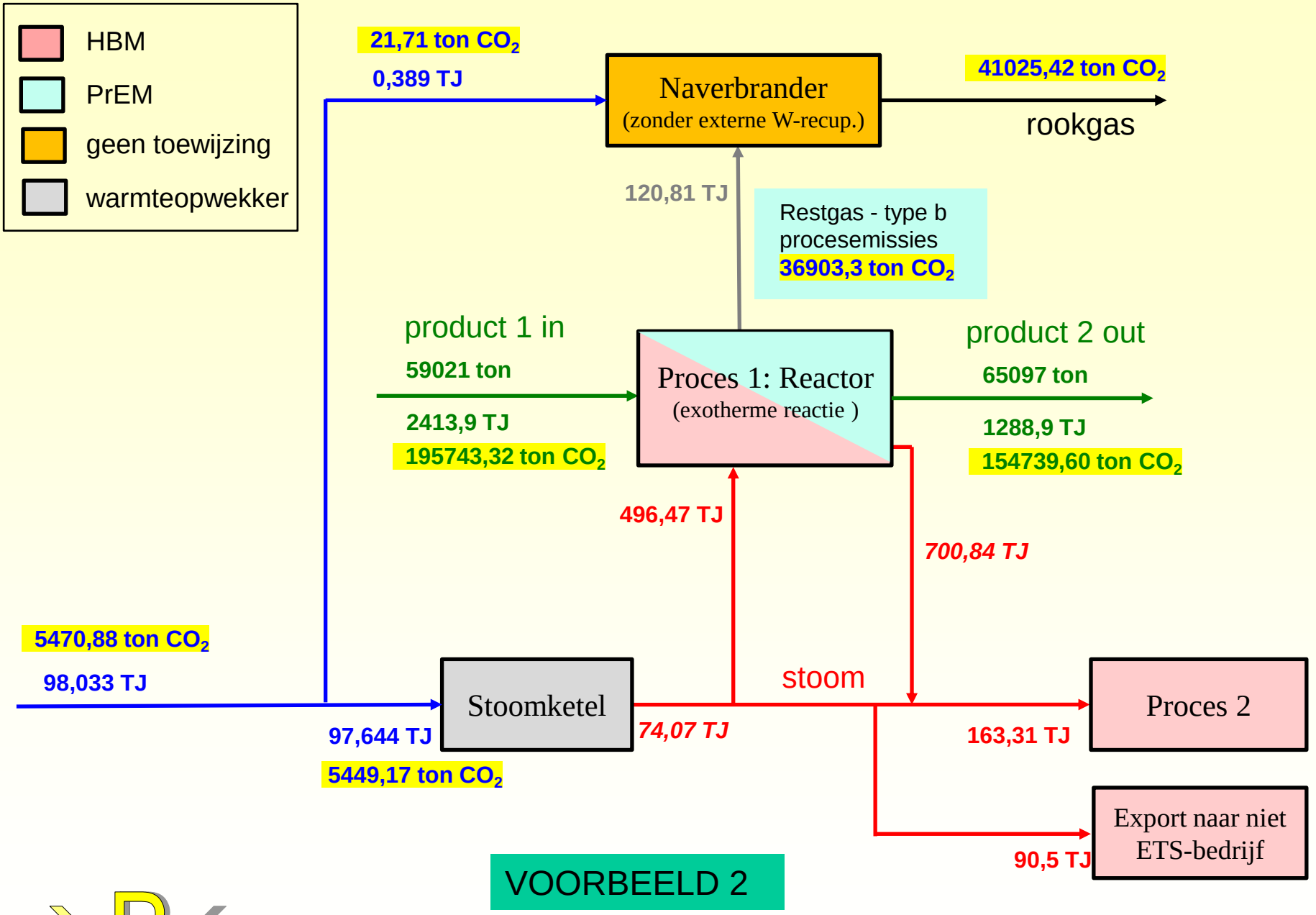

VOORBEELD 1
Droger
warme lucht
aardgas
Oven
WW
rookgassen
Stoom-
ketel 1
stoom
Reactor 1
Stoom-
ketel 2
Elektr. tracing
elektriciteit
Warmte-
pomp
Reactor 2
lucht
warm water
gasolie
Nood-
aggregaat
elektriciteit
Brand-
beveiliging
FBM
HBM
geen toewijzing
warmteopwekker

# VOORBEELD 1


26,5 TJ
Droger
40 TJ
warme lucht
aardgas
200 TJ
Oven
WW
rookgassen
250 TJ
76904 MWH$_{bvw}$
14103 ton CO$_2$
Stoom-ketel 1
23,5 TJ
20 TJ
stoom
19,6 TJ
Reactor 1
2778 MWh = 10 TJ
Stoom-ketel 2
10 TJ
elektriciteit
Elektr. tracing
278 MWh = 1 TJ
556 MWh = 2 TJ
Warmte-pomp
10 TJ
9,8 TJ
Reactor 2
lucht
8 TJ
warm water
9,8 TJ
gasolie
0,5 TJ
37,05 ton CO$_2$
Nood-aggregaat
elektriciteit
27360 liter = 1TJ
74,1 ton CO$_2$
Brand-beveiliging
13680 liter → 0,5 TJ
37,05 ton CO$_2$
FBM
HBM
geen toewijzing
warmteopwekker


HBM
PrEM
geen toewijzing
warmteopwekker
Naverbrander
(zonder externe W-recup.)
rookgas
Restgas - type b
procesemissies
product 1 in
Proces 1: Reactor
(exotherme reactie )
product 2 out
exotherme warmte
(stoom)
stoom
Stoomketel
Proces 2
Export naar niet
ETS-bedrijf

VOORBEELD 2


HBM
PrEM
geen toewijzing
warmteopwekker
21,71 ton CO2
0,389 TJ
Naverbrander
(zonder externe W-recup.)
41025,42 ton CO2
rookgas
120,81 TJ
Restgas - type b
procesemissies
36903,3 ton CO2
product 1 in
59021 ton
2413,9 TJ
195743,32 ton CO2
Proces 1: Reactor
(exotherme reactie )
product 2 out
65097 ton
1288,9 TJ
154739,60 ton CO2
496,47 TJ
700,84 TJ
5470,88 ton CO2
98,033 TJ
Stoomketel
97,644 TJ
5449,17 ton CO2
74,07 TJ
stoom
Proces 2
163,31 TJ
Export naar niet
ETS-bedrijf
90,5 TJ

VOORBEELD 2

# Rekenvoorbeeld bij MMP

- Doelstelling: overzichtelijke link tussen BDR/ALC en rekenvoorbeeld in MMP

*Twee methodes*

– Tabbladen uit BDR kopiëren en van daaruit de link lekken naar de cel waarin de waarde berekend wordt

– Vanuit het rekenvoorbeeld duidelijk verwijzen naar de cel (of de rubrieknr.) in het BDR

*Verzoek VBBV*

– Vertrekkend vanuit het bestaande rekenvoorbeeld, de aanpassingen n.a.v. gewijzigde FAR zo goed mogelijk aangeven

(bv. inkleuren van de gewijzigde cellen, rijen, kolommen,…)

# Einde

## Vragen?