



# The Carbon Border Adjustment Mechanism

Dear participants,  
Welcome to the webinar session on the

**FERTILISERS SECTOR**

Please be patient, the webinar will start at  
11:30 (CET).

# The Carbon Border Adjustment Mechanism (CBAM)

## Webinar session on the fertilisers sector

Please make sure that you appear in Zoom with your name and affiliation.

**If needed, rename yourself:**

- Click on the "Participants" icon in the Zoom toolbar.
- In the "Participants" window, next to your name click on "More" and choose "Rename".
- Enter a new name and click "Rename" to save it. You will see the new name showing in the "Participants" window.

Starting time: 11:30 AM (CET)

*26 September 2023*

# Housekeeping rules



- ✓ All participants are muted
- ✓ Webinar is being recorded and will be made public
- ✓ Video recording is not allowed
- ✓ Please write your questions in the chat – they will be answered at the end of the webinar
- ✓ A feedback survey will appear on your screen at the end of webinar
- ✓ The presentation will be uploaded on the [DG TAXUD CBAM](#) webpage, where you can also find additional materials.

# Zoom poll



## Question: **Which entity defines you best?**

- EU Member State
- EU Importers
- Non-EU country
- Non-EU producer
- Non-EU exporter
- International organisation
- NGO & think tank
- Law firm, consultancy
- Academia
- Other

# Webinar Agenda

- 1 **CBAM general overview**
- 2 **Determination of embedded emissions in the fertilisers sector**
- 3 **Overview of CBAM actors & reporting declarants**
- 4 **Submitting CBAM reports**

# Carbon Border Adjustment Mechanism

## **1** CBAM general overview



# The aim of CBAM

**Prevents carbon leakage**  
to ensure effectiveness of  
EU climate policy

**Contributes to decarbonisation**  
globally and to reaching climate  
neutrality by 2050



Complements and  
reinforces the EU ETS

# Reporting obligations in the transitional phase

**October 2023 – December 2025**

## **CBAM report containing the following:**

- Total quantity of goods imported during the preceding quarter
- Total embedded direct and indirect emissions
- The carbon price due in the country of origin for the embedded emissions

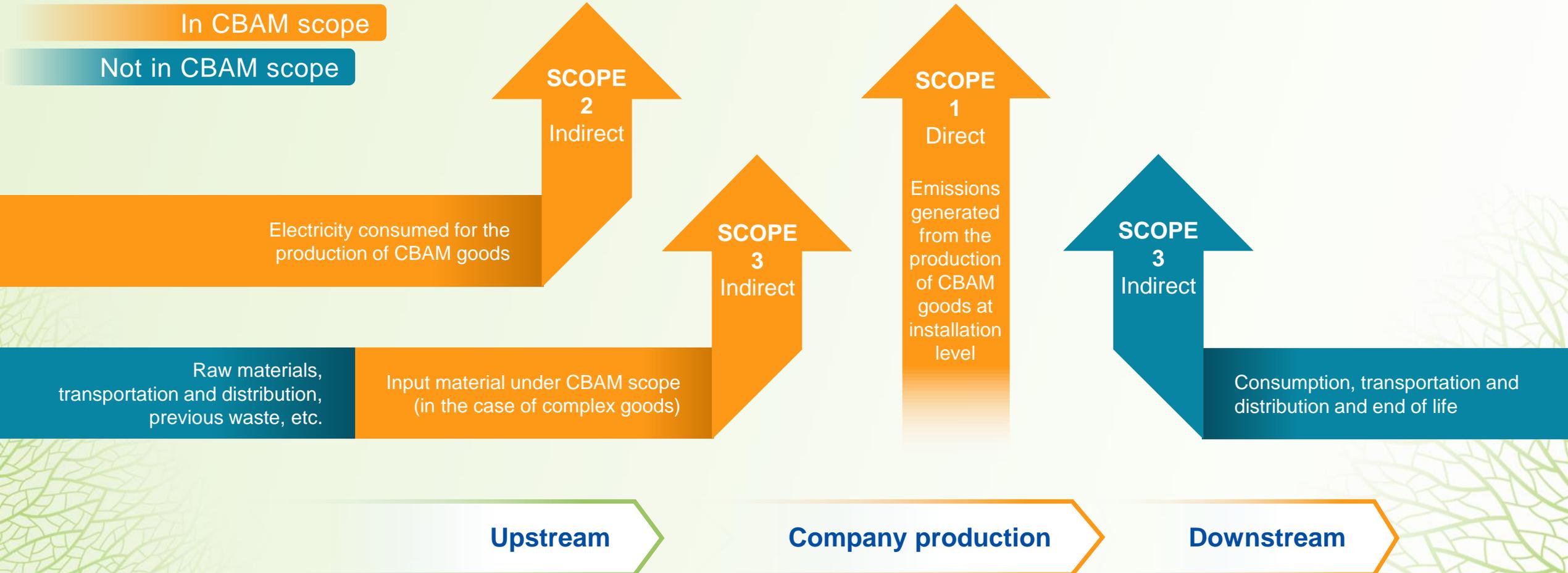
**Report to be submitted quarterly**

**No verification of emissions by  
EU-accredited verifier**



**No CBAM certificates**

# CBAM emissions during the transitional phase



# Carbon Border Adjustment Mechanism

## **2** Determination of embedded emissions: **Fertilisers**

# Key Terms

## Simple goods

- goods produced from fuels and raw materials considered to have zero embedded emissions under CBAM

## Complex goods

- goods produced from other CBAM goods (either simple or other complex goods)

## Aggregated goods category

- group of CBAM goods with different CN codes but similar characteristics
- for each aggregated goods category and production route: provisions on system boundaries (inputs, outputs and corresponding emissions), emission monitoring and relevant precursors

## Production process

- chemical or physical processes carried out in parts of an installation to produce goods under an aggregated goods category and its specified system boundaries

## Production route

- specific technology used in a production process to produce goods

# CBAM goods in the fertilisers sector

Aggregated goods category	Product CN Code	Description
<b>Nitric acid</b>	2808 00 00	Nitric acid; sulphonitric acids
<b>Urea</b>	3102 10	Urea, whether or not in aqueous solution
<b>Ammonia</b>	2814	Ammonia, anhydrous or in aqueous solution
	2834 21 00	Nitrates of potassium
<b>Mixed fertilizers</b>	3102 except 3102 10	Mineral or chemical fertilizers, nitrogenous, except: urea
	3105 except 3105 60 00	Mineral or chemical fertilizers containing two or three of the fertilising elements nitrogen, phosphorus, and potassium; other fertilizers, except: mineral or chemical fertilisers containing the two fertilising elements phosphorus and potassium

# Steps to determine specific embedded emissions

**Step 1.** Define the system boundaries associated with the production processes

**Step 2.** Identify relevant parameters and methods, then carry out monitoring

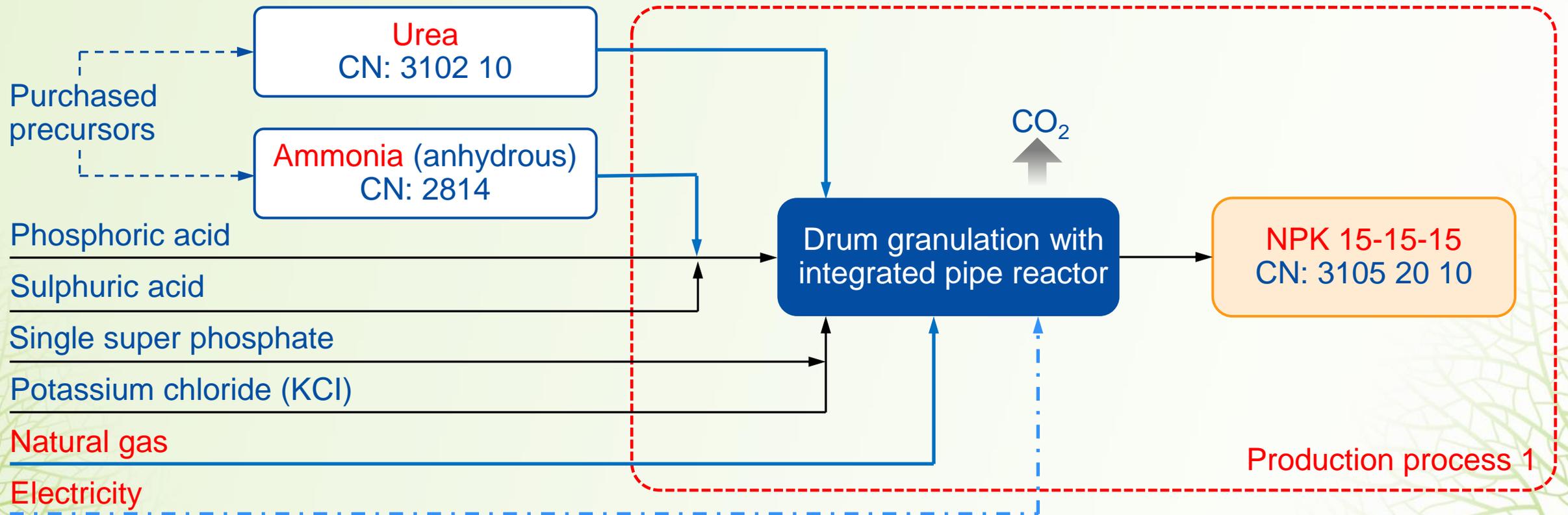
**Step 3.** Attribute emissions to production processes and then to goods

**Step 4.** Add the specific embedded emissions of relevant precursors

**Step 5.** Determine the specific embedded emissions of CBAM goods

# Step 1: Define the system boundaries

## Mixed fertilisers example



## Step 2: Monitoring – General

### Direct emissions from fuels and materials

- Standard method, mass balance, continuous emissions monitoring

### Direct emissions related to heat flows, if relevant

- Determine heat flows
- Emissions = heat flow × corresponding emission factor

### Waste gases, if relevant

- Determine flows and calorific values

### Electricity produced, if relevant

### Indirect emissions related to electricity consumption

- Determine electricity consumption for the production of CBAM goods

### Precursors, if relevant

- Determine precursor consumption

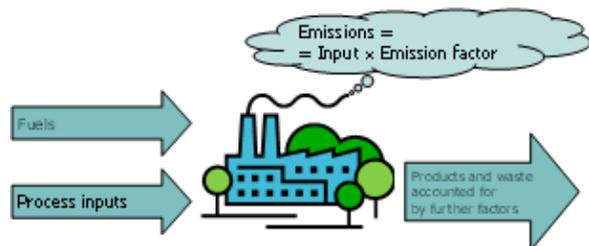
# Step 2: Monitoring – Direct emissions

1

## Calculation-based methodology

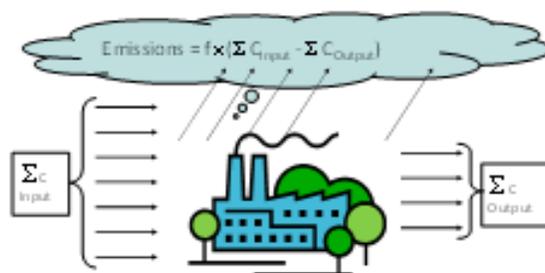
### Standard method

- determine quantities of fuels and input materials consumed
- determine calculation factors such as net calorific value and emission factor
- determine emissions by multiplying consumption with calculation factors



### Mass balance

- determine carbon content in all fuels and input materials
- determine carbon content in all output materials
- determine emissions as difference between inputs and outputs
- typically relevant where carbon remains in the goods produced (e.g. steel).

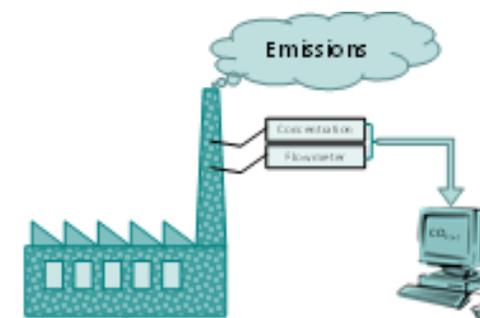


2

## Measurement-based methodology

### Continuous emissions monitoring system

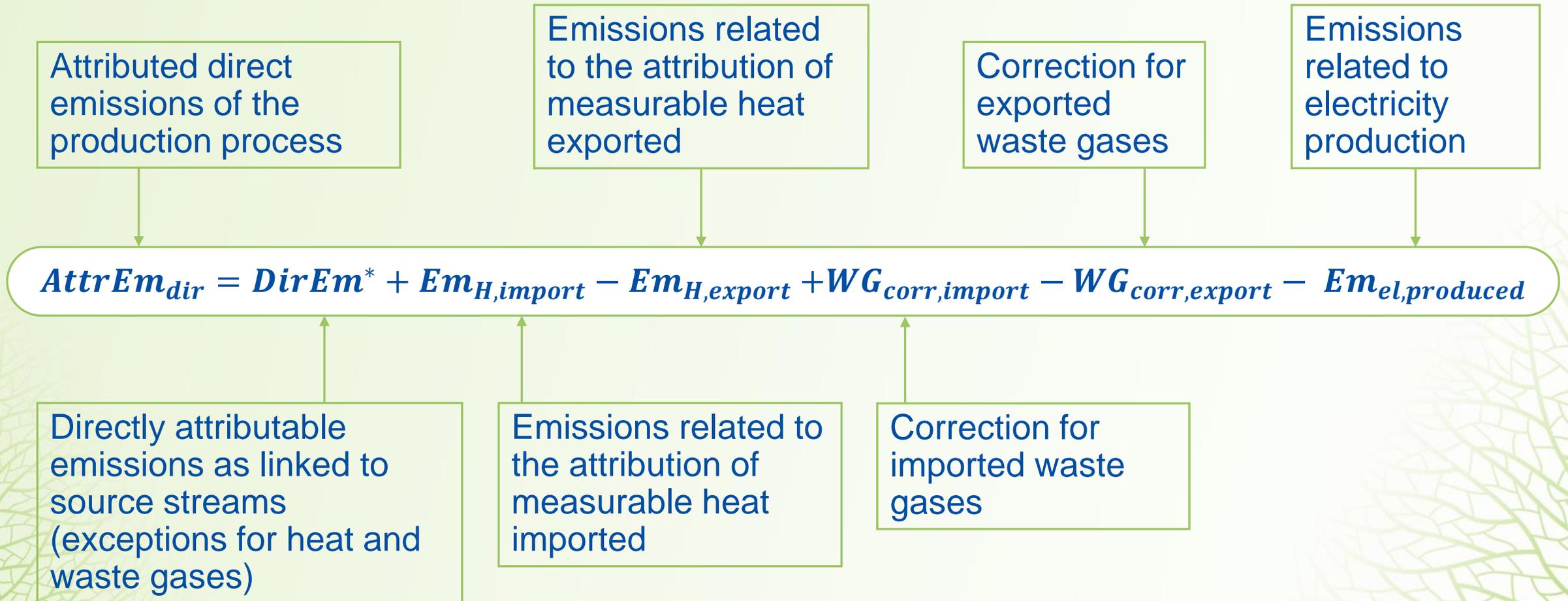
- measure GHG concentration directly in the stack or using extractive procedures (needed for N<sub>2</sub>O)
- measure flue gas flow
- determine emissions



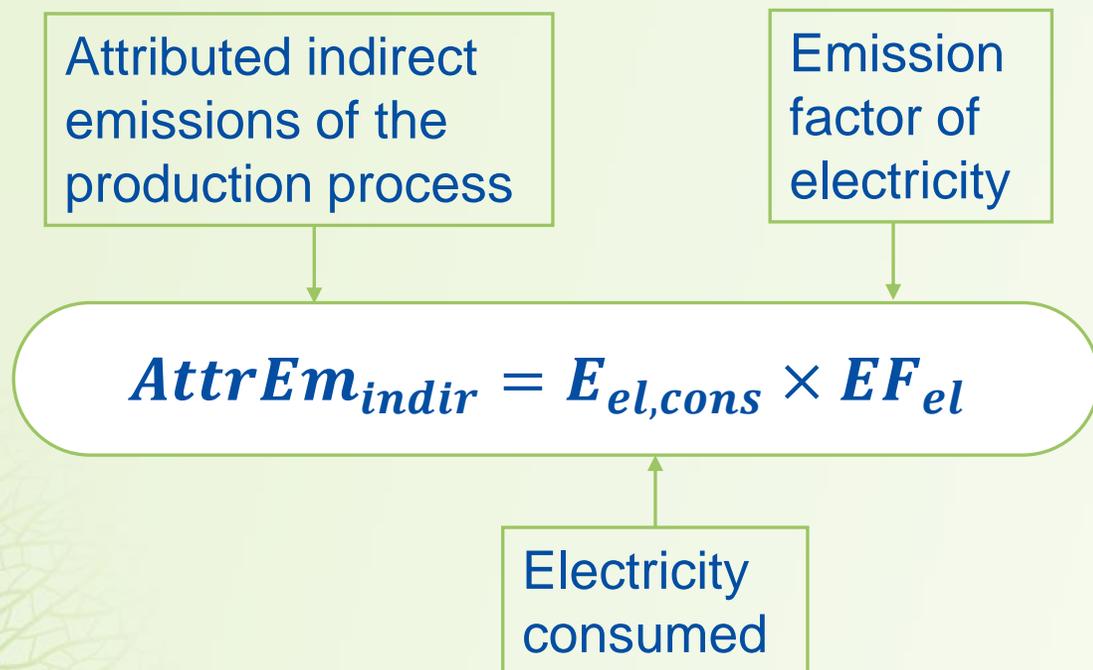
## Step 2: Monitoring – Other methods

- 1. Other monitoring and reporting methods** until 31 December 2024, if similar coverage and accuracy of emissions data:
  - a carbon pricing scheme where the installation is located, or
  - a compulsory emission monitoring scheme where the installation is located, or
  - an emission monitoring scheme at the installation which can include verification by an accredited verifier.
- 2. Other referenced methods** including default values until 31 July 2024
- 3. Estimation of up to 20%** of the total embedded emissions in the case of complex goods (includes the use of default values)

# Step 3: Attribution of direct emissions



## Step 3: Attribution of indirect emissions



### Emission factor of electricity

#### 1) General case: use of default values

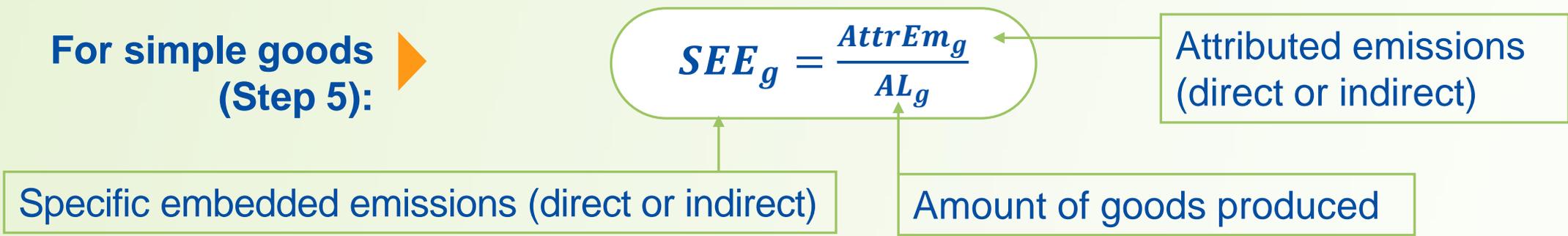
- average emission factor of the country of origin, based on IEA data
- other emission factors based on publicly available data (average emission factor or CO<sub>2</sub> emission factor)

#### 2) Use of actual emission factors, if:

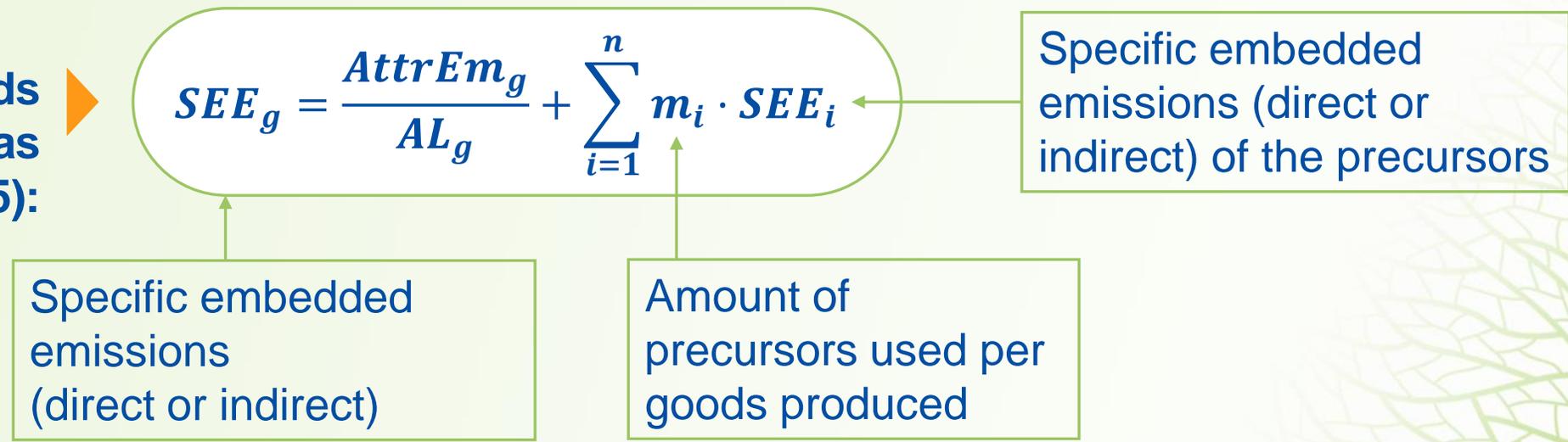
- direct technical connection or
- power purchase agreement

# Steps 4 & 5: Precursors and calculation of specific embedded emissions

**For simple goods (Step 5):**

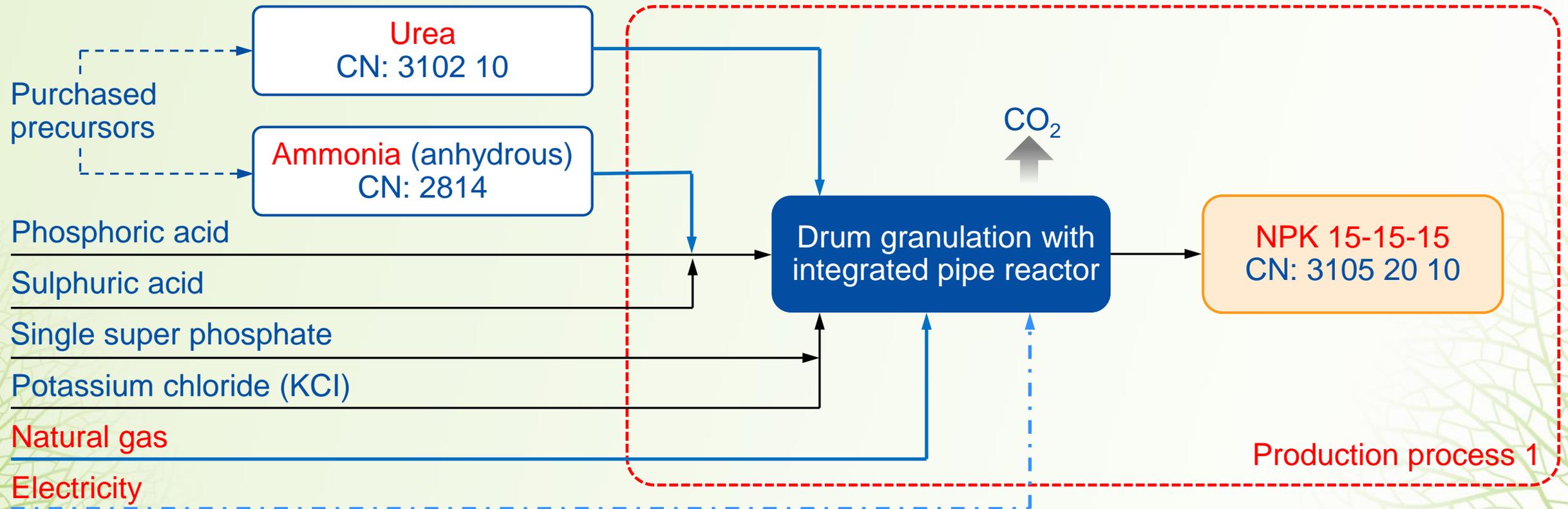


**For complex goods using precursors as input (Steps 4 and 5):**



# Worked fertilisers example (1/3)

Mixed fertilisers example: System boundaries, inputs, outputs and emissions



# Worked fertilisers example (2/3)

## Installation's direct and indirect emission intensity

<b>Direct emissions</b>	<b>Consumption (t)</b>	<b>Emissions (t CO<sub>2</sub>)</b>
Natural gas (NCV = 48 GJ/t, EF = 56,1 t CO <sub>2</sub> /TJ)	668	1 800
<b>Indirect emissions</b>	<b>Consumption (MWh)</b>	<b>Emissions (t CO<sub>2</sub>)</b>
Electricity (EF = 0,833 t CO <sub>2</sub> /MWh)	720	600
<b>Activity level</b>	<b>Production (t)</b>	
NPK fertiliser (15-15-15)	100 000	
<b>Emission intensity</b>	<b>Direct emission intensity (t CO<sub>2</sub>/t)</b>	<b>Indirect emission intensity (t CO<sub>2</sub>/t)</b>
<b>Emission intensity</b>	<b>0,018</b>	<b>0,006</b>

# Worked fertilisers example (3/3)

Example calculation of total direct and indirect specific embedded emissions for NPK mixed fertiliser

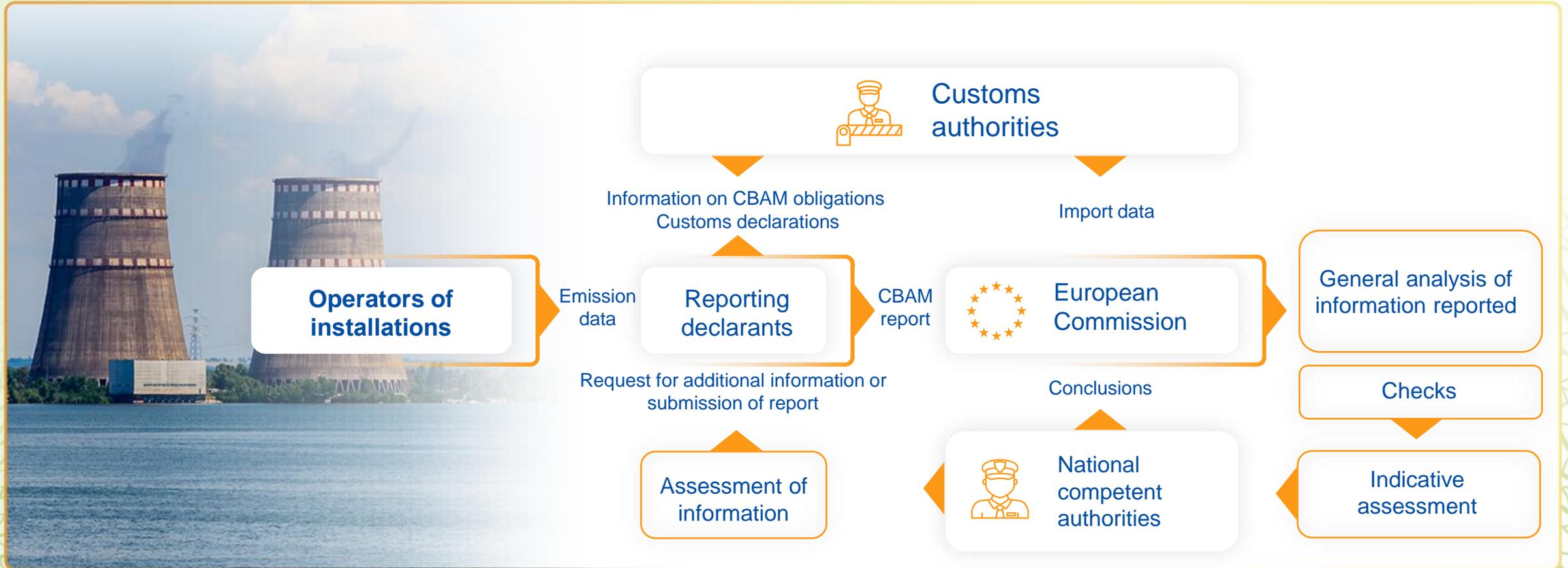
Inputs	Input mass (kg / t)	Precursor embedded emissions (t CO <sub>2</sub> /t)		Embedded emissions (t CO <sub>2</sub> /t)	
		direct	indirect	direct	indirect
Urea	160	0,719	0,178	0,115	0,028
Ammonia	93	1,900	0,208	0,177	0,019
Phosphoric acid (40% P <sub>2</sub> O <sub>5</sub> )	300	NA	NA	NA	NA
Sulphuric acid (96 wt-%)	116	NA	NA	NA	NA
Single super phosphate (17% P <sub>2</sub> O <sub>5</sub> )	200	NA	NA	NA	NA
Potassium chloride (KCl)	251	NA	NA	NA	NA
Energy needed for granulation	NA	NA	NA	0,018	0,006
<b>Total SEE for mixed fertiliser product NPK 15-15-15 (N-P<sub>2</sub>O<sub>5</sub>-K<sub>2</sub>O)</b>				<b>0,310</b>	<b>0,054</b>

# Carbon Border Adjustment Mechanism

## **3** Overview of CBAM actors & reporting declarants



# Overview of the actors in CBAM



# Who are the reporting declarants?

## Rules for Representatives



No representation by others -  
Own import



**Direct** customs representative  
(Status: Customs Declarant)



**Indirect** customs representative  
(Status: Importer)

Importer is the  
reporting declarant

Importer or indirect  
customs representative  
may be the reporting  
declarant

**Subject to  
reporting  
obligations**

# Steps to comply with the CBAM reporting obligations

**Step 1:** Define the scope of goods concerned

**Step 2:** Determine the reporting period to use

**Step 3:** Identify all the parameters you need to report

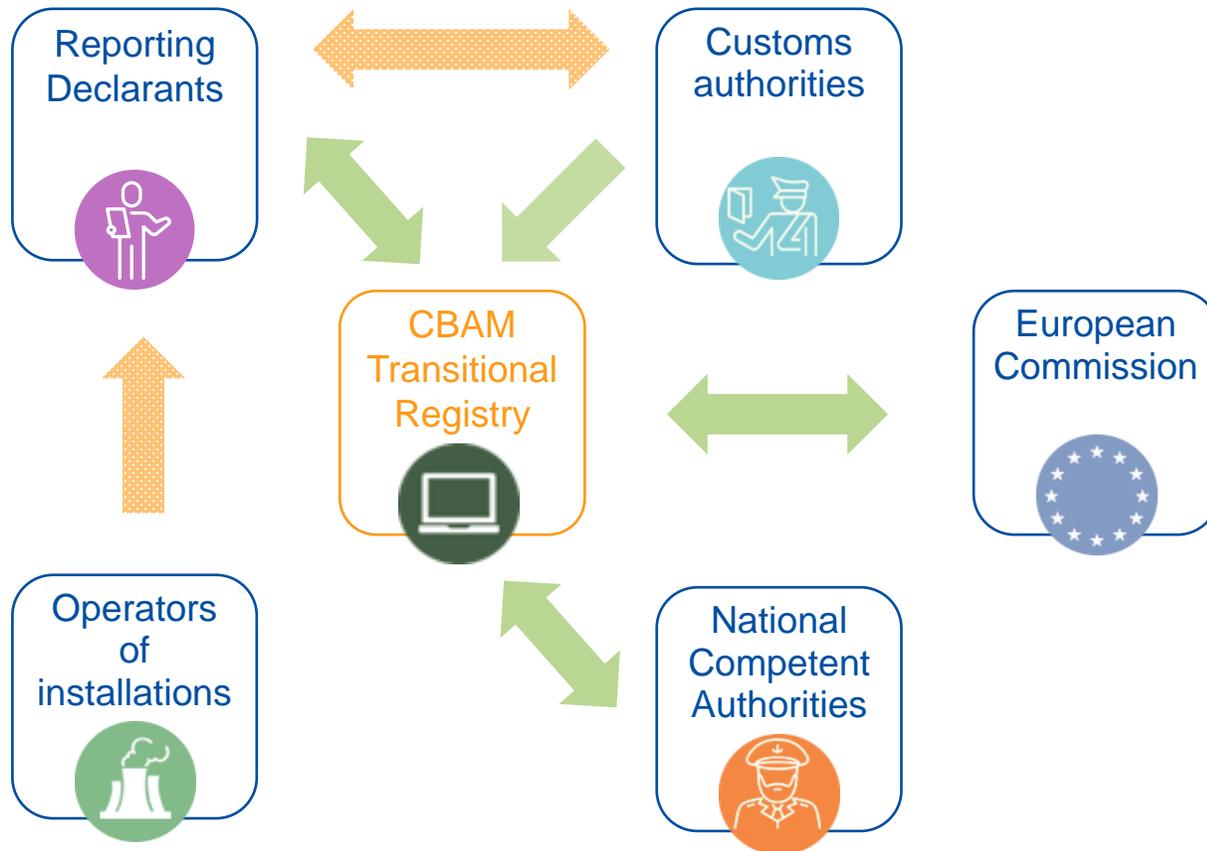
**Step 4:** Collect data on carbon price due in jurisdiction if any

# Carbon Border Adjustment Mechanism

## **4** Submitting CBAM reports



# Reporting in the CBAM Transitional Registry

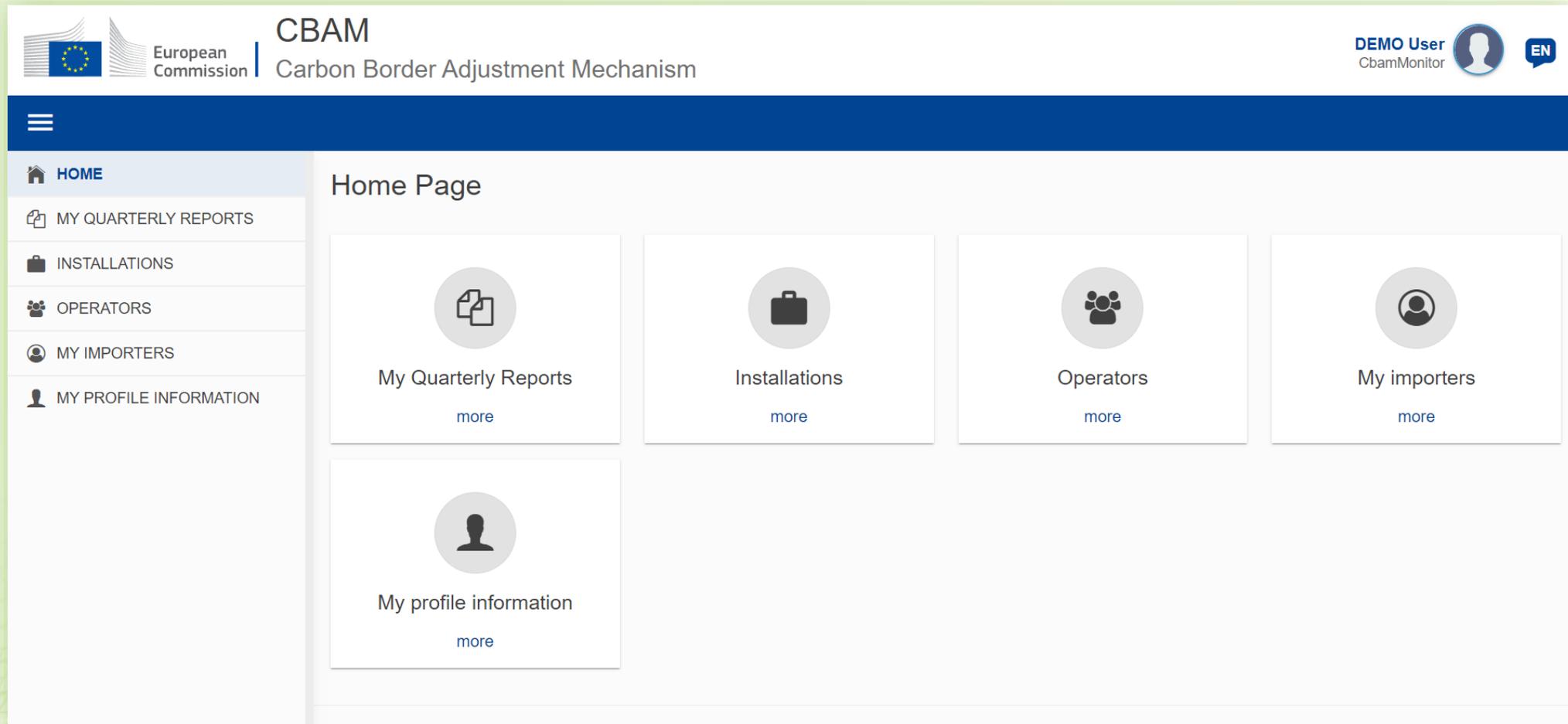


## Key highlights

- Single platform to create synergies
- Tool to perform CBAM-related tasks
- Secured platform to ensure confidentiality of information



# The CBAM Transitional Registry



The screenshot displays the user interface for the CBAM Transitional Registry. At the top left, the European Commission logo is visible. The main header area contains the text "CBAM Carbon Border Adjustment Mechanism". On the top right, the user is identified as "DEMO User CbamMonitor" with a profile icon and a language selector set to "EN". A dark blue navigation bar with a hamburger menu icon is positioned below the header. A light grey sidebar on the left lists the following menu items: HOME, MY QUARTERLY REPORTS, INSTALLATIONS, OPERATORS, MY IMPORTERS, and MY PROFILE INFORMATION. The main content area, titled "Home Page", features five interactive cards. Each card consists of a circular icon, a title, and a "more" link. The cards are: "My Quarterly Reports" (document icon), "Installations" (briefcase icon), "Operators" (group of people icon), "My importers" (person icon), and "My profile information" (person silhouette icon).

# Timeline for reporting declarants

REPORTING PERIOD	SUBMISSION DUE BY	MODIFICATION POSSIBLE UNTIL*
2023: October – December	2024: January 31	2024: July 31
2024: January – March	2024: April 30	2024: July 31
2024: April – June	2024: July 31	2024: August 30
2024: July – September	2024: October 31	2024: November 30
2024: October – December	2025: January 31	2025: February 28
2025: January – March	2025: April 30	2025: May 31
2025: April – June	2025: July 31	2025: August 31
2025: July – September	2025: October 31	2025: November 30
2025: October – December	2026: January 31	2026: February 28

*\*After the modification deadline, reporting declarants may request reopening of the file before the national competent authority for eventual corrections.*

# Where to find further information on CBAM?

Visit the **CBAM webpage regularly – our one-stop shop**

[https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism\\_en](https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism_en)

- 2 guidance documents
- Communication template between importers and operators
- Registration to dedicated webinars
- Link to our E-learning materials through the [Customs and Tax EU Learning portal](#)
- Q&A and factsheet
- Soon: link to the recording of these webinars

# The Carbon Border Adjustment Mechanism - Fertilisers Sector

**Thank you!**