## Industry data reporting Preparation of reporting 2020 data

**EEA:** Federico Antognazza, Juan Calero

#### ETC/ATNI:

Jachym Brzezina, Lucy Garland, Christophe Lescot, Laure Malherbe, Laurence Opie, Torleif Weydahl, Holly Zhang



#### **Agenda**

- 1. Improved automatic QA/QC
- 2. Reporting of permit conditions
- 3. Additional support to QA/QC submissions
- 4. Feedback on the new European Industrial Emissions Portal
- 5. Feedback on the mapping exercise
- 6. Feedback on post submission checks
- 7. Additional issues/doubts that Member States may be facing



#### Improved automatic QA/QC

New blockers added aiming at improving the quality of the data reported under both EU Registry and E-PRTR/LCP



#### Improved automatic QA/QC

#### **EU REGISTRY**

- C11.3 [totalRatedThermalInput]
  - is less than 50MW: blocker
  - is larger than 8500MW: warning

- C11.5 [TotalNominalCapacityAnyWasteType]
  - is greater than 300 t/h: blocker
  - is between 100 and 300: updated warning message



#### Improved automatic QA/QC

#### **E-PRTR/LCP**

- C7.1 [numberOfOperatingHours]
  - blocker if reported hours greater than the maximum hours within a year (leap years are considered)
- C3.6 update
  - [buildingNumber] is removed from the check
- C16.8 new
  - a count of the distinct namespace for both FacilityReport and InstallationPartReport



#### **Reporting of Permit conditions**

 Issuing a permit might be an action which happens following a country specific procedure

 The way information about a permit is collected might vary from country to country

 Some logic coherence and consistency within the reporting should be ensured for the benefit of the whole dataset



#### Reporting of Permit conditions – Reporting Elements

**Dates** 

DoG

Date of Granting

DoLU

Date of Last Update

**Booleans** 

PG

Permit Granted

PR

Permit Reconsidered

PU

Permit Updated

#### **Status of installation**

- Functional
- Disused
- Decommissioned
- notRegulated



#### Reporting of Permit conditions – General approach

 Reported data should reflect the status of the entities within the reporting year

The data should be reported according to the proposed logic in MfR

This logic is not always explicitly specified within the legislation



#### 3.11c) if PG always report DoG

#### 3.11d+e) 1996 =< DoG =< Reporting year

Reporting year (RY)	Date of Granting	Date of Last Update	Permit Granted	Permit Updated	Permit Reconsidered	Installation status
2017	DoG		PG			Functional
2018	DoG		PG			Functional
2019	DoG		PG			Functional
2020						
2021						

## 2.1 c) DoG should be static between reporting years2.1 d) Once PG is True, PG should remain True unless not functional

Reporting year (RY)	Date of Granting	Date of Last Update	Permit Granted	Permit Updated	Permit Re- considered	Installation status
2017	DoG		PG			Functional
2018	DoG		PG			Functional
2019	DoG		PG			Functional
2020	DoG		PG			Functional
2021	DoG		PG			Disused /decommissioned / notRegulated

# 3.10 a) When a permit is reconsidered (PR) it should also be granted (PG) 3.10 b) When a permit is updated (PU) it should be reconsidered and granted (PR & PG)

Reporting year (RY)	Date of Granting	Date of Last Update	Permit Granted	Permit Updated	Permit Re- considered	Installation status
2017	DoG		PG			Functional
2018	DoG	DoLU <sub>2018</sub>	PG	PU _	PR	Functional
2019	DoG		PG			Functional
2020	DoG		PG		PR	Functional
2021	DoG		PG			Disused /decommissioned/ notRegulated

## 3.11 a) If a permit is updated (PU), date of last update (DoLU) should be given and be a date within the reporting year

Reporting year (RY)	Date of Granting	Date of Last Update	Permit Granted	Permit Updated	Permit Reconsidere d	Installation status
2017	DoG		PG			Functional
2018	DoG	DoLU <sub>2018</sub>	PG	PU	PR	Functional
2019	DoG		PG			Functional
2020	DoG		PG		PR	Functional
2021	DoG		PG			Disused /decommissioned / notRegulated



### 3.11b) If the permit is not updated, DoLU is optional, but if given, it should be at date in a year prior to the reporting year

Reporting year (RY)	Date of Granting	Date of Last Update	Permit Granted	Permit Updated	Permit Re- considered	Installation status
2017	DoG		PG			Functional
2018	DoG	DoLU <sub>2018</sub>	PG	PU	PR	Functional
2019	DoG	DoLU <sub>2018</sub>	PG			Functional
2020	DoG	DoLU <sub>2018</sub>	PG		PR	Functional
2021	DoG	DoLU <sub>2021</sub>	PG	PU	PR	Functional

#### 2.1a) Date of Last Update (DoLU) should be in chronological order

#### 2.1b) Date of Last Update (DoLU) should be following the Date of Granting (DoG)

Reporting year (RY)	Date of Granting	Date of Last Update	Permit Granted	Permit Updated	Permit Reconsidere d	Installation status
2017	DoG		PG			Functional
2018	DoG	DoLU <sub>2018</sub>	PG	PU	PR	Functional
2019	DoG	DoL J <sub>2018</sub>	PG			Functional
2020	DoG	DoL J <sub>2018</sub>	PG		PR	Functional
2021	DoG	DoLU <sub>2021</sub>	PG	PU	PR	Functional

#### Additional support to QA/QC submission

Automatic QA/QC prevents submission of wrong data

Warning and info messages are useful but not enough to prevent the submission of some wrong information

Additional support to improve feedback to reporters and to EEA to accept submissions



#### Additional support to QA/QC submission - NEW

RELEASE ENVELOPE PROVISIONAL HARVESTING IN QAQC DB KPI VIEWER TECHNICAL ACCEPTANCE

TECHNICAL ACCEPTED



**REJECTION** 





#### Additional support to QA/QC submissions

#### **C1**

## MAGNITUDE OF DATASET

- C1.1 # of sites
- C1.2 # of facilities
- C1.3 # of installations
- C1.4 # of parts
- C1.5 # of facilities (EPRTR/LCP)
- C1.5 # of parts (EPRTR/LCP)

#### **C2**

#### COHERENCE OF ADMINISTRATIVE FIELDS

- C2.1: Number of facilities at [EPRTRAnnexIMainActivity] level
- C2.2: Number of installations at [IEDAnnexIMainActivity] level
- C2.3: Number of permit granted for Installations

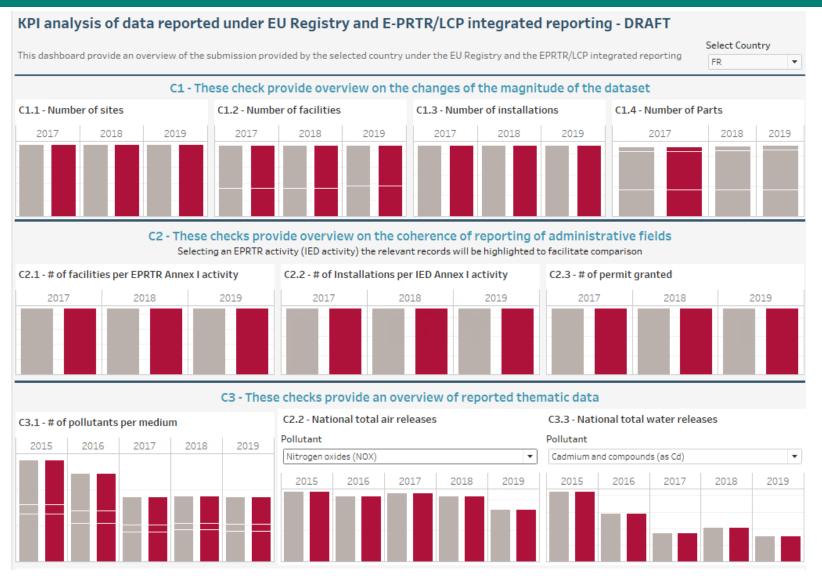


#### Additional support to QA/QC submissions

# C3 COHERENCE OF THEMATIC REPORTING

- C3.1: Number of releases reported per pollutant
- C3.2: **National Total emissions** of Main **Air Pollutant Releases**(include the detail of FacilityInspireID)
- C3.3: **National Total emissions** of Main **Water Pollutant Releases** (include the detail at [FacilityInspireID])
- C3.4: **National Total emissions** of Main **Pollutant Transfers**(include the detail at [FacilityInspireID])
- C3.5: **National Total Waste Transfer** (include the detail at [FacilityInspireID])
- C3.6: National Total of [totalEnergyInput] (with PlantInspireID and [fuelType] detail)
- C3.7: National Total of [emissionToAir] (with PlantInspireID detail)
- C3.8: [operatingHours] distribution with highlight of the AVG
- C3.9: [totalNominalCapacityAnyWaste] distribution for WI and co-WI
- C3.10: [totalRatedThermalInput] distribution for LCP
- C3.11: **Number** of **ProductionVolume** reported include the detail at EPRTRAnnexIMainActivity -- to be further improved

#### Additional support to QA/QC submissions





HOME

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#### Welcome to the Industrial emissions portal

The website presents information on the largest industrial complexes in Europe, releases and transfers of regulated substances to environmental media, waste transfers as well as more detailed data on energy input and emissions for large combustion plants in EU Member States, Iceland, Liechtenstein, Norway, Serbia, Switzerland and the United Kingdom.

If you are new to this topic, please make sure that you read our guide on what to find in the portal. You can explore the data online, or download datasets and work with them in a software of your own preference.





#### ANALYSE

Find the biggest polluters and compare data across countries



#### **DOWNLOAD**

Work with raw datasheets on your own choice of software



#### **ABOUT**

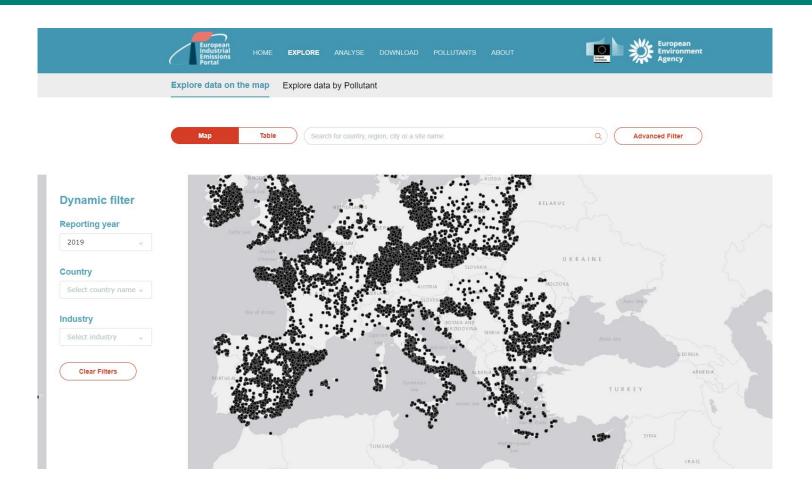
New to this topic? Understand the Industry portal

#### **Learn more about pollutants**

Pollutants are different in nature, and each of them may have different harmful potential in relation to the medium in which is released into. Select one pollutant to learn more about it.

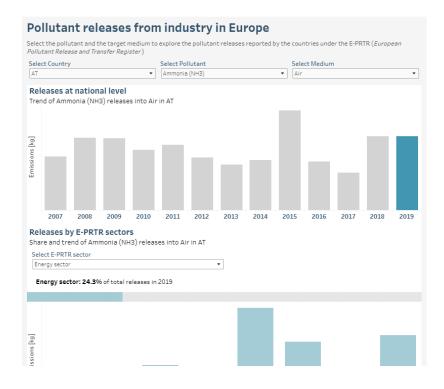
Carbon dioxide (CO2) Carbon monoxide (CO) Methane (CH4) Total nitrogen

Non-methane volatile organic compounds (NMVOC) Ammonia (NH3) Nitrous oxide (N2O)





#### Pollutant releases by country and sector





ndustry.eea.europa.eu/download

#### **Download**

This section collects the relevant datasets for download. It includes the database behind all the data presented in the website and a collection of other relevant databases which are handful while analysing and studying the industry domain such as the EU emission inventories (both air pollutants and greenhouse gases), the EU-ETS dataset and the Energy Community database.

Below this, links to the relevant guidance documents have also been included.

#### **Download datasets**

#### Industrial reporting dataset

This dataset contains the location and administrative data for the largest industrial complexes in Europe, releases and transfers of regulated substances to all media, waste transfers as well as more detailed data on energy input and emissions for large combustion plants

DOWNLOAD

#### Air pollutants emission inventory

Data compiled are annual national total and sectoral emissions of air pollutants and associated activity data reported by EEA member and cooperating countries under the LRTAP convention.

DOWNLOAD

#### **Energy community database**

This dataset contains the location and administrative data for Large Combustion Plants in the Energy Community (Energy Community Treaty 2006/500/EC) participating countries, as well as more detailed data on energy input and emissions to air.

DOWNLOAD

#### Greenhouse gas emission inventory

Data on greenhouse gas emissions and removals, sent by countries to UNFCCC and the EU Greenhouse Gas Monitoring Mechanism (EU Member States)

DOWNLOAD

#### **European Union Emission Trading System (EU-ETS)**

The EU Emissions Trading System (ETS) is a central instrument of the EU's policy to fight climate change and achieve cost-efficient reductions of greenhouse gas emissions

DOWNLOAD

#### **Download guidance documents**

Data are reported by individual facilities to the relevant competent authorities on an annual basis. The respective authorities in the countries compile and



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#### **Pollutant index**

This section provides a close-up picture to the various pollutants reported in the Portal, their description, main uses and information on the pollutant thresholds in Annex II of the E-PRTR Regulation (See our About section to find more information on what this Annex contains).

Hint: Select from the list of pollutants or start typing to see suggestions

#### Nitrogen oxides (NOx/NO2) General information Pollutant thresholds E-PRTR Pollutant No 18 IUPAC Name Nitrogen dioxide CAS Number 10102-44-0 Formula $NO_2$ Description Nitrogen dioxide is a reddish-brown gas with a strong odour, although its colour can only be seen at high concentrations. Main Uses Nitrogen dioxide is used in various chemical processes as an oxidising agent, including the production of nitric acid. Where do the releases originate? At low concentrations, nitrogen-containing species deposited on plants can act as nutrients.

Nitrogen oxides may contribute to acid deposition and also to eutrophication. Of the chemical species that comprise the NOx air pollutant, it is NO2 that is associated with adverse effects on health, as high concentrations cause inflammation of the airways. NOx also contributes to the formation of harmful particulate matter and ground level ozone in the atmosphere. Nitrogen dioxide can react with organic peroxy radicals (formed from the breakdown of volatile organic compounds (VOCs) in the air) to form PANs (peroxyacetyl nitrates), which can serve as a temporary reservoir for



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#### **About the Industrial Emission Portal**

The Industrial Emissions Portal covers over 60,000 industrial sites from 65 economic activities across Europe [1]. These activities are within the following sectors:

- Energy
- · Production and processing of metals
- Mineral industry
- · Chemical industry
- · Waste and waste water management
- Paper and wood production and processing
- · Intensive livestock prdocution and aquaculture
- · Animal and vegetable products from the food and beverage sector, and
- Other activities

The Portal shows the sites' location and administrative data; as well as their releases and transfers of regulated substances to air, water, and land; and waste transfers. For large combustion plants (LCPs), there is more detailed data on energy input and emissions.

Data can be browsed in our map of sites, here. Full datasets and guidance documents can be downloaded here. Various data analysis tools and visualisations can be found here. Finally, the Portal also includes a glossary .

The information contained in the Portal is reported annually and requested under the Industrial Emissions Directive (IED), via the EU Registry on Industrial Sites (EU Registry) and the European Pollutant Release and Transfer Register (E-PRTR).

#### **IED**

The IED (Directive 2010/75/EU) aims at achieving a high level of protection of human health and the environment taken as a whole by reducing harmful industrial emissions across the EU, in particular through better application of Best Available Techniques (BAT).

Around 50,000 installations undertaking the industrial activities listed in Annex I of the IED are required to operate in accordance with a permit (granted by the authorities in the Member States).

This permit should contain conditions set in accordance with the principles and provisions of the IED. Visit the Commission's dedicated website for more details on the legislation as well as information and data on the IED implementation, transposition and evaluation.

#### **EU Registry**

The EU Registry represents an annual reporting stream that facilitates the annual reporting to the EEA of administrative and identification data pertaining to

#### Feedback on mapping excercise

- Status of mapping was reported as part of the 2017 post-submission findings logs in April 2021 (Checks C1.1\_EPRTR and C.1.1\_LCP).
- About 20 countries have mapping related findings.
- About 1000 previous E-PRTR facilities are not reported in the EU-Registry. In this number the ones that have been confirmed by the reporters not to be transferred are not counted. (Note: This is status by April 15th, resubmissions and responses are not taken into account.)

#### Feedback on mapping excercise

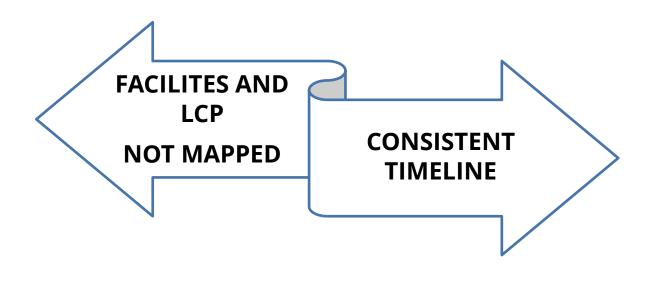
About 300 previous LCPs are not reported in the EU-Registry.

 We encourage now to make sure that findings related to transition from E-PRTR/LCP to EU-Registry are either verified or corrected (checks C1.#)

 The historical E-PRTR and LCP data is locked, but the EU-Registry is open to re-submissions

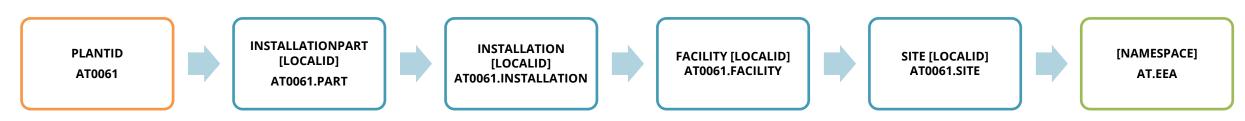


#### **Mapping and Industrial Dataset**

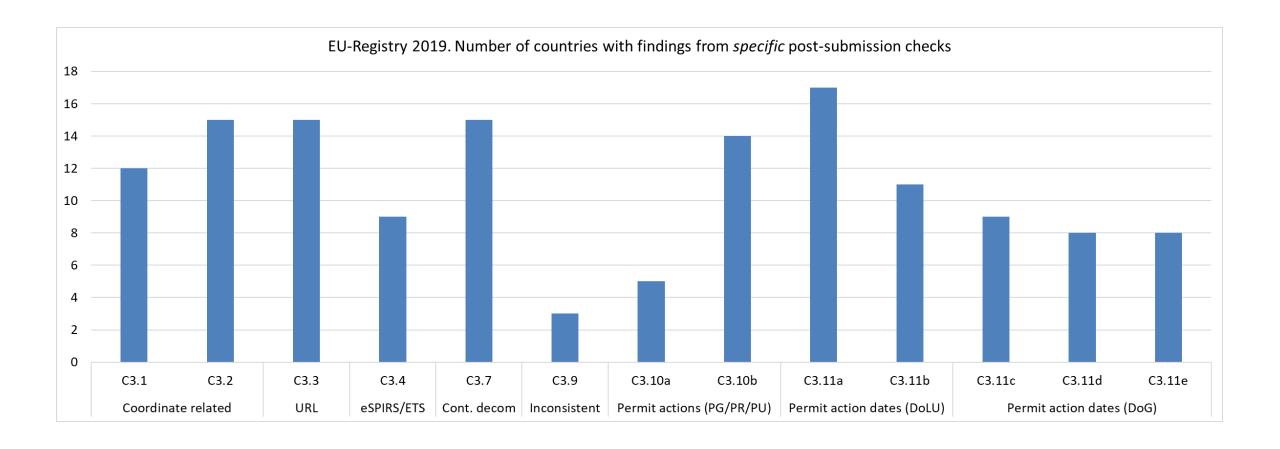


- Need to import those entities in the new system
- Definition of "dummy" entities to import Facilities and LCP in the new reporting format
- PlantID and FacilityID used as a key to generate [localID]
- Creation of a general [namespace] as "CC.EEA"
- Import of relevant information from EPRTR and LCP databases

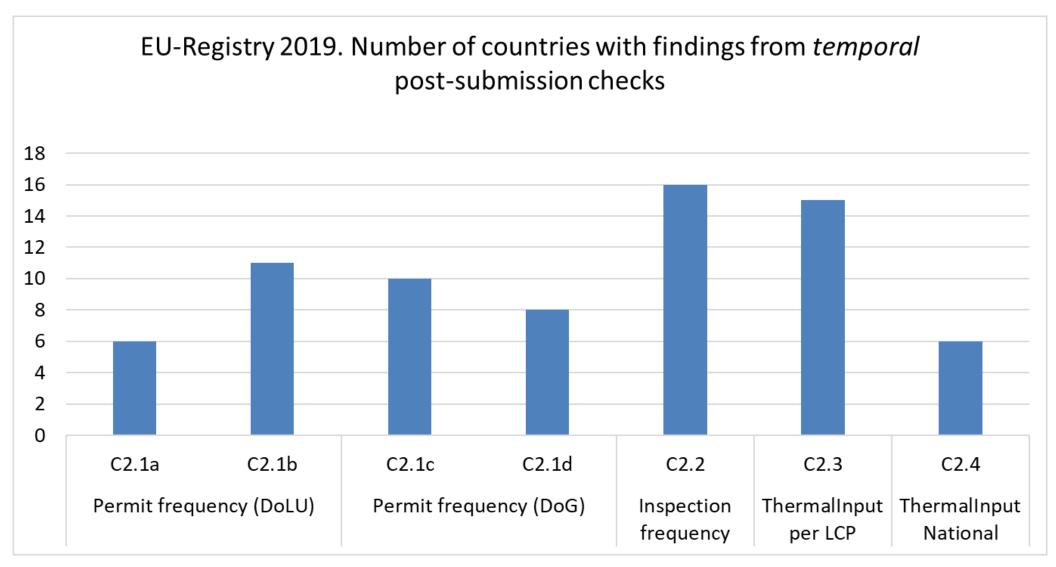
#### **EXAMPLE**



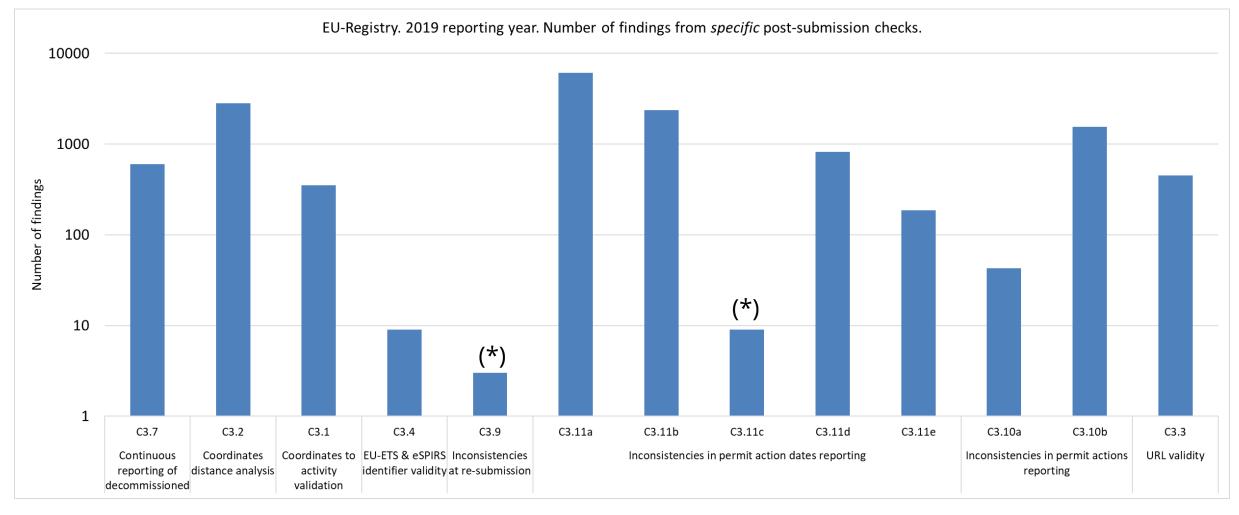
#### Feedback on post-Submission checks (1)



#### Feedback on post-Submission checks (2)



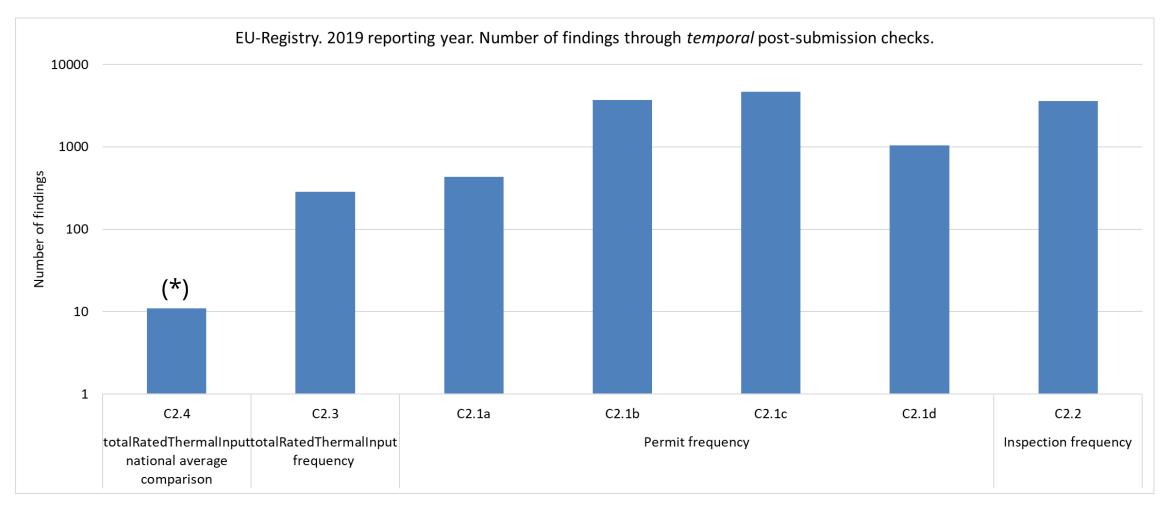
#### Feedback on postSubmission checks (1)



(\*) max. one per country



#### Feedback on postSubmission checks (2)



(\*) max. one per year and country



# Many thanks for your attention, feedback and continuous support

#### **Guidance documents:**

- EU Registry: <a href="https://cdr.eionet.europa.eu/help/euregistry">https://cdr.eionet.europa.eu/help/euregistry</a>
- E-PRTR/LCP: <a href="https://cdr.eionet.europa.eu/help/eprtrlcp">https://cdr.eionet.europa.eu/help/eprtrlcp</a>
- Helpdesk: <u>industry.helpdesk@eea.europa.eu</u>

