



EUROPEAN COMMISSION  
DIRECTORATE-GENERAL FOR ENERGY  
DIRECTORATE-GENERAL FOR CLIMATE ACTION

# **Reporting Guidelines**

## **Dataflow 9 to 14: Integrated Policies and Measures**

**under Regulation (EU) 2018/1999 on Governance of the Energy Union  
and Climate Action  
Implementing Regulation 2020/1208  
Annex 24  
&  
Implementing Regulation 2022/2299  
Annex 9 to 14**

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# 1. INTRODUCTION

## 1.1. This document

From 2023, reporting on ‘Integrated policies and measures’ is part of the national energy and climate progress reports (Article 17) under Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action. This further integrates reporting requirements already reported according to Article 18(1)(a) of Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action.

This document provides both technical and thematic guidance for the relevant reporting obligation and the use of the e-platform. The purpose of the guidelines is to support Member States in reporting this information by outlining:

- How to utilise the reporting platform
- Background information and examples for the information required,
  - *Technical guidelines* – facilitating how to report.
  - *Thematic guidelines* – facilitating what to report.
- Information on finalising reporting,
- The quality checks carried out.

Ultimately, the goal is to improve the quality of the information reported by Member States and disseminated through the e-platform, by making it more timely, transparent, complete, consistent, comparable, coherent and accurate.

These reporting guidelines have been prepared by the European Commission, the EEA and its ETC/CME to provide guidance and support to the Member States for this transition to the new reporting obligation and reporting tool.

Some additional and background information is annexed to this document:

- Appendix 1: Types of measures,
- Appendix 2: List of Union policies,
- Appendix 3: List of relevant provisions,
- Appendix 4: List of references Ex-ante,
- Appendix 5: Reporting roles.

## 1.2. Legal background

According to Article 17(1) of the [Regulation \(EU\) 2018/1999](#) (Governance Regulation), by 15 March 2023, and every two years thereafter, each Member State shall report to the Commission on the status of implementation of its integrated national energy and climate plan (NECP) by means of an integrated national energy

and climate progress report (NECPR) covering all five dimensions of the Energy Union.

The recently adopted Commission [Implementing Regulation \(EU\) 2022/2299](#) ‘Laying down rules for the application of Regulation (EU) 2018/1999 of the European Parliament and of the Council as regards the structure, format, technical details and process for the integrated national energy and climate progress identifies all the reporting requirements within 23 Annexes.

### 1.3. Overall process of reporting

Each Member State shall submit their NECPR by **15 March 2023**, and every two years thereafter.

The NECPR will be submitted through the e-platform established by the Commission<sup>1</sup>. Different elements of the progress reporting will be submitted through one of the following systems: Reportnet 3 and ReportENER.

This reporting obligation will be reported in [Reportnet](#).

### 1.4. Pre-filling, post-filling, pre-loading

#### 1.4.1. The process for pre-filling, pre-loading and post-filling of data

The following tables of this dataflow has the possibility to include (partially) data that is pre-loaded.

Table	Type of filling	Source(s) of data
Annex 9, table 1	Pre-loading	Greenhouse gas policies and measures reported previously under Article 18 of the Governance Regulation (information previously reported according to 3 tables outlined in the Annex XXIV of the EU 2020/1208).

In the paragraphs below, the process for integrating this data in the progress report is described.

---

<sup>1</sup> Article 28 of the Regulation (EU)2018/1999 on the Governance of the Energy Union and the Climate change. E-platform available at: [Reporting system for EU countries | European Commission \(europa.eu\)](#).

#### 1.4.1.1. Policies and measures reported previously (Article 18 of the Governance Regulation)

Pursuant to Article 18(1)(a) of the Governance Regulation, greenhouse gas policies and measures or groups of policies and measures, need to be reported by Member States 15 March 2021, and every two years thereafter, thus coinciding with the NECPRs.

Member States, which previously reported under Article 18(1)(a), will have the option to have all of their greenhouse gas policies and measures or groups of policies and measures reported during a previous reporting cycle pre-loaded into Reportnet.

However, it should be reminded that the reporting requirements for policies and measures or groups of policies and measures under Article 17 of the Governance Regulation are broader than those of previous reporting exercises, and Member States should thus review and complete the information for pre-loaded policies and measures.

### 1.5. Dynamic references to years

Many tables in the annexes to the Implementing Regulation make dynamic references to years, which depend on the year of reporting.

The table below summarizes the dynamic references used in the annexes, and the years they refer to in the first two reporting exercises in 2023 and 2025.

Note: in the e-platform, the years themselves, rather than the dynamic references will be displayed.

**For the first reporting cycle in 2023, X-3 (i.e., 2020) reporting is not required but can be included by MS, where available and applicable.**

Dynamic reference	Respective year in first reporting (2023)	Respective year in second reporting (2025)
X	2023	2025
X-1	2022	2024
X-2	2021	2023
X-3	2020	2022
t	2025	2030
t+5	2030	2035
t+10	2035	2040
t+15	2040	2045
t+20	2045	2050
t+25	2050	2055

## 2. REPORTNET 3

### 2.1. Introduction

The Governance Regulation specifies in Article 28 that the e-platform should be used for reporting on all dimensions of the Energy Union by Member States and the Commission, assisted by the European Environment Agency (EEA).

The e-platform consists of different elements, notably “ReportNet 3: and “ReportENER”. For the dataflow(s) described in this document, ReportNet 3 is used.

Reportnet 3 (<https://reportnet.europa.eu/>) is the next generation platform for reporting environmental data to the EEA and also host several reporting tasks for the European Commission. Reportnet 3 is a centralized e-Reporting platform, aiming at simplifying and streamlining the data flow steps across all environmental domains. The system acts as a one-stop-shop for all involved stakeholders.



### 2.2. Logging in

User authentication is carried out on the **EU login** platform, hence you need to have an EU login account before you can be authenticated for Reportnet 3 access.

**How to log in.** In this guide you will find the steps for the following:

- A. Regular login process: Where you already have an EU account and you have logged on to Reportnet 3 before,
- B. Creating an EU login account: Where you do not have an EU account,
- C. Logging on for the first time: Where you have an EU account but you have not logged on to Reportnet 3 before.

For a visual guide, please check [this document](#).

#### A. Regular login to Reportnet 3.0

1. Navigate to Reportnet 3 and click on the “Login” button at the top right,
2. You will be redirected to authenticate using EU login,
3. With a successful login you will be redirected back to Reportnet 3,
4. You will see the dataflows you have authorisation to access.

## B. Creating an EU login

EU Login (<https://webgate.ec.europa.eu/cas>) is the entry gate to sign in to the Reportnet 3 platform as well as different European Commission services and/or other systems. EU Login verifies your identity and allows recovering your personal settings, history and access rights in a secure way.

1. If you do not have EU account with the entered email, you will see the message 'User not found' and you will need to create an account,
2. Click on the "Create an account" link on the EU Login sign-in page,
3. Fill in the provided form with your personal details,
4. If the form is correctly filled in, an e-mail is sent to the address you provided in order to verify that you have access to it. If you cannot find the e-mail, check your spam or junk folder,
5. Click the link in the e-mail or copy/paste it in the address bar of your browser,
6. Select and confirm a password and click on "Submit",
7. You now have an EU Login account and can proceed with the login for Reportnet 3 from the home page,
8. As this is the first time you will login in to the Reportnet 3 platform, there are some additional steps to follow (next section) after you have been authenticated.

## C. First time login to Reportnet 3.0

1. If this is your first login to Reportnet 3, after you have been authenticated by EU login, you will be asked to fill a form. Username should just be your email address,
2. You are now logged in. However you will not see any dataflows the first time you log in. You will be sent an email when the reporting is open for your credentials.

### If you need support please contact the EEA:

- Governance Regulation helpdesk: [govreg@eea.europa.eu](mailto:govreg@eea.europa.eu)
- Reportnet helpdesk: [helpdesk@reportnet.europa.eu](mailto:helpdesk@reportnet.europa.eu)

## 2.3. Dataflow overview

Once you are successfully logged-in to Reportnet 3 you will see the **dataflows assigned to you**. If this is your only reporting obligation in Reportnet, you will only see this obligation. If you are a reporter on multiple obligations they should all appear here.

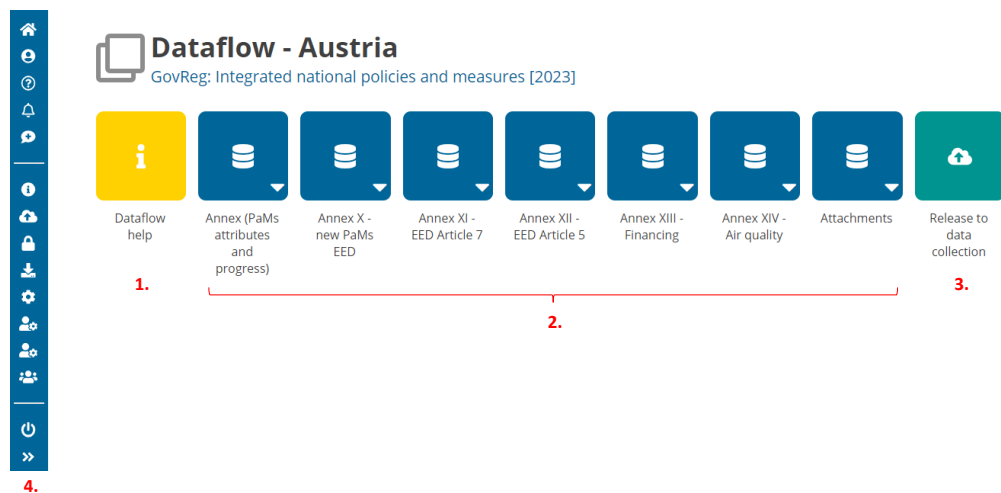
For historic dataflows, please note that these will still be visible in Reportnet. All dataflows will be labelled with the relevant reporting year (i.e., the first submission will be 2023). Furthermore all dataflows in grey are closed.



Once selecting the relevant dataflow, you will see the **reporting window** for the dataflow “Integrated national policies and measures”.

The reporting window is made up of several key elements:

1. Dataflow help,
2. Data schema(s),
3. Data submission,
4. Navigation bar.



**Dataflow help** is presented on the far left (1; in yellow), and provides relevant helpful documentation, including these guidelines.

Inside dataflow help, useful documentation will be made available here, including:

- Supporting documents:
  - These guidelines,
  - Specific excel import guidance documentation.
- Web links:
  - Video trainings (technical and thematic) via YouTube,
  - Legislation and implementing regulations,

- Links to relevant materials used within the dataflow,
- Other possible guidance of relevance (such as guidance document for ex-post evaluation or methodologies for cost-benefit analysis).

## **Dataflow help** NECPR Annex XVII EE 21112022 V2

Supporting documents
Web links
Dataset schemas

 Upload

Title 
Import_Template_Annex XVII.xlsx



**Data schemas** (in blue) are the location where data can be reported. Please see Sections 4 to 9 for detailed guidance on how to report. Different categories exist depending on the dataflow. For this dataflow the relevant data schemas include:

- **Data:** where reported data is provided,
- **Attachments:** where additional information (technical report and other supporting documentation) can be attached,
- **Reference data:** where fixed and read only data is stored.



Finalisation features (in green; 3) are located on the right in the reporting window. For more information please see Section 10. These include:

- **Release to data collection:** to submit your final reported information.
- **Confirmation receipt:** is available only after the data is submitted.

The blue navigation bar on the left (4) provides many key pieces of information for reporters. Important icons include:



**1. Help:** which explains the main elements at each level.



**2. Notifications:** stores and monitors what happens in the dataflow, downloaded files are also available here.



If the system doesn't react click refresh to reload page

 Refresh

## 2.4. Organizing the reporting network

Lead reporters are officially nominated and are the ones that can submit data. They are also responsible for adding and managing supporting reporters (see guidance below).

Supporting reporters can upload and modify data in the system but cannot add other reporters or officially submit data.

For more information on the roles in the reporting process, please see Appendix 5 of this document.

### Roles in Reportnet 3



#### Lead Reporter(s)

Up to two per country per reporting obligation.

Formally nominated.

Able to submit final data or reports.

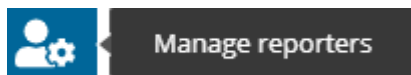


#### Supporting Reporter(s)

Unlimited number per country per reporting obligation.

Managed by the Lead Reporter(s).

A lead reporter can nominate as many supporting reporters as is necessary. This is achieved by selecting the **manage reporters** icon in the blue bar. This button is only available in the overview of all of the data schemas, not within each Annex webform.



Lead reporters are responsible for maintaining the reporting network.

## 2.5. Technical details of reporting

This section provides the technical guidance required for reporting in Reportnet 3. This includes:

- Use of webforms,
- Use of import/export templates



To ensure that Member States can report as easily as possible, the recommended workflow for this dataflow is as follows.

1. Pre-load GHG PaMs
2. Complete the webform, updating previous PaMs where relevant (including the additional fields compared to previous reporting) and adding new PaMs
3. Validate data (see Section 10),
4. Download export file (Excel or PDF) for own use if desired
5. Submit data when final data is ready.



**Video trainings on the technical details of reporting are available through the EEA's YouTube channel: [Governance Regulation Reporting Playlist](#)**

### 2.5.1. Use of webform

The Integrated PaMs dataflow is more intricate than the previous GHG PaMs dataflow. The information on GHG PaMs ('decarbonisation: GHG emissions and removals', Implementing Regulation 2020/1208) is now integrated with reporting tables on 'decarbonisation: renewable energy', 'energy efficiency', 'progress towards financing' and 'impacts on air quality and emissions to air' (Implementing Regulation 2022/2299). The webform is therefore split into the varying data schemas:

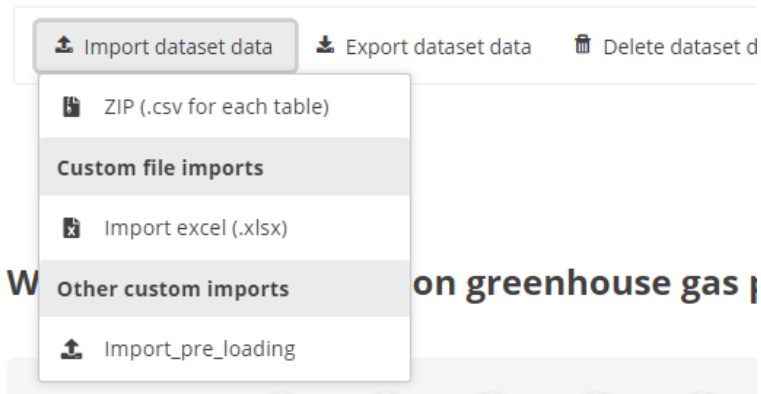
1. PaMs characteristics and progress (Implementing Regulation 2020/1208, Annex XXIV & Implementing Regulation 2022/2299, Annex IX),
2. New PaMs from the EED (Implementing Regulation 2022/2299, Annex X),
3. PaMs related to Article 7 of the EED (Implementing Regulation 2022/2299, Annex XI),
4. PaMs related to Article 5 of the EED (Implementing Regulation 2022/2299, Annex XII),
5. Information on the financing of PaMs (Implementing Regulation 2022/2299, Annex XIII), and
6. PaMs effects on air quality (Implementing Regulation 2022/2299, Annex XIV).

#### 2.5.1.1. Webform: Pre-loading

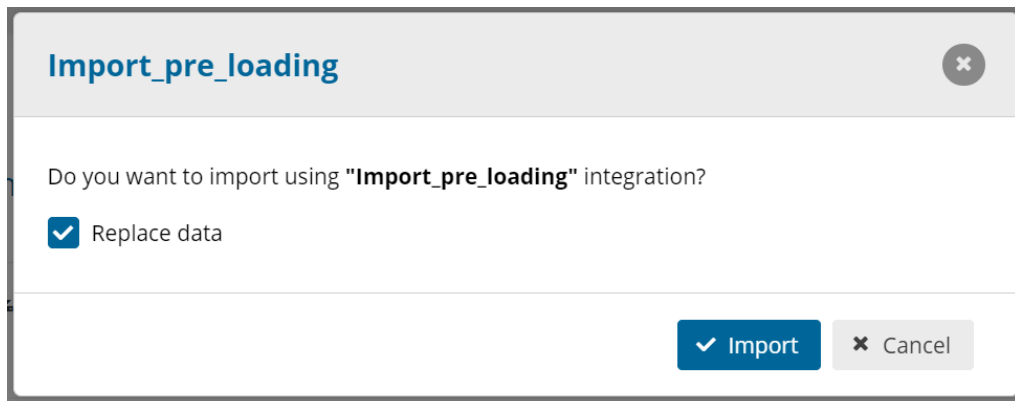
It is possible to automatically import GHG PaMs submitted under the previous reporting cycle. **It is recommended to do so as the first step of filling in the webform.** This is achieved via the "pre-loading" feature in Reportnet. To achieve this, click on 'Import dataset data' and select 'Pre-loading'. This will import the quality checked PaMs from the previous reporting cycle into this dataflow. This is only available in the Annex IX dataflow.

# Annex IX - PaMs progress

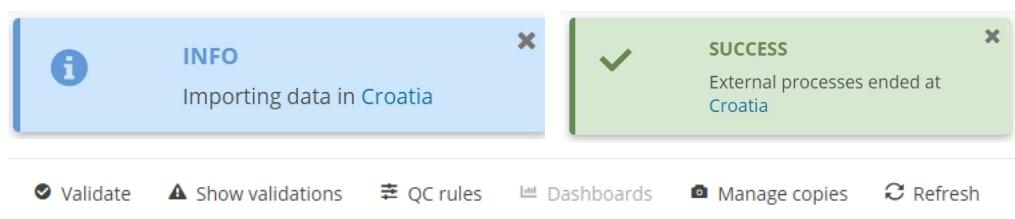
Integrated national policies and measures [MS 1



Once selected it will request a confirmation on whether you want to import previous data. It is advised to select 'replace data', this will ensure only the updated information from the previous reporting cycle is included.



Once selected, this will be followed by a blue notification 'info' box in the right corner of the window. This can take a few minutes to process. Once successful a green notification 'success' box will appear. Press the refresh button to see the pre-loaded PaMs.



You can start reviewing and modifying the existing information by either clicking on a PaM (1) or a Table you wish to modify in the overview table (2).

1.

12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48

49 50 51 52 53 54 55 56 58 59 60 61 62 63 64 65 66 67

Single: 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85

86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103

104 105 106 107 108 109 110 111 112 113 114 115 117 118 119 121 122

123 124

+ Add single

---

Group: 1 2 3 4 5 6 7 8 9 10 11 116 120

+ Add group

2. Actions	Validations	PaM Number	PaM number in NECP	Name	Name in national language	Single or group	Key characteristics	GHG: Ex-ante and ex-post	GHG: Costs and benefits	Renewable energy: Ex-ante and ex-post	Renewable energy: Costs and benefits	Energy efficiency: Ex-ante and ex-post	Energy efficiency: Costs and benefits
		1		Measures to improve the energy mix	Medidas orientadas a mejorar el mix energético	Group							
		2		Energy measures in the industrial sector	Medidas energéticas en el sector industrial	Group							

It is recommended to review the pre-loaded information. Moreover, if GHG PaMs previously reported also relate to other dimensions this is the chance to provide further information in this regard. Please note the **pre-loading only includes previously reported GHG PaMs**. Further guidelines on what should be reported is provided in Sections 4 to 9.

### 2.5.1.2. Webform: Adding reporting tables

When pre-loading PaMs, non-GHG dimensions are not automatically added to the webform. Therefore to be able to report on ‘decarbonisation: renewable energy’ or ‘energy efficiency’ tables (i.e., ex-ante/ex-post or costs and benefits) these tables must be added for the specific PaM. This can be done in the **PaM Overview**. Click on the button ‘create table’ for all instances where reporting is required.

Renewable energy: Ex-ante and ex-post	Renewable energy: Costs and benefits	Energy efficiency: Ex-ante and ex-post	Energy efficiency: Costs and benefits

Note that for new PaMs these tables will be automatically included.

### 2.5.1.3. Webform: Adding new PaMs

If you don’t want to use the previous submission for GHG PaMs, or require to add additional PaM(s) of any dimension(s), you can do so within the webform. Click ‘Add single’ (1) if you wish to add a new single PaM and ‘Add group’ (2) if you wish to add a new group PaM. New PaMs are added at the end of the list of single or grouped PaMs.

Single: 1 2 3 + Add single




Group: + Add group

Then it is possible to edit the relevant data either by selecting the PaM added (a) or editing by table (b).

a) Single: 3 4


Group:

b)

Actions	Validations	PaM Number	PaM number in NECP	Name	Name in national language	Single or group	Key characteristics
 		3				Single	 Edit table

Using either approach, you can return to the overview page by clicking on the 'Overview' button.

Overview

 The **attachments data schema** can be used to add an attachment to this dataflow, allowing you to clarify further details on the data provided. This is a useful tool for adding information not requested within the tables.

### 2.5.2. Use of import templates (webform)

**This is a functionality for a voluntary use.**

**To work successfully with the import functionality, one needs to understand the data model and the relations between tables so the data in the excel file is entered correctly.**



**There are supporting documents available in the Eionet portal and 'Dataflow help' section. The file zip file 'Integrated PaMs - Import data from Excel - supporting documentation' provides all the necessary background to work with it. Additional guidance is found on the [YouTube tutorials playlist](#).**

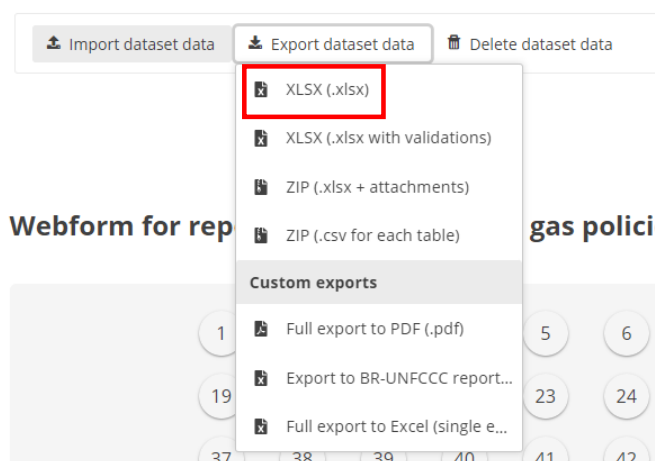
### 2.5.2.1. PaM data model

The PaM webform is flexible, it allows users to multiselect many different elements or rearrange policies. The data model behind the webform is complex. Almost infinite combinations of different reported elements and the relationships between them need to be captured. For example, the PaMs logical model where **a single PaM has**:

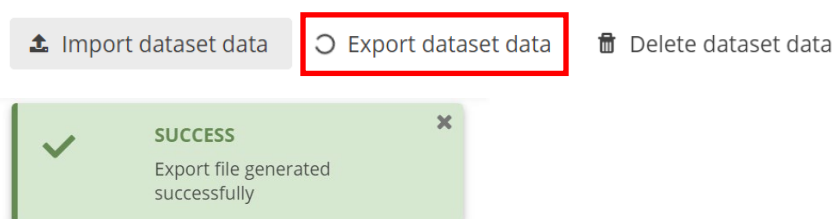
- At least one Sector
  - If a Sector is 'other' then one 'other' input
  - For each Sector at least one Objective
  - For each Sector if an Objective is 'other' then at least one 'other' listed
  - If a Sector is 'other' then the Objective is 'other' and at least one listed
- At least one Union Policy
  - If a Union Policy is 'other' then at least one 'other' listed – At least one 'Entities'
- Can have one or more Indicators (at least one if you have information) – Can have one or more References (at least one if have information)
- At least one 'References – Ex-ante Assessment'
- At least one 'References – Ex-post Assessment'
- At least one year of 'GHG Emissions'
- At least one 'References – Cost estimation' for projected costs
- At least one 'References – Cost estimation' for realised costs

### 2.5.2.2. Template – Excel file to be used

Despite the complex PaM data model there is a functionality that can be used to import PaM information from the excel file. The file to be used to import the data with must follow the structure of the file generated by export to XLSX – the first option in the screenshot below.



When you choose to export the XLSX file a loading circle will appear next to *Export dataset data* heading. A green success box will appear when the file is downloaded.



The structure establishes relationships between the sheets. Data is spread across many data worksheets. The way the file is structured follows the way the webform is structured. As such, **the template differs for each reporting Annex**, and needs to be exported from each data flow to be able to use them for import. The column headings are the name of fields in the data model, which may be in shorthand or in codes.

To support reporters we have prepared a help sheet. This is available via the zip file in ‘dataflow help’ of this dataflow. This zip. file contains:

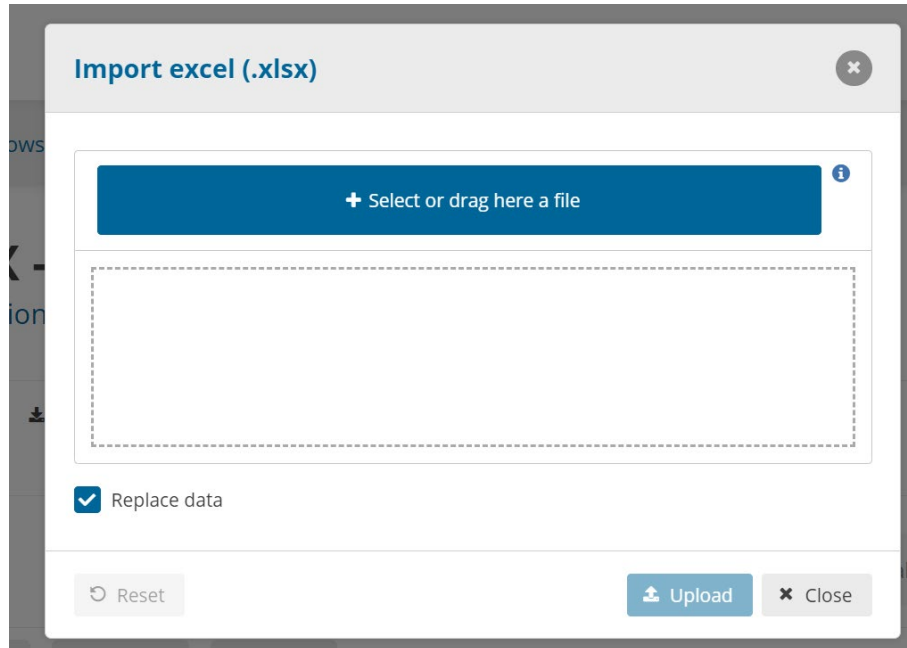
- **‘Integrated PaMs\_Import functionality\_excel import table with notes.xlsx.** This spreadsheet describes the relationship between the PaMs webform and the reporting tables where the data is stored for ‘Annex (key attributes and progress)’ (Annex IX of Implementing Regulation 2022/2299).
- **‘Integrated PaMs\_Import functionality\_presentation.pdf.** This presentation outline provides a broader description and overview of the data model.

In addition to this, please review the ‘[Importing PaMs \(excel\)](#)’ section of the video tutorial for PaMs reporting, found on YouTube.

### 2.5.2.3. Importing a file

To import the excel file, select **Import dataset data** and then **Import from file**.

You will be asked to select or drag your file to the pop-up. Note, if you are replacing the existing data, select **Replace data**. The import will always add new PaMs from the excel, **it does not update existing PaMs**.



It is **strongly recommended to check the data** in the webform after it has been imported using the Excel template. The Excel template follows the strict data model and if field names are changed or incompatible data types are used, or other values are used in pre-defined fields, errors in importing will occur.

#### 2.5.2.4. Import from different sources

It is possible to import information on PaMs coming from multiple excel files. However, it is recommended to merge all the data in one excel document and import this central file. This could **avoid possible risks of accidentally replacing information previously imported**.

Be aware that import from the excel will add new PaMs but it will not update existing PaMs.

### 3. THEMATIC GUIDELINES FOR REPORTING – INTRODUCTION TO INTEGRATED REPORTING ON POLICIES AND MEASURES

The integrated reporting on policies and measures introduced for the NECPRs will allow Member States to report policies and measures only once, regardless of the (one or more) dimensions of the Energy Union and Climate Action they affect, while enabling to report dimension specific information where required.

This reporting is fully integrated with reporting on policies and measures pursuant to Article 18(1)(a) of the Governance Regulation, using the same dataflow. The biennial reports submitted pursuant to Article 18 are considered as submissions for the purpose of the NECPR with regard to the area of greenhouse gas emissions.

For reporting under Article 18(1)(a), guidelines for reporting on greenhouse gas policies and measures have been prepared by the European Environment Agency (EEA) and the European Topic Centre on Climate Change Mitigation (ETC-CME). The 2021 guidelines are accessible online at:

The reporting guidelines in the present document reuse and build further on these guidelines, and take these into account for consistency on reporting on policies and measures.

Tables  PaMs	Annex IX, table 1	IR 2020/1208, Annex 24, table 1	IR 2020/1208, Annex 24, table 2	Annex IX, table 2 and 4	Annex IX, table 3 and 5	Annex X	Annex XI	Annex XII	Annex XIII	Annex XIV
	Decarbonisation - GHG	■	■	■						
Decarbonisation - RES	■			■	■					■
Energy efficiency	■					■				■
Energy Efficiency (new policies and measures referred to in Article 21, point	■					■	■			■



(b)(3) of the Governance Regulation)									
Energy Efficiency (energy savings achieved under Article 7 of Directive 2012/27/EU )									
Energy Efficiency (public buildings under Article 5 of Directive 2012/27/EU )									
Energy security									
Internal Energy Market									
Research, Innovation and Competitiveness									

[1] Annex IX, table 1 of Implementing Regulation 2022/2299 and Annex XXIV, table 1 of Implementing Regulation 2020/1208 largely overlap. For GHG policies it is important that the field “GHG(s) affected” and “Projections scenario” (included in Annex XXIV, table 1 of Implementing Regulation 2020/1208, but not in Annex IX, table 1 of Implementing Regulation 2022/2299) is completed.

[2] It needs to be reminded that for GHG policies, information as specified in tables Annex XXIV, table 2 and 3 of Implementing Regulation 2020/1208, needs to be reported where available.

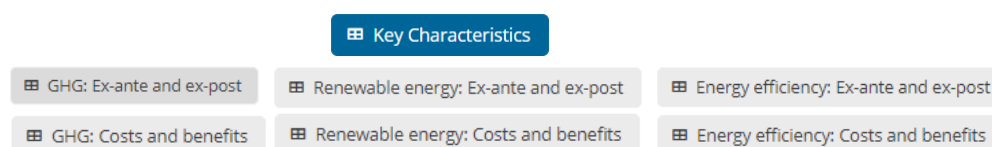
## 4. THEMATIC GUIDELINES FOR REPORTING - PAMs ATTRIBUTES AND PROGRESS

### 4.1. Introduction

This section provides guidance for reporting information related to national policies and measures (Article 7) according to Annex IX and Annex X of the Implementing Regulation 2022/2299 and focussing on the Member State climate neutrality objective. It also includes guidance for reporting on national policies and measures on greenhouse gases (Article 37) according to Annex XXIV of the Implementing Regulation 2020/1208. This guidance focuses on the following tables in the dataflow:

- Key characteristics and progress towards implementing policies and measures,
- GHG - Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change,
- GHG - Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change,
- Renewable Energy - Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on renewable energy production,
- Renewable Energy - Available projected and realised costs and benefits of individual or groups of policies and measures on renewable energy production,
- Energy Efficiency - Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on energy efficiency,
- Energy Efficiency: Available projected and realised costs and benefits of individual or groups of policies and measures on energy efficiency.

### 4.2. Key characteristics and progress towards implementing policies and measures



The table is to be used by Member States to report the information on the progress accomplished towards implementing the national policies and measures, in accordance with Article 17(2) of the Governance Regulation.

This reporting is fully integrated with reporting on policies and measures pursuant to Article 18(1)(a) of the Governance Regulation, using the same dataflow and the biennial reports submitted pursuant to the article are considered as submissions for the purpose of the NECPR with regard to the area of greenhouse gas emissions.

1. PaM Id \* 1

2. PaM number in NECP 0

3. Name of PaM or group of PaMs \* 0

4. Name of PaM or group of PaMs in national language 0

#### 4.2.1. FIELD 1: PaM number

##### **Purpose**

The purpose of this field is for the Member State to provide the PaM ID. By default the PaM ID follows the order of the reporting sequence. It is also possible to adjust the PaM ID. The order of the PaMs can be adjusted to group PaMs. It is not possible to have the same ID more than once in the webform.

##### **Guidance, including format of the data**

There are two options to order the PaMs:

- PaMs are given the correct, but not necessarily consecutive, ID number when added to the webform for the first time, or
- when all PaMs have been added to the webform, the ID can be changed to reorganize the PaMs

There is no requirement to order PaMs in a certain way. This is only for the convenience of the reporters, so PaMs can be switched places and grouped if this is deemed appropriate.

##### **Good practice Example**

This is automatically filled in when pre-loading or adding PaMs to the reporting system. This can be edited if the Member State wants to change the ordering. It is advisable to keep the numbering of previous reporting to ensure consistency between reporting periods. Numbering could also be used to organise the policies, e.g. by sector or dimension.

Data format: number (integer).

##### **Level of obligation**

Mandatory.

#### 4.2.2. *FIELD 2: PaM number in NECP, if different*

##### **Purpose**

This reporting field in the NECPR aim to make a connection between PaMs provided in NECPs and the NECPR, in case different PaM numbering has been used for the same PaMs. This is to increase transparency and support MS in tracking different PaMs

##### **Guidance, including format of the data**

Member States to report on the PaM ID used in the NECP, if this is different to that provided in the previous field (PaM number) in the NECPR. If the PaM is new or was not included in the NECP, then this field may be left empty.

Data format: number (integer).

##### **Level of obligation**

Mandatory, if applicable (i.e. different numbering has been used).

#### 4.2.3. *FIELD 3: Name of PaM or group of PaMs*

##### **Purpose**

The name of policy or measure is key to allow the reader to get a clear idea what the policy or measure is about.

##### **Guidance, including format of the data**

Each policy must have a unique name, which allows clear understanding of what the measure is about. It must be comprehensible for interested members of the public and ideally should be concise.

If a reported PaM corresponds to a legal act (law, decree, regulation, etc.), it is good practice to report its exact name, preferably in English. The name in the national language can be added in Field 4.

National measures should not have the same name as EU Directives, since Directives are supposed to be transposed in national law. An exception to this rule could be made for the EU ETS, which is an EU Directive implemented in a consistent manner EU-wide.

In reporting on greenhouse gas policies and measures, it is recommended to use the same names as those used to report information on PaMs under the UNFCCC (Biennial Update Reports, National Communication).

If an internal code is used, the name of the PaM must be added, otherwise it will not be understandable for others. If it is important to keep the national code it could be entered in brackets at the end of the PaM name. The name must not exclusively consist of the reference to legal national/international documents but provide information on what the legislation is about. The use of abbreviations will also hinder the comprehensiveness, especially abbreviations in the national languages.

Data format: text.

### **Good examples**

- ‘Improvement of production efficiency in existing coal-fired power plants’;
- ‘Eco driving’;
- ‘Nitrate Action Plan’;
- ‘Taxation of energy products’;
- ‘Implementation of the EU Emissions Trading System’;
- ‘Financial support for improving the equipment and the technology of production in agriculture’.
- Emission reduction through livestock and feeding management
- Energy-efficient or energy neutral waste water treatment.

### **Not recommended**

- ‘Economic and tax tools’
  - This is too general, it does not indicate to which emission source the tools are referring, or to which products/services it relates, or what is the objective.
- ‘Strategy for growth’
  - As single title it is too general, as it is normally associated to economic growth, whereby the linkage to policy objectives is not clear.
- ‘IPPC’
  - Using abbreviations is not recommended, as these are not necessarily understood by others. Furthermore, the IPPC Directive is an EU law, which must have been transposed into national law. The purpose of the Governance Regulation is for Member States to report on their national laws. The link to an EU Directive can be made in a separate part of the webform.
- ‘3rd party financing’
  - It is not clear what is financed by the 3rd party, so linkage to the action should be made. (e.g. 3rd party financing for efficiency improvements or for awareness raising).
- ‘Regulating measures’
  - It is not clear to what these regulating measures refer to.
- ‘WAM scenario Transport Sector’
  - This does not correspond to any specific policy.

### **Level of obligation**

Mandatory.

#### *4.2.4. FIELD 4: Name of PaM or group of PaMs in national language*

##### **Purpose**

To increase transparency, the name of the PaM can be added in the national language.

##### **Guidance, including format of the data**

Most Member States report their information on PaMs in English. This translation could make the link with the national PaM less clear. To increase transparency, it is possible to include the name and measures in the national language. This will make the link between the entry in the webform and the EEA PaM database, and other information sources (e.g. a national website on this PaM) clear.

## Good examples

Name of PaM or group of PaMs \* ?

KfW/BAFA programmes to financially support ambitious energy standards for new buildings and renovations 103

Name of PaM or group of PaMs in national language

Bundesförderung effiziente Gebäude 34

## Level of obligation

Voluntary.

### 4.2.5. FIELD 5: Single or grouped policy or measure

Is this a single PaM or a group of PaMs? \*

5. Group

Which policies or measures does the group cover?

6.

Short description \*

7.

0

## Purpose

All PaMs have to be reported as single PaMs. If information on the impacts and costs (Annex IX Tables 2 to 5, with relevance to energy efficiency and RES PaMs, and Tables 2 and 3 of Annex XXIV of the Implementing Regulation (EU) 2020/1208, with relevance to GHG PaMs) is not available on the single policy level, but is available for a group of policies, it is possible to group single PaMs. In that case, the Member States need to select “Group” and add all the single PaMs that belong to that group.

A group of PaMs should always consist of PaMs that have also been reported as single PaMs, even when the available level of detail differs.

## Guidance, including format of the data

Deciding on whether a PaM should be reported as a single PaM or a group of PaMs can be based on the following characteristics:

### Single PaM

- Unique policy intervention (e.g. mineral oil tax increase)
- Pursuing a well identified and specific objective
- Possible overlaps with other PaMs can be restrained

- Monitoring and evaluation is possible
- Impact can be estimated (ex-ante and ex-post)
- Specific timeframe
- Clear assignment to an implementing entity

#### Group of PaMs

- Coherent set of individual measures
- Following the same concrete objective (overarching framework like a national strategy) but with different implementing actions
- Can use the same type of instrument (e.g. public awareness measures, carbon tax)
- Monitoring and evaluation is only possible on group level
- Better data availability on group level to estimate impact
- Data on costs and benefits only available on group level
- Consists of specific, clearly identified mitigation actions
- Individual GHG measures that are grouped belong to the same projections scenario (WEM or WAM).

PaMs can be reported as single PaMs or a group depending on the reporting purposes. For example, when reporting PaMs to the Article 7 of the Energy Efficiency Directive it is more relevant to report single PaMs, as the Member State needs to explain how additionality and materiality are ensured, how the results are monitored, etc. This can be difficult when grouping PaMs that use different policy instruments (e.g. information campaign, financial incentive) or have a different focus (e.g. insulation measures, replacing boilers).

When reporting information on a group of PaMs, certain fields (for dimension(s) and related information, sector(s) affected and objective(s), type of policy instrument, Union policies information for PaMs related to Union policy, status of implementation and entities responsible for implementation) will be automatically filled in on the basis of the information reported for the individual PaMs. The rest of the information to be filled in Table 1 for groups must be provided with the same level of detail as for individual PaMs.

Reporting on a group of measures is particularly relevant in case quantitative information (such as ex-post/ex-ante impacts or costs) is only available for this package of measures, while the impacts of the individual measures included in the package are not available (due to for example to strong interactions between these measures). However, all available estimates of impacts or costs should be reported: quantitative information can also be provided for single measures, which are part of a group.

If a policy includes various implementing actions, which have different implementation or adoption dates, it is recommended to report this policy as a group of measures.

Data format: text (dropdown list: single/group).

#### Good examples

Examples of groups of PaMs:

- ‘National strategy to increase energy efficiency in buildings’, includes:
  - Information campaign on energy savings for households;
  - Financial rebate for insulation work on existing homes;
  - New obligation on regular checks of boilers and stoves.
- ‘Plan on modal shift in transport’, includes:
  - Deployment programme of “park & ride” facilities;
  - Parking regulations;
  - Car sharing initiative;
  - Financial support for e-bikes;
  - Free public transport for commuters;
  - Awareness raising campaign.
- ‘Energy efficiency package in public bodies’, includes:
  - Renovation of central government buildings;
  - Green procurement by public bodies;
  - Financing of energy efficiency measures in public bodies.
- ‘Renewable Energy Action Plan’, includes:
  - Feed-in tariff for renewable energy;
  - Promotion of the use of biofuels.

### **Not recommended**

Grouping of all measures included in one sector or dimension or grouping of all measures included in one projections scenario is not seen as appropriate (unless the measures concerned form part of a coherent policy action). Not recommended examples are:

- Group: All measures [too general]
- Group: Waste group [too general, title does not provide sufficient information to understand the policy’s main idea]
- Group: With existing measures projections scenario for agriculture sector [main idea not clear, affiliation of single PaMs to one sector should not be the motivation to report it as a group of PaMs]
- Group: Renewable energy with additional measures [main idea not clear, avoid using the projections scenario definition in wording].
- Single: Group of energy efficiency measures [not coherent, should be reported as group and individual PaMs as single entries]

### **Level of obligation**

Mandatory.

#### **4.2.6. FIELD 6: *In case of a grouped policy or measure, which single policies or measures does it cover***

##### **Purpose**

The purpose of this field is for the Member State to indicate which single PaMs does a group of PaMs cover, in case a Member State has grouped the PaMs.

##### **Guidance, including format of the data**



Member States need to list all single PaM ID numbers that the group of PaMs covers. As described for Field 5, a group of PaMs should always consist of PaMs that have also been reported as single PaMs. It is recommended to only include single PaMs in a group of PaMs, and not groups of PaMs within a group.

Data format: text (dropdown list: list of PaM IDs).

### **Level of obligation**

Mandatory, if applicable (i.e. to be completed where a Member State has grouped PaMs).

## *4.2.7. FIELD 7: Short Description*

### **Purpose**

Not all information that is relevant for the PaM database is captured in the different sections. The short description should make it possible to have a good understanding of what the PaM is. The following questions should be answered in the short description:

- Which problem is the policy or measure addressing?
- What is the objective of the measure?
- What are the actions taken?
- How and when is it implemented?
- Who is responsible for implementation?

### **Guidance, including format of the data**

The description should provide a condensed explanation of how the PaM will deliver the policy objective, which is understandable for non-experts. This implies that the policy objective, the actions taken, and the target group/sector are evident from the description. This should be done as specific as possible. The length should be roughly 30-100 words.

The description will be short and therefore will not include all the details. It is therefore recommended to make appropriate use of the references/links to direct users to documents and websites with a more detailed description of the PaM.

Data format: text.

### **Good examples**

Examples of good descriptions (not necessarily good policies/measures!):

- ‘The measure stipulates minimum requirements as regards the energy performance of new and existing buildings, requires the certification of their energy performance and the regular inspection of boilers and air conditioning systems in buildings.’
- “‘Better Home’ is a scheme from the Danish Energy Agency focusing on energy renovation of private homes. The aim is to make it easier for homeowners to energy renovate their homes by creating a “one stop shop” for energy renovation for private home owners, where the owner only has to contact one certified building contractor and to get an overall counselling on energy renovation of the

entire building. Skilled workers are educated under the Better Home program to be advisors on energy renovation in private homes. The Danish Energy Agency educates and approves professionals like architects, engineers, craftsmen/women, energy consultants and building designers to advisors. A Better Home advisor can manage the process and can follow the project all the way from plan to completed renovation.'

- 'Incorporate a price signal for carbon on the non-ETS sector, specifically fuels used for heating and transport. The tax applies to petrol, diesel, kerosene, marked gas oil (for agricultural use), Liquid Petroleum Gas (LPG), fuel oil, natural gas, coal and commercial peat.'
- 'There are a number of waste measures whose overarching objective is to increase recycling/reuse and reduce harmful disposal. These include the Waste Framework Directive (2008/98/EC), Landfill Directive (1999/31/EC) and the UK Landfill Tax, an escalating tax on biodegradable waste. The Waste Framework Directive is the general framework of waste management requirements and sets rules governing the separate collection of waste. The Landfill Directive and the UK Landfill Tax sets rules governing the disposal of waste to landfill. There are other waste measures targeting other waste streams. The overall effect is reducing landfill of biodegradable waste and associated CH<sub>4</sub> emissions.'
- 'The aim of the group of measures is to promote efficiency in the public transport system including: Eco-driving in buses; Efficiency in suburban electric rail; Efficiency in national rail network.'

#### **Not recommended**

- 'The objective of the particular agreement is to achieve in the company the energy saving of at least 10%.' [The target is mentioned, but it does not describe how this energy saving will be achieved and in which type of companies, commercial or industrial sector.]
- 'Implementation of the best available techniques, promotion of environmentally friendly and effective practices and technologies in industrial activities and support for the development of environment-friendly and technically cost-effective methods for greenhouse gas emission reductions.' [The actions are described in a very general way, so it is not clear by which means this will be achieved, or to which industrial sector this applies, or by whom its triggered and monitored (government, industries?). It is recommended to provide some more specific information.]
- 'Policy includes: taxation of road vehicles proportional to CO<sub>2</sub> emissions, regulation on CO<sub>2</sub> from cars, energy labelling for cars and tyres, green public procurement, financial incentives for clean cars and promotion activities' [This description includes many different elements, which is possible for the description of a group measures, but not suitable for a single measure description. If the listed actions are part of a coherent approach – like a transport strategy – it is recommended to be reported as a group.]
- 'Reduction of amount of landfill waste and from CH<sub>4</sub> emissions from landfill sites' [It would be good to provide information on how the amount of landfill waste will be reduced (enforced waste separation, other waste treatment, etc) and how the CH<sub>4</sub> emissions will be reduced (e.g. less C content in disposed waste, flaring of landfill gas, aeration, etc)]
- Supporting of energy saving 2008-2012 (Energy Efficiency) [This is too general, as it does not provide information how energy savings will be achieved, and by which sector, who is the target group, which policy instruments will be used, etc.]

- The main aim is to decrease car traffic volumes especially in urban agglomerations. The tools of the management mobility are based on information, communication, organization and coordination. The constitution of the mobility management responded to the need of such approaches in the solution of the oppressive problem of considerably increasing mobility demand which simply do not rely on new road construction or introduction of the advanced technologies [It would be good, to provide more concrete information how car traffic volumes will be decreased. Currently it mainly describes the need for this policy, but the role of the constitution is not clear.]

### Level of obligation

Mandatory.

#### 4.2.8. FIELD 8: Dimensions

##### 4.2.8.1. FIELD 8a: Relevant Union dimension(s) affected

### Purpose

To identify which Union dimensions will be affected by the PaMs, and to create a link between the Union dimensions and the relevant NECP objectives, targets or contributions as reported in Field 9.

### Guidance, including format of the data

Member States have to select from the following list of relevant Union dimension(s) affected by the PaM:

- Decarbonisation: GHG emissions and removals;
- Decarbonisation: Renewable energy;
- Energy efficiency;
- Energy security;
- Internal energy market;
- Research, innovation and competitiveness.

Some reporting is dimension dependent. For example information on affected GHGs is only asked when the “dimension decarbonisation: GHG emissions and removals” is selected. It is therefore important to be complete and report on all the dimensions that are affected by the PaM.

Data format: text (drop-down list). Additional records can be added in the reporting system to link the measure to additional Union dimensions.

### **Good example**

PaM ‘Renovation of central government buildings’: contribute to the objectives under the dimension **Decarbonisation: GHG emissions and removals** and the dimension **Energy efficiency**.

### **Level of obligation**

Mandatory.

## 4.2.8.2. FIELD 8b: Relevant objective(s), target(s) or contribution(s) the policy or measure contributes to

### **Purpose**

To identify which PaMs will contribute to each of the NECP objectives, and to assess progress with the implementation of PaMs to meet each of the NECP objectives, information is required on the relevant NECP objectives, targets or contributions that the policy contributes towards. This reporting field therefore associates PaMs with specific NECP objectives, targets and contributions.

### **Guidance, including format of the data**

Member States have to select from the list of NECP objectives, targets and contributions that the PaM contributes to, in line with the break-down provided in footnote 1, Table 1, Annex IX, of the Implementing Regulation:

- In dimension **Decarbonisation: GHG emissions and removals** - Member State’s binding national target for greenhouse gas emissions and the annual binding national limits pursuant to Regulation (EU) 2018/842; Other objectives and targets, including sector targets and adaptation goals.
- In dimension **Decarbonisation: Renewable energy** - A contribution to the Union's binding target of at least 32% renewable energy in 2030 as referred to in Article 3 of Directive (EU) 2018/2001; Estimated trajectories for the sectoral share of renewable energy in final energy consumption from 2021 to 2030 in the electricity, heating and cooling and transport sector; Estimated trajectories per renewable energy technology; Estimated trajectories on bioenergy demand, disaggregated between heat, electricity and transport, and on biomass supply, by feedstock and origin; Other national trajectories and objectives, including those that are long-term or sectoral (e.g. share of renewable energy in district heating, renewable energy use in buildings, renewable energy produced by cities, renewable energy communities and renewables self-consumers, energy recovered from the sludge acquired through the treatment of wastewater).
- In dimension **Energy efficiency** - The indicative national energy efficiency contribution to achieving the Union's energy efficiency targets of at least 32,5 % in 2030 as referred to in Article 1(1) and Article 3(5) of Directive 2012/27/EU; The cumulative amount of end-use energy savings to be achieved over the period 2021-2030 under point (b) of Article 7(1) on the energy saving obligations pursuant to Directive 2012/27/EU; The indicative milestones of the long-term strategy for the renovation of the national stock of residential and non-residential

buildings; The total floor area to be renovated or equivalent annual energy savings to be achieved from 2021 to 2030 under Article 5 of Directive 2012/27/EU on the exemplary role of public bodies' buildings; Other national objectives, including long-term targets or strategies and sectoral targets, and national objectives in areas such as energy efficiency in the transport sector and with regard to heating and cooling.

- In dimension **Energy security** - National objectives with regard to increasing the diversification of energy sources and supply from third countries, the purpose of which may be to reduce energy import dependency; National objectives with regard to reducing energy import dependency from third countries, for the purpose of increasing the resilience of regional and national energy systems; National objectives with regard to increasing the flexibility of the national energy system, in particular by means of deploying domestic energy sources, demand response and energy storage; National objectives with regard to addressing constrained or interrupted supply of an energy source, for the purpose of improving the resilience of regional and national energy systems.
  
- In dimension **Internal energy market** - The level of electricity interconnectivity that the Member State aims for in 2030 in consideration of the electricity interconnection target for 2030 of at least 15%; Key electricity and gas transmission infrastructure projects, and, where relevant, modernisation projects, that are necessary for the achievement of objectives and targets under the five dimensions of the Energy Union; Main infrastructure projects envisaged other than Projects of Common Interest (PCIs); National objectives related to other aspects of the internal energy market such as increasing system flexibility, in particular related to the promotion of competitively determined electricity prices in line with relevant sectoral law, market integration and coupling, aimed at increasing the tradeable capacity of existing interconnectors, smart grids, aggregation, demand response, storage, distributed generation, mechanisms for dispatching, re-dispatching and curtailment, and real-time price signals; National objectives related to the non-discriminatory participation of renewable energy, demand response and storage, including via aggregation, in all energy markets; National objectives with regard to ensuring that consumers participate in the energy system and benefit from self-generation and new technologies, including smart meters; National objectives with regard to ensuring electricity system adequacy, as well as for the flexibility of the energy system with regard to renewable energy production; National objectives to protect energy consumers and improve the competitiveness of the retail energy sector; national objectives with regard to energy poverty.
  
- In dimension **Research, innovation and competitiveness** - National objectives and funding targets for public and, where available, private research and innovation relating to the Energy Union; National 2050 objectives related to the promotion of clean energy technologies and, where appropriate, national objectives, including long-term targets (2050) for deployment of low-carbon technologies, including for decarbonising energy and carbon-intensive industrial sectors and, where applicable, for related carbon transport and storage infrastructure; National objectives with regard to competitiveness.

Where the PaM contributes to several NECP objectives, targets or contributions, Member States should select all applicable.

All relevant objectives, targets and contributions will be selected for the policy or measures according to which they contribute to.

Additional records can be added in the reporting system by adding a record relating to the dimension and selecting the additional objective(s), target(s) or contribution(s).

Data format: text (dropdown list).

### Level of obligation

Mandatory.

#### 4.2.9. FIELD 9: Dimension specific reporting

Dimensions \*

+ Add record

Relevant Union dimension(s) affected \* ⓘ

Decarbonisation: GHG emissions and removals

Relevant objective, target or contribution the policy or measure contributes to \*

-- None --

Member States shall select from the following GHGs

9a.

Projections scenario in which the PaM is included

9b.

-- None --

##### 4.2.9.1. FIELD 9.a: Member States shall select GHGs

### Purpose

The purpose is to understand on which GHG the PaM will have a significant impact. This is to be reported for PaMs or group of PaMs that contribute to dimensions Decarbonisation: GHG emissions and removals. More than one can be selected.

### Guidance, including format of the data

The most relevant GHGs shall be selected, e.g. agricultural measures commonly target either N<sub>2</sub>O or CH<sub>4</sub> emissions but hardly CO<sub>2</sub>. Also waste measures mainly target CH<sub>4</sub> emissions. Combustion measures relate to CO<sub>2</sub> emissions.

Guiding questions are: “Which of the GHG(s) will change most due to the implementation of the PaM? What is/are the key GHGs affected by the PaM?” In most cases, this question can be answered by selecting one or two GHGs, other GHGs with minor impact can be neglected.

If also other gases are selected (maybe because you have calculated also the effects for other gases), an explanation to the 'general comment' field at the end of Table 1 should be added.

It is expected that all relevant GHGs for a specific country are selected at least once.

### **Good examples**

PaM: 'National Climate change action programme': all GHGs can be selected.

PaM: 'Fuel switching in power plants': CO<sub>2</sub> is selected.

PaM: 'Increased waste incineration': select CH<sub>4</sub> as less waste is deposited and emits less CH<sub>4</sub>, but also CO<sub>2</sub> due to the combustion.

PaM: 'Feeding measures for cattle': select CH<sub>4</sub> as main emission from enteric fermentation.

### **Not recommended**

Selection of gases which are not emitted by the concerned emission source or sink (e.g. CO<sub>2</sub> for measures from waste water) or that are only marginally or indirectly affected by the PaM.

### **Level of obligation**

Mandatory, if applicable (i.e. if the Dimension is Decarbonisation: GHG emissions and removals).

## 4.2.9.2. FIELD 9.b: Projections scenario in which the PaM is included

### **Purpose**

Each PaM that contributes to dimensions Decarbonisation: GHG emissions and removals shall be allocated to the projection scenario in which the impact is taking effect. This is to be reported for PaMs or group of PaMs

### **Guidance, including format of the data**

Member States shall select one scenario:

- **With existing measures**, shall encompass currently implemented and adopted PaMs. In that case the status must be implemented or adopted.
- **With additional measures**, also encompass planned PaMs. In that case the status must be planned, and the implementation period must be in the future.
- **Without measures scenario**, excludes all PaMs implemented, adopted or planned after the year chosen as the starting point for this projection. This is a voluntary reported scenario, which contains only measures which have been implemented before the chosen reference year.
- **Not included in a projection scenario**: For some measures it might not be possible to allocate them to a specific scenario, e.g. projections have already been finalised, and a specific policy has not been considered in the projections due to time constraints. If possible, the use of this option should be avoided, and if yes, it is encouraged to provide a reason for it.

### **Level of obligation**

Mandatory, if applicable (i.e. if the Dimension is Decarbonisation: GHG emissions and removals).

#### 4.2.9.3. FIELD 9.c: Vector(s) affected

The screenshot shows a form titled 'Dimensions \*' with a '+ Add record' button in the top right. Below the title, there is a section for 'Relevant Union dimension(s) affected \*' with a dropdown menu currently showing 'Energy security'. Below that is a section for 'Relevant objective, target or contribution the policy or measure contributes to \*' with a dropdown menu currently showing '-- None --'. At the bottom of the form is the field '9c. Vector(s) affected', which is a dropdown menu. A red '9c.' label is positioned to the left of this field.

#### **Purpose**

The purpose of this field is for the Member State to indicate for the PaMs or groups of PaMs that contribute to the dimension “Energy security” which energy vector(s) the PaM affects.

#### **Guidance, including format of the data**

Member States can select one or more vectors from the following:

- Whole system;
- Electricity;
- Gas;
- Petroleum products;
- Nuclear;
- Heat;
- Other fuels.

If ‘Other fuels’ is selected, an additional field will open, where the additional vector(s) should be inputted.

Data format: text (dropdown list).

#### **Level of obligation**

Mandatory, if applicable (i.e. if the Dimension is Energy security).



#### 4.2.9.4. FIELD 9.d: Supported Energy Union R&I priority

The screenshot shows a form titled 'Dimensions \*' with an 'Add record' button. It contains five dropdown menus, each with a red label to its left:

- 9e.** Relevant Union dimension(s) affected \* (Selected: Research, innovation and competitiveness)
- 9f.** Relevant objective, target or contribution the policy or measure contributes to \* (Selected: -- None --)
- 9g.** Supported Energy Union R&I priority (Empty)
- Supported Clean energy / low carbon technologies (Empty)
- Sectors supported (Empty)

A '0' is visible at the bottom right of the form area.

#### **Purpose**

The purpose of this field is for the Member State to name and make clear to the reader the Energy Union R&I priority, which is supported by the PaM or groups of PaMs for the implementation and translation of the SET Plan objectives and policies. The Energy Union R&I priorities align with the SET plan key actions, which in turn should align with national targets and objectives. This is to be reported for PaMs which contribute to dimension Research, innovation and competitiveness.

#### **Guidance, including format of the data**

A supported Energy Union R&I priority should be selected for each national target/objective. Member States have to select one or more Energy Union R&I priorities from the following list:

- No.1 in renewables
- Smart Systems
- Energy efficiency
- Sustainable transport
- CCUS
- Nuclear

Data format: text (dropdown list).

#### **Level of obligation**

Mandatory, if applicable (i.e. if the Dimension is Research, innovation and competitiveness).

#### 4.2.9.5. FIELD 9.e: Supported clean energy / low carbon technologies

##### **Purpose**

The purpose of this field is for Member States to select which Clean energy/ low carbon technologies is supported by the corresponding PaM. By including the supported technology, the Member States indicate that the PaM supports the implementation and translation of the SET Plan objectives and policies into national context. This is to be reported for PaMs which contribute to dimension Research, innovation and competitiveness.

##### **Guidance, including format of the data**

Member States have to select all the relevant options, from the following list:

- No.1 in renewables
  - Photovoltaics
  - Geothermal heat & power
  - Wind (onshore and offshore)
  - Ocean energy
  - Concentrated solar power & heat {}solar thermal electricity{-}
  - Hydropower and pumped hydro-storage
  - Renewable fuels of non-biological origin (other than hydrogen)
  - Bioenergy
  - Sustainable biofuels
  - (No.1 in renewables) Advanced biofuels
  - Direct Solar fuels
  - Other - No 1 in renewables
  
- Smart systems
  - Advanced metering infrastructure (including smart meters)
  - Building/home energy management systems
  - Grid-scale energy storage
  - Direct current (DC) technologies
  - EV charging infrastructure
  - Efficient (smart) electrical power transmission
  - Efficient (smart) electrical power distribution
  - Other - Smart systems
  
- Energy efficiency
  - Integration of renewables in buildings
  - Thermal performance of building
  - Appliances & lighting
  - Heat pumps
  - Other HVAC (not heat pumps)
  - Energy efficiency in industry
  - Industrial and district heat & cold management
  - Other - Energy efficiency

- Sustainable transport
  - Batteries
  - Electric vehicles
  - Road transport (non-EV)
  - Rail transport
  - Shipping
  - Aviation
  - (Sustainable transport) Advanced biofuels
  - Solar fuels (direct)
  - Renewable hydrogen
  - Renewable fuels of non-biological origin (other)
  - Other - Sustainable transport
  
- CCUS
  - CCS
  - CCU
  - Other - CCUS
  
- Nuclear
  - Nuclear fusion
  - Small modular reactors
  - Decommissioning of nuclear installations
  - Nuclear fission (focus on safety, security, radiation protection)
  - Other - Nuclear

**Level of obligation**

Mandatory if applicable (i.e. if the Dimension is Research, innovation and competitiveness).

4.2.9.6. FIELD 9.f: Sectors supported

**Purpose**

The purpose of this field is for Member States to highlight and select which technologies under the SET plan the key actions that are supported by the corresponding PaM or group of PaMs. This is to be reported for PaMs which contribute to dimension Research, innovation and competitiveness.

**Guidance, including format of the data**

Member State should provide further details on the sectoral coverage. Member States should include a description of which sectors are supported by this policy.

Data format: text.

**Level of obligation**

Mandatory, if applicable. “Mandatory if applicable” in this context means that Member States are obliged to provide the information if the field is relevant. If the PaMs or groups of PaMs do not focus on any technology or sector, the field could be

left empty, however where possible it is encouraged to provide a description of the policy focus.

#### 4.2.10. FIELD 10: Geographical coverage

10.



##### **Purpose**

The purpose of this field is for the Member State to be transparent about the geographical coverage of the PaM. PaMs are implemented at different levels of organisation. To capture better these different levels of governance, include the geographical coverage of the PaM.

##### **Guidance, including format of the data**

Member States have to answer the question by selecting one of the following:

- Covering two or more countries,
- National,
- Regional, or
- Local.

The emphasis is not on the implementing entity, but on the geographical scope and coverage of the PaM. It differs in this respect from the implementing entity, which is the entity that is responsible for the implementation of the PaM. For example, a national initiative to set-up cross-border cooperation will be implemented by the national government, but the geographical coverage is two or more countries. National level initiatives might also target only one or two regions. In this respect the implementation is at the national level, yet the geographical coverage is regional.

Data format: text (dropdown list).

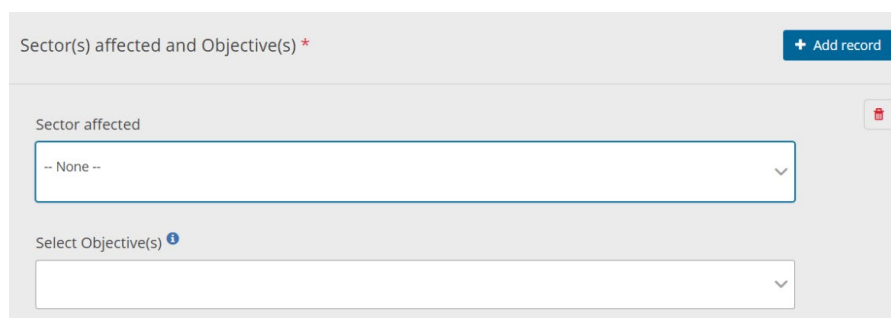
##### **Level of obligation**

Mandatory.

#### 4.2.11. FIELD 11: Sector(s) affected and Objectives(s)

11a.

11b.



#### 4.2.11.1. FIELD11.a: Sector(s) affected

##### **Purpose**

Here the selected sector(s) should reflect the sector(s) that is/are most significantly affected by the PaM. Guiding questions to decide if a sector should be ticked or not, are: “In which sector is this measure supposed to solve a problem?” “In which sector might the impact of the PaM be verifiable?” If the selection of sectors is based on a different understanding, Member States are encouraged to provide information on their interpretation in the field ‘general comments’ at the end of Table 1.

##### **Guidance, including format of the data**

Member States have to select from the following sectors (more than one sector can be selected for cross-sectoral PaMs):

- energy supply (comprising extraction, transmission, distribution and storage of fuels as well as the transformation of energy for heating and cooling and electricity production);
- energy consumption (comprising consumption of fuels and electricity by end users such as households, public administration; services, industry and agriculture);
- transport;
- industrial processes (comprising industrial activities that chemically or physically transform materials leading to greenhouse gas emissions, use of greenhouse gases in products and non-energy uses of fossil fuel carbon);
- agriculture;
- Land use, land-use change and forestry (LULUCF);
- waste management/waste;
- other sectors.

It is recommended to select one or multiple sectors to indicate all the affected sectors by adding records as needed. If other sectors than those provided in the list are affected, ‘other sectors’ shall be selected. An additional field will open where the other sector should be inputted. Regarding GHG PaMs, a good practice is to be consistent with the reporting under the UNFCCC (Biennial Reports, National Communication) for greenhouse gas PaMs.

Data format: text (dropdown list). Additional records can be added in the reporting system to link the measure to additional sector(s) affected.

##### **Good examples**

- Use of agricultural waste as energy source: In this case the GHG emissions from the energy sector will be influenced. The agricultural sector is merely providing the resource. But if the agricultural waste has contributed to emissions through for example: biological degradation, before the PaM was implemented, then the agriculture sector should be selected as well.
- Use of captured methane for electricity production: This concerns the waste and the energy sector as CH<sub>4</sub> emissions are avoided by capturing and the fossil fuels can be replaced to a certain extent by biogas use.
- Installation of waste incineration plant: This concerns the waste and the energy sector, assuming that the waste was deposited on landfills and emitted during

degradation before the implementation of the PaM. The energy sector is relevant as waste incineration with energy recovery is part of the energy sector.

- Renewable energy for domestic heating: This PaM influences emissions from Common Reporting Format (CRF) category 1A4 (emissions from households), assuming that renewable energy replaces the use of fossil fuels in residential buildings for heating. Therefore, energy consumption should be selected. The energy supply sector should be ticked additionally if the renewable energy is centrally produced and then distributed to households.
- Use of biofuels: The main impact of this PaM is with the transport sector, therefore it should be selected. The energy supply sector (which includes the emissions of a biorefinery) is only of minor importance and it should not be selected.

### **Level of obligation**

Mandatory.

## 4.2.11.2.FIELD 11.b: Objective(s)

### **Purpose**

Following the Implementing Regulation, the relevant objectives that the PaM contributes towards should be selected. Several predefined objectives per sector can be selected.

### **Guidance, including format of the data**

An objective means ‘initial statement of the outcomes (including results and impacts) intended to be achieved by the intervention’.

Member States need to select from the following objectives (more than one objective can be selected, and additional objectives could be added and specified under ‘other’):

- Energy supply:
  - Increase in renewable energy sources in the electricity sector;
  - Increase in renewable energy in the heating and cooling sector;
  - Switch to less carbon-intensive fuels;
  - Enhanced non-renewable low carbon generation (nuclear);
  - Reduction of losses;
  - Efficiency improvement in the energy and transformation sector;
  - Carbon capture and storage or carbon capture and utilisation;
  - Control of fugitive emissions from energy production;
  - Increase the number of sources used in primary energy generation;
  - Reduce energy dependency from third countries;
  - Improve the resilience of energy supply infrastructure, including ensuring energy supply in case of major disruptions to the network;
  - Increase the ability of the power network to absorb increased share of renewable generation;
  - Increase electricity interconnectivity;
  - Increase price convergence of electricity markets;
  - Increase consumer participation in energy markets;
  - Increase electricity system flexibility and adequacy;
  - Research and innovation in energy supply;
  - Other energy supply.
- Energy consumption:

- Efficiency improvements of buildings;
  - Efficiency improvement of appliances;
  - Efficiency improvement in services/tertiary sector;
  - Efficiency improvement in industrial end-use sectors;
  - Demand management/reduction;
  - Research and innovation in technologies, processes and materials, which will contribute to reduction in energy consumption;
  - Other energy consumption.
- Transport:
    - Efficiency improvements of vehicles;
    - Modal shift to public transport or non-motorized transport;
    - Low carbon fuels;
    - Electric road transport;
    - Demand management/reduction;
    - Improved behaviour;
    - Improved transport infrastructure;
    - Reduce emissions from international air or maritime transport;
    - Research and innovation to reduce emissions from the transport sector;
    - Innovation in digitalisation of transport;
    - Other transport.
- Industrial processes:
    - Installation of abatement technologies;
    - Improved control of fugitive emissions from industrial processes;
    - Improved control of manufacturing, fugitive and disposal emissions of fluorinated gases;
    - Replacement of fluorinated gases by gases with a lower GWP value;
    - Research and innovation in making EU industry less energy intensive;
    - Other industrial processes.
- Waste management/waste:
    - Demand management/reduction;
    - Enhanced recycling;
    - Enhanced CH<sub>4</sub> collection and use;
    - Improved treatment technologies;
    - Improved landfill management;
    - Waste incineration with energy use;
    - Improved wastewater management systems;
    - Reduced landfilling;
    - Other waste.
- Agriculture:
    - Reduction of fertilizer/manure use on cropland;
    - Other activities improving cropland management;
    - Improved livestock management;
    - Improved animal waste management systems;
    - Activities improving grazing land or grassland management;
    - Improved management of organic soils;
    - Other agriculture.
- LULUCF:
    - Afforestation and reforestation;
    - Conservation of carbon in existing forests;
    - Enhancing production in existing forests;
    - Increasing the harvested wood products pool;

- Enhanced forest management;
- Prevention of deforestation;
- Strengthening protection against natural disturbances;
- Substitution of GHG intensive feedstocks and materials with harvested wood products;
- Prevention of drainage or rewetting of wetlands;
- Restoration of degraded lands;
- Other LULUCF.

It is important that for each of the selected sector at least one corresponding objective is selected. Select the option 'other' only, if the predefined objectives of the drop-down menu are not appropriate. In that case an additional field will open, where the objective (but not actions, activities or instrument types) should be described. The option 'other' can be specified at two levels: (1) other objectives in a particular sector and (2) by selecting other sector and defining the corresponding objective for which no drop-down options are available.

Please make sure to only (multi-select) objectives that belong to the same sector. If objectives from different sectors have to be reported, this has to be done linked to each sector.

Data format: text (dropdown list). Additional records can be added to report on additional objective(s).

**Level of obligation**

Mandatory.

4.2.12. *FIELD 12: Quantified objective*

**12.**

**Purpose**



The knowledge of a quantified objective allows a better understanding of the ambition and the envisaged impact.

### **Guidance, including format of the data**

If the policy has one or more quantified objectives, the figure(s) should be entered, whereby it is important to also include the units and timeframe. For example:

- GHG reduction in the agricultural sector of 10% by 2030 (compared to 2010);
- Stabilisation of gross inland energy consumption at the level of 2005, which is 3000 PJ;
- Share of electric vehicle in total fleet in 2030 of 40%.

The quantitative objective should focus on the key purpose and benefit of the PaM and should be an integral part of the objectives and description of the PaM.

Data format: text.

### **Level of obligation**

Mandatory, if applicable (where an objective is quantified).

#### *4.2.13. FIELD 13: Assessment of the contribution of the policy or measure to the achievement of the Union's climate-neutrality objective set out in Article 2(1) of Regulation 2021/1119 and to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999*

**13.**

Assessment of the contribution of the policy or measure to the achievement of the Union's climate-neutrality objective set out in Article 2(1) of Regulation 2021/1119 and to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999 \*

0

### **Purpose**

The purpose of this field is for the Member State to provide any updates relevant to the Union's climate-neutrality objective, set out in Article 2(1) of Regulation 2021/1119, and the progress achieving the objective, also the long-term strategy, referred to in Article 15 of Regulation (EU) 2018/1999. A brief assessment of the contribution of each PaM to the Union's climate-neutrality objective and the long-term strategy allows a better understanding of the progress to achieving the objective and the long-term strategy.

### **Guidance, including format of the data**

Member States need to provide an assessment of the contribution of each PaM to the achievement of the Union's climate-neutrality objective and the long-term strategy.

For the Union's climate-neutrality objective, this may cover:

- Does the PaM contribute to the Union's climate-neutrality target?
- Does the PaM have a negative effect on the target?

- How does the PaM contribute to the target?
- What is the importance of the PaM in contributing to the target?

For the long-term strategy, this may cover any of the elements of the long-term strategy set out in Article 15 and Annex IV of Regulation (EU) 2018/1999. More specifically:

- Does the PaM contribute to the achievement of specific targets in the long-term strategy?
- Which targets?
- How does the PaM contribute to these targets?
- Was the PaM included in the long-term strategy?

Information has to be specific for the PaM and should avoid reporting that the “PaM contributes to the achievement of the long-term strategy”. Nevertheless the field is particularly relevant for those PaMs that contribute to the achievement of long-term targets, such as a climate law or a carbon budget policy.

Data format: text.

#### **Level of obligation**

Mandatory.

#### 4.2.14. *FIELD 14: Type of policy instrument*

**14.**

#### **Purpose**

It facilitates understanding of how the measure is implemented.

#### **Guidance, including format of the data**

Member States need to select from the following policy implementation types (more than one can be selected):

- **Economic:** a PaM that provides an economic incentive. This includes measures such as infrastructure programmes, subsidies, investment programmes, feed-in tariffs, loans/grants and trading schemes (e.g. ETS), charges and fees for non-beneficial actions (e.g. waste fees or congestion charges etc.).
- **Fiscal:** a PaM that provides a financial incentive via taxes. This includes both increases and decreases in taxes.
- **Voluntary/negotiated agreements:** a binding or voluntary standard/regulation as in regulatory and information measures but agreed between regulators and target group (e.g. automotive industry, farmers).
- **Regulatory:** measures that set binding standards and regulations or permitting systems. This includes for instance building regulations, eco-design standards, establishment of permit and inspection procedures.

- Information: measures such as labelling, awareness rising, voluntary standards. The objective is to disseminate information to the general public or specific target groups.
- Education: measures such as training programmes, workshops, seminars at all levels (e.g. primary school, adult education, off-the-job training).
- Research: includes the provision of funds to allow for research programmes and demonstration projects for private and public institutions
- Planning: measures such as waste management plan, transport plan, urban planning, land use plan, which direct the development of the subject in a specific direction (ideally climate friendly and sustainable)
- Other: measures that do not fit in any of the above.

Largest ambiguity is when to use economic and when to use fiscal. Taxes should always be considered as fiscal instruments, even if the sole objective of the tax is to provide a financial incentive (and not to increase tax revenue).

If 'Other' is selected, an additional field will open where the other policy instrument should be inputted.

Data format: text (dropdown list).

#### Level of obligation

Mandatory.

### 4.2.15. FIELD 15: Union policies which resulted in the implementation of the PaM

#### Purpose

Some Member States' PaMs are directly the result of implementation of EU legislation, and some are national PaMs. In order to find out about if and how EU legislation is implemented in Member States and which domestic measures are set by the Member States independently, this information is needed.

**15a.**

Union policy which resulted in the implementation of the PaM ⓘ

Related / Non related \*

**15b.**

Select Union policy/policies \* ⓘ

**15c.**

Select Relevant Provision(s) - only for dimensions 'Decarbonisation: Renewable energy' and 'Energy efficiency' ⓘ

#### 4.2.15.1. FIELD 15.a: Related / Non-related

#### Guidance, including format of the data

Member States have to indicate whether national PaMs are related to the Union Policy, by selecting ‘Related’ or ‘Non-Related’ from the drop-down list.

#### **Level of obligation**

Mandatory.

#### 4.2.15.2.FIELD 15.b: Select Union policy/policies

##### **Guidance, including format of the data**

Member States needs to select the Union policy (or policies) implemented through the national policy or where national policies are aimed directly at meeting objectives of Union policies. More than one Union policy can be selected from the drop down menu.

If the appropriate Union policy is not listed, ‘Other (Union policy not listed above or additional Union policy)’ can be chosen and additional Union policies will need to be entered by creating a new record in the sub-section which opens.

Guidance on when to select a Union policy includes the following:

1. A national PaM that is the translation of Union policy into national legislation (e.g., eco-design).
2. A national PaM that is implemented in direct response to a Union policy (e.g., implementation of the EU ETS).
3. A national PaM that was implemented to achieve an EU target (e.g., an energy efficiency subsidy to achieve the EE target).

This would mean that chronologically, the national PaM should follow after the Union policy, although in certain cases national PaMs could have been implemented in response to a planned Union policy and therefore precede the Union policy.

A Union policy should NOT be selected in case a national PaM contributes to the achievement of an EU target but was not implemented specifically for this or existed already before the Union policy being in force. For instance, numerous policies will contribute to the achievement of the Effort Sharing Regulation, although few will be specifically implemented by the Member States in response to this policy.

Any reference to a title of legislation transposing EU law should be in line with the title notified for EurLex in the overview of the national transposition.

Data format: text (dropdown list).

#### **Level of obligation**

Mandatory, if applicable (i.e. a Union policy has resulted in the implementation of the PaM).

#### 4.2.15.3.FIELD 15.c: Relevant provision(s) – only for 'decarbonisation: renewable energy' and 'energy efficiency'

##### **Purpose**

Member States shall report on the PaMs or groups of PaMs that contribute to dimensions Decarbonisation: Renewable energy and Energy efficiency.

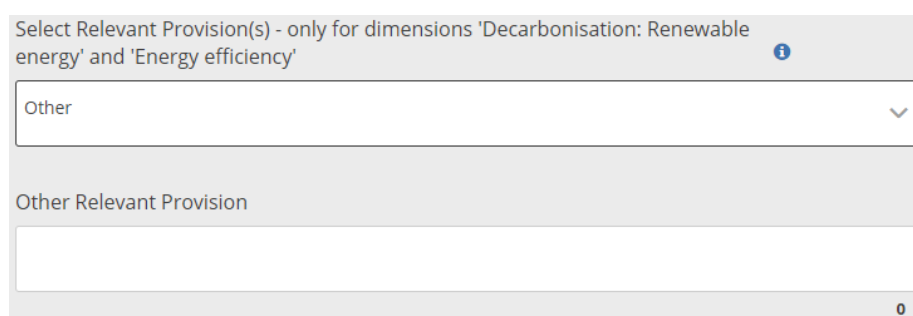
### **Guidance, including format of the data**

Member States shall select a relevant legal provision from the list provided. Additional provisions may be added and specified under any of the options that contain 'Other'. If an 'Other' option is selected, an additional field will open, where the other legal provision should be inputted (see below).

### **Level of obligation**

Mandatory, if applicable (when the dimension is Decarbonisation: Renewable energy or Energy efficiency).

#### 4.2.15.4. Field 15.d Other relevant provision – only for 'decarbonisation: renewable energy' and 'energy efficiency'



The screenshot shows a form interface for selecting a relevant provision. The title of the field is "Select Relevant Provision(s) - only for dimensions 'Decarbonisation: Renewable energy' and 'Energy efficiency'". Below the title is a dropdown menu with "Other" selected. Underneath the dropdown is a text input field labeled "Other Relevant Provision". To the left of this input field, the text "15d." is displayed in red. At the bottom right corner of the form area, there is a small "0" indicating the number of characters remaining.

### **Purpose**

To provide further context to 'Other' relevant provisions selected in the previous field.

### **Guidance, including format of the data**

Member States shall outline in clear text which relevant legal provision is being referred to beyond the list provided in the previous field. Article numbers should be used and if the generic 'Other' field is selected in the previous field, then the relevant legislation should be written.

### **Level of obligation**

Mandatory, if applicable (when the dimension is Decarbonisation: Renewable energy or Energy efficiency and the selected provision is an 'Other' option).

#### 4.2.16. FIELD 16: Implementation status and period

16a.

16b.

16c.

The screenshot shows a form titled 'Status of implementation \*' with a dropdown menu currently set to '-- None --'. Below this is the 'Implementation Period' section, which contains two input fields: 'Start year \*' and 'Finish year \*', both with a '0' below them. At the bottom is a 'Comment on Implementation Period' section with a large text area and a '0' at the bottom right.

##### 4.2.16.1. FIELD 16.a: Status of implementation

###### **Purpose**

The status reflects at which stage of implementation the policy is, whether the policy is in the planning stage, adopted, implemented or expired.

###### **Guidance, including format of the data**

Member States have to select from the following categories:

- Planned: PaMs under discussion, realistic chance of being adopted and implemented in the future;
- Adopted: clear commitment to proceed with the implementation, official government decision has been made;
- Implemented: national legislation is in force, financial resources have been allocated, one or more voluntary agreements have been established;
- Expired: legislation expired, funding has stopped, or agreements have expired.

If for an existing policy a significant change is planned, it is recommended to enter it as a new policy, so it becomes visible as a planned measure.

When reporting on GHG PaMs, the status should correspond to the projections scenario that the policy impact should be captured under. All impacts of PaMs in the WEM (with existing measures) scenario should be 'implemented' or 'adopted', whereas for the PaMs in the WAM (with additional measures) scenario the status should be 'planned'.

A group of measures should only include measures which are attributed to the same scenario.

Data format: text (dropdown list).

###### **Level of obligation**

Mandatory.

#### 4.2.16.2.FIELD 16.b: Implementation period (Start year; finish year)

##### **Purpose**

Here the time period (start year and finish year) during which the policy will be/is/was implemented needs to be entered. This may be different from the time period during which the policy has impacts.

##### **Guidance, including format of the data**

The start of the implementation period is the year the policy is implemented. It could be possible that the policy consists of several instruments with a different starting date (e.g. if a national policy needs to be implemented in different regions). In this case the start year of the overarching policy should be considered. Existing PaMs (expired and implemented) have a start year in the past, and adopted or planned PaMs have a start year in the future.

The finish year is the date which the policy is currently planned to run until, and not the year when the impacts of the policy are projected to persist until (which may be longer than the implementation period). For policies that have already expired, this refers to the year when the policy ended or was replaced. If the policy does not expire or end in a specific year leave the field empty.

Considering that the implementation status and the start and/or end year of the PaM are closely linked, some combinations are not consistent (e.g. a PaM starting in 2012 cannot be planned).

When reporting on GHG PaMs which have a start or end year is close to the reporting year, there might be some inconsistencies with the implementation status and projection scenario. It is most transparent if reporting is made consistent with the projections (e.g. all WAM policies are planned and considered in the WAM projections). If this would not be possible, make sure to use a consistent approach across all PaMs on how to deal with this. The comment section can be used to clarify reporting, where needed.

In case, the implementing actions have different time periods or an existing measure has been changed (e.g. change in tax value), there are two possibilities:

1. Either the overarching dates are used and any update(s) are explained in the short description, or
2. a new policy is added (e.g. increase in fuel tax), and the “old” one is treated as expired. The choice depends on the policy and the importance which is attributed to this change.

Data format: number (integer).

##### **Level of obligation**

Mandatory, for the start year. Finish year is only mandatory if applicable.

#### 4.2.16.3.FIELD 16.c: Comment on implementation period

##### **Purpose**

Additional information can be provided in the text box.

### Guidance, including format of the data

This box may be used to add any additional information or clarification on the start or end year, for example if it is not known.

### Level of obligation

Voluntary.

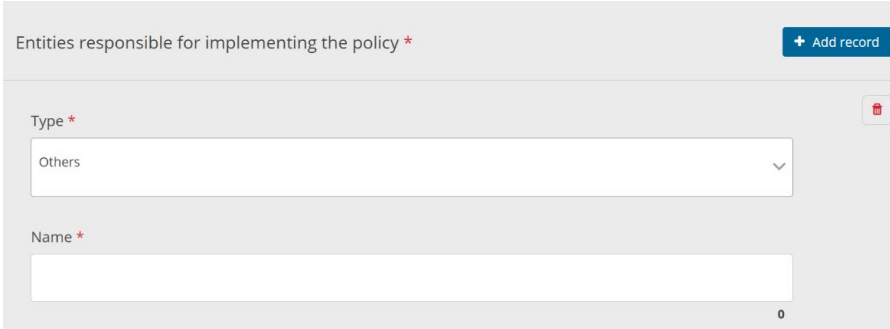
#### 4.2.17. FIELD 17: Entities responsible for implementing the policy

### Purpose

For each policy or measure one or more entities are responsible for the implementation e.g. for setting the regulations needed, providing the funding, planning, monitoring, evaluation.

17a.

17b.



##### 4.2.17.1.FIELD 17.a: Type

### Guidance, including format of the data

Member States have to choose the relevant entity responsible for the implementation by selecting the type from the following list:

- National government;
- Regional entities;
- Local government;
- Companies/ businesses/industrial associations;
- Research institutions;
- Others not listed.

Report only entities that are responsible for the actual implementation of the PaM, and not entities who are benefitting or just affected by the PaMs (e.g. Companies profiting from a subsidy should not be included). See Field 7 'Geographical coverage' on the difference with implementing entity.

Data format: text (dropdown list). Additional records can be added to report on (an) additional entity/entities responsible for implementation.

### Level of obligation

Mandatory.



#### 4.2.17.2.FIELD 17.b: Name

##### **Guidance, including format of the data**

Member States have to enter the specific name of the entity (e.g. Ministry for Agriculture) in the empty field.

##### **Level of obligation**

Mandatory.

Data format: text. Additional records can be added to report on (an) additional entity/entities responsible for implementation.

#### 4.2.18. FIELD 18: Indicators used to monitor and evaluate progress over time

##### **Purpose**

It is good practice to monitor the effective implementation and impact of policies using indicators. For each PaM the relevant indicator that will be used (ex-ante) to monitor and evaluate progress of the PaM have to be provided, including the indicator values for the years available.

The screenshot shows a web form titled "Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)". The form has a blue "Add record" button in the top right corner. The form fields are as follows:

- 18a.** Description: A large text input field.
- 18b.** Unit \*: A text input field.
- 18c.** Year #1 \*, Year #2 \*, Year #3 \*, Year #4 \*: Four separate text input fields for years.
- 18d.** Value #1 \*, Value #2 \*, Value #3 \*, Value #4 \*: Four separate text input fields for values.

Each input field has a small "0" in the bottom right corner, likely indicating a default value or a placeholder.

#### 4.2.18.1.FIELD 18.a: Description

##### **Guidance, including format of the data**

One or more indicators needs to be provided if used for monitoring and evaluation of progress over time.

The 'description' field requires the name of the indicator, The description field should also include a reference to the underlying data.

Performance indicators identified by Member States should be relevant, accepted, credible, easy and robust.

##### **Good examples**

- Number of people trained;
- Number of organic farms;
- Share of electric vehicles in fleet;

- Savings in annual primary energy consumption in households;
- Average fuel consumption for new cars sold in a given year.

Data format: text for description. Additional records can be added to report on additional indicator(s).

**Level of obligation**

Mandatory, if applicable (i.e. the field is to be completed where there are indicators to monitor and evaluate progress over time).

4.2.18.2.FIELD 18.b: Unit

**Guidance, including format of the data**

The unit of measurement is to be provided in the field.

**Good examples**

- t CO<sub>2</sub> eq.;
- number of cars;
- %, number of installations;
- GJ.
- na (when it concerns a unit-less number, e.g. number of people trained)

Data format: text.

**Level of obligation**

Mandatory, if applicable (i.e. the field is to be completed where there are indicators to monitor and evaluate progress over time).

4.2.18.3.FIELD 18.c: Year(s)

**Guidance, including format of the data**

The year for which each value applies needs to be specified in the field 'year'.

Data format: number (integer).

**Level of obligation**

Mandatory, if applicable (i.e. the fields are to be completed where there are indicators to monitor and evaluate progress over time).

4.2.18.4.FIELD 18.d: Value(s)

**Guidance, including format of the data**

In the field 'value', indicator values for specified years need to be entered, whereby it is important that the value corresponds to the unit entered above.

Data format: number (decimal).

### Level of obligation

Mandatory, if applicable (i.e. the fields are to be completed where there are indicators to monitor and evaluate progress over time).

#### 4.2.19. FIELD 19: Update since last submission

The screenshot shows a form interface for 'Update since last submission'. It consists of two main parts: a dropdown menu and a text area. The dropdown menu is currently set to '-- None --'. Below it is a text area for 'Explanations of the update'. The field is labeled '19a.' and '19b.'.

##### 4.2.19.1. FIELD 19.a: Update since last submission

### Purpose

The purpose of this field is for the Member State to identify any updates on the PaMs since the last submission, including for example the introduction of new policies developed, or including new/updated objectives for policies referred to in the NECP.

### Guidance, including format of the data

Member States need to select from the following options:

- Adoption of a new measure, conclusion of agreement, publication of legislation;
- Commencement/enforcement of a measure/programme;
- Abolition/termination/completion of measure;
- Amendments, implementation or design changes and extension of an on-going measure;
- Monitoring information, update on progress or impact assessment results;
- Continuation of existing measures/no significant updates;
- Drafts, announcements, commitments, planned measures, discussions for a new measure;
- Other.

Where there has been no update to report, Member States can select 'Continuation of existing measures/no significant updates'.

Data format: text (dropdown list).

### Level of obligation

Mandatory.

#### 4.2.19.2.FIELD 19.b: Explanations of the update

##### **Purpose**

The purpose of this field is for the Member State to describe the update and/or provide links to additional documents, as identified in the last field ‘Update since last submission’.

##### **Guidance, including format of the data**

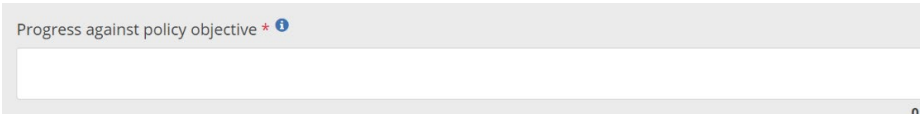
Given that field 19 ‘Update since last submission’ was a drop-down selection, here Member States need to provide further information in regard to the update. For example, where Member State selects ‘Amendments, implementation or design changes and extension of an on-going measure’ in the last field, they will describe the amendments or design changes made or provide the timeframe that the measure has been extended for.

Data format: text.

##### **Level of obligation**

Mandatory, if applicable (i.e. the PaM has been updated).

#### 4.2.20. FIELD 20: Progress against policy objective

A screenshot of a form field. The field is titled 'Progress against policy objective' with a red asterisk and an information icon. The field is empty and has a red '20.' label to its left. The field is surrounded by a light gray border.

##### **Purpose**

The purpose of this field is for the Member State to understand how successful a policy has been in achieving or progressing towards its objective(s). This will allow the assessment of progress made with the implementation of the PaMs. Together with the information in the field ‘Relevant objective(s), target(s) or contribution(s) the policy or measure contributes to’, this allows the assessment of progress accomplished towards reaching the objectives, targets and contributions set out in the NECP.

##### **Guidance, including format of the data**

Every PaM, when adopted, should have a policy objective, which defines the aims and goals of the policy. In this field, Member States need to provide a qualitative description of the progress achieved against this objective. Quantitative information on progress should be reported in the next field.

Data format: text.

##### **Good examples**

- The Reconstruction grant for apartment buildings was opened for applications in late March 2022, which is nearly three months after the expected date. The start was affected by the delayed adoption of the ministerial regulation allowing for the grant due to the parliamentary elections. In 2022, the grant was distributed to 100 successful applicants. The total allocated funds to date account for 8mln euro. This represents about 25% of the total allocated grant fund, which will run

until the end of 2024. Quantitative information on the results achieved is not yet available.

- Works to build interconnector X, to be operational by 2025, are advancing according to the schedule. The progress is monitored via information published by ACER according to developers' submission.

### Level of obligation

Mandatory.

#### 4.2.21. FIELD 21: Progress against policy indicators

Progress against policy indicators + Add record

Indicator 0

21a.

Year 0

21b.

Value 0

21c.

Unit 0

21d.

### Purpose

The purpose of this fields is for the Member States to understand how successful a policy has been in achieving or progressing towards its objective, measured using the indicators for monitoring and evaluating progress. These fields directly links to Field 18 'Indicators used to monitor and evaluate progress over time (Description; Year; Value)'.

As the last field, the field allows the assessment of progress made with the implementation of the PaMs. Together with the information in the field 'Relevant objective(s), target(s) or contribution(s) the policy or measure contributes to', it allows the assessment of progress accomplished towards reaching the objectives, targets and contributions set out in the NECP. The focus here is however on quantitative progress description.


### Guidance, including format of the data

Data format: multiple (see below). Additional records can be added to report on additional indicator(s).

### Good example

Progress against policy indicators + Add record

---

Indicator 

Production of biogas 20

---

Year

2017 4

---

Value

0.4 3

---

Unit

TWh 3

### Not recommended

It is not recommended to use these fields to report information that can be added to the impacts on GHG emissions (section 4.3), renewable energy (section 4.5) or energy efficiency (section 4.7).

#### 4.2.21.1.FIELD 21.a: Indicator

##### Guidance, including format of the data

In this field, the brief description of the indicator should be provided (see good example above).

Data format: text.

##### Level of obligation

Mandatory, if applicable (i.e. where there are indicators to monitor and evaluate progress).

#### 4.2.21.2.FIELD 21.b: Year

##### Guidance, including format of the data

In this field, the year for which the value is to be specified is to be provided.

Data format: number (integer).

##### Level of obligation

Mandatory, if applicable (i.e. where there are indicators to monitor and evaluate progress).

#### 4.2.21.3.FIELD 21.c: Value

##### **Guidance, including format of the data**

Value for progress achieved (ex-post) against indicators need to be entered in the field 'value'.

Data format: number (decimal).

##### **Level of obligation**

Mandatory, if applicable (i.e. where there are indicators to monitor and evaluate progress).

#### 4.2.21.4.FIELD 21.d: Unit

##### **Guidance, including format of the data**

In the field 'Unit' Member States will specify the unit in which the progress of the indicator is measured (e.g., t CO2 eq., number of cars, %, number of installations, energy consumption in GJ, etc.).

Data format: text.

##### **Level of obligation**

Mandatory, if applicable (i.e. where there are indicators to monitor and evaluate progress).

#### 4.2.22. FIELD 22: Reference to assessments and underpinning technical reports

The screenshot shows a data entry interface for 'Reference to assessments and underpinning technical reports \*'. It features two input fields, both labeled '22a.' on the left. The first field is labeled 'Reference' and the second is labeled 'URL'. Each field has a small trash icon on the right and a '0' at the bottom right corner. A blue '+ Add record' button is located in the top right corner of the form area.

##### **Purpose**

The purpose of this field is for the Member State to provide access to any underlying reports, studies, webpages which provide further information on the policy in general, but also information on how the underlying data has been gained.

#### 4.2.22.1.FIELD 22.a: Reference

##### **Guidance, including format of the data**

Member States are encouraged to enter here the title of any underlying reports, webpages, etc., If more than one reference is available, they can be provided by creating additional records. Considering that the description of the PaMs is concise, Member States are encouraged to also include here references to documents with a more elaborate description of the PaM in English or the national language.

Data format: text. Additional records can be added to report on additional references to assessments.

##### **Level of obligation**

Mandatory.

#### 4.2.22.2.FIELD 22.b: URL

##### **Guidance, including format of the data**

Member States are required to enter the URL link to the report or online pages referred to in the previous field.

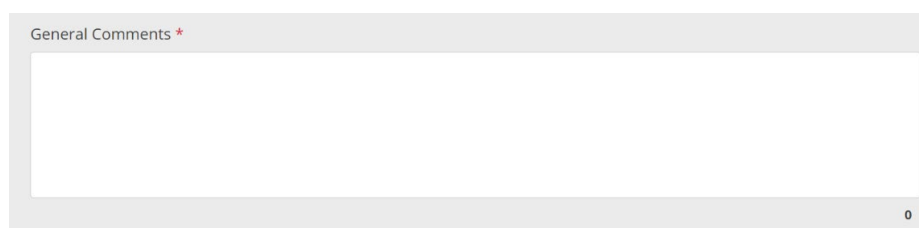
Data format: text.

##### **Level of obligation**

Mandatory.

#### 4.2.23. *FIELD 23: General comments*

**23.**



General Comments \*

0

##### **Purpose**

The purpose of this field is for the Member State to have the possibility to provide any remarks, comments, explanations etc. to increase the transparency and comprehensiveness of the reported PaM, or any additional policy relevant information which was not possible to provide in the boxes above.

##### **Guidance, including format of the data**

Here the following issues could be mentioned:

- Reference to the accompanying report providing further information on general national PaM situation or information on specific PaMs.



- Any background information relevant for the PaM.
- This field can also be used to input additional information such as name or organisation that provided the information for this policy for reference use by the Member States.

Data format: text.

**Level of obligation**

Mandatory.

**4.3. GHG - Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change**

Refer to section 2.5.1.2 for guidance on how to create a reporting table for the relevant PaMs or group of PaMs. The PaM Id and Name of PaM are automatically provided in the table upon creation of the table.

*4.3.1. FIELD 1: Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions*

**Purpose**

To report on whether the PaM or group of PaMs impact EU ETS, LULUCF and/or ESD/ESR emissions.

**Guidance, including format of the data**

The relevant emissions are to be selected from the drop-down list. More than one selection can be made.

Data format: text (from drop-down list).

**Level of obligation**

Mandatory, if available.

*4.3.2. FIELD 2: Ex-ante assessment: GHG emissions reductions*

**Purpose**

Reporting the effect of a policy or measure in specified future years on GHG emissions reductions.

**2a.**

**Ex-ante assessment \***

GHG emissions reductions for year 2025 (kt CO<sub>2</sub>-equivalent per year)

EU ETS	ESR	LULUCF	Total
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
0	0	0	0

GHG emissions reductions for year 2030 (kt CO<sub>2</sub>-equivalent per year)

EU ETS	ESR	LULUCF	Total
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
0	0	0	0

GHG emissions reductions for year 2035 (kt CO<sub>2</sub>-equivalent per year)

EU ETS	ESR	LULUCF	Total
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
0	0	0	0

GHG emissions reductions for year 2040 (kt CO<sub>2</sub>-equivalent per year)

EU ETS	ESR	LULUCF	Total
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
0	0	0	0

**2b.**

Explanation of the basis for the mitigation estimates \*

**2c.**

Factors affected by the PaM \*

**2d.**

Documentation / Source of ex-ante estimation if available + Add record

Reference 🗑

0

**2e.**

URL

0

#### 4.3.2.1. FIELD 2.a: GHG emissions reductions for year 2025, 2030, 2035, 2040 (kt CO<sub>2</sub>-equivalent per year): EU ETS

##### **Guidance, including format of the data**

A quantitative estimate of the expected impact of the policy or measure in the given years (2025, 2030, 2035, 2040) shall be reported in kilotonnes (kt) CO<sub>2</sub> equivalent per year (same as Gg CO<sub>2</sub> equivalent per year), where available. Note, that the effects shall not be reported as cumulative values, instead as an estimated emission reduction in the specific year. If only cumulative values are available, note this in the ‘documentation box’ and provide the cumulative estimates and background information in the accompanying report.

The estimated GHG reduction can be allocated to the EU ETS, ESD/ESR, LULUCF and/or the Total, whereby the sum of EU ETS, ESD/ESR and LULUCF should be the same as the total<sup>2</sup>. In many cases the total GHG reductions of a policy will be

<sup>2</sup> NF3 emissions are not covered by the ESD and are covered by the ESR. In context of this reporting, changes in NF3 emissions should be included in the ESR sector for the projections, while can be ignored for the ESD.

allocated either to EU ETS, ESD/ESR or LULUCF. It is only possible to enter numbers. Reporting should be consistent with the GHG inventory and emission projections reporting.

Positive values denote reduced emissions or increased sinks (in the case of the LULUCF sector).

Negative values denote increased emissions or decreased sinks.

Useful literature on ex-ante impacts can be found in Appendix 4.

Examples

Electrification might result in decreased emission in the ESD/ESR sectors (reported as positive value) but increase emissions in the EU ETS (reported as negative value).

**Level of obligation**

Mandatory, if available.

4.3.2.2. FIELD 2.b: Explanation of the basis for the mitigation estimates

**Guidance, including format of the data**

An explanation of the basis for the ex-ante mitigation estimates shall be provided. This may include the type of methodology used for the assessment, for example top-down model, bottom-up model, accounting model, expert judgement, etc.

Useful literature on ex-ante impacts can be found in this link: <https://www.eionet.europa.eu/reportnet/docs/govreg/policies-and-measures>

**Level of obligation**

Mandatory, if available.

4.3.2.3. FIELD 2.c: Factors affected by the PaM

**Guidance, including format of the data**

This field requires a brief description of the factors affected by the measure resulting in the emission reduction or additional saving e.g. change in activity data or change in emission factors.

**Level of obligation**

Mandatory, if available.

4.3.2.4. FIELD 2.d: Documentation / Source of estimation if available: Reference

**Purpose**

The purpose of this field is for the Member State to provide access to reports, studies, webpages which the ex-ante estimate of GHG emissions reductions has been referenced from.

### **Guidance, including format of the data**

Member States are encouraged to enter here the title of any underlying documents or other sources. If more than one reference is available, they can be provided by creating additional records.

Data format: and text. Additional records can be added to report additional documentation.

### **Level of obligation**

Mandatory, if available.

#### 4.3.2.5. FIELD 2.e: Documentation / Source of estimation if available: URL

### **Guidance, including format of the data**

This field requires the web link of the report/document where the ex-ante estimate of GHG emissions reductions has been referenced from.

Data format: text (hyperlink).

### **Level of obligation**

Mandatory, if available.

#### 4.3.3. FIELD 3: Ex-post assessment

**3a.** GHG emissions reductions (kt CO<sub>2</sub>-equivalent per year)

Year

**3b.** EU ETS, ESD/ESR, LULUCF, Total

**3c.** Documentation / Source of estimation if available

Reference

URL

## Purpose

The purpose of this field is to report estimates of the GHG mitigation effect of a policy or measure for one or more past years (ex-post) and to provide documentation for sources of estimation.

## Guidance, including format of the data

The effect of the implemented PaM shall be entered, whereby the year (3.b) can be freely chosen, and the annual emission reduction must be given in kt CO<sub>2</sub> eq per year, split between EU ETS, ESR and LULUCF if data is available or aggregated for the total (3.b). If data is available for more than one year, more records can be added.

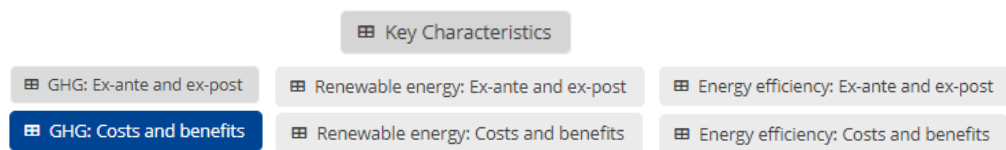
The reporting of emissions in this section should follow the same guidance as provided for ex-ante assessment in the previous sections.

References (e.g. title, authors, publication year) and links to documents with more information on the quantification should be reported when available (3.c).

## Level of obligation

Mandatory, if available.

## 4.4. GHG - Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change



Refer to section 2.5.1.2 for guidance on how to create a reporting table for the relevant PaMs or group of PaMs. The PaM Id and Name of PaM are automatically provided in the table upon creation of the table.

#### 4.4.1. FIELD 1: Projected costs and benefits

The screenshot shows a form titled "Projected costs and benefits" with the following fields and labels:

- 1a.** Year(s) for which cost has been calculated
- 1b.** Price reference year
- 1c.** Cost
  - Gross costs in EUR per tonne CO2eq reduced/sequestered
  - Absolute gross costs per year in EUR
- 1d.** Benefit
  - Benefits in EUR per tonne CO2eq reduced/sequestered
  - Absolute benefit per year in EUR
- 1e.** Net Cost
  - Net costs in EUR per tonne CO2eq reduced/sequestered
  - Absolute net cost per year in EUR
- 1f.** Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)
- 1g.** Documentation / Source of cost estimation (with an "Add record" button)
- 1h.** Description of non-GHG mitigation benefits

#### Purpose

The purpose of this section is for the Member State to report an ex-ante assessment of the projected costs and benefits of the effects of PAMs and group of PAMs on decarbonisation, including:

- Year(s) for which cost has been calculated
- Price reference year
- Gross costs in EUR per tonne CO2eq reduced/sequestered
- Absolute gross costs per year in EUR
- Benefits in EUR per tonne CO2eq reduced/sequestered
- Absolute benefit per year in EUR
- Net costs in EUR per tonne CO2eq reduced/sequestered
- Absolute net cost per year in EUR
- Description of cost estimates
- Documentation/source of cost estimations
- Description of non-GHG emissions benefits.

##### 4.4.1.1. FIELD 1.a: Year(s) for which cost has been calculated

#### Guidance, including format of the data

For reporting of projected costs of identified PaMs, the year(s) for which costs have been calculated must be in the future. Member States should report the year(s) for which costs have been calculated, whereby also a range of years can be given. If a

range of years is given, the absolute costs per year should be given as the average over this period.

Data format: number (integer/range).

**Level of obligation**

Mandatory, if available.

4.4.1.2. FIELD 1.b: Price reference year

**Guidance, including format of the data**

The price year should be entered to set a benchmark. If current costs have been calculated (i.e. unadjusted, nominal prices as actually observed year by year), the price reference year should be the same as the ‘year(s) for which cost has been calculated’.

Data format: number (integer).

**Level of obligation**

Mandatory, if available.

4.4.1.3. FIELD 1.c: Cost: Gross costs in EUR per tonne CO<sub>2</sub>eq reduced/sequestered and Absolute gross costs per year in EUR

**Guidance, including format of the data**

Gross costs should be reported in € per tonne CO<sub>2</sub>eq reduced/sequestered and absolute gross costs per year in €. Gross cost and absolute gross cost should be entered as positive values. They could include administrative costs, implementation costs, investment costs, etc.

Data format: number (decimal).

**Level of obligation**

Mandatory, if available.

4.4.1.4. FIELD 1.d: Benefit: Benefits in EUR per tonne CO<sub>2</sub>eq reduced/sequestered and Absolute benefit per year in EUR

**Guidance, including format of the data**

Benefits can be filled as benefits in € per tonne CO<sub>2</sub>eq reduced/sequestered and absolute benefit per year. A benefit must be indicated as a negative cost. Benefits include monetary benefits from reduced climate change effects, higher tax revenues, etc. It can cover a number of aspects and the Member States can select what they report.

Data format: number (decimal).

**Level of obligation**

Mandatory, if available.

- 4.4.1.5. FIELD 1.e: Net Cost: Net costs in EUR per tonne CO<sub>2</sub>eq reduced/sequestered and Absolute net cost per year in EUR

**Guidance, including format of the data**

Absolute net costs are the gross costs less benefits. This can be given as net costs in € per toe tonne CO<sub>2</sub>eq reduced/sequestered and as annual absolute net cost.

Data format: number (decimal).

**Level of obligation**

Mandatory, if available.

- 4.4.1.6. FIELD 1.f: Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)

**Guidance, including format of the data**

Description of cost estimates should provide a brief overview of the type of methodology used to calculate the net costs, as well as details of the costs included and excluded in the estimate. The user is encouraged to provide a detailed description as much as possible.

Data format: text.

**Level of obligation**

Mandatory, if available.

- 4.4.1.7. FIELD 1.g: Documentation / Source of ex-ante estimation if available

**Guidance, including format of the data**

Refer to section 4.3.3 for guidance on this field.

**Level of obligation**

Mandatory, if available.

- 4.4.1.8. FIELD 1.h: Description of non-GHG mitigation benefits

**Purpose**



Reporting the (quantitative or non-quantitative) non-GHG mitigation benefits of the policy or measure.

### **Guidance, including format of the data**

This applies for both projected and realised non-GHG mitigation benefits. Climate PaMs have multiple benefits other than reducing GHG emissions. These co-benefits can be environmental, economic or social. These could include:

- decrease energy dependency
- reduce air pollutant emissions
- reduce waste generation
- reduce water pollution
- improve water management
- reduce energy poverty
- reduce cost of energy production and transport
- protect biodiversity
- aligned with DNSH principle
- increase health levels.

Avoid overlap with the reported objectives of the PaMs. Some of these co-benefits could be an integral part and objective of the PaM, while others could be additional effects not principally targeted by the PaM.

### **Level of obligation**

Mandatory, if available.

### **Good practice example**

A measure aimed to reduce GHG emissions involves an investment with a lifetime of 15 years. The expected reduction in GHG emissions are 10,000 tonnes CO<sub>2</sub>eq per year. The investment has a gross financial cost estimated at €9 million over the entire duration. This is equivalent to an average cost of €600,000 per year.

The estimated benefits are estimated at €12 million across the entire duration, equivalent to a benefit of €800,000 per year. The net costs over the 15-year horizon therefore are expected to be negative at €3 million, equivalent to a net reduction of costs of €200,000 per year. This implies that on average the measure will result in net benefits. These results are reported as follows:

**Projected costs and benefits \***

Year(s) for which cost has been calculated \* <sup>1</sup>

2025-2040 9

Price reference year \*

2022 4

Cost \*

Gross costs in EUR per tonne CO<sub>2</sub>eq reduced/sequestered \* 5

60.00

Absolute gross costs per year in EUR \* 6

600000

Benefit \* <sup>1</sup>

Benefits in EUR per tonne CO<sub>2</sub>eq reduced/sequestered \* <sup>1</sup> 2

80

Absolute benefit per year in EUR \* <sup>1</sup> 6

800000

Net Cost \*

Net costs in EUR per tonne CO<sub>2</sub>eq reduced/sequestered \* 2

20

Absolute net cost per year in EUR \* 6

200000

#### 4.4.1.9. FIELD 2: Realised costs and benefits

##### Purpose

The purpose of this field is for the Member State to produce an ex-post assessment of realised costs and benefits for years in the past due to the implementation PAMs, including:

- Year(s) for which cost has been calculated
- Price reference year
- Gross cost in EUR per tonne CO<sub>2</sub>-eq reduced/sequestered and Absolute gross costs per year in EUR
- Benefits in EUR per tonne CO<sub>2</sub>-eq reduced/sequestered and Absolute benefits per year in EUR
- Net costs in EUR per tonne CO<sub>2</sub>-eq reduced/sequestered and Absolute net costs per year in EUR
- Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)
- Documentation/source (provide a weblink of the report where the is referenced from)
- Description of non-GHG mitigation benefits.

##### Guidance, including format of the data

For reporting of realised costs of identified PaMs, the year(s) for which costs have been calculated must be in the past.

For reporting of ex-post assessment of costs and benefits of GHG PaMs, the same guidance provided for ex-ante assessment of costs and benefits in section 4.4.1 may be followed.

##### Level of obligation

Mandatory, if available.

#### 4.5. Renewable Energy - Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on renewable energy production

☰ Key Characteristics

☰ GHG: Ex-ante and ex-post   **☰ Renewable energy: Ex-ante and ex-post**   ☰ Energy efficiency: Ex-ante and ex-post

☰ GHG: Costs and benefits   ☰ Renewable energy: Costs and benefits   ☰ Energy efficiency: Costs and benefits

Refer to section 2.5.1.2 for guidance on how to create a reporting table for the relevant PaMs or group of PaMs. The PaM Id and Name of PaM are automatically provided in the table upon creation of the table.

##### 4.5.1.1. FIELD 1: Ex-ante assessment

**Ex-ante assessment \***

**1a.** Renewable energy production (ktoe/year)

Renewable energy in 2025	Renewable energy in 2030	Renewable energy in 2035	Renewable energy in 2040
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
0	0	0	0

**1b.** Explanation of the basis for the estimate

0

Documentation / Source of ex-ante estimation if available + Add record

**1c.** Reference ☒

0

**1d.** URL

0

#### Purpose

The purpose of this field is for the Member State to transparently report the effects and methodology used for ex-ante assessment of PaMs on renewable energy production, including:

- renewable energy production (ktoe/year, final energy) in 2025, 2030, 2035 and 2040
- explanation of the basis for the estimate
- documentation/source of ex-ante estimation if available.

4.5.1.2. FIELD 1.a: Renewable energy production (ktoe/year) in 2025, 2030, 2035, 2040

**Guidance, including format of the data**

A quantitative estimate of the expected impact of the policy or measure on renewable energy production has to be reported in ktoe per year for the given years 2025, 2030, 2035 and 2040, where available.

Note, that the effects must not be reported as cumulative values, instead as estimated renewable energy production in the specific year. If only cumulative values are available, note this in the ‘explanation box’ and provide the cumulative estimates and background information in the accompanying report.

It is only possible to enter numbers. Positive values denote production increases and negative values denote production reductions.

Useful literature on ex-ante impacts can be found in Appendix 4.

**Example**

This example is about a renewable energy measure that would be expected to deliver new annual renewable energy production each year from 2021 to 2030 through investments in renewable energy installations. The lifetime of each installation is 20 years. The annual increase and total annual production at each year are estimated in ktoe as shown in the table below.

	<b>Annual Increase in RE</b>	<b>Total annual Production</b>
	ktoe	ktoe
2021	0.0172	0.0172
2022	0.0172	0.0344
2023	0.0194	0.0538
2024	0.0194	0.0731
2025	0.0215	0.0946
2026	0.0258	0.1205
2027	0.0258	0.1463
2028	0.0301	0.1764
2029	0.0301	0.2065
2030	0.0344	0.2409
2031	-	0.2409
2032	-	0.2409
2033	-	0.2409
2034	-	0.2409
2035	-	0.2409
2036	-	0.2409
2037	-	0.2409
2038	-	0.2409
2039	-	0.2409
2040	-	0.2409

The annual renewable energy production at each year is therefore inputted in the fields as follows:

The screenshot shows a form titled "Name of PaM or group of PaMs:" with a sub-section "Ex-ante assessment \*". Below this, it asks for "Renewable energy production (ktoe/year)" and provides four input fields for the years 2025, 2030, 2035, and 2040. The values entered are 0.0946, 0.2409, 0.2409, and 0.2409 respectively. Each input field has a small "6" below it, likely indicating a character limit.

Renewable energy in 2025	Renewable energy in 2030	Renewable energy in 2035	Renewable energy in 2040
0.0946	0.2409	0.2409	0.2409

Data format: number (decimal).

### **Level of obligation**

Voluntary.

#### 4.5.1.3. FIELD 1.b: Explanation of the basis for the estimate

##### **Guidance, including format of the data**

An explanation of the basis for the ex-ante production estimates should be provided in this field. This may include the type of methodology used for the assessment, for example top-down model, bottom-up model, accounting model, expert judgement, etc. Further information on the ex-ante assessment may be provided here (e.g. overlap with other measures, underlying assumptions, uncertainty).

Data format: text.

#### 4.5.1.4. FIELD 1.c: Documentation / Source of ex-ante estimation if available: Reference

##### **Purpose**

The purpose of this field is for the Member State to provide access to reports, studies, webpages which the ex-ante estimate of renewable energy production has been referenced from.

##### **Guidance, including format of the data**

Member States are encouraged to enter here the title of any underlying documents or other sources. If more than one reference is available, they can be provided by creating additional records.

Data format: and text. Additional records can be added to report additional documentation.

Data format: text.

### **Level of obligation**

Voluntary.

4.5.2. *FIELD 1.d: Documentation / Source of ex-ante estimation if available: URL*

**Guidance, including format of the data**

This field requires the web link of the report/document where the ex-ante estimate of renewable energy production has been referenced from.

Data format: text (hyperlink).

**Level of obligation**

Voluntary.

4.5.3. *FIELD 2: Ex-post assessment*

Ex-post assessment \* i

Renewable energy production (ktoe/year) + Add record

Year for which production applies i [input field] 0

Renewable energy production (ktoe/year) \* i [input field] 0

Explanation of the basis for the estimate [input field] 0

Documentation / Source of ex-post estimation if available + Add record

**Purpose**

The purpose of this field is for the Member State to report on the ex-post assessment of the effects in year(s) in the past of the PaM and group of PaMs on:

- renewable energy production (ktoe/year, final energy)
- explanation of the basis for the estimate
- documentation/source of ex-ante estimation if available.

**Guidance, including format of the data**

The effect of the implemented PaM shall be entered, whereby the year can be freely chosen, and the annual renewable energy production must be given in ktoe per year. If data is available for more than one year, more records can be added.

The reporting of renewable energy production in this section should follow the same guidance as provided for ex-ante assessment in the previous sections.

### Level of obligation

Voluntary.

## 4.6. Renewable Energy - Available projected and realised costs and benefits of individual or groups of policies and measures on renewable energy production

☒ Key Characteristics

☒ GHG: Ex-ante and ex-post	☒ Renewable energy: Ex-ante and ex-post	☒ Energy efficiency: Ex-ante and ex-post
☒ GHG: Costs and benefits	☒ Renewable energy: Costs and benefits	☒ Energy efficiency: Costs and benefits

Refer to section 1.5.1.2 for guidance on how to create a reporting table for the relevant PaMs or group of PaMs. The PaM Id and Name of PaM are automatically provided in the table upon creation of the table.

### 4.6.1. FIELD 1: Projected costs and benefits (ex-ante assessment)

**Projected costs and benefits (ex-ante assessment)**

Year(s) for which cost has been calculated

Price reference year

**Cost**

Gross cost in EUR per toe renewable energy production  Absolute gross costs per year in EUR

**Benefit**

Absolute benefits per year in EUR  Benefits in EUR per toe renewable energy production

**Net Cost**

Net costs in EUR per toe renewable energy production  Absolute net cost per year in EUR

Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)

Documentation / Source of cost estimation  + Add record

Description of other benefits

### Purpose

The purpose of this field is for the Member State to report an ex-ante assessment of the projected costs and benefits of the effects of PAM and group of PAMs on renewable energy production, including:

- Year(s) for which cost has been calculated
- Price reference year
- Gross cost per toe renewable energy production and absolute gross costs per year
- Benefits per toe renewable energy production
- Net costs per toe renewable energy production and absolute net costs per year
- Description of cost estimates
- Documentation/sources of cost estimations
- Description of other benefits.

**Level of obligation**

Voluntary.

4.6.1.1. FIELD 1.a: Year(s) for which cost has been calculated

**Guidance, including format of the data**

For reporting of projected costs of identified PaMs, the year(s) for which costs have been calculated must be in the future. Member States should report the year(s) for which costs have been calculated, whereby also a range of years can be given. If a range of years is given, the absolute costs per year should be given as the average over this period.

Data format: number (integer/range).

**Level of obligation**

Voluntary.

4.6.1.2. FIELD 1.b: Price reference year

**Guidance, including format of the data**

The price year should be entered to set a benchmark. If current costs have been calculated (i.e. unadjusted, nominal prices as actually observed year by year), the price reference year should be the same as the ‘year(s) for which cost has been calculated’.

Data format: number (integer).

**Level of obligation**

Voluntary.



4.6.1.3. FIELD 1.c: Cost: Gross costs in EUR per toe renewable energy production and Absolute gross costs per year in EUR

**Guidance, including format of the data**

Gross costs should be reported in € per toe renewable energy production, absolute gross costs and absolute costs per year in €. Gross cost and absolute gross cost should be entered as positive values. They could include administrative costs, implementation costs, investment costs, etc.

Data format: number (decimal).

**Level of obligation**

Voluntary.

4.6.1.4. FIELD 1.d: Benefits in EUR per toe renewable energy production

**Guidance, including format of the data**

Benefits can be filled as benefits in € per toe renewable energy production. A benefit must be indicated as a negative cost. Benefits include reduced energy consumption, monetary benefits from better public health, higher tax revenues, etc. It can cover a number of aspects and the Member States can select what they report.

Data format: number (decimal).

**Level of obligation**

Voluntary.

4.6.1.5. FIELD 1.e: Net Cost: Net costs in EUR per toe renewable energy production and Absolute net cost per year in EUR

**Guidance, including format of the data**

Absolute net costs are the gross costs less benefits and can be given as net costs in € per toe renewable energy production and as annual absolute net cost.

Data format: number (decimal).

**Level of obligation**

Voluntary.

4.6.1.6. FIELD 1.f: Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)

**Guidance, including format of the data**

Description of cost estimates should provide a brief overview of the type of methodology used to calculate the costs, as well as details of the costs included and excluded in the estimate. Alternatively, it may include both costs. Regardless of the selection, the user is encouraged to provide a detailed description as possible.

Data format: text.

### Level of obligation

Voluntary.

#### 4.6.1.7. FIELD 1g: Documentation / Source of ex-ante estimation if available

### Guidance, including format of the data

Refer to section 4.5.1.4 for guidance on this field.

### Level of obligation

Voluntary.

### Good practice example

The example provides the costs for the same measure provided in the example in section 4.5.1. The measure which involves installation of renewable energy technology has a gross cost of almost €9,000 per toe of output. On the other hand, the benefits are estimated at almost €11,000 per toe of output. Based on the estimated total renewable energy production levels at each year, the gross cost per year is estimated at around €1.6 million, whilst the benefits are estimated at around €1.9 million per year. This results in negative net costs of around €300,000 per year. These figures are reported as follows:

Projected costs and benefits (ex-ante assessment) *	
Year(s) for which cost has been calculated * ⓘ	
2021-2040	
9	
Price reference year *	
2020	
4	
Cost *	
Gross cost in EUR per toe renewable energy production *	Absolute gross costs per year in EUR *
8966.56	1601830
9	8
Benefit * ⓘ	
Benefits in EUR per toe renewable energy production * ⓘ	
-10775.57	
10	
Net Cost *	
Net costs in EUR per toe renewable energy production	Absolute net cost per year in EUR *
-1809	-323170
5	8

#### 4.6.1.8. FIELD 1.h: Description of other benefits

##### **Guidance, including format of the data**

For the reporting of other benefits of the PaM besides affecting renewable energy.

##### **Level of obligation**

Voluntary.

#### 4.6.2. FIELD 2: Realised costs and benefits (ex-post assessment)

**Realised costs and benefits (ex-post assessment) \***

Year(s) for which cost has been calculated \* [?](#)

Price reference year \*

**Cost \***

Gross cost in EUR per toe renewable energy production \*

Absolute gross costs per year in EUR \*

**Benefit \* [?](#)**

Benefits in EUR per toe renewable energy production \* [?](#)

Absolute benefits per year in EUR \*

**Net Cost \***

Net costs in EUR per toe renewable energy production \*

Absolute net costs per year in EUR \*

Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology) [?](#)

Documentation / Source of cost estimation

Description of other benefits

##### **Purpose**

The purpose of this field is for the Member State to produce an ex-post assessment of realised costs and benefits due to the implementation PAMs on renewable energy production, including:

- Year(s) for which cost has been calculated
- Price reference year
- Gross cost in EUR per toe renewable energy production and Absolute gross costs per year in EUR
- Benefits in EUR per toe renewable energy production and Absolute benefits per year in EUR
- Net costs in EUR per toe renewable energy production and Absolute net costs per year in EUR
- Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)
- Documentation/source of cost estimate
- Description of other benefits.

#### **Guidance, including format of the data**

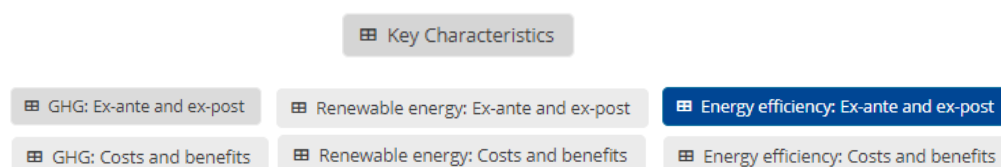
For reporting of realised costs of identified PaMs, the year(s) for which costs have been calculated must be in the past.

For reporting of ex-post assessment of costs and benefits of Renewable Energy PaMs, the same guidance provided for ex-ante assessment of costs and benefits in section 4.6.1 may be followed.

#### **Level of obligation**

Voluntary.

### **4.7. Energy Efficiency - Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on energy efficiency**



Refer to section 2.5.1.2 for guidance on how to create a reporting table for the relevant PaMs or group of PaMs. The PaM Id and Name of PaM are automatically provided in the table upon creation of the table.

#### *4.7.1. FIELD 1: Ex-ante assessment: Energy reductions (ktoe/year, final energy)*

##### **Purpose**

The purpose of this field is for the Member State to provide an ex-ante assessment of the effects of PaMs on energy efficiency.

- energy reductions (ktoe/year, final energy) in 2025, 2030, 2035 and 2040

- explanation of the basis for the estimate
- documentation/source of ex-ante estimation if available.

#### 4.7.2. *FIELD 1.a: Energy reductions (ktoe/year) in 2025, 2030, 2035, 2040*

##### **Guidance, including format of the data**

A quantitative estimate of the expected impact of the policy or measure on energy reduction has to be reported in ktoe per year for the given years 2025, 2030, 2035 and 2040, where available.

Note, that the effects must not be reported as cumulative values, instead as estimated energy reduction in the specific year. If only cumulative values are available, note this in the ‘explanation box’ and provide the cumulative estimates and background information in the accompanying report.

It is only possible to enter numbers. Positive values denote energy reduction and negative values denote energy increase.

Useful literature on ex-ante impacts can be found in Appendix 4.

Data format: number (decimal).

##### **Level of obligation**

Voluntary.

#### 4.7.3. *FIELD 1.b: Explanation of the basis for the estimate*

##### **Guidance, including format of the data**

An explanation of the basis for the ex-ante energy reduction estimates should be provided in this field. This may include the type of methodology used for the assessment, for example top-down model, bottom-up model, accounting model, expert judgement, etc. Further information on the ex-ante assessment may be provided here (e.g. overlap with other measures, underlying assumptions, uncertainty).

Data format: text.

**Level of obligation**

Voluntary.

4.7.4. *FIELD 1.c: Documentation / Source of ex-ante estimation if available: Reference*

**Purpose**

The purpose of this field is for the Member State to provide access to reports, studies, webpages which the ex-ante estimate of renewable energy production has been referenced from.

**Guidance, including format of the data**

Member States are encouraged to enter here the title of any underlying documents or other sources. If more than one reference is available, they can be provided by creating additional records.

Data format: text. Additional records can be added to report additional documentation.

**Level of obligation**

Voluntary.

4.7.5. *FIELD 1.d: Documentation / Source of ex-ante estimation if available: URL*

**Guidance, including format of the data**

This field requires the web link of the report/document where the ex-ante estimate of renewable energy production has been referenced from.

Data format: text (hyperlink).

**Level of obligation**

Voluntary.

#### 4.7.6. FIELD 2: Ex-post assessment

Ex-post assessment

Energy reductions + Add record

Year for which reduction applies

Energy reductions (ktoe/year, final energy)

Explanation of the basis for the estimate

Documentation / Source of ex-post estimation if available + Add record

#### Purpose

The purpose of this field is for the Member State to produce an ex-post assessment of the effects of PAM and PAMs on energy efficiency on.

- energy reductions (ktoe/year, final energy)
- explanation of the basis for the estimate
- documentation/source of ex-ante estimation if available.

#### Guidance, including format of the data

The effect of the implemented PaM shall be entered, whereby the year can be freely chosen, and the annual energy reduction must be given in ktoe per year. If data is available for more than one year, more records can be added.

The reporting of emissions in this section should follow the same guidance as provided for ex-ante assessment in the previous sections.

#### Level of obligation

Voluntary.

### 4.8. Energy Efficiency - Available projected and realised costs and benefits of individual or groups of policies and measures on energy efficiency

Key Characteristics

GHG: Ex-ante and ex-post   Renewable energy: Ex-ante and ex-post   Energy efficiency: Ex-ante and ex-post

GHG: Costs and benefits   Renewable energy: Costs and benefits   Energy efficiency: Costs and benefits

Refer to section 1.5.1.2 for guidance on how to create a reporting table for the relevant PaMs or group of PaMs. The PaM Id and Name of PaM are automatically provided in the table upon creation of the table.

#### 4.8.1. FIELD 1: Projected costs and benefits (ex-ante assessment)

#### Purpose

The purpose of this field is for the Member State to produce an ex-ante assessment of the projected costs and benefits of the effects of PAM or group of PAMs on energy efficiency. The data to be reported includes:

- Year(s) for which cost has been calculated
- Price reference year
- Gross cost in EUR per toe final energy reduction and absolute gross costs per year
- Benefits per toe final energy reduction
- Net costs per toe final energy reduction and absolute net costs per year
- Description of cost estimates
- Documentation/sources of cost estimations
- Description of other benefits.

##### 4.8.1.1. FIELD 1.a: Year(s) for which cost has been calculated

#### Guidance, including format of the data



For reporting of projected costs of identified PaMs, the year(s) for which costs have been calculated must be in the future. Member States should report the year(s) for which costs have been calculated, whereby also a range of years can be given. If a range of years is given, the absolute costs per year should be given as the average over this period.

Data format: number (integer/range).

**Level of obligation**

Voluntary.

4.8.1.2. FIELD 1.b: Price reference year

**Guidance, including format of the data**

The price year should be entered to set a benchmark. If current costs have been calculated (i.e. unadjusted, nominal prices as actually observed year by year), the price reference year should be the same as the 'year(s) for which cost has been calculated'.

Data format: number (integer).

**Level of obligation**

Voluntary.

4.8.1.3. FIELD 1.c: Cost: Gross costs in EUR per toe renewable energy production and Absolute gross costs per year in EUR

**Guidance, including format of the data**

Gross costs should be reported in € per toe final energy reduction, absolute gross costs and absolute costs per year in €. Gross cost, absolute gross cost and absolute costs should be entered as positive values. They could include administrative costs, implementation costs, investment costs, etc.

Data format: number (decimal).

**Level of obligation**

Voluntary.

4.8.1.4. FIELD 1.d: Benefits in EUR per toe renewable energy production

**Guidance, including format of the data**

Benefits can be filled as benefits in € per toe final energy reduction. A benefit must be indicated as a negative cost. Benefits include reduced energy consumption, monetary benefits from better public health, higher tax revenues, etc. It can cover a number of

aspects and the Member States can select what they report. Nonetheless, the description of the costs and benefits must be thorough.

Data format: number (decimal).

**Level of obligation**

Voluntary.

4.8.1.5. FIELD 1.e: Net Cost: Net costs in EUR per toe renewable energy production and Absolute net cost per year in EUR

**Guidance, including format of the data**

Absolute net Costs are the gross costs less the benefits and can be given as net costs in € per toe final energy reduction and as annual absolute net cost.

Data format: number (decimal).

**Level of obligation**

Voluntary.

4.8.1.6. FIELD 1.f: Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)

**Guidance, including format of the data**

Description of cost estimate should provide a brief description of the type of methodology used to calculate the costs, as well as details of the costs included and excluded in the estimate. Alternatively, it may include both costs. Regardless of the selection, the user is encouraged to provide an as detailed description as possible.

Data format: text.

**Level of obligation**

Voluntary.

4.8.1.7. FIELD 1g: Documentation / Source of ex-ante estimation if available

**Guidance, including format of the data**

Refer to section 4.7.1.3 and 4.7.1.4 for guidance on this field.

**Level of obligation**

Voluntary.

#### 4.8.1.8. FIELD 1.h: Description of other benefits

##### **Guidance, including format of the data**

For the reporting of other benefits of the PaM besides affecting energy reductions.

Data format: text.

##### **Level of obligation**

Voluntary.

#### 4.8.2. FIELD 2: Realised costs and benefits (ex-post assessment)

**Realised costs and benefits (ex-post assessment)**

Year(s) for which cost has been calculated \*

Price reference year \*

**Cost \***

Gross cost in EUR per toe final energy reduction \*      Absolute gross costs per year in EUR \*

**Benefits \***

Benefits in EUR per toe final energy reduction \*      Absolute benefits per year in EUR \*

**Net Cost \***

Net costs in EUR per toe final energy reduction \*      Absolute net costs per year in EUR \*

Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology) \*

Documentation / Source of cost estimation [+ Add record](#)

Description of other benefits

##### **Purpose**

The purpose of this field is for the Member State to produce an ex-post assessment of realised costs and benefits due to the implementation PAMs on energy efficiency, including:

- Year(s) for which cost has been calculated
- Price reference year
- Gross cost in EUR per toe final energy reduction and absolute gross costs per year

- Benefits in EUR per toe final energy reduction and Absolute benefits per year in EUR
- Net costs per toe final energy reduction and absolute net costs per year
- Description of cost estimates
- Documentation/sources of cost estimations
- Description of other benefits.

### **Guidance, including format of the data**

For reporting of realised costs of identified PaMs, the year(s) for which costs have been calculated must be in the past.

For reporting of ex-post assessment of costs and benefits of Energy Efficiency PaMs, the same guidance provided for ex-ante assessment of costs and benefits in section 4.8.1 may be followed.

### **Level of obligation**

Voluntary.

## 5. THEMATIC GUIDELINES FOR REPORTING - ANNEX X: NEW PaMs EED

### 5.1. Introduction

This section provides guidance for reporting information related to national policies and measures (Article 7) according to Annex X of the Implementing Regulation 2022/2299. The tables in the dataflow are as follows:

- Annex X: Energy efficiency Obligation Schemes (EEOS) referred to in Article 7a of Directive 2012/27/EU,
- Annex X: Alternative policy measures referred to in Article 7b and Article 20(6) of Directive 2012/27/EU (except taxation measures),
- Annex X: Information on taxation measures,
- Annex X: Information about the lifetime of the individual actions eligible to the policies and measures reported for Article 7 of Directive 2012/27/EU.

### 5.2. Annex X: Energy efficiency Obligation Schemes (EEOS) referred to in Article 7a of Directive 2012/27/EU

Art. 7a Art. 7b Taxation Actions

Energy efficiency Obligation Schemes (EEOS) referred to in Article 7a of Directive 2012/27/EU + Add record

1. Select PaM ID as listed in Annex IX \*

2. Source(s) of information (including the reference of the related law or other legal text(s)) \*

#### 5.2.1. FIELD 1: Select PaM ID as listed in Annex IX

##### Purpose

The purpose of this field is for the Member State to identify the specific PaM or group of PaMs that provide funding that supports the delivery of the objectives, targets and contributions set out in the NECPs. The specific PaMs are identified through the reporting of the respective PaM ID number(s). Data can be reported at the level of individual PaMs or for groups of PaMs.

##### Guidance, including format of the data

Each row in the template refers to either a specific PaM, or a group of PaMs. The relevant PaM or group of PaMs ID number(s) that correspond with the data in each field should therefore be selected. In case of a missing PaM, information needs to first be completed in “Annex IX: Key characteristics and progress towards implementing policies and measures”.

Data format: text (dropdown list – list of PaMs). Additional records can be added to report on additional PaMs or group of PaMs for this table.

**Level of obligation**

Mandatory.

5.2.2. *FIELD 2: Source(s) of information (including the reference of the related law or other legal text(s))*

**Purpose**

The purpose of this field is for the Member State to provide the reference of the PaM for Energy efficiency Obligation Schemes.

**Guidance, including format of the data**

Member States have to complete the field with the title and/or the web link of a report/document to direct users to documents and websites with a more detailed description of the PaMs. References of the related law or other legal text(s) have to be included. It is good practice to report the exact name of legal act (law, decree, regulation, etc.), preferably in English.

Data format: text.

**Level of obligation**

Mandatory.

5.2.3. *FIELD 3: Expected savings for 2021-2030 and duration of the obligation period(s) (point 5(d) and 5(e) of Annex V to Directive 2012/27/EU)*

**Expected savings for 2021-2030 and duration of the obligation period(s) (points 5(d) and 5(e) of Annex V to Directive 2012/27/EU)**

Expected cumulative end-use energy savings for the period 2021-2030 (ktoe) \*

**3a.**

Expected new annual end-use energy savings (ktoe/year) <sup>i</sup>

**3b.**

2021	2022	2023	2024	2025
<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
2026	2027	2028	2029	2030
<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

Duration of the obligation period(s) \*

**3c.**

5.2.3.1. Field 3.a: Expected cumulative end-use energy savings for the period 2021-2030 (ktoe)

**Purpose**

The purpose of this field is for the Member State to report Member States' total volume of expected cumulative end-use energy savings for the period 2021-2030 according to Energy efficiency Obligation Schemes.

**Guidance, including format of the data**

Member States have to report the total volume of expected cumulative end-use energy savings for the period 2021-2030 in the field. The reported information corresponds to the annual sum of total volume of expected savings in the direct energy consumption by the users for each year from 2021 to 2030. The information should be calculated and reported in thousand tonnes of oil equivalent (ktoe). It can be based on the data already reported in the NECP, or providing new or updated data.

Data format: number (decimal).

Good examples

**Example 1**

This example is about an EEOS that would be expected to deliver a constant rate of new annual savings of 10 ktoe/year each year from 2021 to 2030 as represented in the table below. In this example, all the individual actions reported as part of the EEOS have a lifetime of 10 years or more. Therefore, the annual energy savings from the

actions implemented in a given year remain the same in the subsequent years until 2030.

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
2021	10	10	10	10	10	10	10	10	10	10
2022		10	10	10	10	10	10	10	10	10
2023			10	10	10	10	10	10	10	10
2024				10	10	10	10	10	10	10
2025					10	10	10	10	10	10
2026						10	10	10	10	10
2027							10	10	10	10
2028								10	10	10
2029									10	10
2030										10
<b>Total annual savings</b>	<b>10</b>	<b>20</b>	<b>30</b>	<b>40</b>	<b>50</b>	<b>60</b>	<b>70</b>	<b>80</b>	<b>90</b>	<b>100</b>

The last line of the table above shows the total annual savings achieved by the EEOS in each year from the actions implemented from 2021 until 2030.

The cumulative savings for 2021-2030 are then the sum of the total annual savings of each year from 2021 to 2030, so in the case shown above, these would amount to 550 ktoe.

### *Example 2*

This example is about an EEOS that would start in 2023 and then expected to deliver an increasing rate of new annual savings from 5 ktoe/year in 2023 to 30 ktoe/year in 2030, as represented in the table below. Moreover in this example, it is expected that half of the savings come from actions with a lifetime of 10 years or more, and half with a lifetime of 1 year only (e.g. behavioural measures). The way the savings from actions implemented in a given year evolves over time is shown in each line of the table below (that corresponds to the savings from the actions implemented in the year of this line).

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
2021										
2022										
2023			5.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5
2024				7.0	3.5	3.5	3.5	3.5	3.5	3.5
2025					10.0	5.0	5.0	5.0	5.0	5.0
2026						14.0	7.0	7.0	7.0	7.0
2027							18.0	9.0	9.0	9.0
2028								22.0	11.0	11.0
2029									26.0	13.0
2030										30.0
<b>Total annual savings</b>	<b>0</b>	<b>0</b>	<b>5.0</b>	<b>9.5</b>	<b>16.0</b>	<b>25.0</b>	<b>36.0</b>	<b>49.0</b>	<b>64.0</b>	<b>81.0</b>



The last line of the table above shows the total annual savings achieved by the EEOS in each year from actions implemented from 2021 until 2030.

The cumulative savings for 2021-2030 are then the sum of the total annual savings of each year from 2021 to 2030, so in the case shown above, these would amount to 286 ktoe.

### **Level of obligation**

Mandatory.

#### 5.2.3.2. FIELD 3.b: Expected new annual end-use energy savings (ktoe/year)

### **Purpose**

The purpose of this field is for the Member State to report Member States' volume of expected end-use energy savings achieved in a year according to Energy Efficiency Obligation Schemes.

### **Guidance, including format of the data**

When new annual end-use energy savings are expected to be stable over time, Member States have to report the volume of expected end-use energy savings achieved in a year in the field "Expected new annual end-use energy savings (ktoe/year)". The information should be calculated and reported in thousand tonnes of oil equivalent (ktoe).

When new annual end-use energy savings are expected to change over time, Member State have to report the disaggregated annual volume of expected savings in the direct energy consumption by the users for each year from 2021 to 2030 in different fields.

Data format: number (decimal).

Good examples

#### *Example 1*

This example is about an EEOS that would be expected to deliver a constant rate of new annual savings of 10 ktoe/year each year from 2021 to 2030.

In this case, the following reporting is sufficient:

Expected new annual end-use energy savings (ktoe/year)	10
--	----

**Expected savings for 2021-2030 and duration of the obligation period(s) (points 5(d) and 5(e) of Annex V to Directive 2012/27/EU)**

Expected cumulative end-use energy savings for the period 2021-2030 (ktoe) \*

550

3

Expected new annual end-use energy savings (ktoe/year) <sup>i</sup>

10

2

2021

2022

2023

2024

2025






0

0

0

0

0

2026

2027

2028

2029

2030






0

0

0

0

0

Duration of the obligation period(s) \*

2021-2030

9

**Example 2**

This example is about an EEOS that would start in 2023 and then expected to deliver an increasing rate of new annual savings from 5 ktoe/year in 2023 to 30 ktoe/year in 2030

In this case, the following lines of table 1 of Annex X need to be filled in, as follows:

Expected new annual end-use energy savings (ktoe/year)	
2021	0
2022	0
2023	5
2024	7
2025	10
2026	14
2027	18
2028	22
2029	26
2030	30

**Expected savings for 2021-2030 and duration of the obligation period(s) (points 5(d) and 5(e) of Annex V to Directive 2012/27/EU)**

Expected cumulative end-use energy savings for the period 2021-2030 (ktoe) \*

286 3

Expected new annual end-use energy savings (ktoe/year) <sup>1</sup>

0 0

2021	2022	2023	2024	2025
0	0	5	7	10
1	1	1	1	2
2026	2027	2028	2029	2030
14	18	22	26	30
2	2	2	2	2

Duration of the obligation period(s) \*

2023-2025; 2025-2027; 2027-2029; 2030-2032 42

### Level of obligation

Mandatory, if applicable (i.e. Member States have to provide yearly objective when new annual end-use energy savings are expected to change over time).

#### 5.2.3.3. FIELD 3.c: Duration of the obligation period(s)

### Purpose

The purpose of this field is for the Member State to report Member States' duration of the obligation period(s) (obligation period and intermediate periods) for the operation Energy efficiency Obligation Schemes.

### Guidance, including format of the data

Member States have to report the duration of the obligation period(s) (obligation period and intermediate periods) for the operation of Energy Efficiency Obligation Schemes imposed on obligated, participating or entrusted parties, or implementing public authorities. The obligation period is included in the detailed methodology for operation presented by Member States to the Commission.

Good examples

#### *Example 1*

The EEOS is designed with an obligation period similar to the one set in the EED. For this obligation period, the obligated parties have an annual target of new annual savings to be achieved each year, from 2021 to 2030. This can be reported as follows:

Duration of the obligation period(s)	2021-2030
--------------------------------------	-----------

**Example 2**

**Expected savings for 2021-2030 and duration of the obligation period(s) (points 5(d) and 5(e) of Annex V to Directive 2012/27/EU)**

Expected cumulative end-use energy savings for the period 2021-2030 (ktoe) \*

286 3

Expected new annual end-use energy savings (ktoe/year) ⓘ

0

2021	2022	2023	2024	2025
	0	5	7	10
	0	1	1	1
				2
2026	2027	2028	2029	2030
14	18	22	26	30
	2	2	2	2
				2

Duration of the obligation period(s) \*

2023-2025; 2025-2027; 2027-2029; 2030-2032 42

The EEOS starts in 2023 and is designed with obligation periods of 3 years. This can be reported as follows:

Duration of the obligation period(s)	2023-2025; 2025-2027; 2027-2029; 2030-2032
--------------------------------------	---

**Level of obligation**

Mandatory.

### 5.2.4. FIELD 4: Key design features

**Key design features**

Obligated parties and their responsibilities (point 5(b) of Annex V to Directive 2012/27/EU) \*

**4a.**  0

Target sectors (point 5(c) of Annex V to Directive 2012/27/EU) \* [i](#)

**4b.**  ▾

Sectors where individual actions are eligible to the EEOS \* [i](#)

**4c.**  0

Individual actions eligible to the EEOS \* [i](#)

**4d.**  0

Main eligibility criteria provided as a separate file [i](#)

**4c.**

#### Purpose

The purpose of this field is for the Member State to report on present key design features included in detailed methodology for operation of Energy efficiency Obligation Schemes presented by Member States to the Commission.

#### 5.2.4.1. FIELD 4.a: Obligated parties and their responsibilities (point 5(b) of Annex V to Directive 2012/27/EU)

#### Guidance, including format of the data

Member States have to report details on obligated parties (“obligated party” means an energy distributor or retail energy sales company that is bound by the national energy efficiency obligation schemes referred to in Article 7 of Directive 2012/27/EU) and their responsibilities in the operation of energy efficiency obligation schemes. The description of responsibilities should be condensed.

#### Good example

<p>Obligated parties and their responsibilities (point 5(b) of Annex V to Directive 2012/27/EU)</p>	<p>Example 1: The obligated parties are all energy suppliers with annual energy savings above 100 GWh/year. They have to implement or contract energy efficiency programmes to achieve an annual target of new annual savings. They need to demonstrate that their intervention was material to the achievement of the energy savings, by reporting about the type of intervention (e.g. grant, free energy audit) and keeping evidence about the implementation of the action (e.g. invoice) and that the intervention occurred before the implementation of the action (attestation signed by the final customer).</p> <p>Example 2: The obligated parties are all the electricity and gas distributors and have to achieve energy saving</p>
---	---

	targets over 3-year periods. They can implement their own programmes promoting energy savings among end-users to get white certificates. Or they can buy white certificates from third parties eligible to get white certificates for their energy saving projects (including energy companies, ESCOs with certified energy managers, local authorities, social housing bodies).
--	--

Data format: text.

**Level of obligation**

Mandatory.

5.2.4.2. FIELD 4.b: Target sectors (point 5(c) of Annex V to Directive 2012/27/EU)

**Guidance, including format of the data**

Member States have to specify the sectors taken into account to calculate the target(s) of the energy efficiency obligation schemes and to define obligated parties. Main following sectors of interest need to be reported in the field “Target sectors”:

- Energy supply;
- Energy consumption;
- Transport;
- Industrial processes;
- Waste management/waste;
- Agriculture;
- LULUCF;
- Other sectors.

**Good example**

Target sectors (point 5(c) of Annex V to Directive 2012/27/EU) <sup>(2)</sup>	<p>Example 1: All end-use sectors, including Residential; Services; Industry; and Transport. The targets on the energy suppliers are calculated based on their sales to all final customers.</p> <p>Example 2: Residential; Services; and Industry. The targets on the electricity and gas distributors are calculated based on the volumes of electricity and gas they distribute to final customers of these three sectors.</p>
---	---

Data format: text (dropdown list).

**Level of obligation**

Mandatory.

### 5.2.4.3. FIELD 4.c: Sectors where individual actions are eligible to the EEOS

#### Guidance, including format of the data

When sectors where individual actions are eligible (“individual action” means an action that leads to verifiable, and measurable or estimable, energy efficiency improvements and is undertaken as a result of a policy measure) are different from the sectors taken into account to calculate the target(s) of the energy efficiency obligation schemes, these need to be reported in the this field.

#### Good example

Sectors where individual actions are eligible to the EEOS (if different from the target sectors listed above) (point 5(c) of Annex V to Directive 2012/27/EU)	Example 1: nothing has to be mentioned here, as the scope is the same as for setting the targets on obligated parties (all end-use sectors).  Example 2: individual actions can be implemented in all end-use sectors, including Residential; Services; Industry; and Transport.
---	--

Data format: text.

#### Level of obligation

Mandatory.

### 5.2.4.4. FIELD 4.d: Individual actions eligible to the EEOS

#### Guidance, including format of the data

Details on eligible individual actions and corresponding lifetimes (of policy measures and energy savings) have to be reported by Member States. “Individual action” means an action that leads to verifiable, and measurable or estimable, energy efficiency improvements and is undertaken as a result of a policy measure.

Details should include information on:

- **End-use sector:** Sector taken into account by the individual action,
- **Assumed lifetime value (in years):** Lifetime of energy savings,
- **Assumptions about possible changes in the energy savings over time:** Assumptions of increase or decrease of energy savings in different years after implementation,
- **Source or method use to estimate the lifetime of savings and related assumptions:** Sources, methods and provision used and made to ensure a binding calculation requirement.

Note: when the list of individual action is too long to be reported in this table, it can be reported in the table “Annex X: Information about the lifetime of the individual actions eligible to the policies and measures reported for Article 7 of Directive 2012/27/EU” (see section 5.5). This enables reporting a list of different types of individual actions.

Member States should provide condensed information.

If the list of measures is too long, Member States should only report the name of the action and the main eligibility criteria (proof that the action leads to energy efficiency improvements in order to be considered as individual action). Additional information for the listed individual actions should then be reported in Annex X: Information about the lifetime of the individual actions eligible to the policies and measures reported for Article 7 of Directive 2012/27/EU as indicated in Section 5.5.

### Good examples

<p>Individual actions eligible to the EEOS (point 5(f) of Annex V to Directive 2012/27/EU) and corresponding lifetimes (points 2(i) and 5(h) of Annex V to Directive 2012/27/EU)<sup>(3)</sup></p>	<p>Example 1: all individual actions that save end-use energy and that have an energy performance higher than the minimum energy performance standards in place are eligible. It should be noted that some actions eligible to the EEOS are not reported to Article 7 EED (e.g., new buildings with a higher energy performance than the current requirements; new cars).</p> <p>Example 2: a catalogue of 100 action types has been defined for the actions eligible in the residential and services sectors (see <a href="https://www.eeos-catalogue.gov">https://www.eeos-catalogue.gov</a>). Then all individual actions saving end-use energy in industry and transports, and evaluated with an energy audit can be eligible for the EEOS.</p>
--	---

Data format: text.

### Level of obligation

Mandatory.

#### 5.2.4.5. FIELD 4.e: Main eligibility criteria provided as a separate file

### Guidance, including format of the data

Additional information on eligibility criteria can be added in an attachment (max. 5 MB).

Data format: attachment.



### 5.2.5. FIELD 5: Information on the application of the following EED provisions

**Information on the application of the following EED provisions:**  
Where applicable, specific actions and/or share of savings to be achieved in vulnerable households, including those affected by energy poverty, and, where appropriate, in social housing (article 7(11) to Directive 2012/27/EU)

**5a.**  0

Savings achieved by energy service providers or other third parties (Article 7a(6), point (a) of Directive 2012/27/EU of Directive 2012/27/EU) ⓘ

**5b.**  0

Rules about banking and borrowing ⓘ

**5c.**  0

Possibilities for trading of energy savings (where relevant)

**5d.**  0

Interactions with a National Energy Efficiency Fund in accordance with Article 20(6) of Directive 2012/27/EU (as considered in Article 7a(1) of that Directive) ⓘ

**5e.**  0

#### Purpose

The purpose of this field is for the Member State to provide information on the application of Energy Efficiency Directive provisions, when applicable, regarding:

- Requirements with a social aim in the saving obligations they impose
- Permission to obligated parties to count towards their obligation certified energy savings achieved by energy service providers or other third parties
- Rules about banking and borrowing
- Energy saving trading measures
- Creation of a National Energy Efficiency Fund.

#### Guidance, including format of the data

For each field within the section “Information on the application of the following EED provisions”, the description needs to present consistent but condensed details. It is therefore recommended to make appropriate use of the references/links to direct users to documents and websites with a more detailed description of the information and methodologies used to acquire this information.

If the changes correspond to a legal act (law, decree, regulation, etc.), it is good practice to report its exact name, preferably in English.

#### Level of obligation

Mandatory, if applicable (i.e. Member States are required to provide the information if the relevant Energy Efficiency Directive provisions have been set):

- Requirements with a social aim in the saving obligations they impose,

- Permission to obligated parties to count towards their obligation certified, energy savings achieved by energy service providers or other third parties,
- Rules about banking and borrowing,
- Energy saving trading measures,
- Creation of a National Energy Efficiency Fund.

5.2.5.1. FIELD 5.a: Where applicable, specific actions and/or share of savings to be achieved in vulnerable households, including those affected by energy poverty, and, where appropriate, in social housing (article 7(11) to Directive 2012/27/EU)

**Guidance, including format of the data**

Member States may report energy efficiency measures with social aims and/or related share of savings to be achieved, being measures implemented as a priority in vulnerable households affected by energy poverty and social housing.

Data format: text.

5.2.5.2. FIELD 5.b: Savings achieved by energy service providers or other third parties (Article 7a(6), point (a) of Directive 2012/27/EU of Directive 2012/27/EU)

**Guidance, including format of the data**

Member States have to report the volume of energy savings achieved by energy services providers and other third parties, if applicable. The information needs to be calculated and reported in thousand tonnes of oil equivalent (ktoe). The calculation includes when obligated parties promote measures through other State-approved bodies or through public authorities that may or may not involve formal partnerships and may be in combination with other sources of finance.

5.2.5.3. FIELD 5.c: Rules about banking and borrowing

**Guidance, including format of the data**

Member States have to report the rules about banking and borrowing, if applicable. Banking is when obligated parties exceed their target in one period of the EEOS, and are allowed to count all or part of the excess energy savings for the achievement of their target in the next period. Borrowing is when obligated parties do not meet their target in one period of the EEOS and are allowed to compensate full or part of this gap with energy savings achieved in the next period in addition to their target for this next period. In case of white certificates, banking and borrowing can also be related to the duration of validity of a white certificate until it is used by an obligated party to report achieved energy savings.

5.2.5.4. FIELD 5.d: Possibilities for trading of energy savings (where relevant)

**Guidance, including format of the data**

Where relevant, Member States have to report existing possibilities for trading energy savings (in organised electricity markets), such as white certificates schemes or bilateral (over-the-counter) trading between obligated parties.

5.2.5.5. FIELD 5.e: Interactions with a National Energy Efficiency Fund in accordance with Article 20(6) of Directive 2012/27/EU (as considered in Article 7a(1) of that Directive)

**Guidance, including format of the data**

When a National energy Efficiency Fund was set, Member States have to report relevant interaction. In accordance with Article 20 (6) of Directive 2012/27/EU, Member States may also provide that obligated parties fulfil their obligations set out in Article 7a(1) of the Directive by contributing annually to the Energy Efficiency National Fund an amount equal to the investments required.

Data format: text.

5.2.6. FIELD 6: General information about the calculation methodology

The screenshot shows a form titled "General information about the calculation methodology". It contains four input fields, each with a red label to its left:

- 6a.** Measurement method(s) used (point 1 of Annex V , to Directive 2012/27/EU) \* ⓘ
- 6b.** Metric(s) used to express the energy savings (primary or final energy savings) (Article 7a(4), and point 3(d) of Annex V to Directive 2012/27/EU) \*
- 6c.** How are lifetimes (and possible changes in savings over time) taken into account in savings calculations (points 2(i) and 5(h) of Annex V to Directive 2012/27/EU) \* ⓘ
- 6d.** Other sources of information or references (e.g. studies, evaluation reports) where more explanations and details about the savings calculations can be found

**Purpose**

The purpose of this field is for the Member State to present the calculation methodology of the impact of Energy Efficiency Obligations Schemes or other policy measures used by Member States (e.g. obligations for energy distributors or retail energy sales companies to achieve target(s) on yearly energy savings, which can be coupled with a trading system).

**Level of obligation**

Mandatory (except for reporting of other sources of information or references about the savings calculations can be found).

5.2.6.1. FIELD 6.a: Measurement method(s) used (point 1 of Annex V , to Directive 2012/27/EU)

**Guidance, including format of the data**

Member States have to report the measurement method(s) used for calculating the impact of Energy Efficiency Obligations Schemes or other policy measures used by obligated, participating or entrusted parties, or implementing authorities. Member States need to report the method used by each party responsible. When reporting the method used, Member States need to select and present one of the following methods for calculation provided in Annex V of Directive 2012/27/EU:

- **Deemed saving:** by reference to the results of previous independently monitored energy improvements in similar installations. The generic approach is termed ‘ex-ante’;
- **Metered savings:** whereby the savings from the installation of a measure, or package of measures, is determined by recording the actual reduction in energy use, taking due account of factors such as additionality, occupancy, production levels and the weather which may affect consumption. The generic approach is termed ‘ex-post’;
- **Scaled savings:** whereby engineering estimates of savings are used. This approach may only be used where establishing robust measured data for a specific installation is difficult or disproportionately expensive, e.g. replacing a compressor or electric motor with a different kWh rating than that for which independent information on savings has been measured, or where they are carried out on the basis of nationally established methodologies and benchmarks by qualified or accredited experts that are independent of the obligated, participating or entrusted parties involved;
- **Surveyed savings:** where consumers’ response to advice, information campaigns, labelling or certification schemes, or smart metering is determined. This approach may only be used for savings resulting from changes in consumer behaviour. It may not be used for savings resulting from the installation of physical measures.

When another method is used, Member States have to explain the different type of method in the new field which opens. When more than one method was used for calculating energy savings, Member States need to report all the methods used.

Data format: text (dropdown list).

5.2.6.2. FIELD 6.b: Metric(s) used to express the energy savings (primary or final energy savings) (Article 7a(4), and point 3(d) of Annex V to Directive 2012/27/EU)

**Guidance, including format of the data**

Member States have to report the metric(s) used to express the energy savings in either final or primary energy consumption. It should be reminded that the EEOS can have its own metric(s) (e.g. final or primary energy; annual or lifetime-cumulated). However, when reporting the results to Article 7 EED, the results need to be expressed in final energy savings in ktoe, in the three metrics: new annual savings, total annual savings and cumulative savings (see tables in Annex XI).

Data format: text.

- 5.2.6.3. FIELD 6.c: How are lifetimes (and possible changes in savings over time) taken into account in savings calculations (points 2(i) and 5(h) of Annex V to Directive 2012/27/EU)

**Guidance, including format of the data**

Member States have to report how lifetimes and possible changes in savings over time are taken into account in energy savings calculations. Member States may have counted the savings each individual action will achieve between its implementation and 31 December 2030. If the Member States adopted an alternative method, this method needs to be detailed.

Data format: text.

- 5.2.6.4. FIELD 6.d: Other sources of information or references (e.g. studies, evaluation reports) where more explanations and details about the savings calculations can be found

**Guidance, including format of the data**

Member States may report other sources of information or references (e.g. studies, evaluation reports) providing additional explanations and details about the savings calculations in the next field.

The description should present condensed details. It is therefore recommended to make appropriate use of the references/links to direct users to documents and websites with a more detailed description of the information and methodologies used to acquire these information. If the changes correspond to a legal act (law, decree, regulation, etc.), it is good practice to report its exact name, preferably in English. In case a catalogue of calculation methods or deemed savings, or a general calculation methodology, has been defined for the EEOS, it is recommended to include the reference/link where this catalogue or methodology can be found.

Data format: text.

5.2.7. *FIELD 7: Additionality and materiality (requirements related to points 2 and 5(g) of Annex V to Directive 2012/27/EU)*

**Additionality and materiality (requirements related to points 2 and 5(g) of Annex V to Directive 2012/27/EU)**

Description of the calculation methodology; including how additionality is taken into account in the calculation methodology (point 2(a) of Annex V to Directive 2012/27/EU) \*

**7a.**  0

Does the EEOS promote early replacements? If so, how is it taken into account in the calculation of the savings? (point 2(f) of Annex V to Directive 2012/27/EU) \*

**7b.**  0

Benchmarks used for deemed and scaled savings (in case deemed or scaled savings are used) (point 1(c) of Annex V to Directive 2012/27/EU) \*

**7c.**  0

How is materiality of savings ensured? (point 3(h) of Annex V to Directive 2012/27/EU) \*

**7d.**  0

**Purpose**

The purpose of this field is for the Member State to provide information on the application of Energy Efficiency Directive provisions on additionality and materiality.

**Level of obligation**

Mandatory.

5.2.7.1. **FIELD 7.a:** Description of the calculation methodology; including how additionality is taken into account in the calculation methodology (point 2(a) of Annex V to Directive 2012/27/EU)

**Guidance, including format of the data**

Member States should explain in a condensed description how the calculation methodology used to measure the impact of operation of energy efficiency obligation schemes includes additionality (for more details, see Appendix XI of Commission Recommendation C(2019) 6621 final). In accordance with Annex V of Directive 2012/27/EU, Member States must only calculate additionality by considering credits given for savings exceeding the following levels:

- Union emission performance standards for new passenger cars and new light commercial vehicles following the implementation of Regulation (EC) No 443/2009 of the European Parliament and of the Council of 23 April 2009 setting emission performance standards for new passenger cars as part of the Community’s integrated approach to reduce CO2 emissions from light-duty vehicles <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32012L0027> and Regulation (EU) No 510/2011 of the European Parliament and of the Council of 11 May 2011 setting emission performance standards for new light commercial vehicles as part of

the Union's integrated approach to reduce CO<sub>2</sub> emissions from light-duty vehicles <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32012L0027>, respectively;

- Union requirements relating to the removal from the market of certain energy related products following the implementation of implementing measures under Directive 2009/125/EC.

Data format: text.

- 5.2.7.2. FIELD 7.b: Does the EEOS promote early replacements? If so, how is it taken into account in the calculation of the savings? (point 2(f) of Annex V to Directive 2012/27/EU)

**Guidance, including format of the data**

Member States have to report existing provisions promoting early replacement (which aim to result in lasting transformation of products, equipment, or markets to a higher level of energy efficiency are permitted, in early planning) in the operation of energy obligation schemes (in line with Annex V(2)(f)). When such measures exist, a description of the calculation of the savings methodology including early replacement has to be included (for more details, see also appendix XI of Commission Recommendation C(2019) 6621 final).

Data format: text.

- 5.2.7.3. FIELD 7.c: Benchmarks used for deemed and scaled savings (in case deemed or scaled savings are used) (point 1(c) of Annex V to Directive 2012/27/EU)

**Guidance, including format of the data**

Member States have to provide a description of the benchmark used assess deemed savings (by reference to the results of previous independently monitored energy improvements in similar installations) and scaled savings (whereby engineering estimates of savings are used). Benchmarks have to be established by qualified or accredited experts that are independent of the obligated, participating or entrusted parties involved. It is recommended to make appropriate use of the references/links to direct users to documents and websites with a more detailed description of the benchmark.

Data format: text.

- 5.2.7.4. FIELD 7.d: How is materiality of savings ensured? (point 3(h) of Annex V to Directive 2012/27/EU)

**Guidance, including format of the data**

Member States have to provide a description of provisions to ensure the materiality of the achievement of claimed savings (for more details about materiality, see Appendix IX of Commission Recommendation C(2019) 6621 final). The description should be detailed. When relevant, it is recommended to make appropriate use of the

references/links to direct users to documents and websites where provisions about ensuring materiality in the EEOS are available. If the measures correspond to a legal act (law, decree, regulation, etc.), it is good practice to report its exact name, preferably in English.

Data format: text.

#### 5.2.8. *FIELD 8: Possible overlaps (between policy measures and between individual actions) and double counting*

**Possible overlaps (between policy measures and between individual actions) and double counting**

Possible overlaps between individual actions eligible to the EEOS <sup>0</sup>

**8a.**  0

Possible overlaps between the EEOS and alternative measure(s) reported to Article 7 of Directive 2012/27/EU

**8b.**  0

How are possible overlaps (between the EEOS and alternative measures) addressed to avoid any double counting of energy savings? (point 3(g) of Annex V to Directive 2012/27/EU) \*

**8c.**  0

#### **Purpose**

The purpose of this field is for the Member State to report the existence of overlaps in Energy Efficiency Obligation Schemes and their accounting in energy saving calculations.

#### **Level of obligation**

Mandatory, if applicable (i.e. Member States have to provide details on overlaps and saving calculation in the case of existing overlaps between individual actions and between the EEOS and alternative measure(s)).

#### 5.2.8.1. FIELD 8.a: Possible overlaps between individual actions eligible to the EEOS

#### **Guidance, including format of the data**

Member States have to report the existence of possible overlaps between individual actions eligible to Energy Efficiency Obligation Schemes, and how such overlaps are taken into account in the savings calculations (e.g. interactions between insulation of walls and replacement of heating systems). In the case of existing overlaps between individual actions, an explanation on how the Measurement, Control and Verification system put in place prevents same individual actions to be reported by several obligated parties, and therefore avoid double counting within Energy Efficiency Obligation Schemes needs to also be provided.

Data format: text.



5.2.8.2. FIELD 8.b: Possible overlaps between the EEOS and alternative measure(s) reported to Article 7 of Directive 2012/27/EU

**Guidance, including format of the data**

Member States have to report the existence of possible overlaps between Energy Efficiency Obligation Schemes and alternative measure(s) reported to Article 7 of Directive 2012/27/EU, and how such overlaps are taken into account in the savings calculations. Alternative measure(s) are policy measures to achieve energy savings among final customers may be combinations of:

- energy or CO<sub>2</sub> taxes that have the effect of reducing end-use energy consumption;
- financing schemes and instruments or fiscal incentives that lead to the application of energy-efficient technology or techniques and have the effect of reducing end-use energy consumption;
- regulations or voluntary agreements that lead to the application of energy-efficient technology or techniques and have the effect of reducing end-use energy consumption;
- standards and norms that aim at improving the energy efficiency of products and services, including buildings and vehicles, except where these are mandatory and applicable in Member States under Union law;
- energy labelling schemes, with the exception of those that are mandatory and applicable in the Member States under Union law;
- training and education, including energy advisory programmes, that lead to the application of energy-efficient technology or techniques and have the effect of reducing end-use energy consumption.

The description should be detailed. It is recommended to make appropriate use of the references/links to direct users to documents and websites with a more detailed description of the benchmark. If the measures correspond to a legal act (law, decree, regulation, etc.), it is good practice to report its exact name, preferably in English.

Data format: text.

5.2.8.3. FIELD 8.c: How are possible overlaps (between the EEOS and alternative measures) addressed to avoid any double counting of energy savings? (point 3(g) of Annex V to Directive 2012/27/EU)

**Guidance, including format of the data**

Member States have to describe mechanisms set to avoid any double counting of energy savings between Energy Efficiency Obligation Schemes and alternative measure(s). Measure, Control and Verification system put in place may prevent overlaps. If other mechanism(s) are used, Member States have to list and provide a description of the mechanism(s).

The description should be detailed. It is recommended to make appropriate use of the references/links to direct users to documents and websites with a more detailed description of the benchmark. If the measures correspond to a legal act (law, decree, regulation, etc.), it is good practice to report its exact name, preferably in English.

Data format: text.

5.2.9. *FIELD 9: Climatic variation (where relevant) (point 2(h) and 5(i) of Annex V to Directive 2012/27/EU)*

**Climatic variations (where relevant) (points 2(h) and 5(i) of Annex V to Directive 2012/27/EU)**

Are there climatic variations between regions? And can they affect the actions eligible to the EEOS?

**9a.**  0

How are climatic variations addressed in savings calculations where relevant?

**9b.**  0

**Purpose**

The purpose of this field is for the Member State to report the existence of climatic variation and inclusion in energy saving calculation, when relevant.

**Level of obligation**

Mandatory, if applicable (i.e. Member States have to provide details when climatic variations between regions are relevant, and taken into account in the EEOS).

5.2.9.1. **FIELD 9.a:** Are there climatic variations between regions? And can they affect the actions eligible to the EEOS?

**Guidance, including format of the data**

Where relevant, Member States have to report the existence of climatic variation between regions. To account for climatic variations between regions, Member States may choose to adjust the savings to a standard value (e.g. referring to the national standard value for Heating Degree Days) or to accord different energy savings in accordance with the temperature variations between regions (e.g. referring to the normalised Heating Degree Days set by region in the building code or other national legislation).

Data format: text.

5.2.9.2. **FIELD 9.b:** How are climatic variations addressed in savings calculations where relevant?

**Guidance, including format of the data**

When climatic variations are addressed in savings calculation, Member States have to provide a description of the methodology used. The description should be detailed. It is recommended to make appropriate use of the references/links to direct users to documents and websites where the approach to address climatic variations is

described. If the measures correspond to a legal act (law, decree, regulation, etc.), it is good practice to report its exact name, preferably in English.

Data format: text.

5.2.10. *FIELD 10: Monitoring and verification (M&V) of savings (point 5(j) of Annex V to Directive 2012/27/EU)*

Monitoring and verification (M&V) of savings (point 5(j) of Annex V to Directive 2012/27/EU)	
10a.	Brief description of the monitoring & verification system and of the process of verification * <input type="text"/> 0
10b.	Authorities responsible for the M&V of the EEOS * <input type="text"/> 0
10c.	Independence of the M&V from obligated parties (Article 7a (5) of Directive 2012/27/EU) * <input type="text"/> 0
10d.	Verification of statistically representative samples (Article 7a (5) of Directive 2012/27/EU) * ⓘ <input type="text"/> 0
10e.	Reporting obligations for obligated parties (savings achieved by each obligated party, or each sub-category of obligated party, and in total under the scheme) * <input type="text"/> 0
10f.	Publication of energy savings achieved each year under the EEOS (Article 7a (7) of Directive 2012/27/EU) * <input type="text"/> 0
10g.	Penalties applied in case of non-compliance (and related references, including the law or other legal texts setting the penalties and related conditions) * <input type="text"/> 0
10h.	Provision(s) in case the progress of the EEOS is not satisfactory (point 3(f) of Annex V to Directive 2012/27/EU) * <input type="text"/> 0

**Purpose**

The purpose of this field is for the Member State to present monitoring and verification of savings systems set by Member States.

**Level of obligation**

Mandatory.

5.2.10.1.FIELD 10.a: Brief description of the monitoring & verification system and of the process of verification

**Guidance, including format of the data**

Member States have to provide a short description of Monitoring and Verification systems and the verification process put in place, under which at least a statistically significant proportion and representative sample of the energy efficiency improvement measures put in place by the obligated parties is verified. For more details about Monitoring and Verification systems, see the appendix XII of Commission Recommendation C(2019) 6621 final.

Data format: text.

5.2.10.2.FIELD 10.b: Authorities responsible for the M&V of the EEOS

**Guidance, including format of the data**

Member States have to report the list of Authorities identified as responsible for the system within the Energy Efficiency Obligation Schemes.

Data format: text.

5.2.10.3.FIELD 10.c: Independence of the M&V from obligated parties (Article 7a (5) of Directive 2012/27/EU)

**Guidance, including format of the data**

Member States have to provide details on the measures taken to guarantee the independence of the system from obligated parties. For more guidance, see section 8 of the annex and Appendix XII of Commission Recommendation C(2019) 6621 final.

Data format: text.

5.2.10.4.FIELD 10.d: Verification of statistically representative samples (Article 7a (5) of Directive 2012/27/EU))

**Guidance, including format of the data**

Member States have to explain with a short description how verification of statistically representative samples of actions is ensured with Monitoring and Verification systems and specify the criteria (qualitative or quantitative) used to define and select representative samples.

Data format: text.

5.2.10.5.FIELD 10.e: Reporting obligations for obligated parties (savings achieved by each obligated party, or each sub-category of obligated party, and in total under the scheme)

**Guidance, including format of the data**

Member States have to describe the reporting obligations for obliged parties, including the savings achieved by each obligated party (or sub-category of an obligated party) and the total under the scheme.

Data format: text.

5.2.10.6.FIELD 10.f: Publication of energy savings achieved each year under the EEOS (Article 7a (7) of Directive 2012/27/EU))

**Guidance, including format of the data**

Member States have to indicate whether energy savings achieved by each obligated party, or each sub-category of obligated party, and in total under the scheme has been published yearly since the implementation of the scheme by reporting “Yes” or ”No”.

Data format: text.

5.2.10.7.FIELD 10.g: Penalties applied in case of non-compliance (and related references, including the law or other legal texts setting the penalties and related conditions)

**Guidance, including format of the data**

Member States have to provide a description of the penalties which have been applied in case of non-compliance from each obligated party. References to applied penalties have to be provided. Law or other legal texts setting the penalties and related conditions have to also be reported. It is recommended to make appropriate use of the references/links to direct users to documents and websites where provisions about penalties can be found. If the measures correspond to a legal act (law, decree, regulation, etc.), it is good practice to report its exact name, preferably in English.

Data format: text.

5.2.10.8.FIELD 10.h: Provision(s) in case the progress of the EEOS is not satisfactory (point 3(f) of Annex V to Directive 2012/27/EU))

**Guidance, including format of the data**

Member States have to list the envisaged measures in case the progress of Energy Efficiency Obligation Schemes is not satisfactory after monitoring of the results.

Data format: text.

5.2.11. *FIELD 11: Information about quality standards (point 2(g) of Annex V to Directive 2012/27/EU)*

**Information about quality standards (point 2(g) of Annex V to Directive 2012/27/EU)**

How are quality standards (for products, services and installation of measures) promoted or required by the EEOS?

**11.**

0

**Purpose**

The purpose of this field is for the Member State to promote the uptake of energy efficiency measures.

**Guidance, including format of the data**

Member States have to report with a short description on how quality standards (for products, services and installation of measures) aiming to promote the uptake of energy efficiency measures are supported and required by Energy Efficiency Obligation Schemes. Member States may provide examples of promotion actions.

Data format: text.

**Level of obligation**

Mandatory, if applicable (i.e. Member States have to provide details when quality standards (for products, services and installation of measures) have been set).

5.2.12. *FIELD 12: Complementary information or explanations*

**Complementary information or explanations**

Mention here any other information of explanation that can be useful for experience sharing

**12.**

0

**Purpose**

The purpose of this field is for the Member State to support Member States and/or obligated parties in future operation of Energy efficiency Obligation Schemes, and lead to improvement.

**Guidance, including format of the data**

Member States may report any other information of explanation that can be useful for experience sharing with other Member States and/or obligated parties regarding the operation of Energy efficiency Obligation Schemes. Information can refer to success or failures, regarding the different sections and sub-sections, requirements, methodologies, alternative measures, monitoring and verification systems, and other features of the operation of Energy efficiency Obligation Schemes.

Data format: text.

## Level of obligation

Voluntary.

### 5.3. Annex X: Alternative policy measures referred to in Article 7b and Article 20(6) of Directive 2012/27/EU

Art. 7a Art. 7b Taxation Actions

1. Select PaM ID as listed in Annex IX \*

2. Source(s) of information (including the reference of the related law or other legal text(s)) \*

3. Budget planned or estimated, including the corresponding implementation period(s)

#### 5.3.1. FIELD 1: Select PaM ID as listed in Annex IX

##### Purpose

The purpose of this field is for the Member State to identify the specific PaM or group of PaMs that are alternative policy measures. The specific PaMs are identified through the reporting of the respective PaM ID number(s). Data can be reported at the level of individual PaMs or for groups of PaMs.

##### Guidance, including format of the data

Each row in the template refers to either a specific PaM, or a group of PaMs. The relevant PaM or group of PaMs ID number(s) that correspond with the data in each field should therefore be selected. In case of a missing PaM, information needs to first be completed in “Annex IX: Key characteristics and progress towards implementing policies and measures”.

Data format: text (dropdown list – list of PaMs). Additional records can be added to report on additional PaMs or group of PaMs for this table.

##### Level of obligation

Mandatory.

#### 5.3.2. FIELD 2: Source of information (including the reference of the related law or other legal text(s))

##### Purpose

The purpose of this field is for the Member State to provide the reference of the alternative policy measures (except taxation measures).

**Guidance, including format of the data**

Member States have to complete the field with the title and/ or the web link of a report/ document to direct users to documents and websites with a more detailed description of the PaMs. References of the related law or other legal text(s) have to be included. It is good practice to report the exact name of legal act (law, decree, regulation, etc.), preferably in English.

Data format: text.

**Level of obligation**

Mandatory.

5.3.3. *FIELD 3: Budget planned or estimated, including the corresponding implementation period(s)*

**Purpose**

The purpose of this field is to provide information about the funding of the alternative measure, whenever possible with data for each of the planned implementation period(s) (and at the least the current or upcoming one).

**Guidance**

Member States can mention briefly the source of funding for this PaM (e.g. State budget), for how long the budget is set (e.g. annually; for 3-year periods) and the amounts either planned or estimated (to meet the objectives of the PaM).

Data format: text.

**Level of obligation**

Voluntary.



5.3.4. *FIELD 4: Expected savings for 2021-2030 and duration of the obligation period(s) (point 5(d) and 5(e) of Annex V to Directive 2012/27/EU)*

Expected savings for 2021-2030 and duration of the obligation period(s) (points 5(d) and 5(e) of Annex V to Directive 2012/27/EU)

Expected cumulative end-use energy savings for the period 2021-2030 (ktoe) \*

**4a.**

Expected new annual end-use energy savings (ktoe/year) <sup>o</sup>

**4b.**

2021	2022	2023	2024	2025
<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
2026	2027	2028	2029	2030
<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

Intermediate period(s), where relevant <sup>o</sup>

**4c.**

5.3.4.1. FIELD 4.a: Expected cumulative end-use energy savings for the period 2021-2030 (ktoe)

**Purpose**

The purpose of this field is for the Member State to report Member States' total volume of expected cumulative end-use energy savings for the period 2021-2030 according to alternative policy measures.

**Guidance, including format of the data**

Member States have to report the total volume of expected cumulative end-use energy savings from alternative policy measures for the period 2021-2030 in the field. The reported information corresponds to the annual sum of total volume of expected savings in the direct energy consumption by the end users for each year from 2021 to 2030. The information should be calculated and reported in thousand tonnes of oil equivalent (ktoe). It can be based on the data already reported in the NECP, or providing new or updated data.

Data format: number (decimal).

Good examples

Please see the 'Good examples' found for the similar field in Annex X table 1 on Energy Efficiency Obligation Schemes (EEOS) (section 5.2.3).

**Level of obligation**

Mandatory.

5.3.4.2. FIELD 4.b: Expected new annual end-use energy savings (ktoe/year)

**Purpose**

The purpose of this field is for the Member State to report Member States' volume of expected end-use energy savings achieved in a year according to alternative policy measures.

**Guidance, including format of the data**

When new annual end-use energy savings from alternative policy measures are expected to be stable over time, Member States have to report the volume of expected end-use energy savings achieved in a year in the field "Expected new annual end-use energy savings (ktoe/year)". The information should be calculated and reported in thousand tonnes of oil equivalent (ktoe).

When new annual end-use energy savings are expected to change over time, Member State have to report the disaggregated annual volume of expected savings in the direct energy consumption by the users for each year from 2021 to 2030 in different fields.

When the new annual end-use energy savings are expected to change over time, Member State have to report the disaggregated annual volume of expected savings in the direct energy consumption by the users for each year from 2021 to 2030 in different fields.

Data format: number (decimal).

**Level of obligation**

Mandatory, if applicable (i.e. Member States have to provide yearly objective when new annual end-use energy savings are expected to change over time).

5.3.4.3. FIELD 4.c: Intermediate periods

**Purpose**

The purpose of this field is to report Member States' duration of intermediate periods for alternative policy measures.

**Guidance, including format of the data**

Member States have to indicate the periods or dates used to define intermediate objectives (e.g. expected new annual or cumulative energy savings) to enable reviewing the progress of the alternative measures. Intermediate periods can also be defined according to the periods used for planning the budget of the alternative measure.

Data format: text.

**Level of obligation**

Mandatory.

### 5.3.5. FIELD 5: Key design features

**Key design features**

Implementing public authorities, participating or entrusted parties and their responsibilities for implementing the policy measure (points 3(b) and 5(b) of Annex V to Directive 2012/27/EU) \*

**5a.**  0

Target sectors (point 5(c) of Annex V to Directive 2012/27/EU) \* ⓘ

**5b.**  0

Individual actions eligible to the alternative measure (point 5(f) of Annex V to Directive 2012/27/EU) and corresponding lifetimes (points 2(i) and 5(h) of Annex V to Directive 2012/27/EU) \*

**5c.**  0

Main eligibility criteria provided as a separate file ⓘ

**5d.**

Specific policy measures or individual actions targeting energy poverty (where applicable)

**5e.**  0

#### 5.3.5.1. FIELD 5.a: Implementing public authorities, participating or entrusted parties and their responsibilities for implementing the policy measure (points 3(b) and 5(b) of Annex V to Directive 2012/27/EU)

##### **Purpose**

The purpose of this field is for the Member State to report on present key design features included in detailed methodology for operation of alternative policy measures presented by Member States to the Commission.

##### **Guidance, including format of the data**

Member States have to report details on implementing public authorities, participating or entrusted parties (parties bound by the alternative policy measure) and their responsibilities in the operation of alternative policy measures e.g. entity setting the rules or budget of the measure, entity processing the applications for funding, entity in charge of the communication about the measure). The description of responsibilities should be condensed.

Data format: text (dropdown list).

##### **Level of obligation**

Mandatory.

#### 5.3.5.2. FIELD 5.b: Target sectors (point 5(c) of Annex V to Directive 2012/27/EU)

##### **Purpose**

The purpose of this field is for Member States to specify the sectors taken into account to calculate the target(s) of alternative policy measures and to define obligated parties.

### **Guidance, including format of the data**

Main following sectors of interest have to be reported in the field “Target sectors”:

- Energy supply;
- Energy consumption;
- Transport
- Industrial processes
- Waste management/waste
- Agriculture
- LULUCF;
- Other sectors.

Data format: text (dropdown list).

### **Level of obligation**

Mandatory.

5.3.5.3. FIELD 5.c: Individual actions eligible to the alternative measure and corresponding lifetimes (point 5(f) of Annex V to Directive 2012/27/EU) and corresponding lifetimes (points 2(i) and 5(h) of Annex V to Directive 2012/27/EU)

### **Purpose**

The purpose of this field is for the Member State to provide information on individual actions eligible to alternative policy measures and included in detailed methodology for operation presented by Member States to the Commission.

### **Guidance, including format of the data**

Details on eligible individual actions (action that leads to verifiable, and measurable or estimable, energy efficiency improvements undertaken as a result of alternative policy measures) and corresponding lifetimes (of policy measures and energy savings) have to be reported by Member States. Member States needs to specify the categories of individual actions that can receive financial incentives or other types of support from the alternative measure. Member States may also specify individual actions that are promoted by alternative measures through regulations, information or any type of policy instrument.

Note: when the list of individual action is too long to be reported in table 1, it can be reported in table 4 (see section 2.1.5) that enables to report a list of different types of individual actions.

Source entered requires the web link of a report/document where the estimate of end-user savings resulting from the individual action has been referenced. If the individual actions correspond to a legal act (law, decree, regulation, etc.), it is good practice to report its exact name, preferably in English.

Member States should provide condensed information.

If the list of measures is too long, Member States should only report the name of the action and the main eligibility criteria (proof that the action leads to energy efficiency improvements in order to be considered as individual action). Additional information for the listed individual actions should then be reported in Annex X: Information about the lifetime of the individual actions eligible to the policies and measures reported for Article 7 of Directive 2012/27/EU” (see section 5.5).

Data format: text.

**Level of obligation**

Mandatory

5.3.5.4. FIELD 5.d: Main eligibility criteria provided as a separate file

**Guidance, including format of the data**

Additional information on eligibility criteria can be added in an attachment (max. 5 MB).

Data format: attachment.

5.3.5.5. FIELD 5.e: Specific policy measures or individual actions targeting energy poverty (where applicable)

**Purpose**

The purpose of this field is for the Member State to provide information on the application of policy measures or individual actions targeting energy poverty.

**Guidance, including format of the data**

Member States may report energy efficiency measures with social aims and/or related share of savings to be achieved, being measures implemented as a priority in vulnerable households affected by energy poverty.

Data format: text.

**Level of obligation**

Mandatory, if applicable (i.e. Member States are required to provide the information if the relevant application of policy measures or individual actions targeting energy poverty).

### 5.3.6. FIELD 6: General information about the calculation methodology

**General information about the calculation methodology**

Measurement method(s) used (point 1 of Annex V , to Directive 2012/27/EU) \* ⓘ

**6a.**

Metric(s) used to express the energy savings (primary or final energy savings) (point 3(d) of Annex V to Directive 2012/27/EU) \*

**6b.**

0

How are lifetimes (and possible changes in savings over time) taken into account in savings calculations (points 2(i) and 5(h) of Annex V to Directive 2012/27/EU) \* ⓘ

**6c.**

0

Other sources of information or references (e.g. studies, evaluation reports) where more explanations and details about the savings calculations can be found

**6d.**

0

#### Purpose

The purpose of this field is for the Member State to present the calculation methodology of the impact of alternative measures used by Member States.

#### Level of obligation

Mandatory (except for reporting of other sources of information or references about the savings calculations can be found).

#### 5.3.6.1. FIELD 6a: Measurement method(s) used (point 1 of Annex V, to Directive 2012/27/EU)

#### Guidance, including format of the data

Member States have to report the measurement method(s) used for calculating the impact of alternative policy measures used by obligated, participating or entrusted parties, or implementing authorities. Member States have to report the method used by each party responsible. When reporting the method used, Member States have to select and present one of the following methods for calculation provided in Annex V (1) of Directive 2012/27/EU:

- **Deemed saving:** by reference to the results of previous independently monitored energy improvements in similar installations. The generic approach is termed ‘ex-ante’;
- **Metered savings:** whereby the savings from the installation of a measure, or package of measures, is determined by recording the actual reduction in energy use, taking due account of factors such as additionality, occupancy, production levels and the weather which may affect consumption. The generic approach is termed ‘ex-post’;
- **Scaled savings:** whereby engineering estimates of savings are used. This approach may only be used where establishing robust measured data for a specific installation is difficult or disproportionately expensive, e.g. replacing a compressor or electric motor with a different kWh rating than that for which

independent information on savings has been measured, or where they are carried out on the basis of nationally established methodologies and benchmarks by qualified or accredited experts that are independent of the obligated, participating or entrusted parties involved;

- **Surveyed savings:** where consumers' response to advice, information campaigns, labelling or certification schemes, or smart metering is determined. This approach may only be used for savings resulting from changes in consumer behaviour. It may not be used for savings resulting from the installation of physical measures.

When another method is used, Member States have to explain the different type of method. When more than one method was used for calculating energy savings, Member States have to report all the methods used.

Data format: text (dropdown list)

#### 5.3.6.2. FIELD 6b: Metric(s) used to express the energy savings (primary or final energy savings) (point 3(d) of Annex V to Directive 2012/27/EU)

##### **Guidance, including format of the data**

Member States have to report the metric(s) used to express the energy savings in either final or primary energy consumption. It should be reminded that the alternative measure can have its own metric(s) (e.g. final or primary energy; annual or lifetime-cumulated). However, when reporting the results to Article 7 EED, the results have to be expressed in final energy savings in ktoe, in the three metrics: new annual savings, total annual savings and cumulative savings (see tables in Annex XI).

Data format: text.

#### 5.3.6.3. FIELD 6c: How are lifetimes (and possible changes in savings over time) taken into account in savings calculations (points 2(i) and 5(h) of Annex V to Directive 2012/27/EU)

##### **Guidance, including format of the data**

Member States have to report how lifetimes and possible changes in savings over time are taken into account in energy savings calculations. Member States may have counted the savings each individual action will achieve between its implementation and 31 December 2030. If the Member States adopted an alternative method, this method needs to be detailed.

Data format: text.

#### 5.3.6.4. FIELD 6d: Other sources of information or references (e.g. studies, evaluation reports) where more explanations and details about the savings calculations can be found

##### **Guidance, including format of the data**

Member States may report other sources of information or references (e.g. studies, evaluation reports) providing additional explanations and details about the savings calculations in the next field.

The description should present condensed details. It is therefore recommended to make appropriate use of the references/links to direct users to documents and websites with a more detailed description of the information and methodologies used to acquire these information. If the changes correspond to a legal act (law, decree, regulation, etc.), it is good practice to report its exact name, preferably in English. In case a catalogue of calculation methods or deemed savings, or a general calculation methodology, has been defined for the alternative measure, it is recommended to include the reference/link where this catalogue or methodology can be found.

Data format: text.

5.3.7. *FIELD 7: Additionality and materiality (requirements related to points 2 and 5(g) of Annex V to Directive 2012/27/EU)*

**Additionality and materiality (requirements related to points 2 and 5(g) of Annex V to Directive 2012/27/EU)**

Description of the calculation methodology; including how additionality is taken into account in the calculation methodology (point 2(a) of Annex V to Directive 2012/27/EU) \*

**7a.**

Does the policy measure promote early replacements? If so, how is it taken into account in the calculation of the savings? (point 2(f) of Annex V to Directive 2012/27/EU) \*

**7b.**

Benchmarks used for deemed and scaled savings (in case deemed or scaled savings are used) (point 1(c) of Annex V to Directive 2012/27/EU) \*

**7c.**

How is materiality of savings ensured? (point 3(h) of Annex V to Directive 2012/27/EU) \*

**7d.**

**Purpose**

The purpose of this field is for the Member State to provide information on the application of alternative policy measures.

**Level of obligation**

Mandatory.

5.3.7.1. *FIELD 7a: Description of the calculation methodology; including how additionality is taken into account in the calculation methodology (point 2(a) of Annex V to Directive 2012/27/EU)*

**Guidance, including format of the data**



Member States have to explain in a condensed description how the calculation methodology used to measure the impact of operation of alternative policy measures includes additionality (for more details, see Appendix XI of Commission Recommendation C(2019) 6621 final). In accordance with Annex V of Directive 2012/27/EU, Member States have to at least only calculate additionality by considering credits given for savings exceeding the following levels:

- Union emission performance standards for new passenger cars and new light commercial vehicles following the implementation of Regulation (EC) No 443/2009 of the European Parliament and of the Council of 23 April 2009 setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO<sub>2</sub> emissions from light-duty vehicles <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32012L0027> and Regulation (EU) No 510/2011 of the European Parliament and of the Council of 11 May 2011 setting emission performance standards for new light commercial vehicles as part of the Union's integrated approach to reduce CO<sub>2</sub> emissions from light-duty vehicles <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32012L0027>, respectively;
- Union requirements relating to the removal from the market of certain energy related products following the implementation of implementing measures under Directive 2009/125/EC.

Data format: text.

- 5.3.7.2. FIELD 7b: Does the policy measure promote early replacements? If so, how is it taken into account in the calculation of the savings? (point 2(f) of Annex V to Directive 2012/27/EU)

#### **Guidance, including format of the data**

Member States have to report existing provisions promoting early replacement (which aim to result in lasting transformation of products, equipment, or markets to a higher level of energy efficiency are permitted, in early planning) in the operation of alternative policy measures (in line with Annex V(2)(f)). When such actions exist, a description of the calculation of the savings methodology including early replacement have to be included (for more details, see also appendix XI of Commission Recommendation C(2019) 6621 final).

Data format: text.

- 5.3.7.3. FIELD 7c: Benchmarks used for deemed and scaled savings (in case deemed or scaled savings are used) (point 1(c) of Annex V to Directive 2012/27/EU)

#### **Guidance, including format of the data**

Member States have to provide a description of the benchmark used assess deemed savings (by reference to the results of previous independently monitored energy improvements in similar installations) and scaled savings (whereby engineering estimates of savings are used). Benchmarks have to be established by qualified or accredited experts that are independent of the obligated, participating or entrusted parties involved. It is recommended to make appropriate use of the references/links to

direct users to documents and websites with a more detailed description of the benchmark.

Data format: text.

#### 5.3.7.4. FIELD 7d: How is materiality of savings ensured? (point 3(h) of Annex V to Directive 2012/27/EU)

##### **Guidance, including format of the data**

Member States have to provide a description of provisions to ensure the materiality of the achievement of claimed savings (for more details about materiality, see Appendix IX of Commission Recommendation C(2019) 6621 final). The description should be detailed. When relevant, it is recommended to make appropriate use of the references/links to direct users to documents and websites where provisions about ensuring materiality of the alternative measure are available. If the measures correspond to a legal act (law, decree, regulation, etc.), it is good practice to report its exact name, preferably in English.

Data format: text.

#### 5.3.8. *FIELD 8: Possible overlaps (between policy measures and between individual actions) and double counting*

Possible overlaps (between policy measures and between individual actions) and double counting	
<b>8a.</b>	<p>Possible overlaps between individual actions eligible to the policy measure <sup>?</sup></p> <input type="text"/> <p>0</p>
<b>8b.</b>	<p>Possible overlaps among the EEOS (if any) and alternative measure(s) reported to Article 7</p> <input type="text"/> <p>0</p>
<b>8c.</b>	<p>How are possible overlaps (among the EEOS, if any, and alternative measures) addressed to avoid any double counting of energy savings? (point 3(g) of Annex V) *</p> <input type="text"/> <p>0</p>

##### **Purpose**

The purpose of this field is for the Member State to report the existence of overlaps in alternative policy measures and their accounting in energy saving calculations.

##### **Level of obligation**

Mandatory, if applicable (i.e. Member States have to provide details on overlaps and saving calculation in the case of existing overlaps between individual actions and between alternative measure(s) or with an EEOS).

5.3.8.1. FIELD 8a: Possible overlaps between individual actions eligible to the policy measure

**Guidance, including format of the data**

Member States have to report the existence of possible overlaps between individual actions eligible to the alternative policy measures, and how such overlaps are taken into account in the savings calculations (e.g. interactions between insulation of walls and replacement of heating systems).

Data format: text.

5.3.8.2. FIELD 8b: Possible overlaps among the EEOS (if any) and alternative measure(s) reported to Article 7

**Guidance, including format of the data**

Member States have to report the existence of possible overlaps between alternative measures or with Energy Efficiency Obligation Scheme(s) also reported to Article 7 of Directive 2012/27/EU, and how such overlaps are taken into account in the savings calculations.

Data format: text.

5.3.8.3. FIELD 8c: How are possible overlaps (among the EEOS, if any, and alternative measures) addressed to avoid any double counting of energy savings? (point 3(g) of Annex V)

**Guidance, including format of the data**

Member States have to describe mechanisms set to avoid any double counting of energy savings between Energy Efficiency Obligation Schemes and alternative measure(s). Measure, Control and Verification system put in place may prevent overlaps. If other mechanism(s) are used, Member States have to list and provide a description of the mechanism(s).

The description should be detailed. It is recommended to make appropriate use of the references/links to direct users to documents and websites where the provisions about preventing double counting are described. If the measures correspond to a legal act (law, decree, regulation, etc.), it is good practice to report its exact name, preferably in English.

Data format: text.

5.3.9. *FIELD 9: Climatic variation (where relevant) (point 2(h) and 5(i) of Annex V to Directive 2012/27/EU)*

**Climatic variations (where relevant) (points 2(h) and 5(i) of Annex V to Directive 2012/27/EU)**

Are there climatic variations between regions? And can they affect the actions eligible to the policy measure?

**9a.**

0

How are climatic variations addressed in savings calculations where relevant?

**9b.**

0

**Purpose**

The purpose of these fields is for the Member State to report the existence of climatic variation and inclusion in energy saving calculation, when relevant.

**Level of obligation**

Mandatory, if applicable (i.e. Member States have to provide details when climatic variations between regions are relevant, and taken into account in alternative measure(s)).

5.3.9.1. FIELD 9a: Are there climatic variations between regions? And can they affect the actions eligible to the policy measure?

**Guidance, including format of the data**

Where relevant, Member States have to report the existence of climatic variation between regions. To account for climatic variations between regions, Member States may choose to adjust the savings to a standard value (e.g. referring to the national standard value for Heating Degree Days) or to accord different energy savings in accordance with the temperature variations between regions (e.g. referring to the normalised Heating Degree Days set by region in the building code or other national legislation).

Data format: text.

5.3.9.2. FIELD 9b: How are climatic variations addressed in savings calculations where relevant?

**Guidance, including format of the data**

When climatic variations are addressed in savings calculation, Member States have to provide a description of the methodology used. The description should be detailed. It is recommended to make appropriate use of the references/links to direct users to documents and websites where the approach to address climatic variations is described. If the measures correspond to a legal act (law, decree, regulation, etc.), it is good practice to report its exact name, preferably in English.

Data format: text.

### 5.3.10. FIELD 10: Monitoring and verification (M&V) of savings (point 5(j) of Annex V to Directive 2012/27/EU)

Monitoring and verification (M&V) of savings (point 5(j) of Annex V to Directive 2012/27/EU)	
10a.	Brief description of the monitoring & verification system and of the process of verification * <input type="text"/> 0
10b.	Authorities responsible for the M&V of the policy measure * <input type="text"/> 0
10c.	Independence of the M&V from the participating or entrusted parties (Article 7b(2) of Directive 2012/27/EU) * <input type="text"/> 0
10d.	Verification of statistically representative samples (Article 7b(2) of Directive 2012/27/EU) * ⓘ <input type="text"/> 0
10e.	Publication of energy savings achieved each year under the policy measure (point 3(e) of Annex V to Directive 2012/27/EU) * <input type="text"/> 0
10f.	Penalties applied in case of non-compliance (and related references, including the law or other legal texts setting the penalties and related conditions) * <input type="text"/> 0
10g.	Provision(s) in case the progress of the policy measure is not satisfactory (point 3(f) of Annex V to Directive 2012/27/EU) * <input type="text"/> 0

#### Purpose

The purpose of this field is for the Member State to present monitoring and verification of savings systems set by Member States.

#### Level of obligation

Mandatory.

#### 5.3.10.1. FIELD 10a: Brief description of the monitoring & verification system and of the process of verification

##### Guidance, including format of the data

Member States have to provide a short description of Monitoring and Verification systems and the verification process put in place, under which at least a statistically significant proportion and representative sample of the energy efficiency improvement measures put in place by the obligated parties is verified. For more details about Monitoring and Verification systems, see the appendix XII of Commission Recommendation C(2019) 6621 final.

Data format: text.

#### 5.3.10.2.FIELD 10b: Authorities responsible for the M&V of the policy measure

##### **Guidance, including format of the data**

Member States have to report the list of Authorities identified as responsible for the system within the policy measure.

Data format: text.

#### 5.3.10.3.FIELD 10c: Independence of the M&V from the participating or entrusted parties (Article 7b(2) of Directive 2012/27/EU)

##### **Guidance, including format of the data**

Member have to provide details on alternative policy measure(s) and on the measures taken to guarantee the independence of the system from obligated parties.

Member States have to provide details on the measures taken to guarantee the independence of the system from obligated parties. For more guidance, see section 8 of the annex and Appendix XII of Commission Recommendation C(2019) 6621 final.

Data format: text.

#### 5.3.10.4.FIELD 10d: Verification of statistically representative samples (Article 7b(2) of Directive 2012/27/EU)

##### **Guidance, including format of the data**

Member States have to explain with a short description how verification of statistically representative samples of actions is ensured with Monitoring and Verification systems and specify the criteria (qualitative or quantitative) used to define and select representative samples.

Data format: text.

#### 5.3.10.5.FIELD 10e: Publication of energy savings achieved each year under the policy measure (point 3(e) of Annex V to Directive 2012/27/EU)

##### **Guidance, including format of the data**

Member States have to describe the reporting obligations for obliged parties, including the savings achieved by each obligated party (or sub-category of an obligated party) and the total under the policy measure.

Data format: text.

5.3.10.6.FIELD 10f: Penalties applied in case of non-compliance (and related references, including the law or other legal texts setting the penalties and related conditions)

**Guidance, including format of the data**

Member States have to provide a description of the penalties which have been applied in case of non-compliance from each obligated party. References to applied penalties have to be provided. Law or other legal texts setting the penalties and related conditions have to also be reported. It is recommended to make appropriate use of the references/links to direct users to documents and websites where provisions about penalties can be found. If the measures correspond to a legal act (law, decree, regulation, etc.), it is good practice to report its exact name, preferably in English.

Data format: text.

5.3.10.7.FIELD 10g: Provision(s) in case the progress of the policy measure is not satisfactory (point 3(f) of Annex V to Directive 2012/27/EU))

**Guidance, including format of the data**

Member States have to list the envisaged measures in case the progress of alternative policy measure(s) is not satisfactory after monitoring of the results.

Data format: text.

5.3.11. *FIELD 11: Information about quality standards (point 2(g) of Annex V to Directive 2012/27/EU): How are quality standards (for products, services and installation of measures) promoted or required by the policy measure?*

**Information about quality standards (point 2(g) of Annex V to Directive 2012/27/EU)**

How are quality standards (for products, services and installation of measures) promoted or required by the policy measure?

0

**Purpose**

The purpose of this field is for the Member State to provide information about quality standards

**Guidance, including format of the data**

Member States have to report with a short description on how quality standards (for products, services and installation of measures) aiming to promote the uptake of energy efficiency measures are supported and required by alternative policy measure(s). Member States may provide Good examples of promotion actions.

Data format: text.

### Level of obligation

Mandatory, if applicable (i.e. Member States have to provide details when quality standards (for products, services and installation of measures) have been set).

#### 5.3.12. FIELD 12: Complementary information or explanations: Any other information of explanation that can be useful for experience sharing

**Complementary information or explanations**

Any other information of explanation that can be useful for experience sharing

### Purpose

The purpose of this field is for the Member State to support Member States and/or obligated parties in future operation of alternative policy measure(s), and lead to improvement.

### Guidance, including format of the data

Member States may report any other information of explanation that can be useful for experience sharing with other Member States and/or obligated parties regarding the operation of alternative policy measure(s). Information can refer to success or failures, regarding the different sections and sub-sections, requirements, methodologies, alternative measures, monitoring and verification systems, and other features of the operation of alternative policy measure(s).

Data format: text

### Level of obligation

Voluntary.

## 5.4. Annex X: Information on taxation measures

Art. 7a Art. 7b **Taxation** Actions

Select PaM ID as listed in Annex IX \*

1.

Duration of taxation measure (point 5(iv) of Annex V to Directive 2012/27/EU) \*

2.

Implementing public authority (point 5(ii) of Annex V to Directive 2012/27/EU) \*

3.



#### 5.4.1. *FIELD 1: Select PaM ID as listed in Annex IX*

##### **Purpose**

The purpose of this field is for the Member State to identify the specific PaM or group of PaMs that are alternative policy measures. The specific PaMs are identified through the reporting of the respective PaM ID number(s). Data can be reported at the level of individual PaMs or for groups of PaMs.

##### **Guidance, including format of the data**

Each row in the template refers to either a specific PaM, or a group of PaMs. The relevant PaM or group of PaMs ID number(s) that correspond with the data in each field should therefore be selected. In case of a missing PaM, information needs to first be completed in “Annex IX: Key characteristics and progress towards implementing policies and measures”.

Data format: text (dropdown list – list of PaMs). Additional records can be added to report on additional PaMs or group of PaMs for this table.

##### **Level of obligation**

Mandatory.

#### 5.4.2. *FIELD 2: Duration of the taxation measures (point 5(iv) of Annex V to Directive 2012/27/EU)*

##### **Purpose**

The purpose of this field is for the Member State to provide the duration of taxation measures.

##### **Guidance, including format of the data**

Member States have to report the date of entry in application, date of expiration and total number of years of the duration of taxation measures imposed on obligated parties.

Data format: text.

##### **Level of obligation**

Mandatory.

#### 5.4.3. *FIELD 3: Implementing public authority (point 5(ii) of Annex V to Directive 2012/27/EU)*

##### **Purpose**

The purpose of this field is for the Member State to provide the implementing public authority of taxation measures.

### **Guidance, including format of the data**

Member States have to report the complete name of the authority in charge of the implementation of taxation measures.

Data format: text.

### **Level of obligation**

Mandatory.

#### **5.4.4. FIELD 4: Target sectors and segment for taxpayers (point 5(i) of Annex V to Directive 2012/27/EU)**

4a. Target sectors (point 5(i) of Annex V to Directive 2012/27/EU) \* ⓘ

4b. Target segment of taxpayers (point 5(i) of Annex V to Directive 2012/27/EU) \*

0

### **Purpose**

The purpose of the field is to specify the sectors and taxpayer segments affected (or excluded).

### **Level of obligation**

Mandatory.

#### **5.4.4.1. FIELD 4a: Target sectors (point 5(i) of Annex V to Directive 2012/27/EU)**

### **Guidance, including format of the data**

Member States have to specify the sectors targeted by the taxation measure. Main following sectors of interest have to be reported in the field “Target sectors”:

- Residential
- Services
- Industry
- Transport
- Other(s)

If ‘Other(s)’ is selected, another field will appear ‘Other target sector’, which allows the other sector to be elaborated.

Target sectors (point 5(i) of Annex V to Directive 2012/27/EU) \* 

Other(s) 

Other target sectors 



0

Data format: text (dropdown list). If ‘Other(s)’ selected the additional field’s format is text.

#### 5.4.4.1. FIELD 4b: Target segment of taxpayers (point 5(i) of Annex V to Directive 2012/27/EU)

##### **Guidance, including format of the data**

Member States have to specify the segment of taxpayers targeted by the taxation measure. The following segments of taxpayers (4b) have to be reported in field “Target segment of taxpayers”. This is an open text field, however possible responses could include:


- Large business (>250 employees),
- Medium enterprises (50 – 249 employees),
- Micro and small enterprises (<50 employees),
- High-income individuals.

Differential treatment of taxpayer segments has to be reported.

Data format: text.

#### 5.4.5. FIELD 5: Source of information

Source(s) of information (including the reference of the related law or other legal text(s)) \*



0

##### **Purpose**

The purpose of this field is for the Member State to provide the reference of taxation measures.

##### **Guidance, including format of the data**

Member States have to complete the field with the title and/ or the web link of a report/ document to direct users to documents and websites with a more detailed description of taxation measures. References of the related law or other legal text(s) have to be included. It is good practice to report the exact name of legal act (law, decree, regulation, etc.), preferably in English.

Data format: text.

##### **Level of obligation**

Mandatory.

5.4.6. *FIELD 6: Expected savings for 2021-2030 and duration of the obligation period(s) (point 5(d) and 5(e) of Annex V to Directive 2012/27/EU)*

**Expected savings for 2021-2030 and duration of the obligation period(s) (points 5(d) and 5(e) of Annex V to Directive 2012/27/EU)**

Expected cumulative end-use energy savings for the period 2021-2030 (ktoe) \*

**6a.**

**6b.** Expected new annual end-use energy savings (ktoe/year) ⓘ

<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
2021	2022	2023	2024	2025
<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
2026	2027	2028	2029	2030
<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

Complementary explanations (when relevant) \*

**6c.**

5.4.6.1. **FIELD 6a: Expected cumulative end-use energy savings for the period 2021-2030 (ktoe)**

**Purpose**

The purpose of this field is for the Member State to report Member States' total volume of expected cumulative end-use energy savings for the period 2021-2030 according to taxation measures.

**Guidance, including format of the data**

Member States have to report the total volume of expected cumulative end-use energy savings from taxation measures for the period 2021-2030 in the field. The reported information corresponds to the annual sum of total volume of expected savings in the direct energy consumption by the users for each year from 2021 to 2030. The information should be calculated and reported in thousand tonnes of oil equivalent (ktoe).

Data format: number (decimal).

**Good examples**

This example is about a taxation measure in place throughout the period 2021-2030. Separate new annual savings should be entered for each year, as the projected impact of a taxation measure that remains constant (e.g., X euros per toe, or Y% of retail price per toe) will vary, depending on projections for energy consumption (lower

energy consumption reduces the impact of the tax) and energy prices before tax (lower energy prices increase the impact of a tax set in absolute terms (e.g., X euros per toe).

The following line of table 3 of Annex X need to be filled in, as follows – the expected cumulative savings should be the sum of the new annual savings, unless a justification can be provided for the use of long-term elasticities (impacts longer than one year).

Expected cumulative end-use energy savings for the period 2021-2030 (ktoe)	M	15.5
--	---	------

**Level of obligation**

Mandatory.

5.4.6.2. FIELD 6.b: Expected new annual end-use energy savings (ktoe/year)

**Purpose**

The purpose of these fields is for the Member State to report Member States’ volume of expected end-use energy savings achieved per year according to taxation measures.

**Guidance, including format of the data**

As new annual end-use energy savings will vary between years, as a result of expected changes in energy prices and energy consumption of the taxed fuels, Member States have to report the disaggregated annual volume of expected savings in the direct energy consumption by the users for each year from 2021 to 2030 in different fields.

The following lines of table 3 of Annex X has to be filled in with expected new annual savings each year, taking into account any expected changes to tax rates, energy consumption and energy prices (before tax). The example set out here relates to the example set out above (Field 6.a). The new annual savings rate are equal to the sum entered in Field 6.a.

2021	Miap	2
2022	Miap	1.9
2023	Miap	1.8
2024	Miap	1.7
2025	Miap	1.6
2026	Miap	1.5
2027	Miap	1.4
2028	Miap	1.3
2029	Miap	1.2

2030	Miap	1.1
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Data format: number (decimal).

**Level of obligation**

Mandatory, if applicable (i.e. Member States have to provide yearly objective when new annual end-use energy savings are expected to change over time).

5.4.6.3. FIELD 6.c: Complementary explanations (when relevant)

**Purpose**

The purpose of this field is for the Member State to provide complementary explanations when relevant.

**Guidance, including format of the data**

Member States may provide complementary information, for example on the reasons for the variation in expected energy savings (e.g., energy consumption and energy prices trends; expected changes in tax rates).

Data format: text.

**Level of obligation**

Mandatory.

### 5.4.7. FIELD 7: General information about the calculation methodology

General information about the calculation methodology	
7a.	Calculation method(s) used * ⓘ <input type="text"/> 0
7b.	Approach to calculating savings (point 4(a) of Annex V to Directive 2012/27/EU) * ⓘ <input type="text"/> 0
7c.	Elasticities (short-term) (point 4(b) of Annex V to Directive 2012/27/EU) ⓘ <input type="text"/> 0
7d.	Elasticities (long-term) (point 4(b) of Annex V to Directive 2012/27/EU) ⓘ <input type="text"/> 0
7e.	How lifetimes are addressed in savings calculations (point 2(e) of Annex V to Directive 2012/27/EU) * ⓘ <input type="text"/> 0
7f.	How is double counting with other policy measure(s) avoided? (point 4(c) of Annex V to Directive 2012/27/EU) * <input type="text"/> 0
7g.	Independence from the implementing public authority * ⓘ <input type="text"/> 0

#### Purpose

The purpose of this field is for the Member State to present the calculation methodology of the impact of taxation measures set by Member States.

#### Guidance, including format of the data

Member States have to report the calculation method(s) (7.a) used for calculating the impact of taxation measures on energy savings:

- explain if short-term and/or long-term elasticities are taken into account and the reason why with a short explanation;
- explain if cross-price elasticities are taken into account (the impact of the change in price of the taxed fuel on the consumption of substitute fuels);
- provide details on the variables taken into account in the model and how they were selected with a short description;
- provide details on the time period over which the elasticities were estimated.

Member States have to explain with a detailed description the method for analysing the effects on energy consumption (7.b) with and without taking into account the impact of the taxation measure (counterfactual). For counterfactual scenarios, Member States have to specify how the counterfactual is defined, and how it is ensured that at least the minimum EU levels of taxation are taken into account.

When relevant, Member States have to explain how the short-term elasticities (7.c) are defined in the calculation methodology, ensuring that they represent the responsiveness of energy demand to price changes. Member States have to mention data sources to be used to define elasticities.

When relevant, Member States have to explain how the long-term elasticities are defined in the calculation methodology, ensuring that they represent the responsiveness of energy demand to price changes. Member States have to mention the data sources used to define elasticities.

Member States have to report how lifetimes are addressed in savings calculations, and ensure that only savings from individual actions implemented after 31 December 2020 and before 31 December 2030 are taken into account.

Member States have to provide details on the measures taken to guarantee the independence of the assessment of impacts from the implementing public authorities, for example through the publication of the assessment by independent third parties, and the independent peer review of assessments.

Data format: text.

### **Good examples**

Member States could share:

- methodological reports used to calculate elasticity estimates,
- changes to methodologies brought about by changing external circumstances (e.g. higher gas prices) that have an impact,
- estimates of impacts on energy consumption amongst energy poor groups that could be netted off overall energy consumption, if they do not represent energy efficiency actions (e.g. energy rationing in response to higher prices).

### **Level of obligation**

Mandatory, if applicable (i.e. Member States have to provide details on elasticities when short-term and long-term elasticities are defined).

Voluntary for complementary explanations and source(s) of information

## **5.5. Annex X: Information about the lifetime of the individual actions eligible to the policies and measures reported for Article 7 of Directive 2012/27/EU**

☰ Art. 7a

☰ Art. 7b

☰ Taxation

☰ **Actions**



5.5.1. *FIELD 1: Information about the lifetime of the individual actions eligible to the policies and measures reported for Article 7 of Directive 2012/27/EU*

1a. Eligible action \*

1b. End-use sector

1c. Assumed lifetime value (in years)

1d. Assumptions about possible changes in the energy savings over time

1e. Source or method used to estimate the lifetime and related assumptions

**Purpose**

The purpose of this field is for the Member State to provide details on eligible individual action(s) to policies and measures reported for Article 7 of Directive 2012/27/EU.

**Guidance, including format of the data**

Details on eligible individual actions 1.a) and corresponding lifetimes of policy measures and energy savings have to be reported by Member States.

“Eligible action” means an action that leads to verifiable, and measurable or estimable, energy efficiency improvements and is undertaken as a result of a policy measure.

Details need to include:

- (1) End-use sector (1.b): Sector taken into account by the individual action;
- (2) Assumed lifetime value in years (1.c): Lifetime of energy savings;
- (3) Assumptions about possible changes in the energy savings over time (1.d): Assumptions of increase or decrease of energy savings in different years after implementation;
- (4) Source or method use to estimate the lifetime and related assumptions (1.e): Sources, methods and provision used and made to ensure a binding calculation requirement. The source entered requires the web link of a report/document where details about the individual action and their lifetimes have been referenced.

Calculation may be done by counting the savings each individual action will achieve between its implementation date and 31 December 2030. Alternatively, Member States may adopt another method that is estimated to achieve at least the same total quantity of savings. When using other methods, Member States have to ensure that the total amount of energy savings calculated with these other methods does not exceed the amount of energy savings that would have been the result of their calculation when counting the savings each individual action will achieve between its implementation date and 31 December 2030.

Member States should provide condensed information.

Data format: text for eligible action, end-use sector, assumptions about possible changes in the energy savings over time, and source or method used to estimate the lifetime and related assumptions, and number (integer) for assumed lifetime value (in years).

### **Level of obligation**

Mandatory, if applicable (Member States have to report details when the list of individual action is too long to be reported in “Annex X: Energy efficiency Obligation Schemes (EEOS) referred to in Article 7a of Directive 2012/27/EU”).

## 6. THEMATIC GUIDELINES FOR REPORTING - ANNEX XI: EED ARTICLE 7

### 6.1. Introduction

This section provides guidance for reporting information on the amount of energy savings achieved under Article 7 of Directive 2012/27/EU (Article 8 of the Implementing Regulation), according to Annex XI of the Implementing Regulation. This needs to be reported in the following table in Reportnet:

- Annex XI: Energy savings achieved through Article 7 of Directive 2012/27/EU in year X-2
- Annex XI: Energy savings achieved through Article 7 of Directive 2012/27/EU in year X-3

### 6.2. Annex XI: Energy savings achieved through Article 7 of Directive 2012/27/EU in year X-2

#### Art. 7 EED

This reporting table refers to national energy efficiency obligation scheme and alternative measures. This is to track progress of the Member States to achieve their cumulative end-use energy savings target by 31 December 2030 (Art 7 Directive 2012/27/EU). Member States have to report information for the year X-2, where X is the reporting year of NECP.

1. Select PaM ID as listed in Annex IX \*

2. Vulnerable households addressed + i

#### 6.2.1. FIELD 1: Select PaM ID as listed in Annex IX

##### Purpose

The purpose of this field is for the Member State to identify the specific PaM or PaMs that provide funding that supports the delivery of the objectives, targets and contributions set out in the NECPs. The specific PaMs are identified through the reporting of the respective PaM ID number(s). Data can be reported at the level of individual PaMs or for groups of PaMs.

##### Guidance, including format of the data

Each row in the template represents either a specific PaM, or a group of PaMs. The relevant PaM or group of PaMs ID number(s) that correspond with the data in each row should be selected for this first column. In case of a missing PaM, information needs to be completed in Annex IX Table 1 first.

Data format: text (dropdown list – list of PaMs). Additional records can be added to report on additional PaMs or group of PaMs for this table.

### **Level of obligation**

Mandatory.

## *6.2.2. FIELD 2: Vulnerable households addressed*

### **Purpose**

The purpose of this field is for the Member State to report on the inclusion of vulnerable households in the reporting of the PaMs.

### **Guidance, including format of the data**

Member States have to select whether vulnerable households are addressed in the PaMs.

In accordance with Art 3(3) of Directive 2018/1999/EU, Member States have to assess the number of households in energy poverty considering the necessary domestic energy services needed to guarantee basic standards of living in the relevant national context, existing social policy and other relevant policies, as well as indicative Commission guidance on relevant indicators for energy poverty.

Member States have to define the concept of vulnerable households with reference to energy poverty and, inter alia, to the prohibition of disconnection of electricity to such households in critical times. The concept may include income levels, the share of energy expenditure of disposable income, the energy efficiency of homes, critical dependence on electrical equipment for health reasons, age or other criteria (Art 28 Directive 2019/944/EU).

Member States have to also include the households effected by energy poverty and, where appropriate, in social, in the reporting.

The field should be completed by: Yes; No from the dropdown list.

When “Yes” is selected in Field 2, the Member State should report the corresponding energy savings (i.e. amount achieved among vulnerable households) in Field 4.

There could be instances where a Member State can consider that the policy measure addresses vulnerable households (e.g. when the grant rate is higher for households with lower income), but no data is available to estimate what share of the energy savings resulting from this policy measure is achieved among vulnerable or low-income households. In that case, the Member State might still select “Yes” in Field 2 and not report any value in Field 4.

Details about the target groups and how they are addressed in the EEOS or alternative measures can be entered in “Annex X: Energy efficiency Obligation Schemes (EEOS) referred to in Article 7a of Directive 2012/27/EU” (field 5) or “Annex X: Alternative policy measures referred to in Article 7b and Article 20(6) of Directive 2012/27/EU (except taxation measures)” (field 4c) respectively.

Data format: text (yes/no).

## Level of obligation

Mandatory.

- 6.2.3. *FIELD 3: Final energy savings achieved through national EEOs referred to in Article 7a of Directive 2012/27/EU or alternative measures adopted in application of Article 7b of that Directive (excl. Article 7(4), point (c) of that directive)*

Final energy savings achieved through national EEOs referred to in Article 7a of Directive 2012/27/EU or alternative measures adopted in application of Article 7b of that Directive (excl. Article 7(4), point (c) of that Directive)		
Total annual end-use savings achieved in Year X-2 *	Thereof, savings achieved in Year X-2 only from new actions that were implemented in Year X-2 *	Total cumulative end-use savings achieved from 2021 to Year X-2 *
<b>3a.</b> <input type="text"/>	<b>3b.</b> <input type="text"/>	<b>3c.</b> <input type="text"/>
0	0	0

## Purpose

The purpose of this field is for the Member State to report the energy savings achieved through national energy efficiency obligation schemes or alternative measures.

## Guidance, including format of the data

Member States have to report energy savings achieved in Year X-2, where X is the reporting year of NECPR. Energy saving reported in this field need to have been achieved through “national energy efficiency obligation schemes set up by Member States” (article 7a of the Directive 2012/27/EU) or through “alternative policy measures” (article 7b of the Directive 2012/27/EU).

The following information resulting from energy efficiency schemes or alternative measures implemented by Member States has to be reported:

- (1) “Total annual end-use savings achieved in Year X-2” (3.a): Member states have to report the total volume of savings occurring in year X-2 which result from actions implemented from 2021 to Year X-2. These actions need to have continued delivering savings in Year X-2. Information needs to take into account savings lifetimes (i.e. the length of time that one or more energy efficiency measures or activities save energy).
- (2) “Savings achieved in Year X-2 only from new actions that were implemented in Year X-2 (3.b)”: Member States have to report the total volume of savings which result from new actions implemented in Year X-2 only. These actions needs to have delivered savings in Year X-2 only.
- (3) “Total cumulative end-use savings achieved from 2021 to Year X-2” (3.c): Member States have to report the sum of end-use energy savings achieved from 2021 to Year X-2 and resulting from action implemented from 2021 to Year X-2.

Data format: number (decimal).

## Good examples

The results of an alternative measure or an EEOS in year 2021 to 2023 are as follows:

	energy savings achieved in 2021 (in ktoe/year)	energy savings achieved in 2022 (in ktoe/year)	energy savings achieved in 2023 (in ktoe/year)
Results from actions implemented in 2021	5	5	5
Results from actions implemented in 2022		8	8
Results from actions implemented in 2023			7
<b>Total annual savings</b>	<b>5</b>	<b>13</b>	<b>20</b>
	cumulative energy savings for 2021 (ktoe)	cumulative energy savings for 2021-2022 (ktoe)	cumulative energy savings for 2021-2023 (ktoe)
	5	18	38

The reporting done in 2025 about this alternative measure or EEOS will then be as follows:

Final energy savings achieved through national EEOs referred to in Article 7a of Directive 2012/27/EU or alternative measures adopted in application of Article 7b of that Directive (excl. Article 7(4), point (c) of that Directive)		
Total annual end-use savings achieved in Year X-2 <sup>(3)</sup>	Thereof, savings achieved in Year X-2 only from <u>new actions</u> that were implemented in Year X-2	Total cumulative end-use savings achieved from 2021 to Year X-2
20	7	38

**Level of obligation**

Mandatory.

6.2.4. *FIELD 4: Final energy savings achieved by PaMs aimed at alleviation of energy poverty in line with Article 7(11) of Directive 2012/27/EU*

Of which final energy savings achieved by PaMs aimed at alleviation of energy poverty in line with Article 7(11) of Directive 2012/27/EU		
Total annual end-use savings achieved in Year X-2	Thereof, savings achieved in Year X-2 only from new actions that were implemented in Year X-2	Total cumulative end-use savings achieved from 2021 to Year X-2
<b>4a.</b> <input type="text"/>	<b>4b.</b> <input type="text"/>	<b>4c.</b> <input type="text"/>
0	0	0

**Purpose**

The purpose of this field is for the Member State to report the final energy savings achieved by PaMs aimed at alleviation of energy poverty. Article 7(11) states that “In designing policy measures to fulfil their obligations to achieve energy savings, Member States have to take into account the need to alleviate energy poverty in accordance with criteria established by them, taking into consideration their available practices in the field”.

**Guidance, including format of the data**

Member States should include here the energy savings achieved based on requirements that included a social aim in the saving obligations they imposed. For example, Member States could require a share of energy efficiency measures under their national energy efficiency obligation schemes, alternative policy measures, or programmes or measures financed under an Energy Efficiency National Fund, to be implemented as a priority among vulnerable households, including those affected by energy poverty and, where appropriate, in social housing. The energy savings to be reported in this field are then the energy savings from individual actions implemented among these target groups.

Data format: number (decimal).

**Level of obligation**

Mandatory, if applicable.

6.2.5. *FIELD 5: Amount of final energy savings achieved in accordance with Article 7(4), point (c) of Directive 2012/27/EU*

Amount of final energy savings achieved in accordance with Article 7(4), point (c) of Directive 2012/27/EU		
Total annual end-use savings achieved in Year X-2	Thereof, savings achieved in Year X-2 only from new actions that were implemented in Year X-2	Total cumulative end-use savings achieved from 2021 to Year X-2
<b>5a.</b> <input type="text"/>	<b>5b.</b> <input type="text"/>	<b>5c.</b> <input type="text"/>
0	0	0

**Purpose**

The purpose of this field is for the Member State to report the final energy savings achieved in the energy transformation, distribution and transmission sectors. The

article states that Member States have to inform the Commission about their intended policy measures under this point for the period from 1 January 2021 to 31 December 2030 as part of their integrated national energy and climate plans. The impact of those measures have to be calculated in accordance with Annex V and included in those plans.

**Guidance, including format of the data**

Member States have to report energy savings achieved in the energy transformation, distribution and transmission sectors, including efficient district heating and cooling infrastructure, as a result of implementing the requirements set out in Article 14(4), point (b) of Article 14(5), and Article 15(1) to (6) and (9) of Directive 2012/27/EU.

Data format: number (decimal).

**Level of obligation**

Mandatory, if applicable.

**6.3. Annex XI: Energy savings achieved through Article 7 of Directive 2012/27/EU in year X-3**

This table is the same as Annex XI, Table 1, but for year X-3. Please refer to the description provided for Table 1.

Note: for the NECP progress report to be submitted in 2023, this table has not to be filled in, unless a Member State would like to provide updated data about the energy savings achieved in 2020 and already reported as part of the report to the achievement of the 2020 targets due by Member States in April 2022.



## 7. THEMATIC GUIDELINES FOR REPORTING - ANNEX XII: EED ARTICLE 5

### 7.1. Introduction

This section provides guidance for reporting information related to buildings as defined in Article 5 of Directive 2012/27 (Article 9), according to Annex XII of the Implementing Regulation. This is to be reported in the following tables within Reportnet:

- Annex XII: Total renovated building floor area of heated and/or cooled buildings owned and occupied by the Member States' central government referred to in Article 5(1) of the Directive 2012/27/EU
- Annex XII: The amount of energy savings in eligible buildings owned and occupied by their central government as referred to in Article 5(6) of Directive 2012/27/EU

Member States have to report either art 5.1 obligations (table 1 - Annex XII) or art 5.6 obligations (table 2 - Annex XII).

### 7.2. Annex XII: Total renovated building floor area of heated and/or cooled buildings owned and occupied by the Member States' central government referred to in Article 5(1) of the Directive 2012/27/EU

EED Art5(1)

EED Art5(6)

Directive 2012/27/EU stipulate the following which are applicable to the reporting in this Table 1: Without prejudice to Article 7 of Directive 2010/31/EU, each Member State has to ensure that, as from 1 January 2014, 3 % of the total floor area of heated and/or cooled buildings owned and occupied by its central government is renovated each year to meet at least the minimum energy performance requirements that it has set in application of Article 4 of Directive 2010/31/EU.

The 3 % rate has to be calculated on the total floor area of buildings with a total useful floor area over 500 m<sup>2</sup> owned and occupied by the central government of the Member State concerned that, on 1 January of each year, do not meet the national minimum energy performance requirements set in application of Article 4 of Directive 2010/31/EU. That threshold has to be lowered to 250 m<sup>2</sup> as of 9 July 2015.

Where a Member State requires that the obligation to renovate each year 3 % of the total floor area extends to floor area owned and occupied by administrative departments at a level below central government, the 3 % rate has to be calculated on the total floor area of buildings with a total useful floor area over 500 m<sup>2</sup> and, as of 9 July 2015, over 250 m<sup>2</sup> owned and occupied by central government and by these administrative departments of the Member State concerned that, on 1 January of each year, do not meet the national minimum energy performance requirements set in application of Article 4 of Directive 2010/31/EU.

When implementing measures for the comprehensive renovation of central government buildings in accordance with the first subparagraph, Member States may choose to consider the building as a whole, including the building envelope, equipment, operation and maintenance.

Member States have to require that central government buildings with the poorest energy performance be a priority for energy efficiency measures, where cost-effective and technically feasible.

### 7.2.1. *FIELD 1: PaM Number*

Select PaM ID as defined in Annex IX \*

#### **Purpose**

The purpose of this field is for the Member State to identify the specific PaM or PaMs that provide funding that supports the delivery of the objectives, targets and contributions set out in the NECPs. The specific PaMs are identified through the reporting of the respective PaM ID number(s). Data can be reported at the level of individual PaMs or for groups of PaMs.

#### **Guidance, including format of the data**

Each row in the template represents either a specific PaM, or a group of PaMs. The relevant PaM or group of PaMs ID number(s) that correspond with the data in each row should be selected for this first column. In case of a missing PaM, information needs to be completed in Annex IX Table 1 first.

Data format: text (dropdown list – list of PaMs). Additional records can be added to report on additional PaMs or group of PaMs for this table.

#### **Level of obligation**

Mandatory.

### 7.2.2. *FIELD 2: Total building floor area of buildings renovated*

Total building floor area of buildings renovated (sq. m.)

#### **Purpose**

The purpose of this field is for the Member State to capture the total building floor area of central government buildings renovated.

#### **Guidance, including format of the data**

This field requires Member States to report on total floor area of buildings with a total useful floor area over 250 m<sup>2</sup> owned and occupied by the central government of the Member State concerned.

Data format: number (decimal).

### Level of obligation

Mandatory, if applicable (i.e. if the relevant policy or measure was effectively implemented by the member State).

#### 7.2.3. FIELD 3: Amount of energy savings achieved due to renovation of buildings

Amount of energy savings achieved due to renovation of buildings (ktoe)	
Primary Energy Consumption (PEC)	Final Energy Consumption (FEC)
<b>3a.</b>	<b>3b.</b>
0	0

### Purpose

The purpose of this field is for the Member State to report on the amount of annual energy savings achieved due to renovation of buildings in Year X-3 and X-2.

In 2023, year X-3 is 2020, therefore the X-3 component of this field is not applicable for the first reporting in 2023. Reporting in 2023 is required for X-2 only (i.e. year 2021).

### Guidance, including format of the data

Member states have to report on the following for each reporting year (X-3 and X-2):

- Primary Energy Consumption (PEC) savings (3.a) and/or
- Final Energy Consumption (FEC) savings (3.b).

### Definitions:

Primary energy consumption should be as considered in the energy performance calculation of buildings defined by Directive 2010/31/EU: *‘primary energy’ means energy from renewable and non-renewable sources which has not undergone any conversion or transformation process.* Final energy consumption is after conversion or transformation process (inc. electricity and heat).

The amount of energy savings can be estimated: deemed, metered, scaled or surveyed savings can be reported.

Data format: number (decimal).

### Level of obligation

Voluntary.

7.2.4. *FIELD 4: Sum of new energy savings achieved due to renovation of buildings, over the time period 2021 – Year X-3 (X-2) (i.e. corresponding to 3% renovation rate)*

Sum of new energy savings achieved due to renovation of buildings, over the time period 2021 - Year X-3 (X-2)(i.e. corresponding to 3% renovation rate)

Primary Energy Consumption (PEC)	Final Energy Consumption (FEC)
<b>4a.</b>	<b>4b.</b>
0	0

**Purpose**

The purpose of this field is for the Member State to report on the sum of new energy savings achieved due to renovation of buildings, over the time period 2021 to Year X-3.

In 2023, X-3 is 2020, therefore in reporting year 2023 energy savings achieved due to renovation of buildings should cover the year 2021 only. Furthermore, the X-3 component of this field is not applicable for the first reporting in 2023.

**Guidance, including format of the data**

Member states have to report on the sum of new energy savings for the time period 2021-Year X-3 and 2021-Year X-2:

- Primary Energy Consumption (PEC) (4.a) and/or
- Final Energy Consumption (FEC) (4.b).

*In 2023, reporting for X-2 component only is required.*

Please refer to definitions in the Field 3 above.

The amount of energy savings can be estimated: deemed, metered, scaled or surveyed savings can be reported.

Data format: number (decimal).

**Level of obligation**

Mandatory, if applicable (i.e. if the Member States applies the approach from Article 5(1) of the Directive 2012/27/EU).

Member States have to report either art 5.1 obligations (table 1 - Annex XII) or art 5.6 obligations (table 2 - Annex XII).

7.2.5. *FIELD 5: Additional information*

Additional Information

0

## Purpose

This field allows to provide additional information regarding the total building floor area of buildings renovated, amount of energy savings achieved, and sum of energy savings achieved (fields 2-4).

## Guidance, including format of the data

Member States can provide additional either for X-3 or X-2 (in separate text fields). It is encouraged to ensure that it is clearly referenced in this field what the additional information is related to (i.e., which of the above fields).


Data format: text.

## Level of obligation

Voluntary.

### 7.3. **Annex XII: The amount of energy savings in eligible buildings owned and occupied by their central government as referred to in Article 5(6) of Directive 2012/27/EU**

 EED Art5(1)

 EED Art5(6)

Without prejudice to Article 7 of Directive 2010/31/EU, Member States may opt for an alternative approach to paragraphs 1 to 5 of Article 5 of Directive 2012/27/EU, whereby they take other cost effective measures, including deep renovations and measures for behavioural change of occupants, to achieve an amount of energy savings in eligible buildings owned and occupied by their central government that is at least equivalent., reported on annual basis.

For the purpose of the alternative approach, Member States may estimate the energy savings that paragraphs 1 to 4 would generate by using appropriate standard values for the energy consumption of reference central government buildings before and after renovation and according to estimates of the surface of their stock. The categories of reference central government buildings have to be representative of the stock of such buildings.

#### 7.3.1. *FIELD 1: Select PaM ID as defined in Annex IX*

Select PaM ID as defined in Annex IX \*

## Purpose

The purpose of this field is for the Member State to identify the specific PaM or PaMs that provide funding that supports the delivery of the objectives, targets and contributions set out in the NECPs. The specific PaMs are identified through the reporting of the respective PaM ID number(s). Data can be reported at the level of individual PaMs or for groups of PaMs.

### Guidance, including format of the data

Each row in the template represents either a specific PaM, or a group of PaMs. The relevant PaM or group of PaMs ID number(s) that correspond with the data in each row should be selected for this first column. In case of a missing PaM, information needs to be completed in Annex IX Table 1 first.

Data format: text (dropdown list – list of PaMs). Additional records can be added to report on additional PaMs or group of PaMs for this table.

### Level of obligation

Mandatory.

#### 7.3.2. *FIELD 2: Amount of energy savings achieved in eligible buildings owned and occupied by their central government in Year X-3 and X-2*

Amount of energy savings achieved in eligible buildings owned and occupied by their central government in Year X-3 and X-2 (ktoe)

Primary Energy Consumption (PEC)	Final Energy Consumption (FEC)
<b>2a.</b>	<b>2b.</b>
0	0

### Purpose

The purpose of this field is for Member States to report on the amount of energy savings achieved in eligible buildings owned and occupied by their central government in Year X-3 and X-2.

In 2023, year X-3 is 2020, therefore the X-3 component of this field is not applicable for the first reporting in 2023. Reporting in 2023 is required for X-2 only (i.e. year 2021).

### Guidance, including format of the data

Member states have to report on the following for each reporting year (X-3 and X-2):

- Primary Energy Consumption (PEC) savings (2a) and/or
- Final Energy Consumption (FEC) savings (2b).

### Definitions:

Primary energy consumption should be as considered in the energy performance calculation of buildings defined by Directive 2010/31/EU: ‘*primary energy*’ means energy from renewable and non-renewable sources which has not undergone any conversion or transformation process. Final energy consumption is after conversion or transformation process (inc. electricity and heat).

The amount of energy savings can be estimated: deemed, metered, scaled or surveyed savings can be reported.

Data format: number (decimal).

### Level of obligation

Mandatory if applicable (i.e. Member States opting for the alternative approach).

Member States have to report either art 5.1 obligations (table 1 - Annex XII) or art 5.6 obligations (table 2 - Annex XII).

#### 7.3.3. *FIELD 3: Sum of energy savings achieved in eligible buildings owned and occupied by their central government, over the time period 2021 – Year X-3 (X-2) (i.e. corresponding to 3% renovation rate)*

Sum of energy savings achieved in eligible buildings owned and occupied by their central government, over the time period 2021 – Year X-3 (X-2) (i.e. corresponding to 3% renovation rate) (ktoe)

Primary Energy Consumption (PEC)	Final Energy Consumption (FEC)
<b>3a.</b>	<b>3b.</b>
0	0

### Purpose

Sum of energy savings achieved in eligible buildings owned and occupied by their central government, over the time period 2021 – Year X-3 (X-2).

In 2023, X-3 is 2020, therefore in reporting year 2023 energy savings achieved in buildings should cover the year 2021 only. Furthermore, the X-3 component of this field is not applicable for the first reporting in 2023.

### Guidance, including format of the data

Member states have to report on the sum of energy savings achieved in eligible buildings for the time period 2021-Year X-3 and 2021-Year X-2:

- Primary Energy Consumption (PEC) (3.a) and/or
- Final Energy Consumption (FEC) (3.b).

*In 2023, reporting for X-2 component only is required.*

Please refer to definitions in the Field 2 above.

The amount of energy savings can be estimated: deemed, metered, scaled or surveyed savings can be reported.

Data format: number (decimal).

### Level of obligation

Mandatory if applicable (i.e. Member States opting for the alternative approach).

Member States have to report either art 5.1 obligations (table 1 - Annex XII) or art 5.6 obligations (table 2 - Annex XII).

#### 7.3.4. FIELD 4: Additional information

Additional Information

0

##### **Purpose**

This field allows to provide additional information regarding the amount of energy savings achieved, and sum of energy savings achieved (fields 2-3).

##### **Guidance, including format of the data**

Member States can provide additional either for X-3 or X-2 (in separate text fields). It is encouraged to ensure that it is clearly referenced in this field what the additional information is related to (i.e., which of the above fields).

Data format: text.

##### **Level of obligation**

Voluntary.

## 8. THEMATIC GUIDELINES FOR REPORTING - ANNEX XIII: FINANCING

### 8.1. Introduction

This section provides guidance for reporting information related to financing of national policies and measures (Article 10) according to Annex XIII of the Implementing Regulation 2022/2299. The tables in the dataflow are as follows:

- Annex XIII: Progress towards financing.

### 8.2. Annex XIII: Progress towards financing

Financing

#### 8.2.1. FIELD 1: Select PaM ID as listed in Annex IX

Select PaM ID as defined in Annex IX \*

##### **Purpose**

The purpose of this field is for the Member State to identify the specific PaM or group of PaMs that provide funding that supports the delivery of the objectives, targets and



contributions set out in the NECPs. The specific PaMs are identified through the reporting of the respective PaM ID number(s). Data can be reported at the level of individual PaMs or for groups of PaMs.

### **Guidance, including format of the data**

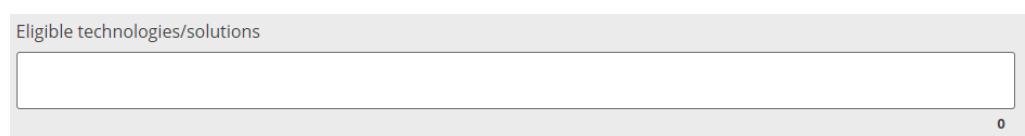
Each row in the template represents either a specific PaM, or a group of PaMs. The relevant PaM or group of PaMs ID number(s) that correspond with the data in each row should be selected for this first column. In case of a missing PaM, information needs to be completed in Annex IX Table 1 first. It is not necessary to add a new group in Annex IX to report using additional groups in Annex XIV.

Data format: text (dropdown list – list of PaMs). Additional records can be added to report on additional PaMs or group of PaMs for this table.

### **Level of obligation**

Mandatory.

## **8.2.2. FIELD 2: Eligible technologies/solutions**



The image shows a screenshot of a form field. At the top, there is a label "Eligible technologies/solutions" in a light grey box. Below the label is a large, empty rectangular text input box. In the bottom right corner of the input box, there is a small number "0".

### **Purpose**

The purpose of this field is for the Member State to identify the specific technologies or solutions that will receive financial support from the respective PaM or group of PaMs.

### **Guidance, including format of the data**

Technologies or solutions that are eligible for financial support by the PaM or PaMs should be listed. For example, a scheme that offers grants to households for the installation of renewable energy technologies will have a list of technologies that are eligible under the terms of the scheme. The individual technologies should be listed (e.g. solar water heating). There is no pre-defined list of technologies.

Data format: text.

### **Good examples**

A good example would identify specific technologies where applicable, e.g. solar water heating, air-source heat pumps, ground source heat pumps. Where the PaM supports multiple technologies, it is reasonable to provide a more general description with some specific elements, e.g. multiple energy efficiency and renewable energy technologies in SMEs.

### **Not recommended**

Listing specific makes and models of technologies e.g. a specific make and model of heat pump is too much detail.

## Level of obligation

Voluntary.

### 8.2.3. FIELD 3: Initial investment assumptions

Initial investment assumptions (EUR) *	
Value *	Price year *
3a.	3b.
0	0

## Purpose

The purpose of this field is for the Member State to understand the total level of investment (in Euros) associated with the PaM or PaMs, that was expected when the PaM was first evaluated. It represents the initial investment assumptions. This may differ from the actual level of investment to date or the current expectation of future investment (this information is requested in subsequent columns).

## Guidance, including format of the data

An initial investment value (3.a) should be reported for all PaM or PaMs. The value should be reported in Euros, and the respective price year (3.b) for the estimate should be stated. This allows to compare and sum coherently any investment amounts across years. So, as an example, if a grant scheme was put in place in 2021, and an estimate was made prior to the implementation of the scheme (in 2020) that it would stimulate 3 million Euro of investment, then the value would be 3 million and the price year would be 2020.

For non-euro area member countries, in case investment estimates are only available in national currency, we recommend using the annual average exchange rate. This is provided by the macro-economic database AMECO of the European Commission's Directorate General for Economic and Financial Affairs as “National currency units per ECU-EUR (XNE)”. (see the link: [https://dashboard.tech.ec.europa.eu/qs\\_digit\\_dashboard\\_mt/public/sense/app/667e9fb-a-eea7-4d17-abf0-ef20f6994336/sheet/f38b3b42-402c-44a8-9264-9d422233add2/state/analysis/](https://dashboard.tech.ec.europa.eu/qs_digit_dashboard_mt/public/sense/app/667e9fb-a-eea7-4d17-abf0-ef20f6994336/sheet/f38b3b42-402c-44a8-9264-9d422233add2/state/analysis/))

The investment value should reflect the monetary value (e.g. the financing commitment) of the specific investments that will be made as a result of the existing or planned PaM or group of PaMs, and not just the value of the subsidy. For example, if a tax rebate is offered to encourage the uptake of more energy efficient motors in industry, the investment value should reflect the monetary value of the investment before support - which is equivalent to the monetary value of the tax rebate and the monetary value of the motors purchased in response to the rebate. It should include all support given, public (national and EU) and the financing from private sources. Both needs to be considered in the investment figure reported.

## Good examples

An example for how the data might be entered is shown below. In the comment column an explanation is provided for the respective values for the purpose of these guidelines (this column is not part of the reporting template).

PaM number(s) the reporting concerns	Eligible technologies/ solutions	Initial investment assumptions (EUR)		Comment
		Value	Price year	
<i>PaM 1</i>	On-shore wind	10,000,000	2019	<p>This is a policy that supports new renewable energy through a feed-in tariff</p> <p>Initial investment assumptions have been taken from the policy impact assessment, that was prepared in 2019 (and based on 2019 prices)</p> <p>The value represents the total value of the investment in renewable energy and not just the value of the public subsidy</p>
<i>PaM 2</i>	Building fabric insulation, Renewable heating	4,000,000	2018	<p>This is an energy efficiency scheme that provides grants for energy renovation of private houses</p> <p>Initial investment assumptions are based on the budget allocation for the grant scheme (in 2018 prices)</p> <p>The total investment value has estimated based on the grant proportion (50% of investment value) and total grant budget.</p>

Select PaM ID as listed in Annex IX \*

1

Eligible technologies/solutions

on-shore wind

13

**Initial investment assumptions (EUR) \***

Value \*

10000000

8

Price year \*

2019

4

**Level of obligation**

Mandatory.

#### 8.2.4. FIELD 4: Actual investment up to and including year X-2

**Actual investments up to and including year X-2 (EUR)**

National public funding \*

4a.  0

Total EU funding \*      Of which RRF funding \*      Of which European Regional Development Fund and/or Cohesion Fund \*

4b.  0      4c.  0      4d.  0

Private funding (where available)

4e.  0

Price year \*

4f.  0

Description of source \*

4g.  0

#### Purpose

The purpose of these fields is for the Member State to understand the actual level of investment (in Euros) that has been made as a result of the PaM or PaMs. The data therefore should represent the value of investments that have actually been made (e.g. disbursements), rather than plans or expectations for future investment. To understand the different sources that have been used to fund the investments, an estimate needs to be made on the contribution to the total investment from:

- National public funding (4a): this includes direct funding from national budgets, as well as local/regional budgets
- Total EU funding (4b): this includes direct funding from EU programmes and EU financial instruments. Further detail of two subsets of EU funding is requested:
  - Of which Recovery and Resilience Facility (RRF) funding (4c): this is the amount of EU funding which is explicitly provided by the RRF
  - Of which European Regional Development Fund and/or Cohesion Fund (4d): this is the amount of EU funding provided through the European Regional Development Fund and/or Cohesion Fund
- Private funding (4e): this is the direct contribution from end users (e.g. businesses, households) as well as other private sector investors (e.g. banks, pension funds)

Description of source (4g): this field is used to describe the original source of information. This may be a single or multiple sources, and may include policy impact assessment, budget documents, programme/fund monitoring data and policy evaluations.

Wherever possible, investment amounts should be intended “excluding VAT”, in order to make them comparable with the initial investment assumption.

Price year (4f): year of estimation of actual investments.

### **Guidance, including format of the data**

The actual value of investments associated with the PaM or PaMs should be reported. The value should be reported as a total value up to and including year X-2 (where X is the current year). For example, if the PaM has been operational since year X-4, the value should represent the total of investments made in years X-4, X-3 and X-2. All values should be reported in Euros, and the respective price year for the estimates should be stated.

The contribution to the investment value from each of the funding sources should be reported, including the private contribution - where available. Thus, the sum of the investment values from each of the individual funding sources (national public, EU public, private) will equal the total value of the investments associated with the PaM or PaMs for the reporting period. This total is not reported separately in the template.

Data format: number (decimal) for *national public funding*, *total EU funding (of which RRF and ERDF or cohesion funding)*, *private funding*, number (integer) for *price year*, and text for *description of source*.

### **Good examples**

An example for how the data might be input is shown below. In the comment column an explanation is provided for the respective values for the purpose of these guidelines (this column is not part of the reporting template).

PaM number(s) the reporting concerns	Actual investments up to and including year X-2 (EUR)							Comment
	National public funding	EU funding	Of which RRF funding	Of which European Regional Development Fund and/or Cohesion Fund	Private funding (where available)	Price year	Description of source	
M	M	M	M	M	M <sub>iaV</sub>	M	M	
<i>PaM 1</i>	6,000,000	0	0	0	0	2021	2021 Annual report for scheme	<p>This is a policy that supports new renewable energy through a feed-in tariff.</p> <p>Public funding was entirely from national sources.</p> <p>Data on national public funding is available from the annual report for the scheme in 2021. This has data for 2019, 2020 and 2021</p> <p>There is no data on the value of the investments made by the renewable energy project developers in this example (although this could be estimated based on the public funding levels).</p>
<i>PaM 2</i>	0	500,000	500,000	0	300,000,000	2022	National estimates for RRF	<p>This is an energy efficiency scheme that provides grants for energy renovation of private houses.</p> <p>The scheme is entirely funded from EU funds linked to the RRF.</p> <p>Private investment that has been leveraged has been estimated by the national budget office</p>

## Level of obligation

Mandatory.

### 8.2.5. FIELD 5: Actual investments still to be implemented

Actual investments still to be implemented (EUR)	
Value *	Price year *
<b>5a.</b>	<b>5b.</b>
0	0

#### Purpose

The purpose of this field is for the Member State to understand the value of investments (in Euros) that are expected to be implemented in the future as a result of the PaM or group of PaMs. It therefore represents future expected investments, over and above investment that have already been made.

#### Guidance, including format of the data

An investment value should be reported for the PaM or group of PaMs. The value (5.a) should be reported in Euros, and the respective price year (5.b) for the estimate should be stated.

The investment value should reflect the monetary value of the specific investments that are expected to result from the PaM or group of PaMs, and not just the value of the subsidy. For example, if a tax rebate is offered to encourage the uptake of more energy efficient motors in industry, the investment value would include the monetary value of the tax rebate but also the monetary value of the motors purchased in response to the rebate.

The value reported should represent the total value of expected investments arising from the PaM or group of PaMs in all future years, taking into account the planned lifetime of the PaM. To ensure alignment with the reporting of actual investments, future years should including year X-1, year X, and any years beyond year X until the end date of the PaM or group of PaMs.

Data format: number (decimal) for value and number (integer) for price year.

#### Good examples

An example for how the data might be entered is shown below. In the comment column an explanation is provided for the respective values for the purpose of these guidelines (this column is not part of the reporting template).

PaM number(s) the reporting concerns	Actual investments still to be implemented (EUR)		Comment
	Value	Price year	



M	M		
<i>PaM 1</i>	4,000,000	2022	<p>This is a policy that supports new renewable energy through a feed-in tariff</p> <p>The scheme runs until 2023, so value represents assumed investment in future years (2022 and 2023)</p>
<i>PaM 2</i>	2,500,00	2022	<p>This is an energy efficiency scheme that provides grants for energy renovation of private houses.</p> <p>Scheme runs until 2026, so value represents assumed investment in future years (2022, 2023, 2024, 2025 and 2026) based on remaining budget envelope</p>

**Actual investments up to and including year X-2 (EUR)**

National public funding \*

0

Total EU funding \*      Of which RRF funding \*      Of which European Regional Development Fund and/or Cohesion Fund \*

7      1      1

Private funding (where available)

0

Price year \*

4

Description of source \*

311

**Actual investments still to be implemented (EUR)**

Value \*      Price year \*

7      4

**Level of obligation**

Mandatory.

## 9. THEMATIC GUIDELINES FOR REPORTING - ANNEX XIV, AIR QUALITY

### 9.1. Introduction

This section provides guidance for reporting information related to impacts of national policies and measures on air quality and emissions of air pollutants (Article 11) according to Annex XIII of the Implementing Regulation 2022/2299. The tables in the dataflow are as follows:

- Annex XIV: Air quality
- Annex XIV: Affected pollutants.

### 9.2. Annex XIV: Impacts on air quality and emissions to air

Annex XIV Air quality

Affected pollutants

#### 9.2.1. FIELD 1: Select PaM ID as listed in Annex IX

Select PaM ID as listed in Annex IX \*

#### Purpose

The purpose of this field is for the Member State to identify the specific PaM or group of PaMs in the NECP that impact air quality and emissions to air. The specific PaMs are identified through the reporting of the respective PaM ID number(s). Data can be reported at the level of individual PaMs or for groups of PaMs.

#### Guidance, including format of the data

Each row in the template represents either a specific PaM, or a group of PaMs. The relevant PaM ID number(s) that correspond with the data in each row should be entered into this first column. The PaM ID number(s) correspond with the PaM ID number(s) from Annex IX reporting. In case of a missing PaM, information needs to be completed in Annex IX Table 1 first.

For reporting on impact on air quality and emissions to air, PaMs can be grouped further than reported in Annex IX Table 1. Where a reporting line concerns several PaMs or group of PaMs, all relevant PaM ID numbers will be listed. It is not necessary to add a new group in Annex IX to report using additional groups in Annex XIV.

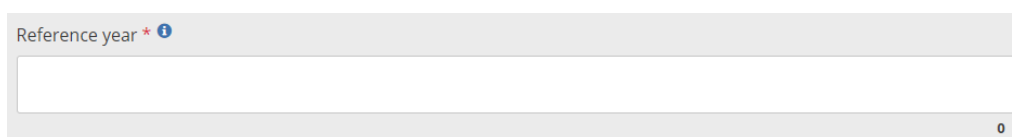
It is recommended to provide information at the highest level of detail as available, without aggregating quantitative data.

Data format: text (dropdown list – list of PaMs). Additional records can be added to report on additional PaMs or group of PaMs for this table.

#### Level of obligation

Mandatory.

### 9.2.2. *FIELD 2: Reference year*



Reference year \* 

0

#### **Purpose**

The purpose of this field is for the Member State to identify the reference year or base year used to project the air pollutant emissions.

#### **Guidance, including format of the data**

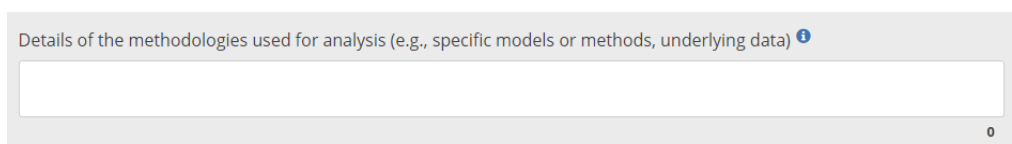
The reference year refers to a year which is set as the base year, for example in a quantitative modelling tool used by a Member State, to project the impacts of PaMs or groups of PaMs on air pollutant emissions and their change between the ‘with existing measures’ and ‘with additional measures’ scenario in years t, t+5 etc. (as reported in the fields “Quantified expected emission impacts (kt/yr)” and “Qualitative assessment of expected emission impacts”). Where no reference year has been defined for the purposes of neither the quantitative nor the qualitative assessment, then “0” should be entered.


Data format: number (integer).

#### **Level of obligation**

Mandatory.

### 9.2.3. *FIELD 3: Details of the methodologies used for analysis (e.g., specific models or methods, underlying data)*



Details of the methodologies used for analysis (e.g., specific models or methods, underlying data) 

0

#### **Purpose**

The purpose of this field is for the Member State to allow comparability of the methods used by Member States for the assessment of the impacts of the PaMs.

#### **Guidance, including format of the data**

This can include summary information of specific methods or models used for analysis of the PaM. Details may include information regarding overlaps or interactions with other PaMs and assumptions made in the assessment.

Additional information can be provided by including links and references to documentation in the field “Documentation/ Source of methodologies”

Data format: text.

### **Level of obligation**

Mandatory, if the information is available.

#### *9.2.4. FIELD 4: Qualitative description of uncertainties (where available)*

Qualitative description of uncertainties (where available)

0

### **Purpose**

The purpose of this field is for the Member State to facilitate understanding of the uncertainty of the projected emission changes estimates.

### **Guidance, including format of the data**

Emission changes estimates in the future are inherently uncertain. Information on uncertainty of the ex-ante assessment should be provided in this box. This can include links to further documentation elsewhere.

Data format: text.

### **Level of obligation**

Voluntary.

#### *9.2.5. FIELD 5: Documentation/ Source of methodologies*

Documentation/ Source of methodologies

0

### **Purpose**

The purpose of this field is for the Member State to provide URL links to documents/reports that detail specific methods or models used for analysing the impact of the PaMs, to allow the reader to seek further information on the assessment of the change.

### **Guidance, including format of the data**

In the field a title and a web URL link of a report/document that details specific methods or models used for analysis of the PaMs should be provided.

Data format: text.

### **Level of obligation**

Mandatory, if available.

### 9.2.6. *FIELD 6: General comments*



#### **Purpose**

The purpose of this field is for the Member State to have the possibility to provide any remarks, comments, explanations etc. to increase the transparency and comprehensiveness of the reported impacts of the PaMs, which was not possible to provide in the boxes above.

#### **Guidance, including format of the data**

Here the following issues could be mentioned, for example:

- Any background information relevant for the impact evaluation of the PaM.
- Results of air quality modelling done in relation to the selected GHG PaMs.

Data format: text.

#### **Level of obligation**

Voluntary.

### 9.3. Annex XIV: Affected Pollutants

Annex XIV Air quality

Affected pollutants

#### 9.3.1. FIELD 1: Select PaM ID as listed in Annex IX

Select PaM ID as listed in Annex IX \*

#### Purpose

The purpose of this field is for the Member State to identify the specific PaM or group of PaMs in the NECP that impact air quality and emissions to air. The specific PaMs are identified through the reporting of the respective PaM ID number(s). Data can be reported at the level of individual PaMs or for groups of PaMs.

#### Guidance, including format of the data

Each row in the template represents either a specific PaM, or a group of PaMs. The relevant PaM ID number(s) that correspond with the data in each row should be entered into this first column. The PaM ID number(s) correspond with the PaM ID number(s) from Annex IX reporting. In case of a missing PaM, information needs to be completed in Annex IX Table 1 first.

For reporting on affected pollutants, PaMs can be grouped further than that reported in “Annex IX: Key characteristics and progress towards implementing policies and measures”. Where a reporting line concerns several PaMs or group of PaMs, all relevant PaM ID numbers will be listed. It is not necessary to add a new group in Annex IX to report using additional groups in Annex XIV.

It is recommended to provide information at the highest level of detail as available, without aggregating quantitative data.

Data format: text (dropdown list – list of PaMs). Additional records can be added to report on additional PaMs or group of PaMs for this table.

#### Level of obligation

Mandatory.

#### 9.3.2. FIELD 2: Affected pollutant(s)

Affected pollutant(s) \*

#### Purpose

The purpose of this field is for the Member State to understand on which pollutant(s) the PaM or the group of PaMs will have an impact and for which pollutants emissions have been quantified or impacts have been qualitatively described.

### Guidance, including format of the data

Member States will be provided with a drop-down list, where they will select from the following pollutants: SO<sub>2</sub>, NO<sub>x</sub>, NMVOC, NH<sub>3</sub>, PM<sub>2.5</sub> (i.e. the main pollutants addressed under Directive 2016/2284), other (additional pollutants may be added and specified under ‘other’). More than one pollutant can be selected by adding a new record.

The most relevant air pollutants for the PaM or the group of PaMs need to be selected - the air pollutant(s) on which the PaM will have the most important effect. Other air pollutants with minor (side) impacts can be ignored.

Data format: text (dropdown list).

### Good examples

- (1) PaM: 'Electrification of the vehicle fleet': NO<sub>x</sub>, PM<sub>2.5</sub>, NMVOC, NH<sub>3</sub> are selected.
- (2) PaM: 'Waste management: Reduced landfilling': NMVOC is selected.
- (3) PaM: 'Agriculture: Reduction of fertilizer/manure use on cropland': NH<sub>3</sub> is selected.
- (4) PaM: 'Energy supply: Switch to less carbon-intensive fuels including biomass': PM<sub>2.5</sub> is selected

### Level of obligation

Mandatory.

### 9.3.3. FIELD 3: Quantified expected emission impacts (kt/yr)

Quantified expected emission impacts (kt/yr) ⓘ

NOTE: The procedure for negative/positive numbers is the opposite of previous PaMs quantitative reporting, and is the opposite of Annex IX

2025	2030	2035	2040	2045	2050
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
0	0	0	0	0	0

### Purpose

A quantitative estimation of the impact (air pollutant emissions changes) of a policy or measure in specified future years. It is an estimation of the projected effects of a policy or measure, compared to the situation without such policy or measure (i.e. compared to the ‘with existing measures’, or WEM, scenario).

### Guidance, including format of the data

A quantitative estimate of the expected impact of the policy or measure on emission reductions or increases, as relevant, should be reported, as far as possible, for the

years t, t+5, t+10, t+15, t+20, t+25 (where t signifies the first future year ending with 0 or 5 immediately following the reporting year). The impact is to be reported in terms of emission reduction/increase in each of the specified years for the ‘with additional measures’ (WAM) scenario in relation to the level of emissions in the ‘with existing measures’ (WEM) scenario (i.e. as the difference of WAM minus WEM emissions), expressed in kt in the given year. **Expected increases in emissions are reported as positive numbers, whereas expected reductions in emissions are shown as negative numbers.**

Ranges can be reported in case the impact is uncertain and the Member State prefers to report it as a range of emissions changes in the year specified. The qualitative description of the uncertainty (a further field) would be then especially useful.

The impact is to be reported for each pollutant that the PaM affects, which can be done in a new record.

Quantified emission changes may be available for some years only. In this case, reporters should keep cells empty. If a PaM does not bring emissions changes right at the beginning when it is implemented (but does so in later years), then “0” should be entered as emission reduction/ increase for the relevant years.

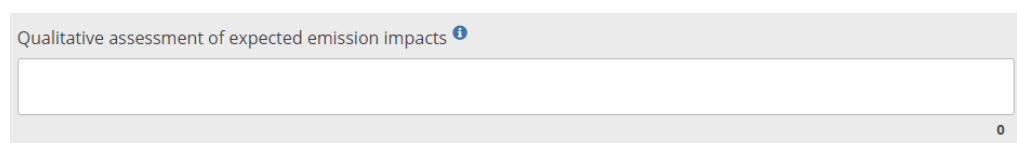
Empty cells should be restricted to situations where a disproportionate amount of effort would be required to collect the data for a pollutant in a given year and / or when the impact of the PaM on this pollutant would be insignificant in terms of the overall level and trend in national pollutant emissions. In these circumstances it is mandatory for Member States to provide a qualitative assessment of expected impacts (next field) for all air pollutants and years excluded on these grounds, and a justification for the exclusion in the field “General comments”.

Data format: number (decimal).

### **Level of obligation**

Mandatory, if quantitative emissions data is available.

#### *9.3.4. FIELD 4: Qualitative assessment of expected emission impacts*



The screenshot shows a data entry interface. At the top, there is a label 'Qualitative assessment of expected emission impacts' followed by a small blue circular icon with a white question mark. Below the label is a large, empty rectangular text input box. In the bottom right corner of the input area, there is a small '0' character.

### **Purpose**

A qualitative assessment of the impact (air pollutant emissions reductions or increases) of a policy or measure in future years. It is an assessment of the projected effects of a policy or measure.

### **Guidance, including format of the data**

A qualitative assessment of the expected impact of the PaM on emission reductions or increases is to be reported in terms of emission reduction/ increase, in relation to the level of emissions in the ‘with existing measures’ (WEM) scenario. The assessment would clearly need to indicate whether the impact on each pollutant is positive,



neutral or negative, also providing any indication of the magnitude of impact, if possible.

Where possible, a timeframe for the impacts should also be indicated in the assessment.

Data format: text.

### **Good examples**

Examples of good assessments (not necessarily good policies or measures):

- (5) A number of waste measures (group of PaMs) whose overarching objective is to increase recycling/reuse and reduce harmful disposal: ‘The overall effect of the group of PaMs is reducing landfill of biodegradable waste and associated CH<sub>4</sub> emissions. The reduction in waste sent to landfill will also reduce NMVOC emissions.’
- (6) Electrification of the vehicles fleet: ‘The policy will result in a reduction in NO<sub>x</sub> emissions of X%/Year 1, X%/Year2 compared to the ‘with existing measures’ (WEM) scenario OR of X% over the period Year 1 to Year 2 etc.’
- (7) Renovation of public sector buildings: ‘The impact of the PaM on emissions of air pollutants can be assessed as positive overall. Since the need for heat production decreases, emissions to air also decrease (SO<sub>2</sub>, NO<sub>2</sub>, NO<sub>x</sub>, fine particulate matter, NMVOC). The impact on NH<sub>3</sub> emissions can be assessed as neutral.’

### **Not recommended**

‘The PaM will have an impact on CH<sub>4</sub> and NMVOC emissions’ [the pollutants are mentioned, but it has not been described whether the impact is positive or negative]

### **Level of obligation**




In case no quantified impacts are available, a qualitative assessment is mandatory. If impacts are quantified, the qualitative assessment is voluntary.

## 10. FINALISING REPORTING

### 10.1. Validating your submission

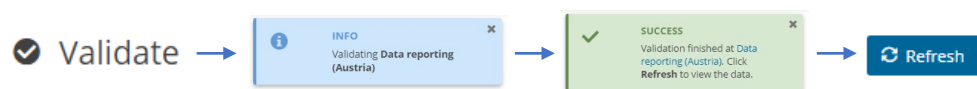
Reportnet is designed to run a series of quality checks once data is reported. This assists you in the reporting process. See Section 11 for a detailed overview of the Quality Assurance and Quality Control (QAQC) procedures undertaken for the dataflows described in this document.

There are three types of errors in Reportnet 3 for this dataflow:

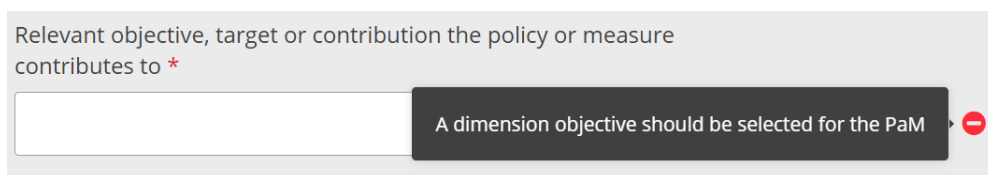
-  **Blocker** – serious issues, the data cannot be submitted,
-  **Error** – the data may be released but some explanation is required. Please note, errors should be avoided. You should submit a dataset with errors only under exceptional circumstances,
-  **Warning** – less serious issues, does not prevent the data to be submitted,

**Note: blockers are only applicable in the Annex IX data flow.**

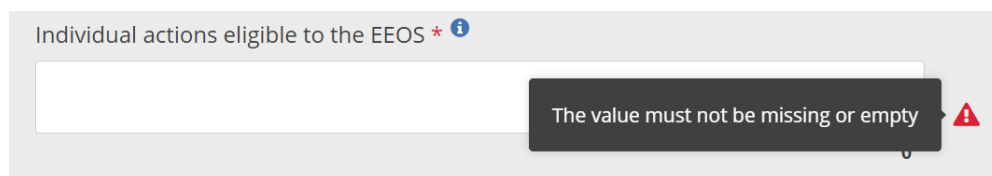
To begin the validation process, click **Validate** (and confirm). Validation takes several minutes, and depends heavily on the amount of data in the dataflow. Validation processes will begin with a blue notification icon and will end with a green success notification in the top right corner. Click the button **Refresh** to see the validations in the dataflow.



Once you have refreshed the data following the successful validation process, the validation blocker and error symbols will appear throughout the webform during your compilation. These are to help highlight potential issues with the data whilst you can edit it. You can hover over the symbols in the webform to see more information about the blocker/error. For example, a blocker symbol will appear next to the data field if it is a mandatory field in the Annex IX data flow and there is no data entered yet. Mandatory data fields are also identifiable by the red star at the end of the field name.



If there is a mandatory field that is currently empty in any of the other data flows, an error symbol will appear.



A warning symbol will appear where you may wish to re-check your data entered, such as making sure the sum of ex-ante GHG emissions reductions across EU ETS, ESR and LULUCF, adding up to the total.

GHG emissions reductions for year 2040 (kt CO2-equivalent per year)			
EU ETS	ESR	LULUCF	Total
143.362	-1.41		1432.21
7	5	0	7

Validations can also be viewed by clicking **Show validations** (1) which shows a table of the validation errors in a pop-up window. Validations can be filtered by type of QC, table name, field, level of error.

Entity	Table	Field	Code	Level error	Message	Number of records
FIELD	Table_7	Are waste-to-energy plants operated	FC58	ERROR	The value must not be missing or empty	2

If you view the data in the ‘Tabular data’ view rather than the webform, the validation errors can be viewed in **table tabs** (2), row-level validations can be found in the **Validations field** (3), and cell level validations are reported within the **relevant record** (4).

Table_1	Table_1_Measures	Table_2	Table_3	Table_4	Table_4_descriptive	Table_5	Table_6	Table_7	Table_8
								▲	
								▲	
								▲	

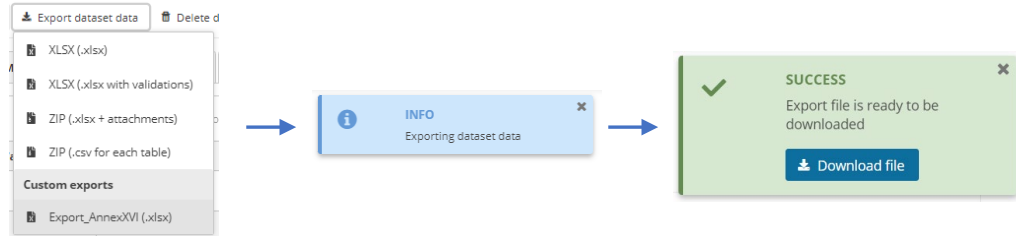
## 10.2. Export functionality

Once data has been reported, there is a possibility to export the reported data from Reportnet.

- **For the Annex IX data flow:**
  - To export to PDF, with all the information provided in the webform.
  - To export to Excel, with all information provided in the webform. All information is stored in one worksheet. It is in a human-friendly file. This file should not be used to import information to Reportnet.
  - To export to BR-UNFCCC reporting template. An excel file is generated that can be used for Biennial Reporting under the UNFCCC, BR-CTF – Table 3 ‘Progress in achievement of the quantified economywide emission reduction target: information on mitigation actions and their effects’. The extra columns with ex-ante estimates should be double checked and removed if necessary.

- For the other data flows, there is only the possibility to export to Excel with information stored in multiple worksheets. It is a computer-friendly file. This is the import template (see section 2.5.2.2).

Once an export is initiated you will be notified by a blue notification icon. When the download is successful a green success icon will appear with the download link available. Click this link to download the export.



Exported files can also be **downloaded from the notification list** that can be accessed on the blue navigation pane on the left of the reporting window.



### 10.3. Releasing data

The green icon in the reporting window, **Release to data collection**, is used to submit your final data for this reporting obligation. Please align with the other lead reporter(s) prior to submitting your data. Once selected a **Confirmation receipt** will be made available, with a timestamped proof of submission.



European Environment Agency  
Kongens Nytorv 6  
Dk 1050 Copenhagen K

Receipt date: 2023-01-23  
Representative: Italy

## To Whom It May Concern

This is a confirmation of receipt for national data submission under the reporting obligation

### ANNEX XVI 22112022

**Obligation:** National projections of anthropogenic greenhouse gas emissions - GovReg  
<https://rod.eionet.europa.eu/obligations/797>

#### Datasets

ANNEX XVI

#### Release date

2023-01-23 19:28:54 CET

Submitted by user: [william.keeling@eea.europa.eu](mailto:william.keeling@eea.europa.eu)



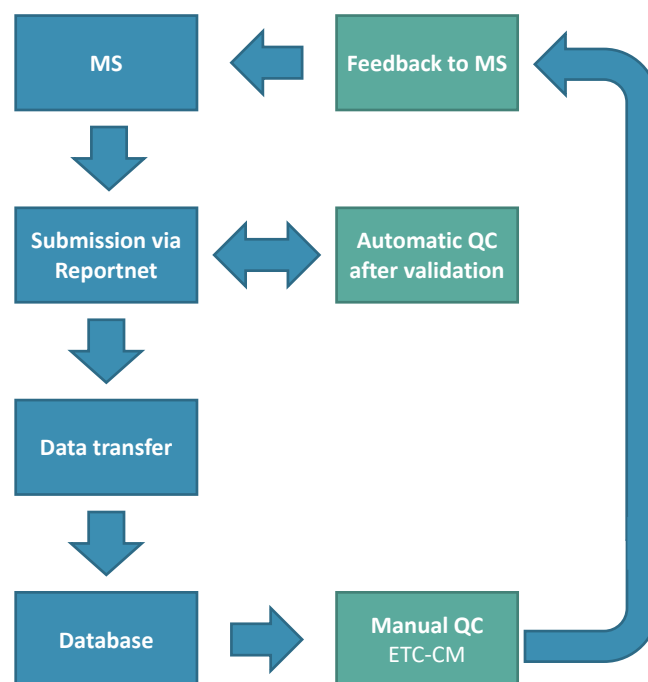
**Data can be submitted multiple times.** In each occasion the data will be saved. However please note that for later use **the EEA will always take the latest version** of the submitted data.

## 11. QUALITY ASSURANCE AND QUALITY CONTROL

### 11.1. Quality assurance and quality control structure

To ensure timeliness, completeness, consistency, comparability, coherence, transparency and accuracy of the reported information, specific quality checks are performed on the submissions by Member States. On behalf of the Commission and the EEA, the European Topic Centre (ETC-CM) carries out these quality checks for the dataflows covered in this guideline. However, Member States are strongly encouraged to adhere as much as possible to the reporting guidelines and to conduct a quality control of the information on the data reported. The results of the quality checks are communicated to Member States. After quality control, the data is stored in the EEA's database, made publicly available and used in the European Commission's assessment of the NECPRs and in certain EEA products. The figure below presents an overview of the process done on the reported information.

Figure 1 - Overview of the quality control process



The quality control procedure is aligned with the key reporting principles set out in the [2006 IPCC Guidelines for National Greenhouse Gas Inventories](#). More specifically, the information reported by Member States is assessed against seven criteria (five quality criteria so called 'TCCCA criteria' and timeliness and coherence):

- Timeliness,
- Transparency,
- Completeness,
- Consistency,
- Coherence,

- Comparability,
- Accuracy.

By performing quality checks each reporting cycle and providing additional reporting guidelines, the aim is to improve reporting along the seven criteria listed above.

Each criterion corresponds to a number of specific checks, which are performed in the sequential order. Below is an overview of what could be required per criteria.

<b>Criteria</b>	<b>Objective</b>
Timeliness	To assess if data and report was submitted on time and identify as early as possible any gaps or inconsistencies to inform Member States about the need for a resubmission.
Transparency	To ensure the data is identifiable and underlying methods are clearly referenced.
Completeness	To ensure that all relevant data and information is included.
Consistency	Ensure that the reporting is consistent and in line with good practices and guidelines. Checks ensure both internal consistency and consistency across years.
Coherence and Comparability	To assess whether the reported data is coherent with other possibly relevant reporting obligations and data provided and to ensure reporting across Member States is comparable.
Accuracy	To assess whether the data provided are credible.

## 11.2. Timeline & communication

Timeliness of reporting is an important quality criterion that helps ensure the smooth running of the quality control process. Member States must submit information on NECPR obligations required under the Governance Regulation by 15 March to allow for proper quality checking at EU level, prior to the publication of the submitted NECPRs and compilation of the European Commission's assessment of the NECPRs.

The number and the dates of additional resubmissions are also tracked. The main steps between the initial submission of information by the Member States, and the publication of the EU's progress report are described below. This includes the initial submission, quality control, a communication period, and the finalization and subsequent publication of the information. The Member States, ETC-CM, EEA and the European Commission are involved in these steps. The timeline below sets out the key dates associated with each of these steps (Table 1).

The effective implementation of the procedure requires efficient responses from all parties at each step and therefore the timeline is only indicative, assuming submission, quality control and resubmission is not delayed for any reason. Furthermore it is not necessary for the procedure to take the full anticipated period, presented below, if data quality is sufficient and clearly presented.

*Table 1 – Indicative timeline and the description of the action required by the organisations involved*

<b>When</b>	<b>What</b>	<b>Who</b>
By 15 March	<ul style="list-style-type: none"> <li>• Preparation of the submission and completion of the reporting obligation within relevant dataflow;</li> <li>• Internal quality checks and via validation on Reportnet;</li> <li>• Release submission via Reportnet.</li> </ul>	Member States
15 March – 15 April	Quality control (transparency, comparability, completeness, coherence, consistency and accuracy checks simultaneously). This includes feedback to Member States and communication on any issues found. Changes to Member States submissions will only be made, if Member States provide updates or corrections based on the findings communicated by the ETC-CM.	ETC-CM
15 April – 30 April	If necessary, MS adjust and resubmit the dataflow via Reportnet.	Member States
1 May – mid June	Review of the resubmitted report, if needed final follow up with the Member States.	ETC-CM (and Member States)
30 June	Delivery of final information by Member States to the EEA for publication in the EEA database.	ETC-CM
End-August	Final checking of whole EU database and preparation of report compiling the outcome of the implementation of the quality control procedure on EU level, including individual feedback to Member States.	ETC-CM
July-October	<p>Assessment, analysis and reporting in progress reports (Commission).</p> <p>Publication of EEA products (trends and projections, data visualisations).</p>	<p>European Commission</p> <p>EEA</p>

The central document in this quality control circle is the quality check feedback report. It ensures a consistent and complete quality control process and is a template to communicate the findings to the Member States. Every finding is added to the feedback report. These reports will be bilaterally shared with relevant lead reporters of a dataflow. If needed Member States will be asked to adjust the submission and resubmit.

If reviewers have a specific question concerning the latest submission, the Member States will be asked for clarification via the feedback report. The Member States then



have the responsibility to provide a clarification, adjust the information provided (report or data) and release the data again via Reportnet. The Member States are responsible for making the necessary changes to the dataflow.

### **11.3. Assessment of Member States submissions**

After the quality control procedure has been concluded a short report presenting the outcome of the quality checks will be prepared. This will include information on:

- List of checks done;
- Overview of findings;
- Overview of corrective actions;
- An EU assessment summarizing the outcome of the implementation of the quality checking procedure;
- Recommendations for further improvements in reporting.

## 12. FREQUENTLY ASKED QUESTIONS

### **Can you report the same PaM in the WEM and WAM scenarios with different intensity of implementation?**

According to the definitions used in the Governance Regulation, the difference between the WEM and WAM projections should be the effect of planned PaMs, i.e. PaMs that are under discussion and that have a realistic chance of being adopted and implemented. Following these definitions, the difference between the WEM and WAM projections should not reflect differences in impact or intensity of the same set of PaMs, for example by using different assumptions regarding the projected effectiveness of one or more implemented PaMs. If it concerns a theoretical additional potential of the same PaM (e.g. a different assumption on the number of subsidies provided) without a clear intention for implementing additional actions, then this would be part of a sensitivity analysis. Differences between the WEM and WAM scenario should only be the result of planned PaMs and reporting on greenhouse gas projections and PaMs should be coherent with one another. For example, where the implementation of a PaM depends on the amount of resources available, the most likely assumptions regarding the impact should be used for the WEM projections. However, if an increase of the resources is under discussion and has a realistic chance of being adopted, this could be considered a planned PaM. In that case, the additional measure (the increase of resources of an already implemented PaM) should be reported as a separate planned PaM. Similarly, an existing regulation setting emission standards should only be reported in the WEM scenario. If discussions are ongoing to strengthen the regulation, this should be considered and reported as a separate and planned PaM. In these cases, reporters are recommended to make the link with the already implemented PaM very clear in the description. The names of the PaMs can be similar, to show relatedness, but should not be exactly the same.

### **What is a single PaM?**

An important issue is what should be considered single PaMs. The guidance mentions a single policy and measure should have a unique policy intervention (e.g. mineral oil tax increase), pursue a well identified and specific objective, has a specific time-frame and has a clear assignment to an implementing entity. It is not recommended to group different distinct instruments with similar objective and report this as one single PaM in the webform. This should especially be avoided if the PaM consists of instruments that are implemented, adopted and planned. This would make allocation of the PaM to the WEM or WAM projections not possible. See also the question “How to report on policies and measures that are only partially implemented?” for some further guidance.

### **What is the difference between adopted and planned PaMs?**

The difference between the two lies in the level of certainty that this measure will be implemented. According to the Governance Regulation, adopted policies and measures means policies and measures for which an official government decision has been made by the date of submission and there is a clear Guidelines for reporting on greenhouse gas policies and measures under Regulation (EU) No 2018/1999 Page | 67 commitment to proceed with implementation. This implies that detailed information is available describing the PaM. Indicators of adopted PaMs could be that they are underpinned by legislation, the PaM has been published in the official journal, financial resources have already been made earmarked, or the start of the PaM is already known. Planned

policies and measures means options that are under discussion and that have a realistic chance of being adopted and implemented after the date of submission. This implies that not all details are necessarily known. In some cases a package of climate policies might be adopted, but the measures included in them are not clearly defined. For such a measures it has to be close to certain that they will be implemented to be included in the WEM projections. The adopted policy should also be defined in such a way that there is almost no uncertainty how it should be implemented in the future. If the policy package consists of implemented, adopted and planned measures, the policy packages could be split into PaMs that are part of the WEM and PaMs that are part of the WAM projections.

### **How to report on policies and measures that are only partially implemented?**

An important rule is that reporting on PaMs and projections should be coherent with one another. PaMs that are identified as implemented and adopted should belong to the WEM projections, and PaMs that are reported as planned should be included in the WAM projections. If needed, reporting should be split into two PaMs to separate the implemented and adopted parts from the planned parts of a PaM. The reporting on PaMs could also include national or regional strategies and plans. While the strategy or plan could be implemented (i.e. agreed by the government), some of the actions that are included in it might not yet be. In this case it is recommended to report PaMs included in an action plan or strategy separately and indicate whether these are implemented, adopted or planned.

### **How to report changes to an existing PaM?**

EU and national PaMs are constantly evolving to make them more effective and efficient or to adjust PaMs to changing ambition levels. Apart from including new PaMs, updating the information on already reported PaMs is therefore very important each reporting cycle. Changes in a PaM since the last reporting can be addressed in two ways:

- Keep the PaM. In this case, the description and other reporting elements have to be adjusted to include the changes that have occurred. The start year can still be the initial starting year.
- Add this change as a new PaM. This might be particularly useful if the changes are very fundamental. In this case the reporting on the new PaM should only reflect the changes that have occurred, e.g. start year should be the start the changes took effect.

## 13. APPENDICES

### Appendix 1 – Types of measures

Area	Relevant to Article #	Referred to in Annex I	Additional reference	Type of measure
<b>GHG emissions and removals</b>	17(2)a	3.1.1i		To achieve the target set under Regulation (EU) 2018/842 as referred in point 2.1.1
	17(2)a	3.1.1i		To comply with Regulation (EU) 2018/841, covering all key emitting sectors and sectors for the enhancement of removals
	17(2)a	3.1.1ii		Regional cooperation in this area
	17(2)a	3.1.1iii		financing measures, including Union support and the use of Union funds, in this area at national level, where applicable.
<b>Decarbonisation: other elements</b>	17(2)a	3.1.3i		national policies and measures affecting the EU ETS sector and assessment of the complementarity and impacts on the EU ETS
	17(2)a	3.1.3iii		Policies and measures to achieve low emission mobility (including electrification of transport)
	17(2)a	3.1.3iv		Where applicable, national policies, timelines and measures planned to phase out energy subsidies, in particular for fossil fuels
<b>Renewable energy</b>	20(b)1	3.1.2i		Policies and measures to achieve the national contribution to the 2030 binding Union target for renewable energy as indicated in point (a)(2) of Article 4 of this Regulation, including sector- and technology-specific measures, with a specific review of the implementation of measures laid down in Articles 23 to 28 of Directive (EU) 2018/2001
	20(b)1	3.1.2i	20(b)9	Increasing renewable energy in heating and cooling Art. 23 REDII
	20(b)1	3.1.2i	20(b)9	Increasing renewable energy in district heating and cooling Art. 24 REDII
	20(b)1	3.1.2i	20(b)9	Increasing renewable energy in the transport sector Art. 25 REDII
	20(b)1			Specific measures to comply with the minimum share of advanced biofuels produced from annex IX feedstock (RED II art 25.1 )
	20(b)1			Specific rules for biofuels, bioliquids and biomass fuels produced from food and feed crops Art. 26 REDII
	20(b)1			Calculation rules with regard to the minimum shares of renewable energy in the transport sector Art. 27 REDII
	20(b)			Other provisions on renewable energy in the transport

	)1		sector Art. 28 REDII
	20(b) )2	3.1. 2ii	specific measures for regional cooperation
	20(b) )3	3.1. 2iii	specific measures on financial support, including Union support and the use of Union funds, for the promotion of the use of energy from renewable sources in electricity, heating and cooling, and transport;
	20(b) )4	3.1. 2iv	the assessment of the support for electricity from renewable sources that Member States are to carry out pursuant to Article 6(4) of Directive (EU) 2018/2001;
	20(b) )5	3.1. 2v	specific measures to fulfil the requirements of Articles 15 to 18 of Directive (EU) 2018/2001;
	20(b) )5	3.1. 2v	Administrative procedures, regulations and codes Art. 15 of REDII;
	20(b) )5	3.1. 2v	Organisation and duration of the permit-granting process Art. 16 of REDII;
	20(b) )5	3.1. 2v	Simple-notification procedure for grid connections Art. 17 of REDII;
	20(b) )5	3.1. 2v	Information and training Art.18 of REDII;
	20(b) )6		measures to assess, make transparent and reduce the need for must-run capacity that can lead to curtailment of energy from renewable sources;
	20(b) )7	3.1. 2v	policies and measures under the enabling framework Member States are to put in place pursuant to Article 21(6) and Article 22(4) of Directive (EU) 2018/2001 to promote and facilitate the development of renewables self-consumption and renewable energy communities;
	20(b) )8	3.1. 2vii	measures promoting the use of energy from biomass, especially for new biomass mobilisation taking into account biomass, including sustainable biomass availability as well as measures for the sustainability of biomass produced and used;
	20(b) )9		measures in place to increase the share of renewable energy in the heating and cooling and transport sector (not covered by measures under Governance Regulation Article 20(b)1);
	20(b) )10	3.1. 2v	policies and measures facilitating the uptake of power purchase agreements
<b>Energy Efficiency</b>	21(b) )1		Policies, measures and programmes to achieve the indicative national energy efficiency contribution for 2030 as well as other objectives referred to in Article 6, including planned measures and instruments (also of a financial nature) to promote the energy performance of buildings, measures to utilise energy efficiency potentials of gas and electricity infrastructure and other measures to promote energy efficiency;
	21(b) )2		market-based instruments that incentivise energy efficiency improvements, including but not limited to energy taxes, levies and allowances;
	21(b) )3	3.2i	national energy efficiency obligation scheme and alternative measures pursuant to Article 7a and 7b of Directive 2012/27/EU and in accordance with Annex III to this Regulation;
	21(b) )4	3.2ii	Long-term renovation strategies in accordance with Article 2a of Directive 2010/31/EU;

	21(b) 5)	3.2ii i		Policy and measures to promote energy services in the public sector and measures to remove regulatory and non-regulatory barriers that impede the uptake of energy performance contracting and other energy efficiency service models;
		3.2i v		measures to promote the exemplary role of public buildings and energy-efficient public procurement
		3.2i v		measures to promote energy audits and energy management systems (Article 8 of Directive 2012/27/EU)
		3.2i v		consumer information and training measures (Articles 12 and 17 of Directive 2012/27/EU)
		3.2i v		Other measures to promote energy efficiency (Article 19 of Directive 2012/27/EU)
		3.2v		measures to promote the role of local renewable energy communities in contributing to the implementation of energy efficiency policies and measures
		3.2v i		Measures to utilise energy efficiency potentials of gas and electricity infrastructure (Article 15(2) of Directive 2012/27/EU)
	21(b) 6)	3.2 vii		Regional cooperation in the area of energy efficiency, where applicable
	21(b) 7)	3.2v iii		financing measures, including Union support and the use of Union funds, in the area of energy efficiency at national level, where applicable;
<b>Energy Security</b>	22(e) )	3.3i	22(a) )	increasing the diversification of energy sources and supply from third countries, the purpose of which may be to reduce energy import dependency
	22(e) )	3.3i	22(c) )	addressing constrained or interrupted supply of an energy source, for the purpose of improving the resilience of regional and national energy systems, including a timeframe for when the objectives should be met;
	22(e) )	3.3i	22(d)	increasing the flexibility of the national energy system, in particular by means of deploying domestic energy sources, demand response and energy storage;
	22(f) )	3.3ii		Regional cooperation in this area
	22(g) )	3.3ii i		Where applicable, financing measures in this area at national level, including Union support and the use of Union funds
<b>Internal Energy Market</b>	23(h) )	3.4. li	23(a) )	the level of electricity interconnectivity that the Member State aims for in 2030 in consideration of the electricity interconnection target for 2030 of at least 15 % and the indicators set out in point 2.4.1 of Section A of Part I of Annex I, as well as measures for the implementation of the strategy for the achievement of this level, including those relating to the granting of authorisations;
	23(h) )	3.4. lii	23(b)	key electricity and gas transmission infrastructure projects that are necessary for the achievement of objectives and targets under the five dimensions of the Energy Union;

	23(h) )	3.4. 1iii	23(c) )	main infrastructure projects envisaged other than Projects of Common Interest, including infrastructure projects involving third countries, and, to the extent feasible, a general assessment of their compatibility with, and contribution to, the aims and targets of the Energy Union
	23(h) )	3.4. 3ii	23(d)	increasing system flexibility, market integration and coupling, aiming to increase the tradeable capacity of existing interconnectors, smart grids, aggregation, demand response, storage, distributed generation, mechanisms for dispatching, re-dispatching and curtailment, real-time price signals
	23(h) )	3.4. 3iii	23(e)	measures related to the non-discriminatory participation of renewable energy, demand response and storage, including via aggregation, in all energy markets
	23(h) )		23(f) )	measures with regard to ensuring that consumers participate in the energy system and benefits from self-generation and new technologies, including smart meters
	23(h) )		23(g)	measures with regard to ensuring electricity system adequacy;
		3.4. 3iv		measures to protect consumers, especially vulnerable and, where applicable, energy poor consumers
		3.4. 3iv		measures to improve the competitiveness and contestability of the retail energy market
		3.4. 3v		measures to enable and develop demand response, including those addressing tariffs to support dynamic pricing
	23(i) )	3.4. 1ii		regional cooperation in implementing the objectives and policies referred to in points (a) to (h);
	23(j) )	3.4. 1iii		without prejudice to Articles 107 and 108 TFEU, financing measures at national level, including Union support and the use of Union funds, in the area of the internal energy market, including for the electricity interconnection target, where applicable;
	23(k) )	3.4. 3ii		measures to increase the flexibility of the energy system with regard to renewable energy production, including the roll-out of intraday market coupling and cross-border balancing markets.
<b>Energy poverty</b>	24(b) )	3.4. 4i		policies and measures addressing energy poverty to achieve the objectives set out in point 2.4.4 of Section A of Part I of Annex I
<b>Research, innovation and competitiveness</b>	25(f)	3.5i	25(b)	public and, where available, private spending in research and innovation relating to clean energy technologies as well as for technology cost and performance development;
	25(f)	3.5i	25(c)	the deployment of technologies for decarbonising energy- and carbon-intensive industrial sectors and, where applicable, for related carbon transport, use, and storage infrastructure;
	25(f) )	3.5ii		cooperation with other Member States in implementing the objectives and policies referred to in points (b) to (d), including coordination of policies and measures in the context of the SET Plan, such as alignment of research programmes and common programmes;

	25(g) )	3.5ii i		financing measures, including Union support and the use of Union funds, in this area at national level, where applicable.
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## Appendix 2 – List of Union policies

NOTE: policies labelled as obsolete are no longer in force. They are included as policies and measures reported previously make reference to them, however no new references to them should be made.

Short Name	Full Name	Obsolete
Governance Regulation	Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action	
Effort Sharing Regulation	Effort Sharing Regulation EU 2018/842 and implementing decision on ESR Annual Emission Allocations	
ETS Directive	EU ETS directive 2003/87/EC as amended by Directive 2008/101/EC, Directive 2009/29/EC and Directive 2018/410 and implementing legislation, in particular 2010/2/EU, 2011/278/EU, 2011/638/EU, 176/2014/EU, and Decision (EU) 2015/1814	
Effort Sharing Decision	Effort Sharing Decision 406/2009/EC, ESD Annual Emission Allocation (AEA) Decision 2013/634/EU and Commission Decision (EU) 2017/1471 amending Decision 2013/162/EU	
European Structural and Investment Funds	European Structural and Investment Funds (Provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund under the Multiannual Financial Framework)	
European Climate Law	European Climate Law Regulation (EU) 2021/1119	
Energy Efficiency Directive	Energy Efficiency Directive 2012/27/EU as amended by Directive 2018/2002	
Energy Performance of Buildings Directive	Recast of the Energy Performance of Buildings Directive (Directive 2010/31/EU) and amended by the Directive 2018/844	
Eco-design Framework Directive	Eco-design framework Directive 2009/125/EC, 2008/28/EC and its implementing Regulations	
Labelling Regulation	Labelling Regulation 2017/1369 repealing 2010/30/EC	
Directive on end-use energy efficiency and energy services	Directive 2006/32/EC on end-use energy efficiency and energy services	X
Energy Star Program	Energy Star Program	X
Regulation on coordinated demand-reduction measures for gas	Regulation (EU) 2022/1369 on coordinated demand-reduction measures for gas	
Union renewable energy financing	Commission Implementing Regulation (EU) 2020/1294 on the Union renewable energy financing mechanism	

mechanism		
Electricity Market Directive	Directive (EU) 2019/944 on common rules for the internal market for electricity and amending Directive 2012/27/EU	
Electricity Market Regulation	Regulation (EU) 2019/943 on the internal market for electricity	
Renewable Energy Directive	Directive 2018/2001 on the promotion of the use of energy from renewable sources, recast of the directive 2009/28/EC	
CCS Directive	Directive on the geological storage of CO2 2009/31/EC	
Geological storage of CO2 Directive	Cogeneration Directive 2004/8/EC	X
Energy Taxation Directive	Energy Taxation Directive 2003/96/EC	
Completion of the internal energy market	Completion of the internal energy market	X
Gas Storage Regulation	Regulation (EU) 2022/1032 with regard to gas storage	
Regulation on risk-preparedness in the electricity sector	Regulation (EU) 2019/941 on risk-preparedness in the electricity sector	
Regulation on CO2 standards for cars and vans	Regulation 2019/631 setting CO2 emission performance standards for new passenger cars and for new light commercial vehicles, and repealing Regulations (EC) No 443/2009 and (EU) No 510/2011	
Regulation on CO2 standards for heavy duty vehicles	Regulation (EU) 2019/1242 setting CO2 emission performance standards for new heavy-duty vehicles	
Alternative Fuels Infrastructure Directive	Directive on the deployment of alternative fuels infrastructure 2014/94/EU	
Eurovignette Directive	Eurovignette Directive on road infrastructure charging 2011/76/EU	
Fuel Quality Directive	Fuel Quality Directive 2009/30/EC	
Clean Vehicles Directive	Directive on the Promotion of Clean and Energy Efficient Road Transport Vehicles 2009/33/EC	
Euro VI Regulation	Regulation Euro VI for heavy duty vehicles 595/2009	
Euro 5/6 Regulation	Regulation 715/2007 on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6)	
Biofuels directive	Biofuels directive 2003/30/EC	X
F-gas Regulation	F-gas Regulation 517/2014	

Mobile Air-conditioning system Directive	Mobile Air-conditioning system (MACs) Directive 2006/40/EC	
F-gas Regulation	F-gas Regulation 2006/842/EC	x
Common Agricultural Policy	Common Agricultural Policy, and its delegated and implementing acts	
Nitrate Directive	Nitrate Directive 1991/676/EEC	
Waste Management Framework Directive	Waste Management Framework Directive 2008/98/EC, amended by Directive 2018/851	
Waste Directive	Waste Directive 2006/12/EC	X
Waste Incineration Directive	Waste incineration Directive 2000/76/EC	X
Landfill Directive	Landfill Directive 1999/31/EC, amended by Directive 2018/850	
LULUCF Regulation	LULUCF Regulation 2018/841	
LULUCF Decision	LULUCF Decision No 529/2013/EU	
Industrial Emissions Directive	Industrial emissions Directive 2010/75/EU (Recast of IPPC Directive 2008/1/EC and Large Combustion Plant Directive 2001/80/EC) and its associated Best Available Technique Reference Documents	
NEC Directive	Directive 2016/2284 on the reduction of national emissions of certain atmospheric pollutants, amending Directive 2003/35/EC and repealing Directive 2001/81/EC	
Water Framework Directive	Water Framework Directive 2000/60/EC	
Medium Combustion Plant Directive	Medium Combustion Plant Directive 2015/2193	
Just Transition Fund Regulation	Just Transition Fund Regulation (EU) 2021/1056	
Recovery and Resilience Facility Regulation	Recovery and Resilience Facility Regulation (EU) 2021/241	
Security of gas supply Regulation	Regulation (EU) 2017/1938 of the European Parliament and of the Council concerning measures to safeguard the security of gas supply	
Network code on electricity emergency and restoration	Commission Regulation (EU) 2017/2196 establishing a network code on electricity emergency and restoration	
Oil Stocks Directive	Council Directive 2009/119/EC of 14 September 2009 imposing an obligation on Member States to maintain minimum stocks of crude oil and/or petroleum products	
Directive on safety of offshore oil and gas operations	Directive 2013/30/EU on safety of offshore oil and gas operations	

NIS Directive	Directive (EU) 2016/1148 concerning measures for a high common level of security of network and information systems across the Union	
Directive on European Critical Infrastructures	Council Directive 2008/114 on the identification and designation of European critical infrastructures and the assessment of the need to improve their protection	
Urban Waste water directive	Directive 91/271/EEC on Urban Waste Water Treatment, amended Directive 98/15/EEC amending Directive 91/271/EEC	
Commission Recommendation on permit-granting procedures Power Purchase Agreements	Commission Recommendation on speeding up permit-granting procedures for renewable energy projects and facilitating Power Purchase Agreements C(2022) 3219 final	
Other (Union policy not listed above)	Other (Union policy not listed above)	

### Appendix 3 – List of relevant provisions

Energy Efficiency Directive	<p>General transposition: Energy Efficiency Directive EED</p> <p>Energy Efficiency Obligation Scheme Art. 7 EED</p> <p>Alternative measure Art. 7 EED</p> <p>Exemplary role and purchasing by public bodies Art. 5 and 6 EED</p> <p>Public sector renovations Art. 5 EED</p> <p>Energy audits in large enterprises (non-SMEs) Art. 8 EED</p> <p>Metering Art. 9 EED</p> <p>Billing Art. 10 and 11 EED</p> <p>Consumer information, empowering programme, information and training Art. 12 and 17 EED</p> <p>Efficiency in heating and cooling (cogeneration, district heating and cooling) Art. 14 EED</p> <p>Demand response and efficiency in transformation and distribution networks Art. 15 EED</p> <p>Qualification, accreditation and certification schemes Art. 16 EED</p> <p>Energy services &amp; performance contracting Art. 18 EED</p> <p>Other measures to promote energy efficiency Art. 19 EED</p> <p>National Energy Efficiency Fund Art. 19 EED</p> <p>Other EED-related measures</p>
Energy Performance of Buildings Directive	<p>Renovation roadmap Art. 2a EPBD</p> <p>Energy performance certificates</p> <p>Nearly zero energy buildings</p> <p>Minimum energy performance requirements</p> <p>Mandatory inspection of heating and cooling systems</p> <p>Other EPBD-related measures</p>
Energy labelling	Energy labelling

Ecodesign	Ecodesign
	Support scheme
Renewable Energy Directive	Guarantees of origin
	Simplification of administrative procedures
	Other

#### Appendix 4 – List of References ex ante

The ETC CM looked into the available guidelines for policy evaluation and the national evaluations and prepared an overview below.

Title	Publisher	Publishing date	Weblink
Guidance document for ex-post evaluation of climate policies in Effort Sharing sectors	European Commission	2020	<a href="https://www.eionet.europa.eu/reportnet/docs/govreg/policies-and-measures/guidance-document-for-ex-post-evaluation-of-climate-policies-in-effort-sharing-sectors.pdf/view">https://www.eionet.europa.eu/reportnet/docs/govreg/policies-and-measures/guidance-document-for-ex-post-evaluation-of-climate-policies-in-effort-sharing-sectors.pdf/view</a>
Overview of policy evaluation guidelines	European Environment Agency	2019	<a href="https://www.eionet.europa.eu/reportnet/docs/govreg/policies-and-measures/overview-of-policy-evaluation-guidelines.xlsx/view">https://www.eionet.europa.eu/reportnet/docs/govreg/policies-and-measures/overview-of-policy-evaluation-guidelines.xlsx/view</a>
EPATEE Evaluation Into Practice to Achieve Targets for Energy Efficiency	EU funded project	2019	<a href="https://epatee.eu/">https://epatee.eu/</a>
StreamSave - streamlining energy savings calculations	EU funded project	2023	<a href="https://streamsavae.eu/">https://streamsavae.eu/</a>

<b>Title</b>	<b>Publisher</b>	<b>Publishing date</b>	<b>Weblink</b>
Environment and climate policy evaluation,  EEA Report No 18/2016	European Environment Agency	2016	<a href="http://www.eea.europa.eu/publications/environment-and-climate-policy-evaluation">http://www.eea.europa.eu/publications/environment-and-climate-policy-evaluation</a>
COMMISSION STAFF WORKING DOCUMENT  Better Regulation Guidelines	European Commission	2015	<a href="http://ec.europa.eu/smart-regulation/guidelines/docs/swd_br_guidelines_en.pdf">http://ec.europa.eu/smart-regulation/guidelines/docs/swd_br_guidelines_en.pdf</a>
Policy and Action Standard. An accounting and reporting standard for estimating the greenhouse gas effects of policies and actions	World Resource Institute	2015	<a href="http://ghgprotocol.org/policy-and-action-standard">http://ghgprotocol.org/policy-and-action-standard</a>  Full Report: <a href="http://www.wri.org/sites/default/files/Policy_and_Action_Standard.pdf">http://www.wri.org/sites/default/files/Policy_and_Action_Standard.pdf</a>
Energy Efficiency Evaluation: The evidence for real energy savings from energy efficiency programmes in the household sector	UK Energy Research Centre	2015	<a href="http://www.ukerc.ac.uk/programmes/technology-and-policy-assessment/energy-efficiency-evaluation.html">http://www.ukerc.ac.uk/programmes/technology-and-policy-assessment/energy-efficiency-evaluation.html</a>
Study to support the definition of a CBA methodology for gas, A report prepared for the European Commission by Frontier Economics	European Commission	2014	<a href="https://ec.europa.eu/energy/sites/ener/files/documents/Study%20to%20support%20the%20definition%20of%20a%20CBA%20methodology%20for%20gas.pdf">https://ec.europa.eu/energy/sites/ener/files/documents/Study%20to%20support%20the%20definition%20of%20a%20CBA%20methodology%20for%20gas.pdf</a>
Guide to Cost-Benefit Analysis of Investment Projects, Economic appraisal tool for Cohesion Policy 2014-2020	European Commission	2014	<a href="http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/cba_guide.pdf">http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/cba_guide.pdf</a>
Assessing the costs and benefits of	European Commission	2013	<a href="http://ec.europa.eu/smart-regulation/impact/commission_guidel">http://ec.europa.eu/smart-regulation/impact/commission_guidel</a>

Title	Publisher	Publishing date	Weblink
regulation			<a href="http://ec.europa.eu/regional_policy/files/docs/131210_cba_study_sg_final.pdf">ines/docs/131210_cba_study_sg_final.pdf</a>
EVALSED Sourcebook	European Commission	2013	<a href="http://ec.europa.eu/regional_policy/en/information/publications/evaluations-guidance-documents/2013/evalsed-the-resource-for-the-evaluation-of-socio-economic-development-sourcebook-method-and-techniques">http://ec.europa.eu/regional_policy/en/information/publications/evaluations-guidance-documents/2013/evalsed-the-resource-for-the-evaluation-of-socio-economic-development-sourcebook-method-and-techniques</a>
<i>Ex post</i> quantification of the effects and costs of PaMs	European Commission	2012	<a href="https://ec.europa.eu/clima/sites/clima/files/strategies/progress/monitoring/docs/report_expost_quantification_en.pdf">https://ec.europa.eu/clima/sites/clima/files/strategies/progress/monitoring/docs/report_expost_quantification_en.pdf</a>
The Magenta Book. Guidance for evaluation	UK	2011	<a href="https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/220542/magenta_book_combined.pdf">https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/220542/magenta_book_combined.pdf</a>
Improving the practice of cost benefit analysis in transport, Summary and Conclusions	OECD, International Transport Forum	2011	<a href="http://www.itf-oecd.org/sites/default/files/docs/dp201101.pdf">http://www.itf-oecd.org/sites/default/files/docs/dp201101.pdf</a>
Quantification of the effects on greenhouse gas emissions of PaMs	European Commission	2009	<a href="http://ec.europa.eu/clima/policies/strategies/progress/monitoring_en#tab-0-2">http://ec.europa.eu/clima/policies/strategies/progress/monitoring_en#tab-0-2</a>  <a href="https://ec.europa.eu/clima/sites/clima/files/strategies/progress/monitoring/docs/ghgPaMs_report_180110_en.pdf">https://ec.europa.eu/clima/sites/clima/files/strategies/progress/monitoring/docs/ghgPaMs_report_180110_en.pdf</a>
Guidelines for the monitoring, evaluation and design of energy	European Commission	2006	<a href="https://ec.europa.eu/energy/intelligent/projects/sites/iee-">https://ec.europa.eu/energy/intelligent/projects/sites/iee-</a>



<b>Title</b>	<b>Publisher</b>	<b>Publishing date</b>	<b>Weblink</b>
efficiency policies - How policy theory can guide monitoring & evaluation efforts and support the design of SMART policies -			<a href="http://ec.europa.eu/projects/files/projects/documents/aid-ee_guidelines_en.pdf">projects/files/projects/documents/aid-ee_guidelines_en.pdf</a>
The Impacts and Costs of Climate Chang	European Commission	2005	<a href="http://ec.europa.eu/clima/policies/strategies/2020/docs/final_report2_en.pdf">http://ec.europa.eu/clima/policies/strategies/2020/docs/final_report2_en.pdf</a>
Guide to Cost-Benefit Analysis of Major Projects, in the context of EC Regional Policy 1997 edition	European Commission	1997	<a href="http://ec.europa.eu/regional_policy/sources/docgener/guides/cost/pdf/3_full_en.pdf">http://ec.europa.eu/regional_policy/sources/docgener/guides/cost/pdf/3_full_en.pdf</a>
Contestation, contingency, and justice in the Nordic low-carbon energy transition	European Commission	2017	<a href="http://ec.europa.eu/environment/integration/research/newsalert/pdf/nordic_countries_demonstrate_potential_of_low_carbon_energy_policies_494na4_en.pdf">http://ec.europa.eu/environment/integration/research/newsalert/pdf/nordic_countries_demonstrate_potential_of_low_carbon_energy_policies_494na4_en.pdf</a>
The economic impact of climate change on European agriculture	European Commission	2017	<a href="http://ec.europa.eu/environment/integration/research/newsalert/pdf/economic_impact_of_climate_change_on_european_agriculture_488na2_en.pdf">http://ec.europa.eu/environment/integration/research/newsalert/pdf/economic_impact_of_climate_change_on_european_agriculture_488na2_en.pdf</a>
Research for environmental policymaking: how to prioritise, communicate and measure impact	European Commission	2016	<a href="http://ec.europa.eu/environment/integration/research/newsalert/pdf/research_for_environmental_policymaking_54si_en.pdf">http://ec.europa.eu/environment/integration/research/newsalert/pdf/research_for_environmental_policymaking_54si_en.pdf</a>
Scope study in modelling of EU environment policy	European Commission	2016	<a href="http://ec.europa.eu/environment/enveco/studies_modelling/pdf/study_modelling.PDF">http://ec.europa.eu/environment/enveco/studies_modelling/pdf/study_modelling.PDF</a>
The challenges of monitoring national climate policy: learning lessons from the EU	Journal: Climate Policy (Author: Jonas Schönefeld)	2016	<a href="http://www.tandfonline.com/doi/full/10.1080/14693062.2016.1248887">http://www.tandfonline.com/doi/full/10.1080/14693062.2016.1248887</a>

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<b>Title</b>	<b>Publisher</b>	<b>Publishing date</b>	<b>Weblink</b>
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## Appendix 5 – Reporting roles

### Roles in the NECPR reporting

This document discusses the different roles envisioned in the technical implementation of the NECPR reporting.

#### Member state roles

- Lead reporter (2 per dataflow)
- Reporter

Function	Lead reporter
<b>Overall aim of the function</b>	The lead reporter is responsible for ensuring the complete and timely reporting of (a) data flow(s)
<b>Role/ responsibilities</b>	<ul style="list-style-type: none"> <li>• Responsible for validating and submitting completed data flows.</li> <li>• Coordinate the reporting exercise from a substantive perspective, following up overall completion and assigning the necessary reporters. <ul style="list-style-type: none"> <li>○ Acts as distribution point of relevant developments/information related to reporting to the necessary reporters.</li> <li>○ Responsible for all reporters in their dataflow(s): that they are coordinated and updated on timelines, key meetings, processes (etc.).</li> </ul> </li> <li>• Key contact for Commission/EEA with regard to substantive issues of reporting.</li> </ul>
<b>Competencies</b>	<ul style="list-style-type: none"> <li>• Expertise of thematic area of relevant dataflow(s)</li> <li>• Knowledge/coordination of supporting reporters and relevant supporting ministry/ministries <ul style="list-style-type: none"> <li>○ To be able to disseminate information related to the relevant dataflow(s)</li> </ul> </li> <li>• Understanding of the reporting system (ReportNet and/or ReportENER) for relevant dataflow(s) following guidance and training: <ul style="list-style-type: none"> <li>○ Ability to assign reporters</li> <li>○ Ability to validate and release/submit data when completed</li> </ul> </li> </ul>
<b>Interfaces to</b>	<ul style="list-style-type: none"> <li>• Data stewards, regarding thematic reporting queries</li> <li>• Data custodians, regarding technical reporting queries</li> <li>• Other lead reporters, for coordination and to ensure the overall reporting obligations of the Member State is accomplished</li> <li>• Reporters, where assigned by lead reporter</li> </ul>
<b>Note</b>	<p>Lead reporters + back-ups for each data flow are nominated initially by mail through the Permanent Representation (November 2022).</p> <p>A lead reporter should be assigned for each individual data flow, however a lead reporter can be responsible for multiple or even all data flows for the NECPR.</p>

Changes can only be requested by e-mail by the relevant lead reporter(s) or Permanent Representation to the relevant data steward. The data steward must inform the Assessment Coordinator and relevant reporting system coordinator (Reportnet or ReportENER).

Contact for changes:

(for dataflows in ReportNet) [govreg@eea.europa.eu](mailto:govreg@eea.europa.eu)

(for dataflows in ReportENER) [EC-E-PLATFORM-IT-SUPPORT@ec.europa.eu](mailto:EC-E-PLATFORM-IT-SUPPORT@ec.europa.eu)

<b>Function</b>	<b>Reporter</b>
<b>Overall aim of the function</b>	The reporter is responsible for contributing to complete and timely reporting of (a) data flow(s)
<b>Role/ responsibilities</b>	<ul style="list-style-type: none"> <li>• Contributing to complete and timely reporting of (a) data flow(s). A reporter cannot submit completed data flows.</li> </ul>
<b>Competencies</b>	<ul style="list-style-type: none"> <li>• Expertise of thematic area of relevant dataflow(s)</li> <li>• Understanding of the reporting system (ReportNet and/or ReportENER) for relevant dataflow(s) following guidance and training</li> </ul>
<b>Interfaces to</b>	<ul style="list-style-type: none"> <li>• Lead reporter</li> </ul>
<b>Note</b>	<p>A reporter is assigned to an individual dataflow by the relevant lead reporter (can be assigned to multiple dataflows). It is not required to officially nominate a reporter to a data flow (given that a lead reporter is nominated)</p> <p>For ReportNet: lead reporters can assign reporters directly in the system (See section 2.4)</p> <p>For ReportENER: lead reporters can request changes to the reporters by e-mail: <a href="mailto:EC-E-PLATFORM-IT-SUPPORT@ec.europa.eu">EC-E-PLATFORM-IT-SUPPORT@ec.europa.eu</a></p>

### **Commission/EEA roles**

- Assessment coordinator
- ReportNet coordinator
- ReportENER coordinator
- Data steward

<b>Function</b>	<b>Assessment coordinator</b>
<b>Overall aim of the function</b>	The assessment coordinator is responsible for the management of the overall process on the business/policy side, keeping track of the fulfilment of the other Commission/EEA roles, in particular data stewards & associated reviewers at COM side.
<b>Role/ responsibilities</b>	<ul style="list-style-type: none"> <li>• Establishes and manages the business processes for the overall assessment</li> <li>• Manages the meetings of the technical implementation group &amp; ISG</li> <li>• Keeps track of the fulfilment and assignment of process roles</li> <li>• If needed, escalates issues to the management level</li> </ul>
<b>Competencies</b>	
<b>Interfaces to</b>	<ul style="list-style-type: none"> <li>• All core team coordinators</li> <li>• All COM associated reviewers</li> </ul>

<b>Function</b>	<b>ReportNet coordinator</b>
<b>Overall aim of the function</b>	The ReportNet coordinator is responsible for ensuring the technical implementation of the NECPR modules implemented through ReportNet, including relations with data stewards & data custodians on the EEA side
<b>Role/ responsibilities</b>	<p><b>NECPR management</b></p> <ul style="list-style-type: none"> <li>• Manages the technical implementation of the NECPR modules implemented through ReportNet</li> <li>• Coordinates with data stewards and custodians on ReportNet dataflows, ensuring where possible a consistency of approach</li> <li>• Coordinates internal business management approaches across dataflows, establishing common timelines and where necessary resource management.</li> </ul> <p><b>Stakeholder relations</b></p> <ul style="list-style-type: none"> <li>• Maintains institutional stakeholder relations (EC, EEA, Eurostat, JRC ...) as main contact point <ul style="list-style-type: none"> <li>○ Ensures regular updates on progress are shared with relevant experts (coordinators, data stewards/custodians, other relevant internal stakeholders)</li> </ul> </li> </ul>
<b>Competencies</b>	<ul style="list-style-type: none"> <li>• Overview of key developments/challenges faced within ReportNet (per dataflow)</li> <li>• In-depth understanding of dataflow management processes</li> <li>• High-level technical and thematic data collection knowledge</li> </ul>

<b>Interfaces to</b>	<ul style="list-style-type: none"> <li>• All core team coordinators</li> <li>• All ReportNet data stewards and custodians</li> <li>• Where relevant, additional institutional stakeholders (EC, EEA, Eurostat, JRC ...)</li> <li>• Where relevant, data providers</li> </ul>
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<b>Function</b>	<b>ReportENER coordinator</b>
<b>Overall aim of the function</b>	The ReportENER coordinator is responsible for ensuring the technical implementation of the NECPR modules implemented through ReportENER, including relations with data stewards & data custodians on the COM side
<b>Role/ responsibilities</b>	<ul style="list-style-type: none"> <li>• Manages the technical implementation of the NECPR modules implemented through ReportENER.</li> <li>• Coordinates with data stewards and custodians on the relevant ReportENER dataflows.</li> <li>• Cooperates internally to align reportENER development plans and resources with NECPR modules implementation needs, escalates to Management if necessary.</li> </ul> <p><b>Stakeholder relations</b></p> <ul style="list-style-type: none"> <li>• Maintains institutional stakeholder relations (EC, EEA, Eurostat, JRC ...) as main contact point. <ul style="list-style-type: none"> <li>○ Ensures regular updates on progress are shared with relevant experts (coordinators, data stewards/custodians, other relevant internal stakeholders).</li> </ul> </li> </ul>
<b>Competencies</b>	<ul style="list-style-type: none"> <li>• Project management</li> <li>• Stakeholder relationship management</li> <li>• High-level technical and thematic data collection knowledge</li> </ul>
<b>Interfaces to</b>	<ul style="list-style-type: none"> <li>• All core team coordinators</li> <li>• ReportENER data steward, custodian and internal stakeholders (e.g. Product Owner, development team)</li> </ul>

<b>Function</b>	<b>Data Steward</b>
<b>Overall aim of the function</b>	Data Stewards are overall responsible for a data collection or dataflow, ensuring compliance with legislation and/or institutional regulations, interfaces to reporters, relevant coordinator and data users, ensures quality procedures are in place.



<p><b>Role/ responsibilities</b></p>	<p><b>Dataflow management</b></p> <ul style="list-style-type: none"> <li>• Establishes and manages the business processes to ensure their dataflow is operational for data collection, data processing/validation and data dissemination.</li> <li>• Ensures a project plan for their relevant dataflow and permanent quality improvement - the what, when, who, how and resources.</li> <li>• Translate requirements to different expert groups (data custodian, analyst, communication).</li> <li>• Coordinates with data custodian on technology improvements impacting data flow.</li> <li>• Coordinate with main data users.</li> <li>• Where necessary ensures that data collected is made visible/accessible.</li> </ul> <p><b>Stakeholder relations</b></p> <ul style="list-style-type: none"> <li>• Works with relevant coordinator to maintain institutional stakeholder relationships (EC, EEA, Eurostat, JRC ...).</li> <li>• Directly maintains stakeholder relationships with data providers/reporters at national level.</li> <li>• Manages the assignment of reporters' rights to the relevant dataflow, after (re)-nomination.</li> <li>• Monitoring reporting status (and initial follow up if there are reporting delays/issues)</li> </ul>
<p><b>Competencies</b></p>	<ul style="list-style-type: none"> <li>• Has in-depth thematic knowledge of the data collection <ul style="list-style-type: none"> <li>○ Understands the data from a content point of view.</li> <li>○ Understands the data collection methodology.</li> <li>○ Understands how this data can be used and not used.</li> </ul> </li> <li>• General understanding of ICT relevant for monitoring, data handling and reporting practices e.g. quality control, data formats (spatial, textual, tabular), and data sharing.</li> </ul>
<p><b>Interfaces to</b></p>	<ul style="list-style-type: none"> <li>• Core group institutional stakeholders (Commission, EEA, Eurostat, JRC ...) with/via relevant coordinator.</li> <li>• Implementation group thematic colleagues internally or externally (Commission, EEA, Eurostat, JRC ...) directly.</li> <li>• Relevant data custodian(s)</li> <li>• Reporters/data providers</li> <li>• Other final users of the data</li> </ul>