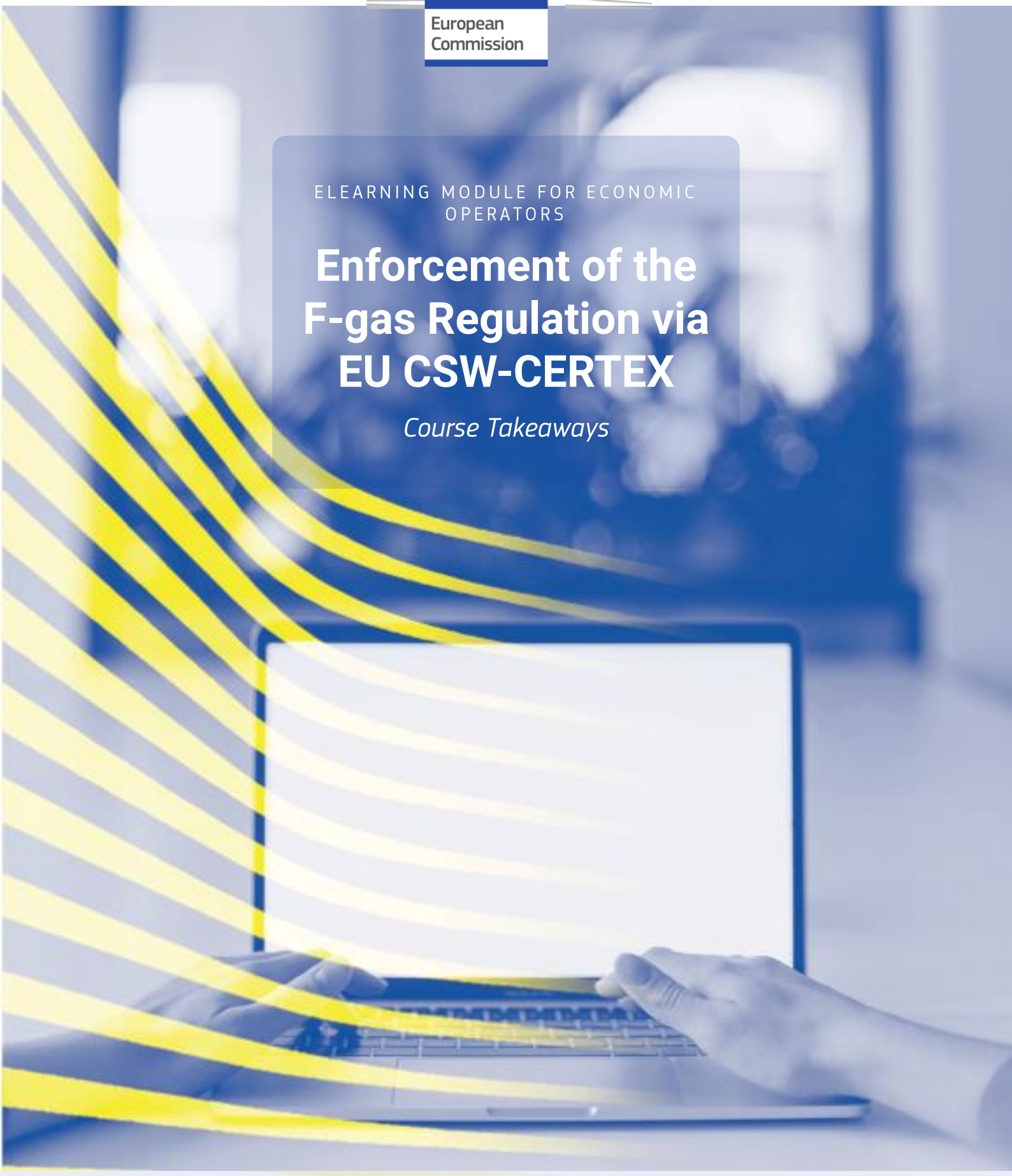
European Commission

ELEARNING MODULE FOR ECONOMIC OPERATORS

Enforcement of the F-gas Regulation via EU CSW-CERTEX

Course Takeaways



This eLearning course provides a general overview of Enforcement of the F-gas Regulation via EU CSW-CERTEX EO rules from the perspective of economic operators countries.

This is a quick and handy summary of the most relevant course information.

1. Introduction

1.1. Learning Objectives – target audience

This course is addressed to **economic operators** across the EU who are impacted by the F-gas Regulation and is published on the Customs and Taxation EU learning portal as a "public" course. This course is not addressed to the general public. The content of this module is aligned with the provisions of Regulation (EU) 2024/573, which were in force on 1 November 2025.

By the end of this course you will be able to:

- Understand the benefits of the EU Single Window Environment for customs and its central module - EU CSW-CERTEX;
- Comprehend the formalities laid down in the F-gas Regulation;
- Understand how F-gas formalities and measures are integrated into TARIC for import and export, and grasp how this affects the process of completing the customs declaration;
- Know the steps to complete a customs declaration for goods subject to the F-gas Regulation.

It is assumed that you already have a basic understanding of the terminology contained within this module. If needed, we advise you to visit the **Glossary** and **Library** sections.

The information presented in this course applies to the **whole of the European Union**. More specific **national information** is a matter of **national administrations**.

The course addresses the process of import, export, and transit of F-gas goods into/outside the Union customs territory.

1.2 Did you know?

Marco is an Economic operator located in Italy. He produces refrigerators and air conditioners in the EU and regularly imports fluorinated gases for his equipment from Türkiye. He must submit information to different authorities, each with their own portal and procedures, to obtain the necessary registrations, authorisations, and clearances to complete his import process.

Once Marco registers in the F-gas Portal, all customs authorities throughout the EU will be able to verify his F-gas registration and quota information directly through the EU CSW-CERTEX application, without requiring Marco to provide any further information, thereby saving time and costs.

Moreover, as these checks will be conducted automatically upon the submission of customs declarations for different types of customs procedures relevant to F-gas management (i.e., imports, exports, and transit), the verification process will be

standardized and will result in more efficient customs operations and controls. A smoother functioning of the verification process will lead to a better enforcement of the Regulation, which can only have a positive impact on the environment.

This digital collaboration between customs and partner competent authorities will facilitate all compliant operators and will reduce the administrative burden on trade.

1.3 Context of Training

This course is part of the "EU Single Window Environment for customs" eLearning programme. You can consult other courses on the Customs and Tax EU eLearning Portal.

2. Why the EU Single Window Environment for customs?

2.1 Learning Objectives

- Explain the scope of the EU Single Window Environment for customs;
- Describe the structure of the EU Single Window Environment for customs and its central module - EU CSW-CERTEX;
- Understand the benefits and impact of the EU Single Window Environment for customs.

2.2 Introduction

The **import** and **export** of fluorinated greenhouse gases, and products and equipment containing those gases is subject to licensing requirements. A valid registration in the F-gas Portal for the relevant activity (e.g. import, export) **at the moment of import or export** constitutes a valid licence. **Prior to import/transit/export** the EO should register and obtain valid registration via the F-gas Portal;

The **quota/authorisation requirement** remains applicable only for Release for free circulation, and only for hydrofluorocarbons in bulk (quota) or contained in refrigeration and air-conditioning equipment, heat pumps and metered dose inhalers (authorisations);

The **placing on the market of hydrofluorocarbons** shall be allowed only to the extent that producers and importers have sufficient quota available to them at that moment. Similarly, the **placing on the market of refrigeration and air-conditioning equipment, heat pumps and metered dose inhalers pre-charged with hydrofluorocarbons** shall allowed only if these hydrofluorocarbons are accounted for within the quota system (e.g. via authorisations). Compliance with the latter must be fully documented and a certificate of conformity must be presented when placing them on the market;

The **authorisation requirement does not apply** to undertakings that placed on the market less than 10 tonnes of CO2 equivalent of hydrofluorocarbons, per year, contained in Refrigeration and air-conditioning equipment, heat pumps and metered dose inhalers.

2.3 Why the EU Single Window Environment for customs?

Before the creation of the EU Single Window Environment for customs, the following problems were experienced:

- The clearance of goods was complex;
- Human and financial resources were not used most efficiently;
- Some regulatory formalities were being duplicated;
- Sometimes there were delays for traders;
- Coordination between regulatory authorities needed to be improved.

After the creation of the EU Single Window Environment for customs, Customs authorities will automatically verify that the goods comply with EU requirements and that the necessary formalities have been completed. The **F-gas Portal** will be **interconnected with the Member States' national customs systems** via the central module of the EU Single Window Environment for customs, called **EU CSW-CERTEX**. Such interconnection will allow for **real-time checks of F-gas formalities** at the moment of the customs declaration. If non-compliance is detected, customs may reject the import, export, or transit of the goods on the market. This interconnection will also support the control of quantities of imported/exported F-gas goods.

The EU Single Window Environment for customs will bring added value, by:

- Facilitating cooperation and ensuring interoperability between regulatory authorities;
- Ensuring a better and more harmonised use of data for border formalities;
- Helping implement better processes and practices for clearing goods, including effective monitoring of authorised goods through EU-wide quantity management;
- Giving traders a better overview of remaining quota and authorisation amounts;
- Providing a win-win situation for both traders and national authorities.

The great advantage of the EU Single Window Environment for customs is that it digitalises and automates information exchange between customs and other competent authorities responsible for controls at the border, saving time and money. Once fully rolled out, the EU Single Window Environment for customs will allow Economic operators to submit border formalities in one single portal in a given Member State.

2.4 Presenting the EU Single Window Environment for customs and EU CSW-CERTEX

The EU Single Window Environment for customs has a central component called the EU Customs Single Window Certificates Exchange (EU CSW-CERTEX), developed by the European Commission to link Member States' national customs systems to EU systems or databases managing non-customs requirements. Let's take a look at a case story for more details.

Marco is a compliant economic operator established in Italy. He produces refrigerators and air conditioners in the EU and imports fluorinated gases for his equipment from Türkiye. The case story presented explains how the EU Single Window Environment for customs can help him speed up the import process:

As an HFC bulk gas importer, Marco goes through the full process of importing F-gases under the EU system. In **Step 1 – Getting the F-gas registration and quota**, he applies online in the F-gas Portal to obtain his importer registration and quota allocation, a process requiring detailed verification and best completed well before any planned imports. In **Step 2 – Sending the customs declaration**, Marco submits his customs declaration for release for free circulation, including his registration ID and relevant TARIC document type codes. In **Step 3 – Request via EU CSW-CERTEX**, the national customs system automatically contacts the F-gas Portal via EU CSW-CERTEX to verify Marco's registration and quota compliance. **Step 4 – Response via EU CSW-CERTEX** ensures that the verified data is returned instantly to customs through this automated system. Finally, in **Step 5 – Validation of the customs declaration**, customs validates Marco's declaration, with the digital link between customs and the F-gas Portal enabling rapid, secure, and automated verification—streamlining clearance and helping prevent illegal F-gas trade.

3. Enforcement of the F-gas Regulation

3.1 Learning Objectives

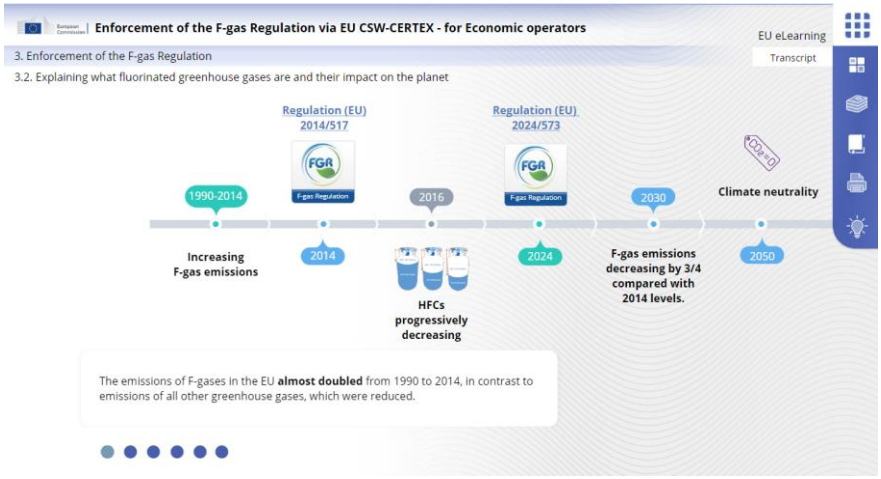
- Explain what fluorinated greenhouse gases are and their impact on the planet;
- Describe the provisions of the F-gas Regulation.

3.2 Explaining what fluorinated greenhouse gases are and their impact on the planet

Fluorinated greenhouse gases or F-gases, like hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride, and other greenhouse gases that contain fluorine, were introduced as

substitutes for ozone-depleting substances, in particular in refrigeration and air conditioning applications, because they do not damage the atmospheric ozone layer.

However, F-gases are powerful greenhouse gases, with a **global warming potential** that is often thousands of times higher than that of carbon dioxide (CO2).



3.3 Legal background

To control emissions from F-gases, including hydrofluorocarbons, or 'HFCs', the European Union has adopted two legislative acts: the F-gas Regulation and the MAC Directive.

F-gas Regulation from 2024:

The 2024 F-gas Regulation (Regulation (EU) 2024/573) builds upon the successes of its predecessor.

The new rules will reduce the placing on the market of hydrofluorocarbons in the EU market to zero by 2050, in line with the EU's objective to become the first climate-neutral continent by that year. The Regulation plans to do so through the reinforcement of the quota system. Many climate-friendly alternatives are available for many of the products and pieces of equipment in which F-gases are commonly used.

The Regulation not only applies to F-gases produced in the EU but also to those subject to export or import procedures (which includes transit, in accordance with the F-gas Regulation). More precisely, the import and export of F-gases means the entry or exit of substances, products, and equipment into the customs territory of the Union, in so far as the territory is covered by ratification of the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer (Articles 3 (7) and (8) of Regulation (EU) 2024/573).

Furthermore, the new Regulation will facilitate better monitoring through increased automation of customs controls. These will allow enhanced enforcement and monitoring in the Member States and combating illegal trade. It will also facilitate the import and export

procedures for Economic operators. As of 3 March 2025, the Commission will ensure the interconnection of the F-gas Portal with the EU CSW-CERTEX, while the Member States will provide the interconnection between the latter and the national single windows environments for customs (Articles 5, 2(a) and 4 of Regulation (EU) 2022/2399).

Mobile air-conditioning systems - MAC Directive:

The MAC Directive prohibits using F-gases with a global warming potential higher than 150 (i.e. more than 150 times greater than carbon dioxide (CO2)) in all new cars and vans produced from 2017.

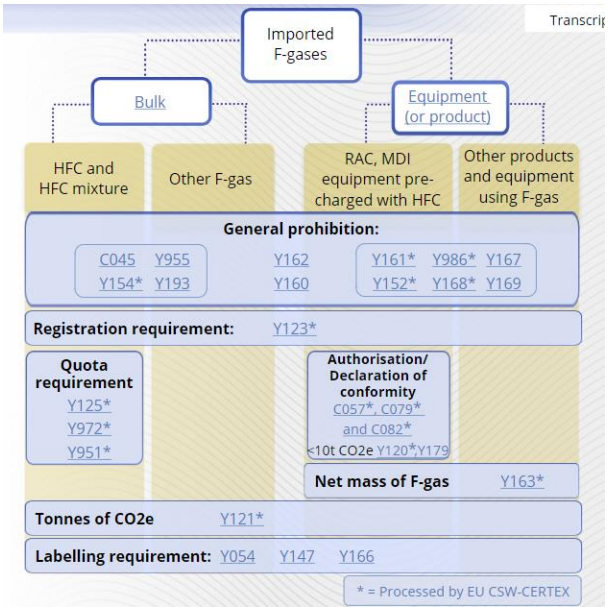
4. Integration of F-gas measures in TARIC

4.1 Learning Objectives

- Explain the TARIC document type codes applicable when completing the customs declaration;
- Describe how to correctly complete the customs declaration for F-gas goods.

4.2 Overview

To comply with the F-gas Regulation, Economic operators need to fulfil the requirements outlined at five different levels: **general prohibitions**, **registration**, **quota/authorisation**, **information requirements** (including tonnes of CO2 equivalent) and **labelling**. Customs will control if the requirements are met.



4.3 F-gas TARIC Document Type Codes Decision Tree

In this sub-chapter, you will find a decision tree to find out step by step how you can complete the customs declaration correctly.

5. Completing the customs declaration

5.1 Learning Objectives

- Complete customs declarations for different F-gas - relevant products

This chapter will guide you through four practical use-cases demonstrating how to correctly **complete customs declarations** for various types of fluorinated gas (F-gas) transactions under Regulation (EU) 2024/573. In **5.2 Completing the Customs Declaration – Bulk Goods – Use-Case**, learners follow *Andrea*, an importer of bulk HFC-125 from China, through each step of identifying the correct Commodity Code, selecting applicable **TARIC document type codes** (for general prohibitions, registration, quota, container, CO_2 equivalent, and labelling requirements), and ensuring compliance with all import conditions. In **5.3 Completing the Customs Declaration – Pre-charged Equipment – Use-Case**, *Olivia* imports split-system air conditioners from Türkiye, learning how to determine codes linked to general prohibitions, registration, authorisation, and the declaration of net mass and CO_2 equivalents, as well as labelling obligations, to demonstrate conformity for equipment pre-charged with HFCs. In **5.4 Completing the Customs Declaration – Bulk F-gas, Non-HFC – Use-Case**, *Maria* imports carbon tetrafluoride (a non-HFC F-gas) and learns how to apply relevant TARIC codes, declare net mass and CO_2 equivalents, and meet container and labelling requirements. Finally, **5.5 Completing the Customs Declaration – Transit – Use-Case** follows *Thomas*, who places bulk HFC-125 under the transit procedure, demonstrating how to declare goods in refillable containers, meet registration obligations, and declare CO_2 equivalents and net mass for goods in bonded movement across the Union. Across all subchapters, you will gain a clear understanding of how to apply TARIC document codes, identify compliance conditions, and complete the necessary data elements for customs declarations involving F-gases and related equipment, ensuring full regulatory conformity within the EU.

Remember, this is a quick and handy summary of the most relevant course information.
Only the European Union legislation published in the Official Journal of the European Union is deemed authentic. The Commission accepts no responsibility or liability whatsoever with regard to the training

Publications Office of the European Union