HOW TO REPORT EMISSIONS UNDER THE CONVENTION ON LONG-RANGE TRANSBOUNDARY AIR POLLUTION

E-learning Course Syllabus

UNECE • Federal Ministry for the Environment, Nature Conservation and Nuclear Safety • Umwelt Bundesamt

Background

Air pollution impacts our health, environment and economy. Air pollutants come from multiple sources, such as traffic, industry and agriculture, and are transported over large distances and across borders. It is therefore paramount that we take action together — across sectors and national boundaries.

UNECE member States have been working successfully for cleaner air in the region since 1979 through the Convention on Long-range Transboundary Air Pollution. With 51 Parties and 8 Protocols in force today, the results of the work under the Convention so far have been significant, leading to emission reductions, cleaner air, healthier forests and prevented premature deaths. The work under the Convention thus also contributes to the achievement of the Sustainable Development Goals (SDGs), specifically to SDG 3 on good health and well-being, SDG 11 on sustainable cities and communities and SDG 12 on sustainable consumption and production.

A basic obligation under the Convention is to report emission inventories. An emission inventory quantifies air pollutants and/or greenhouse gases emitted into the atmosphere in a defined geographical area and time span. Inventories are used to study trends in major air pollution sources and evaluate the impact of air pollution abatement measures. For example, Governments can use emission data to develop sustainable national and local policies, evaluate their effectiveness and impact on populations and ecosystems, demonstrate compliance with emission reduction targets, and provide information to the public.

To assist countries in effectively addressing air pollution and developing emission inventories, this course aims to explain the importance of emission inventories for clean air policy development, the requirements for emission inventory reporting and methods for emission estimation.

Who should take this course?

The course is primarily designed to build capacities of employees of Ministries and technical institutes dealing with the Convention, academics, NGOs, and anyone wanting to learn more about emission reporting under the Convention. Taking this course should enable learners to contribute to emission inventory development as a key step in clean air policy design.

Learning objectives

After completing the course, learners will be able to:

- Explain what an emission inventory is
- Identify substances that are released into the atmosphere from various human activities
- Describe how emission inventories contribute to the development of clean air policy at national and international levels
- Outline the objectives, scope and principles of the Guidelines for reporting developed under the Convention
- List different source categories covered by reporting obligations
- Outline the principles of completing the reporting templates
- Describe different emission estimation methods used under the Convention

Course content and structure

The course features three distinct modules that aim to equip learners with the knowledge and resource materials to understand the purpose of emission inventories, to follow the reporting process under the Convention and to contribute to emission inventory development.

The course will take around 1,5 hours total to complete. Additional resources can be found in the resources tab for further reading.

- Module 1: Purpose and scope of emission inventories
- Module 2: Reporting process and templates
- Module 3: Emission estimation methods

Methodology

The course is self-paced and can be completed according to the schedule of the learner. Each module uses a mix of learning tools and features and engaging content with clear storylines, complemented by interactive features, quizzes, and links to additional resources.

It is recommended that the modules be completed in sequence as they build on each other in a logical manner. In order to prepare for the end-of-course assessment, it is also recommended that learners complete all modules.

Certification and evaluation

To successfully complete the course and gain a Certificate of Completion, participants can take an end-of-course assessment. Once the certification criteria have been met (passing score 70%), and after completing a course evaluation form, participants will be able to download their certificate from the course's webpage.

Technical requirements

Please verify that your web browser is up to date.
If you continue having technical issues, please verify the following requirements:

Browser:
• The course works best with Firefox 3.6 or higher (download for free).
• The course is also compatible with Google Chrome (download for free).
• For technical reasons, it is not recommended to use Internet Explorer.
• Note JavaScript and cookies must be enabled.

Software:
• Adobe Acrobat Reader (download for free).
• Microsoft Office (Windows or Apple version).

Disclaimer

The course's purpose is educational, and participation is voluntary. While its aim is to increase the learner's understanding about emission inventories and it also describes their submission under the Convention, it is separate from the official process of submitting emission inventories by Parties to the Convention. It remains the Parties' obligation to correctly prepare and submit their inventories as required by the Convention and its protocols and in accordance with procedures determined by the Executive Body. While the course was diligently prepared, mistakes cannot be excluded.

Acknowledgments

Photo by Tima Miroshnichenko