

Environment and Climate Regional Accession Network (ECRAN)

Report on Workshop : Operating a Competent Authority

13-15 September 2015, Vilnius,

ENVIRONMENT AND CLIMATE REGIONAL NETWORK FOR ACCESSION - ECRAN

WORKSHOP REPORT

Activity 3.3.2 REPORT ON THE WORKSHOP: OPERATING A COMPETENT AUTHORITY 13 – 15 October 2015, Vilnius, Lithuania





LIST OF ABRE	VIATIONS			
A&V	Accreditation and Verification			
AER	AER Annual Emissions Report			
CCS	Carbon Capture and Storage			
CDM	Clean Development Mechanism			
CITL	Community Independent Transaction Log			
EC	European Commission			
EEA	European Economic Area			
EEA	European Environmental Agency			
EEX	European Energy Exchange			
EFTA	European Free Trade Association			
EPA	Environmental Protection Agency			
EPI	Environmental Protection Inspection			
ETS	Emission Trading System			
EU	European Union			
EUTL	UTL European Union Transaction Log			
GHG	Greenhouse Gas			
ICE	International Exchange			
JI	Joint Implementation			
MP	Monitoring Plan			
MRAV	Monitoring, Regulation, Accreditation and Verification			
MRR	Monitoring and Reporting Regulations			
MRV	Monitoring, Reporting and Verification			
MSR	Market Stability Reserve			
MSR	Member State			
NEA	Dutch Emission Authority			
TAIEX	Technical Assistance and Information Exchange			
UNFCCC	United Nation Framework Convention on Climate Change			
VR	Verification Reports			





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I. Background/Rationale

The European Commission actively supports climate cooperation in the region of the Western Balkans and Turkey, among others via the Environment and Climate Regional Accession Network (ECRAN). Activities under the ECRAN project focus on the ECRAN beneficiaries: Albania, Bosnia and Herzegovina, Croatia, Former Yugoslav Republic of Macedonia, Kosovo^{*1}, Montenegro, Serbia and Turkey.

The climate component of ECRAN focuses on sharing the EU experiences to facilitate development of the national climate policies with the aim to align with the EU *acquis*, including the capacity building on emissions trading.

The objectives of the Emissions Trading Working Group are to provide the essential regulatory building blocks and to increase the technical capacity for a well-functioning future national or regional ETS system, which could be or is modelled in line with the EU ETS. This would pave the way for further cooperation and linking with the EU ETS. The Emissions Trading Working Group specifically aims:

- To improve technical understanding of the EU ETS implementing provisions in relation to monitoring, reporting, verification and accreditation (MRVA) in the beneficiary countries, among the target group of industry and aircraft operators, as well as the Competent Authorities and potential verifiers;
- To identify institutional, legal and procedural arrangements for a future national or regional ETS system, which could be modelled in line with the EU ETS.

An important element of the support provided by the ECRAN Emissions Trading Working Group is the formulation of national and/or regional ETS roadmaps. These roadmaps will serve as a best-practice document for the implementation of ETS modelled along the EU ETS. It will address the steps required towards the full implementation of ETS and identify the resources and competences needed to achieve such implementation. These roadmaps support the following implementation steps that EU Accession candidate countries need to take in the framework of their accession:

- 1. Approximate, as far as possible, the legal and institutional requirements and take the preparatory steps towards the full implementation of the EU ETS Directive. This includes ensuring the necessary capacity building, informing stakeholders of the legal implications of the EU ETS Directive, and agreeing on a time-plan for implementation.
- 2. Implement a system for the monitoring and reporting of greenhouse gas emissions, and for the verification of annual emission reports.
- 3. Consider establishing an accurate accounting system ("registry") for all allowances issued under their ETS. Considerations include a joint operation of registry with other (candidate) countries and the future inclusion in the Union Registry.
- 4. Decide upon the method for allocation, in due understanding of the EU ETS Benchmarking Decision, carbon leakage list, and the approaches towards auctioning of allowances.

¹ *This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ opinion on the Kosovo declaration of independence.





5. Identification of participating installations and preparation of consultation process and capacity building to these future participants, if a candidate country's accession is due before the end of the third trading period, the year 2020.

Regional seminars and workshops

EU Member States have gained a wealth of experience in EU ETS implementation. The candidate countries can benefit from and build upon those lessons learned. The ETS Working Group therefore organises several seminars and workshops on ETS implementation and ETS strategy development. In these workshops and seminars experienced TAIEX and ECRAN experts will work together with their counterparts in the beneficiary countries on selected topics related to ETS implementation. Knowledge and expertise obtained at these seminars and workshops should result in an ETS implementation roadmap in which priorities are set for the implementation steps and the technical capacity needs of beneficiaries for these implementation steps.

Target groups for the training

The main target group for this seminar are the (future) competent authorities in the Western Balkans region and Turkey.

Further information on the workshop

The workshop was held in Vilnius (Lithuania) from October 13th until October 15th at the Ministry of Environment and at the industrial site of SC Achema in Jonavos. In addition to local experts training was provided by representatives from the Croatian Ministry Environmental and Nature Protection and the Czech Ministry of Environment.

The workshop was organised in collaboration with the Technical Assistance and Information Exchange (TAIEX) instrument managed by the Directorate-General for Enlargement of the European Commission.

Chapter 2 describes the objectives of the workshop and the topics addressed. Chapter 3 provides an outline of the relevant EU Climate policy and legislation. Chapter 4 presents the workshop highlights and Chapter 5 presents the evaluation. Furthermore the following Annexes are attached:

- Annex I: the agenda;
- Annex II: List of participants;
- Annex III: Power point presentations (downloadable under separate cover: <u>http://www.ecranetwork.org/Climate/Emissions-Trading</u>







II. Objectives of the training

General objectives

The wider objective is to strengthen regional cooperation between the EU candidate countries and potential candidates in the fields of climate action and to assist them on their way towards the transposition and implementation of the EU climate policies and instruments which is a key precondition for EU accession.

Specific objectives

The specific objective of the training is to:

- Strengthen the understanding of the institutional and procedural arrangements identified when setting up an ETS Competent Authority, illustrating the lessons learned and organisational choices made;
- Exchanging information on tools and systems used for the various tasks to be conducted by the ETS Competent Authority, and obtaining practical insights on use of these tools;
- Supporting beneficiary countries in providing options for developing their action plans for the implementation of the ETS, including identification of choices to be made and priorities to be set;
- Stimulating exchange of information and best practices in the implementation of the ETS within the region, and between the EU Competent Authorities and their counterparts in the beneficiary countries.

Results/outputs

The workshop targeted the following results:

- 1. Insight in the set-up of a Competent Authority in an EU Member State, including the organisational choices made and the lessons learned;
- 2. Insight in the approaches and experiences in the implementation of the M&R and A&V regulation;
- 3. Better understanding of the required human and institutional resources for the implementation of the two regulations;
- 4. Insights in the lessons learned, the risks involved and the bottlenecks of ETS implementation.







III. EU policy and legislation covered by the training

Background and overview of the EU ETS

The European Union greenhouse gas emissions trading scheme (EU ETS) was established under Directive 2003/87/EC and became operable as of 1 January 2005. Its aim is to achieve the cost-effective reduction of greenhouse gas emissions from industrial installations in the EU using an economic instrument that ensures that environmental objectives are reached in an economically efficient manner while providing for a flexible approach in reaching such objectives.

The EU emissions trading system (EU ETS) is a cornerstone of the European Union's policy to combat climate change and a key tool for reducing the industrial greenhouse gas emissions. The EU ETS was established under Directive 2003/87/EC and became operable as of 1 January 2005.

The EU ETS covers more than 11,000 power stations and industrial plants in all 27 EU Member States plus Croatia, Iceland, Norway and Liechtenstein, as well as all flights from airlines operating in the EU or flying into and/or out of the EU.

The EU ETS works on the "**cap and trade**" principle, meaning that there is a "cap", or limit, on the total amount of certain greenhouse gases that can be emitted by the factories, power plants and other installations in the system, as well as originating from flights and aircraft within, entering or flying outbound from the EU. Within this cap, companies receive emission allowances which they can trade as needed. The cap/limit on the total number of allowances available ensures that they have a value. The cap for the year 2013 has been determined at 2,039,152,882 allowances, i.e. just under 2.04 billion allowances.

The **cap** will decrease each year by 1.74% of the average annual total quantity of allowances issued by the Member States in 2008-2012. In absolute terms this means that the number of allowances will be reduced annually by 37,435,387. In 2020, emissions from sectors covered by the EU ETS will be 21% lower than in 2005. The annual reduction in the cap will continue beyond 2020. To achieve the target of a 40% reduction in EU greenhouse gas emissions below 1990 levels by 2030, set out in the 2030 framework for climate and energy policy, the cap will need to be lowered by 2.2% per year from 2021, compared with 1.74% currently. This would reduce emissions from fixed installations to around 43% below 2005 levels by 2030 (See later under Structural Reform of the European Carbon Market).

Within the cap, companies receive or buy emission **allowances** which they can trade with one another as needed. If the emission exceeds the number of allowances received, the installation must purchase allowances from others. Conversely, if an installation has performed well at reducing its emissions, it can sell its leftover allowances. The installations can also buy allowances that are regularly auctioned from 1 January 2013 onwards. They can also buy limited amounts of international credits from emission-saving projects around the world. However, as from 2013 only projects on emission saving from the so-called "Least Developed Countries" are eligible for use. The limit on the total number of allowances available ensures that they have a value.

After each year a company must first submit an emission report summarising the GHG emissions emitted during the year. This report should be based on the emission monitoring practice and procedures laid down in the approved Monitoring Plan, and the total emissions verified by an accredited verifier. The next step is that the installation must surrender enough **allowances** to cover





all its emissions in accordance with the verified emissions, otherwise penalties are imposed. If a company reduces its emissions to a level below the allowances received, it can keep the spare allowances to cover its future needs or sell the surplus to another company that is short of allowances. The flexibility that trading brings ensures that the emissions are cut where it costs least to do so.

Emissions can also be offset directly by buying and cancelling/deleting allowances.

The Directive currently applies to the following greenhouse gases and categories of activities, as listed in Annex I to the Directive:

- Carbon dioxide (CO₂) from:
 - power and heat generation;
 - energy-intensive industry sectors including oil refineries, steel works and production of iron, aluminium, metals, cement, lime, glass, ceramics, pulp, paper, cardboard, acids and bulk organic chemicals;
 - commercial aviation.
- Nitrous oxide (N₂O) from production of nitric, adipic, glyoxal and glyoxlic acids;
- Perfluorocarbons (PFCs) from aluminium production.

Phase 1 of the EU ETS 2005 – 2007

Phase one was a three-year pilot period of 'learning by doing' to prepare for the phase two, when the EU ETS would need to function effectively to help ensure that the EU and Member States would meet their Kyoto Protocol emission targets.

In phase one the EU ETS covered only CO₂ emissions from power generators and energy-intensive industrial sectors. Almost all allowances were given to businesses free of charge. The penalty for non-compliance was €40 per tonne.

The Phase one succeeded in establishing a price for carbon, in free trade of emission allowances across the EU and in creating the necessary infrastructure for monitoring, reporting and verifying actual emissions from the businesses covered. From the launch of the EU ETS in January 2005, national registries ensured the accurate accounting of all allowances issued.

In the absence of reliable emissions data, phase one caps were set on the basis of best guesses. In practice, the total allocation of EU ETS allowances exceeded demand by a sizeable margin and in 2007 the price of phase one allowances fell to nearly zero (phase one allowances could not be banked for use in phase two).

The generation of verified annual emissions data from the installations participating in the pilot phase filled this important information gap and created a solid basis for setting national caps for phase two.

Phase 2 of the EU ETS 2008 – 2012







The three EEA-EFTA states – Iceland, Liechtenstein and Norway – joined the EU ETS at the start of phase two. At the same time, the scope of the system was marginally widened through the inclusion of nitrous oxide emissions from the production of nitric acid by a number of Member States.

The proportion of general allowances given away for free was lower than in the first trading period, i.e. set at 90%. The penalty for non-compliance was increased to €100 per tonne. Several Member States held auctions during phase two.

Businesses were allowed to buy CDM and JI credits (except for those from nuclear facilities and agricultural and forestry activities) totalling around 1.4 billion tonnes of CO_2 -equivalent. This possibility enlarged the range of cost-effective emission mitigation options available to businesses. The EU ETS became the biggest source of demand for such credits, making it the main driver of the international carbon market and the main provider of clean energy investment in developing countries and economies in transition.

Phase two coincided with the first commitment period of the Kyoto Protocol, which required the EU and Member States to meet their emission reduction target of 8%.

On the basis of the verified emissions reported during phase one, the European Commission tightened the cap by cutting the total volume of emission allowances by some 6.5% compared with the 2005 level. However, the economic crisis that began in late 2008 depressed the industrial production and its emissions, and the demand for allowances, by an even greater margin. This led to a large and growing surplus of unused allowances and credits which weighed heavily on the carbon price throughout the second trading period.

The aviation sector was brought into the EU ETS on 1 January 2012 through a revision of the EU ETS Directive adopted in 2008. For 2012 the cap on aviation allowances was set at a level 3% lower than the aviation emissions in the 2004-2006 reference period. In order to strengthen momentum towards reaching agreement on a global market-based measure to address aviation emissions, however, the Commission in November 2012 made a proposal to defer the application of the EU ETS to flights into and out of Europe during 2012.

As from 2012 the accurate accounting of all allowances was transferred from the national registries to a single Union Registry² operated by the Commission, which also covers the three EEA-EFTA states. From 2012 the Union Registry also includes accounts for aircraft operators.

During phase two the national and Union registries recorded:

- National allocation plans;
- Accounts of companies or physical persons holding those allowances;
- Transfers of allowances ("transactions") performed by account holders;
- Annual verified CO₂ emissions from installations;
- Annual reconciliation of allowances and verified emissions, whereby each company had to surrender enough allowances to cover all its verified emissions.

Phase 3 of the EU ETS 2013 - 2020

² The provision and requirements of the EU Registry are laid down in the Commission Regulation (EU) No 1193/2011 of 18 November 2011 establishing a Union Registry for the trading period commencing on 1 January 2013.





Croatia joined the EU-ETS at the start of Phase Three taking the number of countries in the EU ETS to 31. The third phase is significantly different from phases one and two and is based on rules that are far more harmonised between the Member States than before was practicable or possible. The main changes are:

- A single EU-wide cap on emissions applies, compared to 27 national caps in the 1st and 2nd trading period;
- Auctioning, and not free allocation, is now the default method for allocating allowances. In 2013 more than 40% of allowances will be auctioned, and this share will rise progressively each year;
- For those allowances still given away for free, harmonised allocation rules apply which are based on ambitious EU-wide benchmarks of emissions performance;
- Some more sectors and gases are included.

Structural reform of the European Carbon market

At the start of the Third Phase, the EU ETS faced the challenge of a growing surplus of allowances, largely because of the economic crisis which has depressed emissions far more than anticipated. In the short term this surplus risks undermining the orderly functioning of the carbon market; in the longer term it could affect the ability of the EU ETS to meet its objective of meeting the high and demanding emission reduction targets cost-effectively. The surplus of emission allowances built up in the ETS since 2009 reached a total of around 2 billion allowances.

To address this surplus the Commission has initiated a structural reform of the EU ETS. After debate and public consultations it decided to take two measures: to postpone (or 'back-load') the auctioning of some allowances and the establishment of the market stability reserve ("MSR") that aims to improve the system's resilience to major shocks in demand and supply of allowances. The MSR is planned to start in 2019 and would operate entirely according to pre-defined rules, which would leave no discretion to the Commission or Member States in its implementation.

The 'back-loading' of auctions is being implemented through an amendment to the EU ETS Auctioning Regulation. The MSR is being implemented through a legislative proposal, which was put forward in January 2014. The proposal was approved by the European Parliament on 7 July 2015 and still requires approval by the Council to become law.

Revision of the EU ETS for phase 4 (2021-2030)

The European Commission presented in July 2015 a legislative proposal to revise the EU emissions trading system for the period after 2020. This is the first step in delivering on the EU's target to reduce greenhouse gas emissions by at least 40% domestically by 2030 in line with the 2030 climate and energy policy framework and as part of its contribution to the new global climate deal. The main elements to this proposal are:

- 1. Increasing the pace of emissions cuts
- 2. Better targeted carbon leakage rules
- 3. Funding low-carbon innovation and energy sector modernisation

Ad 1. Increasing the pace of emission cuts





To achieve the at least 40% EU target, the sectors covered by the ETS have to reduce their emissions by 43% compared to 2005. To this end, the overall number of emission allowances will decline at an annual rate of 2.2% from 2021 onwards, compared to 1.74% currently. This amounts to an additional emissions reduction in the sectors covered by the ETS of some 556 million tonnes over the decade – equivalent to the annual emissions of the UK.

Ad 2. Better targeted carbon leakage rules

The proposal develops predictable, robust and fair rules to address the risk of carbon leakage which may occur if production is transferred to countries with less ambitious climate policies. This includes:

- Revising the system of free allocation to focus on sectors at highest risk of relocating their production outside the EU around 50 sectors in total
- A considerable number of free allowances set aside for new and growing installations
- More flexible rules to better align the amount of free allowances with production figures
- Update of benchmarks to reflect technological advances since 2008

It is expected that around 6.3 billion allowances will be allocated for free to companies over the period 2021-2030 – worth as much as EUR 160 billion.

Ad 3. Funding low-carbon innovation and energy sector modernisation

The proposal includes several support mechanisms that will be established to help the industry and the power sectors meet the innovation and investment challenges of the transition to a low-carbon economy. These include two new funds:

- Innovation Fund extending existing support for the demonstration of innovative technologies to breakthrough innovation in industry
- Modernisation Fund facilitating investments in modernising the power sector and wider energy systems and boosting energy efficiency in 10 lower-income Member States

Free allowances will also continue to be available to modernise the power sector in these lowerincome Member States.

Implementing provisions

A number of implementing Regulations and Decisions have been adopted to make up a concise operational framework for the EU emission trading scheme which also foresees provision in case of an international post-Kyoto agreement. A short summary of each of these measures are provided below:

Commission Decision 2010/634/EU: of 22 October 2010 adjusting the Union-wide quantity of allowances to be issued under the Union Scheme for 2013 and repealing Decision 2010/384/EU

This Decision determines the cap for the year 2013 at 2,039,152,882 allowances, i.e. just below 2.04 billion allowances. On the basis of Article 9 and Article 9a, the total quantity of allowances to be issued from 2013 onwards is to annually decrease by a linear factor of 1,74 %,, i.e. a total reduction of 37 435 387 allowances, Thus, in 2020, emissions from sectors covered by the EU ETS will be 21% lower than in 2005.

In practice this cap is considered final, although some marginal fine-tuning is likely needed over time for instance in case of:







- New entrants entering the market;
- Member States may want to opt-in installations and activities not covered by the current scope of the Directive.

Commission Regulation (EU) No 1031/2010 of 12 November 2010 on the timing, administration and other aspects of auctioning of greenhouse gas emission allowances pursuant to Directive 2003/87/EC of the European Parliament and of the Council establishing a scheme for greenhouse gas emission allowances trading within the EU ("Auctioning Regulation") as amended by Commission Regulation (EU) No 1210/2011 of 23 November 2011 and by Commission Regulation No 176/2014 of 25 February 2014 in particular to determine the volumes of greenhouse gas emission allowances to be auctioned in 2013 – 2020 (back-loading)

The so-called "Auctioning Regulation" covers the timing, administration and other aspects of auctioning to ensure the auctioning process is conducted in an open, transparent, harmonised and non-discriminatory manner. The Auctioning Regulation seeks to put into practice a number of criteria which the revised EU ETS Directive states auctions must meet, such as predictability, cost-efficiency, fair access to the auctions and simultaneous access to relevant information for all operators.

The Regulation aims at ensuring a smooth transition from the second trading period, into the third trading period (as from 2013). The Auctioning Regulation provided for the auctioning of 120 million general emission allowances in 2012 and to some 30 million aviation allowances.³.

Two auction platforms are already in place. The European Energy Exchange (EEX) in Leipzig is the common platform for the large majority of countries participating in the EU ETS. Germany, UK, Poland and Spain have taken the decision to organise the auctions themselves. For instance, Germany has contracted EEX to act as Germany's auction platform. The second auction platform is ICE Futures Europe (ICE) in London, which acts as the United Kingdom's platform.

In line with the requirements of the Auctioning Regulation the allowances will be offered for sale on an auction platform by means of standardised electronic contracts traded on that auction platform, "the auctioned product". In this sense, one of the improvements determined in the revision of the 2003 Directive was that auctioning should be the basic principle for allocation, as it is the simplest and generally considered to be the most economically efficient allocation of allowances, as it relies on a clear carbon price signal to achieve abatement of greenhouse gas emissions at least cost.

The Auctioning Regulation establishes also the action formats, as well as modalities for submission and withdrawal of bids. It also lays down that the auction clearing price will be determined upon closure of the bidding window and that the auction platform will sort bids submitted to it in the order of the price bid. Where the price of several bids is the same, these bids shall be sorted through a random selection according to an algorithm determined by the auction platform before the auction.

Regarding the auction calendar, timing and frequency, the Regulation establishes that an auction platform will conduct auctions separately through its own regularly recurring bidding window. The bidding window will be opened and closed on the same trading day, and kept open for no less than

³ As a short-term measure, the Commission has taken the initiative to postpone the auctioning of 900 million allowances from the years 2013-2015 until 2019-2020, when it is expected that demand will have picked up. This 'back-loading' of auctions was done by amending the EU ETS Auctioning Regulation





two hours. It also details the economic operators and persons entitled to submit bids directly in an auction. The Regulation entered into force on 19 November 2010.

The Regulation calls for procurement agreements to be concluded between the Commission and the participating Member States, one for the common auction platform that will be used by 24 Member States and another for the auction monitor that will survey the auctions conducted by all auction platforms, i.e. including the platforms acting for other Member States. These agreements also lay down the rules under which the Commission and the Member States will conduct the joint procurement procedures. These procedures will need to be conducted in line with the rules in the Financial Regulation, which is the usual legal framework for procurement procedures carried out by the Commission.

The Auctioning Regulation allows for Member States to opt out of the common platform for auctioning emissions allowances and instead appoint their own auction platform. However, these platforms have to be notified to the Commission to allow the Commission to verify that that the platforms satisfy the provisions of the Auctioning Regulation and meet the objectives of the ETS Directive.

As a short-term measure, the Commission is postponing the auctioning of 900 million allowances until 2019-2020 to allow demand to pick up. This 'back-loading' of auctions is being implemented through an amendment by Commission Regulation (EU) No. 176/2014 of 25 February 2014 in particular to determine the volumes of greenhouse gas emission allowances to be auctioned in 2013 – 2020 (back-loading).

Commission Decision 2011/278/EU of 27 April 2011 determining transitional Union-wide rules for harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87/EC of the European Parliament and of the Council ("Benchmarking Decision")

Member States were required to prepare National Implementing Measures that respected Art. 11 of the ETS Directive and the so-called **Benchmarking Decision** (Commission Decision 2011/278/EU) and the **carbon leakage list** (see hereafter under 4).

It should be noted that most National Implementation Measures (Art 11) were submitted beyond the deadline of September 2011 and a number of them even during the course of 2012. Only after all National Implementation Measures (Article 11) had been submitted and assessed, final annual amounts of allowances to be allocated free of charge over the years 2013 to 2020 could be calculated for all incumbent installations. Once all the planned allocations for installations in all Member States had been checked and no objections had been raised, the legislation allowed the Commission to calculate if and as of which year the so called cross-sectoral correction factor had to be applied. On this basis Member States would be in the position to take final allocation decisions and issue the allowances for 2013. The allowances allocated for free in 2013 can only be used for compliance for the 2013 emissions, reported in March 2014, but cannot be used for compliance concerning the 2012 emissions.

The **"Benchmarking Decision"** determines the transitional Union-wide rules for the harmonised free allocation of emission allowances for the third trading period starting in 2013. Installations that do not meet the benchmark will have a shortage of allowances. They then have the option to either lower their emissions (e.g. through engaging in abatement) or to purchase additional allowances to cover their excess emissions. A benchmark does not represent an emission limit or even an emission reduction target but merely a threshold for the level of free allocation of an individual installation. The





benchmarks are "product-defined". The benchmarks were established on the basis of the principle 'one product = one benchmark', which means that the benchmark methodology does not differentiate by technology or fuel used, nor the size of an installation or its geographical location. This product benchmark is defined as an emission-value per tonne of product reflecting the average greenhouse gas performance of the 10 % best performing installations in the EU producing that product. To respond to market forces and avoid the risk of unfair competition, especially vis-a-vis non-EU countries, the benchmarking and free allocation system allows industrial sectors that face international competition from industries outside the EU which are not subject to comparable climate legislation to receive a higher share of free allowances than those which are not subjected to the risk of such socalled carbon leakage.

This decision is supplemented by a number of guidance documents and templates to facilitate the application of the harmonised allocation rules. In 2011 the Commission further organised a number of workshops for competent authorities in EU-27 (in 2011) to enhance a harmonious application of the Benchmarking Decision rules. These guidelines and workshop PowerPoint presentations can be downloaded from the following location on DG CLIMA's website:

http://ec.europa.eu/clima/policies/ets/cap/allocation/documentation_en.htm

The Benchmarking Decision was further amended in 2011 and 2012, i.e.:

- "Commission Decision 2011/745/EU of 11 November 2011 amending Decisions 2010/2/EU and 2011/278/EU as regards the sectors and subsectors which are deemed to be exposed to a significant risk of carbon leakage": In Annex I to Decision 2011/278/EU, the entries corresponding to product benchmarks 'Facing bricks', 'Pavers' and 'Roof tiles' are replaced by Annex 2 of Decision 2011/745/EU.
- "Commission Decision C(2012) 5715 of 17 August 2012 amending Decisions 2010/2/EU and 2011/278/EU as regards the sectors and subsectors which are deemed to be exposed to a significant risk of carbon leakage": In Annex I to Decision 2011/278/EU, the entry corresponding to product benchmark 'Mineral wool' is replaced.

Commission Decision 2010/2/EU of 24 December 2009 determining, pursuant to Directive 2003/87/EC of the European Parliament and of the Council, a list of sectors and subsectors which are deemed to be exposed to a significant risk of carbon leakage

The Decision is also referred to as the "carbon leakage list".

"Carbon leakage" occurs when there is an increase of CO_2 emissions in a third country as a result of an emissions reduction in the EU as a consequence of a more pro-active climate policy in the EU compared to the policies in a third country.

To address the competitiveness of industries affected by the EU ETS, sectors and sub-sectors deemed to be exposed to a significant risk of "carbon leakage" will receive a higher share of free allowances in the third trading period between 2013 and 2020. This is because they face competition from industries in third countries which are not subject to comparable greenhouse gas emissions restrictions.

The Commission Decision on Carbon Leakage was adopted by the Commission at the end of 2009 and is applicable for the free allocation of allowances in 2013 and 2014. The Commission is required to draw up a new list every five years. It will determine the next list by the end of 2014, which will apply for the years 2015-2019. The criteria to be used to determine the new list are the same as those used





to determine the current list. According to the ETS Directive (Article 10a), a sector or sub-sector is deemed to be exposed to a significant risk of carbon leakage if:

- The extent to which the sum of direct and indirect additional costs induced by the implementation
 of the Directive would lead to an increase of production cost, calculated as a proportion of the Gross
 Value Added, of at least 5%; and
- The trade intensity (imports and exports) of the sector with countries outside the EU is above 10%.

A sector or sub-sector is also deemed to be exposed to a significant risk of carbon leakage if:

- The sum of direct and indirect additional costs is at least 30%; or
- The non-EU trade intensity is above 30%.

The Decision was amended in 2011 and 2012 by:

- "Commission Decision 2011/745/EU of 11 November 2011 amending Decisions 2010/2/EU and 2011/278/EU as regards the sectors and subsectors which are deemed to be exposed to a significant risk of carbon leakage": New entries are inserted in Annex I to Decision 2011/278/EU (i.e. "salt, cocoa and brick, tiles and construction productions in baked clay");
- "Commission Decision EC (2012) 5715 of 17 August 2012 amending Decisions 2010/2/EU and 2011/278/EU as regards the sectors and subsectors which are deemed to be exposed to a significant risk of carbon leakage": New entries are inserted in Annex I to Decision 2011/278/EU (i.e. insertion of "glass fibres, and slag wool and rock wool", while "slivers, rovings, yarn and chopped strands of glass fibre" are deleted).

Commission Regulation (EU) No 601/2012 of 21 June 2012 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council

The so called Monitoring and Reporting Regulation (**MRR**) establishes the requirements for the monitoring and reporting of greenhouse gas emissions by installations in the scheme pursuant to Directive 2003/87/EC. These requirements are effective as from 1 January 2013, from the start of the third trading period. This Regulation builds on the previous Commission Decision establishing monitoring and reporting guidelines (MRG 2004) that were revised in 2006 and implemented through Decision 2007/589/EC⁴. These guidelines were applicable during the second period of the scheme (2008 to 2012). The new Monitoring and Reporting Regulation No 601/2012 provides detailed technical interpretation of the requirements set out in Article 14 and in Annex IV to the Directive. It aims at establishing basic monitoring methodologies to minimise the burden on operators and aircraft operators and facilitate the effective monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC.

The Regulation sets out the following 10 Annexes:

• Annex I sets out the minimum content of the Monitoring Plan for installations and for aviation emissions, (Art 12(1));

⁴ Decision 2007/589/EC is repealed as from 1 January 2013. However, the provisions of the Decision will continue to apply to the monitoring and reporting and verification of emissions and, where applicable, activity data occurring prior to 1 January 2013





- Annex II sets the tier thresholds for calculation-based methodologies related to installations (Art 12(1));
- Annex III sets out the methodologies for aviation (Article 52 and Article 56);
- Annex IV sets out activity-specific monitoring methodologies related to installations listed in Annex I of the ETS Directive (Article 20(2);
- Annex V established the minimum tier requirements for calculation-based methodologies involving category A installations and calculation factors for commercial standard fuels used by Category B and C installations (Article 26(1));
- Annex VI presents the reference values for calculation factors (Article 13(1)(a));
- Annex VII specifies the minimum frequency of analyses (Article 35);
- Annex VIII specifies the measurement-based methodologies (Article 41);
- Annex IX indicates the minimum data and information which need to be retained by installations and aircraft operators (Article 66(1));
- Annex X specifies the minimum content of the Annual Reports (Article 67(3)).

The MRR requirements are designed to ensure regular and precise monitoring and reporting of greenhouse gas emissions in the participating countries (i.e. the EU Member States and countries in the EEA plus Croatia).

The annual procedure of ensuring the proper monitoring, reporting and verification (MRV) of the emissions, as well as all processes connected to these activities, are known as the "compliance cycle" of the EU ETS.

- Industrial installations and aircraft operators covered by the EU ETS are required to have an approved monitoring plan, according to which they monitor and report their emissions during the year. In the case of industrial installations, the monitoring plan forms part of the approved permit that is also required.
- Once the year has ended, the installations and the aircraft operators have to draft an emission report in which they report their emissions that have been monitored and recorded according to the requirements and procedures specified in the approved monitoring plan.
- A crucial next step in the emissions trading compliance cycle is the verification of emission reports prepared by the operators. The objective of verification is to ensure that emissions have been accurately monitored and reported in full accordance with the requirements of the MRR and that reliable and correct emissions data are reported according to Article 14(3) and Annex IV of Directive 2003/87/EC. The data in the annual emissions report must be verified before 31 March each year by an accredited verifier (for the requirements on the verification, see next section).
- Once verified, operators must surrender the equivalent number of allowances by 30 April of the same year. Common rules for the monitoring and reporting of emissions, as well as for the accreditation of verifiers and the verification of annual emissions reports are important for ensuring the quality of the annually reported emissions and the credibility of the data.

The table below summarises the common timeline of the annual ETS Compliance cycle for emissions in year N as specified in the MRR.







Table - Common timeline of the Annual ETS Compliance cycle for emissions in year N as specified in the MRR

When?	Who?	What?
Not specified by MRR but common sense suggests before 31 December N-1	Competent Authority	Approve Monitoring Plan (aviation and installations) and issue permit (in case of installations)
1 January N		Start of the Monitoring period
By 28 February N	Competent Authority	Allocation of allowances for free (if applicable) into the Operator's account in the Registry
31 December N		End of the monitoring period ⁵
31 March N+1 ⁶	Verifier	Finalise the verification of the emission report and issue verification report to the operator
31 March N+1 ⁵	Operators	Submit the verified annual emissions report
31 March N+1	Operators/Verifier	Enter the verified emissions figure in the verified emissions table of the Union Registry
March – April N+1	Competent Authority	Subject to national legislation, possible spot checks of submitted annual reports. Require corrections by the operator if applicable.
30 April N+1	Operator	Surrender allowances (amount corresponding to verified annual emissions) in Registry system
30 June N+1	Operator	Submit report on possible improvements of the Monitoring Plan, if applicable ⁷
(No specified deadline)	Competent Authority	Carry out further checks on submitted annual emissions reports, where considered necessary or as may be required by national legislation; require changes of the emissions data and

⁵ Although usually not considered part of the compliance cycle, it may be useful to note that by 31 December the operator has to submit information about changes to the installation's capacity, activity level and operation, if applicable. This is a new element based on Article 24(1) of the CIMs. This notification is applicable for the first time in December 2012.

⁷ There are two different types of improvement reports pursuant to Article 69 of the MRR. One is to be submitted in the year where a verifier reports improvement recommendations, and the other (which may be combined with the first, if applicable) every year for category C installations, every two years for category B, and every four years for category A installations. For categorisation, see Article 19 of the MRR. The CA may set a different deadline, but no later than 30 September of that year.





⁶ According to Article 67(1) of the MRR, competent authorities may require operators or aircraft operators to submit the verified annual emission report earlier than by 31 March, but by 28 February at the earliest.

When?	Who?	What?
		surrender of additional allowances, if applicable (in accordance with Member State legislation).

Commission Regulation (EU) No 600/2012 of 21 June 2012 on the verification of greenhouse gas emission reports and tonne-kilometre reports and the accreditation of verifiers pursuant to Directive 2003/87/EC of the European Parliament and of the Council.

This Regulation applies to the verification of greenhouse gas emissions and tonne-kilometre data occurring from 1 January 2013 and reported pursuant to Article 14 of Directive 2003/87/EC.

Verification provisions are legally provided for by Article 15, while the criteria for the verification are defined in Annex V to Directive 2003/87/EC.

In accordance with the principles of Annex V of Directive 2003/87/EC, the verifier should apply a riskbased approach with the aim of reaching a verification opinion providing reasonable assurance that the total emissions or tonne-kilometres are not materially misstated and the report can be verified as satisfactory. The level of assurance should relate to the depth and detail of verification activities carried out during the verification and the wording of the verification opinion statement.

The Regulation sets an overall framework of rules for the accreditation of verifiers to ensure that the verification of operator's or aircraft operator's reports in the framework of the EU ETS, to be submitted in accordance with the MRR (Commission Regulation (EU) No 601/2012) is carried out by verifiers that possess the technical competence to perform the entrusted task in an independent and impartial manner and in conformity with the requirements and principles set out in this Regulation.

All verification activities in the verification process are interconnected and should be concluded with the issuance of a verification report by the verifier containing a verification statement that is commensurate with the outcome of the verification assessment. Harmonised requirements for the verification reports and the performance of the verification activities are established to ensure that verification reports and verification activities in the Member States meet the same standards.

Commission Regulation (EU) No 389/2013 establishing a Union Registry pursuant to Directive 2003/87/EC of the European Parliament and of the Council, Decisions No 280/2004/EC and No 406/2009 of the European Parliament and repealing Commission Regulations (EU) No 920/2010 and NO 1193/2011

The EU ETS Directive (Article 19(1)) and Commission Regulation (EU) 1193/2011 provide for the centralisation of the EU ETS operations into a single European Union registry, operated by the Commission. The European Union Transaction Log (EUTL) is the successor of the Community Independent Transaction Log (CITL) which had a similar role before the full activation of the Union registry. The Union registry includes accounts for aircraft operators, which have been included in the EU ETS since January 2012, as well as accounts for stationary installations, which have been transferred from the Member States' national registries. The Union registry covers all EU Member States as well as Croatia, Norway, Iceland and Liechtenstein. It is an online database that records:

- National Implementation Measures in phase 3 (2013-2020);
- Accounts of companies or physical persons holding those allowances;
- Transfers of allowances ("transactions") performed by the account holders;
- Annual verified CO₂ emissions from installations;



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• Annual reconciliation of allowances and verified emissions, whereby each company must have surrendered enough allowances to cover all its verified emissions.

EUTL automatically checks, records, and authorises all transactions that take place between accounts in the Union registry. This verification will ensure that any transfer of allowances from one account to another is consistent with the EU ETS rules. Processes that fail these checks should be terminated in order to ensure that transactions in the Union registry system comply with the requirements of Directive 2003/87/EC and the requirements elaborated pursuant to the UNFCCC and the Kyoto Protocol.

A company or physical person wishing to participate in the EU Emissions Trading System has to open an account in the Union registry. A request for the opening of accounts in the Union registry must be sent to the relevant national administrator, who is in charge of collecting and verifying all supporting documentation.

Procedural and technical requirements for the functioning and operation of registries are provided for under this Regulation for the trading period commencing on 1 January 2013.

Summary of the main points of the EU ETS Directive

A centralised EU-wide cap on emissions will reduce annually by 1.74% of the average annual emission level of the Phase II cap. The cap will deliver an overall reduction of 21 % below the 2005 verified emissions by 2020. To achieve the target of a 40% reduction in EU greenhouse gas emissions below 1990 levels by 2030, set out in its 2030 framework for climate and energy policy, the Commission proposes an increase in the linear reduction factor to 2.2% per year from 2021, from 1.74% currently.

Taking into account their ability to pass on the increased cost of emission allowances, full auctioning is the rule from 2013 onwards for electricity generators. However, Member States who fulfil certain conditions relating to their interconnectivity or their share of fossil fuels in electricity production and GDP per capita in relation to the EU-27 average, have the option to temporarily deviate from this rule with respect to existing power plants. ⁸

In other sectors, allocations for free will be phased out progressively from 2013, with Member States agreeing to start at 20% auctioning in 2013, increasing to 70% auctioning in 2020 with a view to reaching 100% in 2027.

However, an exception will be made for installations in sectors that are found to be exposed to a significant risk of 'carbon leakage'. Sectors deemed at significant risk of relocating production outside

In return for transitional free allocation, the eight Member States will undertake national plans to modernise their electricity sectors and diversify their energy mix through investments worth at least as much as the value of the free allowances.





⁸ Eight of the Member States which have joined the EU since 2004 - Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Lithuania, Poland and Romania - have made use of a derogation (under Article 10c of the revised EU ETS Directive) which allows them to give a decreasing number of free allowances to existing power plants for a transitional period until 2019. These derogations are limited in terms of: time (free allocation must stop by 2020 at the latest); Scope (only installations that started to generate electricity before 31 December 2008, or for which the investment process was "physically initiated" by that date, are eligible to receive free allowances); Quantity (the Directive determines a maximum quantity of free allowances that can be granted in 2013, and this has to decrease progressively in the following years to reach zero in 2020).

of the EU due to the carbon price (i.e. carbon leakage) will receive 100% of the benchmarked allocation for free.

As a result of a rapid build-up of surplus of allowances and international credits in 2012 (amongst others as a result of the economic crisis) the Commission has taken the initiative to propose the postponement of the auctioning of 900 million allowances from the years 2013-2015 until 2019-2020, when it is expected that demand will have picked up. This 'back-loading' of auctions has been done by amending the EU ETS Auctioning Regulation.

Access to project credits under the Kyoto Protocol from outside the EU will be limited to no more than 50% of the reductions required in the EU ETS. This is a reduction from 226% in Phase II, and means many more emissions reductions will happen in the EU.

A total of 88% of the allowances to be auctioned by each Member State is distributed between the Member States on the basis of a Member State's share of historic emissions under the EU ETS. However, in the interest of solidarity 12% of the total allowances auctioned will be re-distributed to Member States with lower GDP. These are mostly the newer eastern Member States.

There is a non-legally binding commitment from EU member states to spend at least half of the revenues from auctioning to tackle climate change both in the EU and in developing countries.

Industrial sectors will be allocated allowances for free on the basis of product benchmarks. The benchmarks will be set on the basis of the average of the top 10% most greenhouse gas efficient installations in the EU (see Benchmarking Decision).

Up to 300 million allowances from the new entrant's reserve of the EU ETS will be used to support the demonstration of carbon capture and storage (CCS) and innovative renewable technologies.

The possibility to opt-out small combustion installations provided they are subject to equivalent measures has been extended to cover all small installations irrespective of activity. The emission threshold has been raised from 10,000 to 25,000 tonnes of CO_2 per year, and the capacity threshold that combustion installations have to fulfil in addition has been raised from 25MW to 35MW. With these increased thresholds, the share of covered emissions that would potentially be excluded from the emissions trading system becomes significant, and consequently a provision has been added to allow for a corresponding reduction of the EU-wide cap on allowances.







IV. Highlights from the training workshop

Reference is made to Annex I for the agenda and Annex III for all the presentations. Below <u>only the highlights</u> are covered. The details can be found in Annex III. The full training was chaired by the Pollution prevention department from the Lithuanian Ministry of Environment, supported by ECRAN Working Group leader Monique Voogt.

Day 1, 13 October 2015:

The first day of the training addressed an overview of the activities and the organisation of the Competent Authority in Lithuania as well as completion of a monitoring plan. The workshop was opened by Mr Vitalijus Auglys, head of the department of Pollution Prevention of the Ministry of Environment, who welcomed the guests and emphasised the importance of exchanging expertise on operating a competent authority.

Introductory notes – ECRAN and the ambitions of the workshop

An introductory presentation was provided by Monique Voogt of ECRAN. She provided background information on the ECRAN activities and the further training options that are available under this programme. Next she introduced the agenda and the format of this specific workshop.

Introduction and identification of needs

All participants introduce themselves and identify their main expectations from the workshop.

Setting up and ETS Competent authority (Vaidotas Kisielius, Ministry of Environment Lithuania)

- Vaidotas Kisielius explains the reasons for having ETS and provides an intro on what is ETS and what are the benefits compared to other policies (such as taxation and standards).
- Lithuania has 95 installations and 2 aircraft operators in the EU ETS. Most stationary installations (87 out of 95) are category A (smaller installations). In the Lithuanian organisation the Ministry is supported by the EPA and its 8 regional departments. Nearly all contact with the operators is done by the regional departments. The Ministry is coordinating all international activities, for ETS but also for other environmental legislation.
- Vaidotas explains that there is no accredited verification company in Lithuania, but that there are Lithuanian verifiers that work for foreign companies and that do the verification of plants in Lithuania.
- Next Vaidotas shows a flow chart of activities in the EU ETS in Lithuania and explains how the organisation of activities has changed over time. For example: the Ministry does not do permitting anymore (this is done by EPA). Their role on that respect is reduced to doing inspections.
- The main remaining issues on EU ETS implementation in Lithuania are a lack of staff in EPA to examine verification report and issues with respect to inspections such as the fact that Inspectors are not trained specifically for GHG but for many areas (such as waste water) and consequently the GHG inspections may fail to provide sufficient in-depth information. Inspection exchange programs do not exist yet in Lithuania, not between regions and not with other countries.

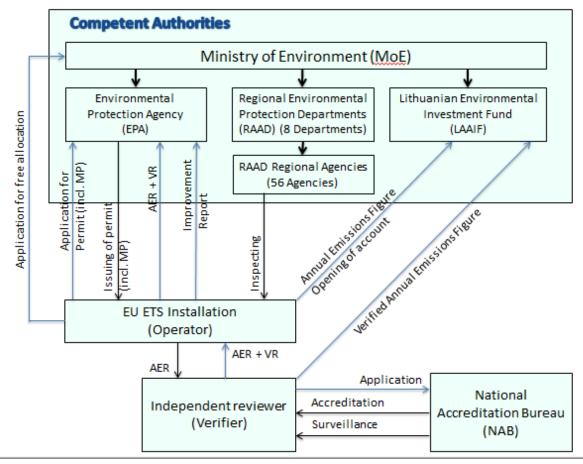






Day-to-day organisation (Tomas Aukstinaitis, EPA Lithuania)

- Tomas provides further details on the organisation of EU ETS activities in Lithuania, pointing out the interactions between different organisations and the information that is exchanged between parties.
- In Lithuania the EPA takes full responsibility of the Monitoring and Reporting in the EU ETS in Lithuania. The split of responsibilities between the regional departments and the central department however changed over time.
- In earlier days all activities were done by the regional EPA departments. The main advantage
 of that was a lower workflow and a better understanding of the processes in individual plants.
 The main drawbacks were that there were different interpretations among the 8 departments
 and that there was no full independency since permitting and inspections were done by the
 same departments.
- In July 2014 the organisational structure was changed, resulting in a more harmonised approach. Two persons at central level are now responsible for review and approval of all MPs, whereas inspections and permitting are still done at the regional level. Drawback of this approach is that many activities such as review of MPs, AER and VR are now done by a limited amount of staff at the central level.



EU-ETS Implementation in Lithuania (Organisational structure)



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- A discussion arises on the advantage and drawbacks of central vs decentralised organisation, with further explanation on the pros and cons of both options.
- The timeframe for reviewing the monitoring plans in practice is around working 20 days; this is the requirement from national law (where all responses from EPA to operators need to be done within 20 working days). The time needed for reviewing a single MP usually is around 1 or 2 weeks for simple installations (such as a boiler house) and can be up to 3-4 weeks for more complicated installations. All MPs are reviewed by a team of 2 persons.
- Eva mentions that on average around 1/3 of MPs are updated during the year. It is important to know that this takes additional time from the responsible party.
- In Kosovo the review of changes of permits is included in the legislation. Operators then have 30 days to respond, but there is no requirement on the timeframe for the Ministry to respond.

Timeline and planning of the CA Activities (Monique Voogt, ECRAN)

- Monique starts this presentation by showing the many activities for which the competent authority is responsible and by showing the many communication activities that need to be done to implement all steps of the EU ETS.
- Next she shows a chart that illustrates the emissions trading year and the consecutive steps. She points out that many additional activities need to be done and that actually some activities can really clash in time. One example is the review of updating of Monitoring Plans, the emission reports and verification reports, which can sometimes require to be done for different plants at the same period in time. This is for example the case in Lithuania, where the same two persons responsible for review of the MPs are responsible for checking the AERs and the VRs.
- Various practical information is shared on timeline, implementation needs and planning of CA activities, sharing examples from various countries.

Stakeholder communication (Tomas Aukstinaitis from EPA)

- Monique gives an introduction on the value of active communication within ETS. Communication is not just to report to other parties, but also to make use of the knowledge and expertise from those parties while designing and implementing the ETS. Monique illustrates this with personal experiences obtained in the UK and Turkey.
- Tomas provides an overview of the communications between EPA and the operators in Lithuania, which is an open line where for example operators call the EPA to ask for specific choices in the monitoring plan and the emissions reporting.
- Next an overview is provided on communication of EPA with other stakeholders. These communications are laid down in two ministerial orders, and for example include the communication with the regional EPA departments, with the European Commission (e.g. doing the Article 21 reporting for Lithuania), with the Lithuanian Environmental Protection Investment Fund, and as information provider to many other stakeholders.
- Tomas shows the many different means of communication that the EPA uses, ranging from official letters, telephone/email communications, on-demand meetings and on-site visits, consultations between CAs, publication of information on the website, etc. Active communication with operators is particularly aimed at improving the quality of monitoring and reporting.
- Tomas points out that in addition to the communication between EPA and individual operators he experiences that among operators there is also active communication. This is illustrated by



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the fact that information shared with one operator on improving the MP or the AER is also taken up by the other companies.

• In Albania active reporting needs to be done on energy, based on relatively new regulation. Emissions from energy will also need to be reported, but process emissions are relatively small and do not yet need to be reported. Despite of regulating a different matter the communication activities however are quite similar to what was included in the presentation from ETS communications in Lithuania.

Implementing the EU ETS in Serbia (Ivana Antonovic, EPA Serbia)

- Ivana Antonovic explains about the activities in Serbia to implement the ETS. The IPA Twinning project played a large role in building up the capacity and ETS activities in Serbia. In the project more than 40 experts from 4 EU Member States were involved, that supported Serbia during two years.
- A lot of progress has been achieved in Serbia. The primary and secondary laws are currently drafted and waiting for public consultation. Planning is to have these adopted by the Government by the end of 2015. The institutional set up was agreed and approved by the Government in June 2014. The list of ETS operators was identified and extensive training was given both to the competent authority and the operators
- In the further part of the presentation details were provided on the institutional set-up and the training activities. All in all a lot of ground was covered during this project, but still further activities need to be done. In the scope of ECRAN two further trainings will be done, on verification and accreditation.

The Monitoring Protocol (Tomas Aukstinaitis, Monique Voogt and Eva Hejralova)

- Tomas Aukstinaitis provides an in-depth overview of GHG Monitoring Plan review procedures in Lithuania, including a step-by-step overview of activities and the main issues commonly identified during the review process. Various options for further improvement of the process were identified including the use of checklists provided by the European Commission, preparing country-specific guidance and FAQs and the future potential use of the electronic communication system DECLARE that is being developed by the European Commission and its Member States.
- Tomas continues his presentation by showing the template for the monitoring plan and showing the audience all chapters and illustrating how the template should be used. Monique adds a short presentation on the logics behind the template and how use of the template supports ensuring completeness and consistency of information.
- Eva provides an additional presentation on how review of monitoring plans is organised in the Czech Republic, including the procedures in place and various practical lessons learned. As in Lithuania, the Czech Ministry takes quite an effort to support its operators during completion of their Monitoring Plans.

Day 2, 14 October 2015:

The second day of the training demonstrated the implementation of the EU ETS requirements from the point of view of a company. For this purpose the training was conducted at the industrial site of SC Achema in Jonavos. This site visit was hosted by Dr Marius Brazlauskas, head of the laboratory control centre of Achema.







The plant

Achema produces nitrogen fertilizers and chemical products, mostly for export to other European countries. The company is 50 years old. In the last decade nearly all of the production units have been modernised. The plant is one of the largest companies in Lithuania and employs over 1400 people.

Achema produces around 1 million ton of Ammonia per year, as well as other fertilisers and chemical products. The ammonia is produced from natural gas, water and air. First syngas is produced, after which it is combined with hydrogen to produced ammonia. The gas used for production is imported from Russia. Achema consumes around 50% of the total gas consumption in Lithuania.



Achema and emissions trading (Marius Brazlaukas, Head of Laboratory Achema)

The first ISO standards were implemented in Achema in 1998. In 2004 the IPPC permit was issued. Production in the plant steadily increased over the years while the emissions have steadily reduced over time. The emissions per production unit have decreased from 2.5 kg CO2/t product in the year 2000 to 0.5 kg/t in the year 2014.

Within the EU ETS Achema has two product benchmarks - for ammonia and nitric acid production - as well as a heat benchmark for its sub-installation for steam and electricity production. The Achema emissions for ammonia and nitric acid are somewhat higher than the benchmarks set and consequently the company has a shortage of emission allowances in the EU ETS. They receive approximately 2/3 of the required amount. Over the years 2005-2013 the total GHG emissions have reduced 49%, with the highest reduction in the production of Nitric Acids.

As a result of the increasing shortage of allowances Achema will stop one of the production units for ammonia for 3-4 months per year, or if needed more. Limits to this reduction are the competitive position (risk of losing clients) and that a maximum of half of the production limit will be achieved (otherwise the allowances will be lost). To restore fair competition levels Achema is making a plea for Lithuania to introduce state aid measures for compensation of the indirect costs of electricity (which



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some competitors receive, but Achema does not receive yet) and for the European Commission to introduce import taxes on imported products from regions where there is no emissions trading or other payment for GHG emissions.

Organisation wise the EU ETS has involved staff member throughout the company, from the production engineers up to the higher management. In Achema a combination of monitoring methodologies are used: continuous emission monitoring in the nitric acid production units and calculation of emissions for the use of natural gas.

During a site visit the entire site with 13 various production plants is visited. Further information on operational management and emissions control is illustrated in the operating rooms of the nitric acid production plant and the ammonia plant.

Day 3, 15 October 2015:

The third day was dedicated to zooming in to some of the specific elements of ETS: inspection and enforcement; accreditation and verification; and the CO2 registry. For this speakers were invited from Croatia and the Czech Republic, as well as specialists from Lithuania on verification and registry.

Inspection, supervision and enforcement (Sandra Pezelj Mestric, Croatian Ministry of Environmental and Nature Protection)

- Sandra gives a brief introduction about implementation of ETS in Croatia, including the organisational chart. The Ministry works closely together with the Croatian Environment Agency. The National Accreditation Body only has direct communication with the verifiers; there is no direct relation with the Ministry or the EPA. Croatia has 72 ETS installations with 13 of them excluded from trading but an obligation to monitor and report (due to temporary closure). The Environmental Protection Inspection (EPI) is part of the Ministry. It has 75 inspectors operating through the central office in Zagreb and its 20 offices in 3 regional branch units.
- At the start of ETS Croatia started with monitoring and reporting. In 2013 inspections were added to the system. Then 60 on-site visits were made, not including operator procedures. Inspectors still had to learn; operators were more experienced than the inspectors themselves. At the start of the system verification was an issue in Croatia. Starting with 22 verifiers there are currently only 3 left.
- Sandra shows the overall planning on inspections and explains the use of the "Easy Tool". This tool is fed with various inputs on impact criteria and then selects which installations need to be inspected. Next she explains all steps in the site-visit, including the preparation time that requires more effort and time than the inspection itself.
- The **routine inspection** conducts the following checks: compliance with the permit; data from the PRTR, verification of the AER, reporting and union registry account.
- The **non-routine inspections** can be initiated by; complaints, accidents, findings from previous inspections, requests from other state institutions; and as part of a criminal investigation. Reports are made for all inspections and are published online at the Ministry website.
- **Penalties** are quite high, ranging from 13,000 30,000 €. This can be charged when an operating is operating without permit, fails to submit an AER, has not opened a registry account or fails to submit its MP. So far Croatia only had one case.



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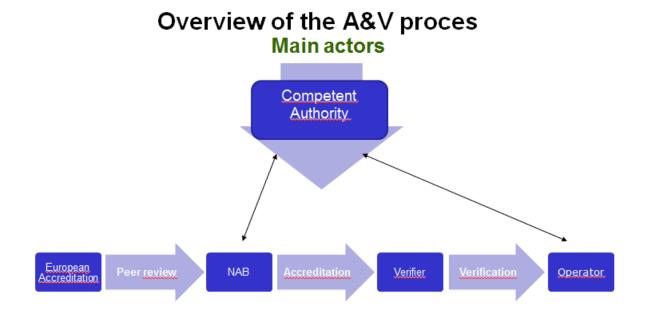


Choices made in the Netherlands in view of inspection and review of MPs (Monique Voogt, ECRAN)

- In the Netherlands it was decided to establish a separate authority for the EU ETS; independent from the Ministry. The main reason was that the main tasks under the EU ETS is quite complex and an active role regarding feedback towards policy is essential.
- The NEa performs all tasks belonging to a competent authority, from permitting to inspections and from allocation to review of the monitoring plans and emission reports.
- Having to perform all tasks the NEa has to make pragmatic choices on where to put its focus
 of attention. This is done with a priority for the larger installations, since 80% of the emissions
 are only in 10% of the installations. Consequently the time spending on inspections as well as
 on review of emission reports is focused more on these larger installations, so that emission
 control is done effective and time-efficient.

Accreditation and Verification (Eva Hejralova, Czech Ministry of Environment)

- In this presentation a full overview was given on A&V regulation and implementation in practice.
- Eva starts the presentation with providing an overview of the timeline of A&V activities and the legislative framework. Next she shows the organisation of A&V activities in the Czech Republic
- In the next part an overview of the A&V process is provided the stakeholders in the Czech Republic are introduced.
- Eva continues the presentation with a step-by step listing of activities in the accreditation
 process as well as in the verification process, adding lessons learned in the Czech Republic. A
 noticeable element is the active role of the Ministry is guiding that the A&V processes go
 smoothly and reach good quality levels. Consequently the Ministry actively engages in
 stakeholder communication and training. Eva provides some of the lessons learned in the
 Czech Republic and how the Ministry has supported smoothening the process.





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Enviroment and Climate ECRAN Regional Accession Network

Independent verification in Lithuania (Jonas Kapturauskas, independent verifier)

- Before the start of the participation in the EU ETS there was already various legislation on audits and controlling environmental emissions, which were very similar to today's legislation
- Jonas Kapturauskas provides a simple example of calculation of CO2 emissions, which is based on the amount of fuel used, the specific heat value, the emission factor and the oxidation factor. The calculation is quite simple, but from a verification perspective this means that not only the data need to be checked, but also the operator's accounting system, its procedures to collect the data, the data management system and the actual equipment.
- In practice it will be impossible to check all data in detail. So first the verifier focuses on the data management system and then in the verification plan he includes which data is selected for a detailed check.



- The presentation provides an overview of all activities done in planning and preparation of the actual verification, as well as of the actual site visit. After the site-visit the information obtained is further assessed, with potential asking for further information. In Lithuania the majority of issues identified is solved during the verification process. Sometimes this results in results in results in of the emissions report several times.
- Conclusions: the competence of various stakeholders in the EUETS in Lithuania has been growing over time. Templates for monitoring and reporting can be quite complicated for smaller installations, but extensive exchange of information is taking place and the quality of consultants supporting them have significantly increased. Data management systems in the companies have significantly improved over time. Procedures related to GHG ETC issues are not sufficiently developed at the sites.

CO2 Registry – (Toma Juraité, Lithuanian ETS registry)

- The presentation outlined the functioning of the Union Registry from different angles. It especially addressed how the registry system is administered and what overall role it takes in the EU ETS.
- The presentation started with an overview of the key facts of the EU ETS from a compliance perspective. An explicit note is made on the fact that no financial transactions take place in the registry, and consequently no financial values are recoded. What is recorded is the transfer of units; it is an accounting system.







- Toma Juraité shows the various types of account holders and how the registry functions. Opening a new account can be a cumbersome process as all information has to be verified. This can take up to 20 working days.
- Next the speaker provided an overview of how actions such as allocation and trade are recorded in the registry and which types of security measures exist to ensure the trust in the use of the system. A series of detailed screen shots was included to give the audience an insight in the registry and its functioning.
- A discussion was held on the various security measures and the role of the Lithuanian ETS registry. The registry actively informs its clients on upcoming deadlines; aiming to support their compliance.

	Holdings	Authoris	Authorised Representatives		Additional Au	thoris	ed Rep	resentatives	Ins	tallation		
ontact Person	Information	Complia	ance Verit	ier 🤇	Trusted Accounts		Accoun	nt Statements				
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V. Evaluation

Reference is made to Annex IV for the detailed evaluation results. The workshop had 10 Participants from the ECRAN beneficiary states, 4 presenters/participants from Lithuania and 3 international speakers. From the 10 participants from the beneficiary countries 9 filled in the evaluation form which is a response of 90%.

The results of the evaluation shows that the workshop was very well received, where seven participants indicated that attending the workshop was time well spent for them while none of the participants considered this aspect as average. Also, eight participants rated the workshop as high level (rated between excellent and good) and eight participants rated the facilitators between excellent and good.

Furthermore all nine participants claimed to have received an improved understanding of the details of the Monitoring and Reporting (MR) regulation as well as of the Accreditation and Verification (A&V) regulation of the European Commission (zero participants rated this aspect as average).

Your Expectations

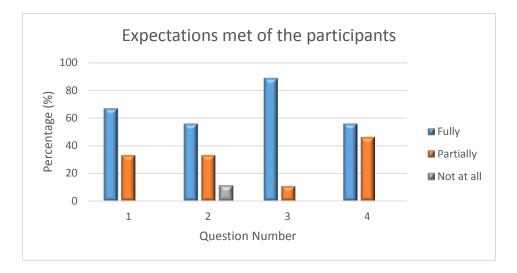
Please indicate to what extent specific expectations were met, or not met:

1 I was familiarised with set-up of a Competent Authority in an EU Member State, including the organisational choices made and the lessons learned

2 I was familiarised with the approaches and experiences in the implementation of the M&R and A&V regulation

3 I have better understanding of the required human and institutional resources for the implementation of the two regulations

4 Insights in the lessons learned, the risks involved and the bottlenecks of ETS implementation





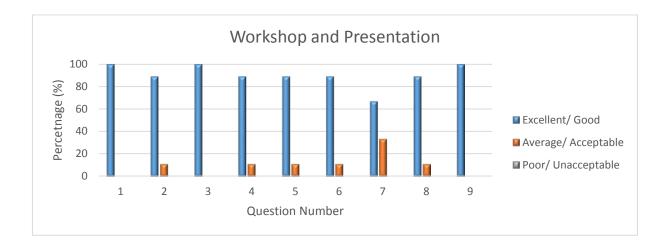
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Workshop and Presentations

- 1 The workshop achieved the objectives set
- 2 The quality of the workshop was of a high standard
- 3 The content of the workshop was well suited to my level of understanding and experience
- 4 The practical work was relevant and informative
- 5 The workshop was interactive
- 6 Facilitators were well prepared and knowledgeable on the subject matter
- 7 The duration of this workshop was neither too long nor too short
- 8 The logistical arrangements (venue, refreshments, equipment) were satisfactory
- 9 Attending this workshop was time well spent









ANNEX I – Agenda

Day 1 : Tuesday 13 October 2015

Chair and Co-Chair: Lithuanian Ministry of Environment, in cooperation with the Climate Change Division of the Lithuania Environmental Protection Agency

Venue: Ministry of Environment, A. Jakšto g. 4, Vilnius 01105

Start	Finish	Торіс	Speaker	Sub topic/Content
09:00	09:30	Coffee and registration		
09:30	09:45	Formal opening and word of welcome	Director of the Ministry of Environment	
9:45	10:00	ECRAN and the ambitions of this workshop	Monique Voogt, ECRAN	 Introduction to ECRAN and the ETS Workgroup Aims of the workshop and planned activities Introductions to speakers, trainers and audience
10:00	10:20	Round of introduction and identification of specific needs	All participants	
10:20	10:45	Setting up an ETS Competent Authority in Lithuania	Vaidotas Kisielius, Ministry of Environment Lithuania	 Key choices made on organizational structure Lessons learned and impacts Practical matters on staffing and capacity requirements
10.45	11.00	Coffee Break		
11:00	11:40	Day-to-day organisation and sharing of responsibilities	Tomas Aukštinaitis, (EPA Lithuania) and	 Sharing responsibilities between Ministry and supporting institutes Regional versus national organization The challenges of large and small
11:40	12:10	Timeline and planning of the CA activities	Monique Voogt (ECRAN)	 Overall timeline for CA activities Practicalities and main challenges Organisational choices made
12.10	12.30	Key choices in beneficiary states	All participants	 Listing the key choices to be made in beneficiary states Q&A on practical implications



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12.30	13.30	Lunch Break	Lunch Break				
Start	Finish	Торіс	Speaker	Sub topic/Content			
13:30	14:15	Stakeholder communication	Representatives from the Ministry of Environment and the Lithuanian EPA	 Overview of stakeholder communication in Lithuania Tools and means 			
14.15	15.15	Stakeholder communication in beneficiary states	All beneficiaries	 Overview of stakeholder communication actions per beneficiary Exchange of lessons learned and best practices 			
15.15	15.30	Coffee Break					
15:30	16:00	Evaluation of Monitoring Plans	Tomas Aukštinaitis and Eva Hejralová (Dpt of Energy and	 Organisation of validation tasks: key choices and experiences Checklists and procedures; practical recommendations 			
16:00	16:45	Practical exercise on evaluation of Monitoring Plans	Climate protection, Czech Republic)	Validation exercise			
16:45	17:00	Wrap-up 1st day / outlook 2nd day	Monique Voogt, ECRAN	 Summary of lessons learned in day 1 Practicalities for day 2 			

Day 2 : Wednesday 14 October 2015

Host: A	Host: Achema, Jonavos, Lithuania					
Start	Торіс					
08:00	Departure by bus (pick up at the hotel)					
10:00	Welcome by Achema					
10:30	Plant activities and EU ETS compliance at Achema					
11:00	From production process to monitoring protocol and monitoring methodology					
11.45	The Annual Emission Report and verification process					
12:15	Site tour					
13.00	Lunch					
13.45	Bus travel back to hotel					







Day 3 : Thursday 15 October 2015

Inspection, accreditation and verification

Chair and Co-Chair: Lithuanian Ministry of Environment, in cooperation with the Climate Change Division of the Lithuania Environmental Protection Agency

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Start	Finish	Торіс	Speaker	Sub topic/Content			
09:00	09:30	Coffee and registration					
09:30	09:45	Welcome/Agenda	Monique Voogt, ECRAN	Summary of lessons learnedProgramme of 3rd day			
09:45	10:30	Inspection, supervision and enforcement	Sandra Pezelj Meštrić, senior inspector at the Croatian Ministry of Environmental and Nature Protection	 Inspections: compliance checks, spot checks and site visits Enforcement Timeframe and organisation 			
10:30	10:45	Main challenges in inspection & enforcement	All participants	Tour du table to identify main challenges and planning issues			
10.45	11.15	Extended Coffee Break	(incl. time for practical	TAIEX arrangements)			
11:15	12:00	Accreditation and verification	Eva Hejralová (Dpt of Energy and Climate protection, Czech Republic)	 Role and importance of A&V Organisational aspects Lessons learned in the Czech Republic 			
12:00	12:25	Independent verification in Lithuania	Dr. Jonas Kapturauskas, independent verifier	 Organisation of verification in Lithuania Practical illustrations 			
12:25	12:45	Q&A on accreditation and verification	All participants	 Discussion on aspects such as: Role, independency and tasks Capacity requirements Are national verification companies needed? 			
12.45	13.45	Lunch Break					
13:45	14:30	Setting up a national ETS registry	Ms. Toma Juraitė (Lithuanian ETS registry)	 The Lithuanian national registry and lessons learned 			

Venue: Ministry of Environment, A. Jakšto g. 4, Vilnius 01105



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14:30	15:15	Further strengthening of a competent authority	Tomas Aukštinaitis, and Eva Hejralová	 Choices and challenges wrt organization Practicalities Taking advantage to learn from others
15.15	15.30	Closing the workshop	Monique Voogt, ECRAN	









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Monique	Voogt	ECRAN	Netherlands	m.voogt@sqconsult.com

ANNEX II – Participants





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ANNEX III - Workshop materials (under separate cover)

Workshop materials including presentations, exercise materials and agenda, can be downloaded from:

http://www.ecranetwork.org/Climate/Emissions-Trading



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ANNEX IV – Evaluation

Statistical Information

1.1	Workshop Session	Activity 3.3.2 A - ECRAN Workshop Operating a Competent Authority
		13-15 October, Vilnius, Lithuania
1.2	Facilitators name	As per agenda
1.3	Name and Surname of Participants (evaluators)	As per participants' list

Your Expectations

Please indicate to what extent specific expectations were met, or not met:

My Expectations	My expectations were met				
	Fully	Partially	Not at all		
 I was familiarised with the set-up of a Competent Authority in an EU Member State, including the organisational choices made and the lessons learned 	 (67%)	III (33%)			
 I was familiarised with the approaches and experiences in the implementation of the M&R and A&V regulation 	IIIII (56%)	III (33%)	l (11%)		
3. I have better understanding of the required human and institutional resources for the implementation of the two regulations	 (89%)	l (11%)			
4. Insights in the lessons learned, the risks involved and the bottlenecks of ETS implementation	 (56%)	IIII (44%)			







Workshop and Presentations

Please rate the following statements:

As	pect of Workshop	Excellent	Good	Average	Accept able	Poor	Unacce ptable
1. The workshop achieved the objectives set	ш	Ш					
	(44%)	(56%)					
2. The quality of the workshop was of a high standard	Ш	Ш	1				
	(56%)	(33%)	(11%)				
 The content of the workshop was well suited to my level of understanding and experience 	ш	Ш					
	(56%)	(44%)					
4. The practical work was relevant and informative	11111	П	1				
	(67%)	(22%)	(11%)				
5. The workshop was interactive	1111-11	1	1				
	(78%)	(11%)	(11%)				
6. Facilitators were well prepared and knowledgeable on the subject matter	11111-1	П	1				
	(67%)	(22%)	(11%)				
7. The duration of this workshop was neither too long nor too short	11111		ш				
	(67%)		(33%)				
8. The logistical arrangements (venue,	11111-1	П	1				
	refreshments, equipment) were satisfactory	(67%)	(22%)	(11%)			
9. Attending this workshop was time well spent	11111-11	П					
	(78%)	(22%)					





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Comments and suggestions

I have the following comment and/or suggestions in addition to questions already answered:

Workshop Sessions:

- To be organized in the future similar workshops for specific tasks;
- Well structured.

Facilitators:

- Excellent;
- With High competence.

Workshop level and content:

- Excellent;
- Very good.





