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# Environment and Climate Regional Accession Network (ECRAN)

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Report on Workshop :  
Operating a Competent  
Authority

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23-25 September 2014, The Hague

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# **ENVIRONMENT AND CLIMATE REGIONAL NETWORK FOR ACCESSION - ECRAN**

## **WORKSHOP REPORT**

### **Activity 3.3.2**

#### **REPORT ON THE WORKSHOP: OPERATING A COMPETENT AUTHORITY**

**The Hague, 23 – 25 September 2014**



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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\*<sup>1</sup>, 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.
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.

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<sup>1</sup> \*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.



## 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 **The Hague (Netherlands)** from September 23<sup>rd</sup> until September 25<sup>th</sup> 2014 at the Netherlands Emissions Authority and at the Hydrogen Plant of Air Products in the Rotterdam Port Area. In addition experts from the Walloon Air and Climate Agency participated on the last day.

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: <http://www.ecranetwork.org/Climate/Emissions-Trading>)



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## 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:

- Strengthening 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. 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.
2. Insight into the approaches and experiences in the implementation of both regulations in EU Member States.
3. Better understanding of the required human and institutional resources for the implementation of the two regulations as part of an ETS system.
4. Insights in the lessons learned, the risks involved and the bottlenecks of the EU ETS implementation.



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### 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 emission saving projects 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.



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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 (CO<sub>2</sub>) 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 (N<sub>2</sub>O) from production of nitric, adipic, glyoxal and glyoxalic 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 CO<sub>2</sub> 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<sub>2</sub>-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 Registry<sup>2</sup> 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;

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<sup>2</sup> 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.



- Accounts of companies or physical persons holding those allowances;
- Transfers of allowances ("transactions") performed by account holders;
- Annual verified CO<sub>2</sub> 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*

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 1<sup>st</sup> and 2<sup>nd</sup> 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 faces 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 Commission has therefore taken the initiative to postpone (or 'back-load') the auctioning of some allowances as an immediate measure. This 'back-loading' of auctions is being implemented through an amendment to the EU ETS Auctioning Regulation.

As back-loading is only a temporary measure, a sustainable solution to the imbalance between supply and demand requires structural changes to the EU ETS. The Commission proposes to establish a market stability reserve at the beginning of the next trading period in 2021.

The reserve would both address the surplus of emission allowances that has built up and improve the system's resilience to major shocks by adjusting the supply of allowances to be auctioned. It would operate entirely according to pre-defined rules which would leave no discretion to the Commission or Member States in its implementation.

The legislative proposal put forward in January 2014 at the same time as the framework for climate and energy policies up to 2030 requires approval by the Council and the European Parliament before becoming legally binding.



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Efforts to address the market imbalance would also be helped by an increase in the annual linear reduction factor which determines the EU ETS cap. 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.

### *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.<sup>3</sup>

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 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

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<sup>3</sup> 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



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 so-called carbon leakage.



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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](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<sub>2</sub> 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:



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- 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 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”: 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/EC<sup>4</sup>. 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));
- 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));

<sup>4</sup> 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 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 <sup>5</sup>
31 March N+1 <sup>6</sup>	Verifier	Finalise the verification of the emission report and issue verification report to the operator
31 March N+1 <sup>5</sup>	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 <sup>7</sup>
(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 surrender of additional allowances, if applicable (in accordance with Member State legislation).

<sup>5</sup> 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.

<sup>6</sup> 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.

<sup>7</sup> 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.



**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 risk-based 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 CO<sub>2</sub> emissions from installations;
- Annual reconciliation of allowances and verified emissions, whereby each company must have surrendered enough allowances to cover all its verified emissions.



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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.<sup>8</sup>

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

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<sup>8</sup> 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).

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.



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 entrants 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<sub>2</sub> 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 only the highlights are covered. The details can be found in Annex III.

##### Day 1 , 23 September 2014:

The first day of the training addressed an overview of the activities and the organisation of the Competent Authority in the Netherlands for the EU ETS. In addition a presentation on preserving market integrity and preventing fraud was provided. The permitting procedure, including issuing and registration was addressed in detail. The afternoon session was an interactive session on evaluating the monitoring plan. The day was concluded with the allocation procedures and the Benchmarking Decision.

The training was chaired by Monique Voogt and Imre Csikós.

##### Introductory notes – ECRAN and the ambitions of the workshop

The meeting was opened by Monique Voogt of ECRAN. The agenda was presented and expectations of participants were discussed.

##### Setting up and ETS Competent authority (Monique Voogt, ECRAN)

- The flowchart of the permitting process and the key tasks for a competent authority as per respective articles of the EU ETS Directive were presented.
- The exchange of information as per Article 21(3) of the EU ETS was explained, including the role of the Compliance Forum and the Task Forces.

##### The NEA – Overview of activities and organization (Harm van de Wetering, NEA)

- The rationale on why a separate authority for the EU ETS was established: The CA should be separated 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. (Besides, the political colour should not play a role in enforcement. Your Minister is actually a ‘trader’ !).
- An overview of tasks of the operator versus the Competent Authorities in the compliance cycle was presented.
- The number of installations and the contribution of the installations to the GHG emissions was presented, as well as an indication of the yearly workload for the CA in terms of Installations under control; Number of inspections; Validated changes ; Questions answered and KYC (“Know your Customer”)-checks in the Registry. Besides at least 25% of time for implementation of new rules, reporting, policy advice is planned.
- For each 50 installations: 1 full time employee.
- In terms of compliance control it should be considered that 80% of the emissions are only in 10% of the installations: More time should be spent on these installations in order to be more effective and efficient in keeping the emissions under control.
- Experience learns that although ETS is complex, companies are willing to comply. Education and practical guidance is **essential** for success. Visiting complex sites helps to understand



process and risks. A special message includes the notion that market fraud should not be underestimated.

- It is recommended to make clear design choices: (1) How big is the expected workload / target group? (2) Is policy work excluded from executive workload? (3) Is there a demand to be independent from politics? (4) Are there existing authorities to build upon? (4) Is there a demand for national body or are there reasons for a regional approach? (5) Will permitting, inspections, registries be combined? (6) Which strategy is used to create compliance of rules
- Security measures in the union Registry have been addressed. Reference is made to: [https://www.emissieautoriteit.nl/mediatheek/emissierechten/informatiebladen/20120402\\_Security\\_Registry\\_EN.pdf](https://www.emissieautoriteit.nl/mediatheek/emissierechten/informatiebladen/20120402_Security_Registry_EN.pdf). The Prezi presentation of this aspect can be found on: [http://prezi.com/pimm8xmxdan/?utm\\_campaign=share&utm\\_medium=copy&rc=ex0share](http://prezi.com/pimm8xmxdan/?utm_campaign=share&utm_medium=copy&rc=ex0share)

#### Starting ETS: Permitting procedure, issuing and registration of allowances (Margreet Kleijn, NEA)

- The Guidance for the interpretation of Annex I of the EU ETS Directive was addressed in this presentation, with examples of installations to be included or excluded from the EU ETS, including boundaries of installations and interpretation of capacities.
- The contents of GHG emissions permits were presented, including the process of assessing the monitoring plans.
- Lessons learned in the process of permitting include: (1) Clear communication with operators to inform them about the monitoring requirements; (2) Start preparations on time; (3) Give operators feedback if the monitoring plan does not yet meet the requirements and give them the opportunity to adjust the monitoring plan; (4) Prevent 'endless' permitting procedures by setting tight deadlines and taking steps in the procedure on time and (5) Ensure equal treatment of operators

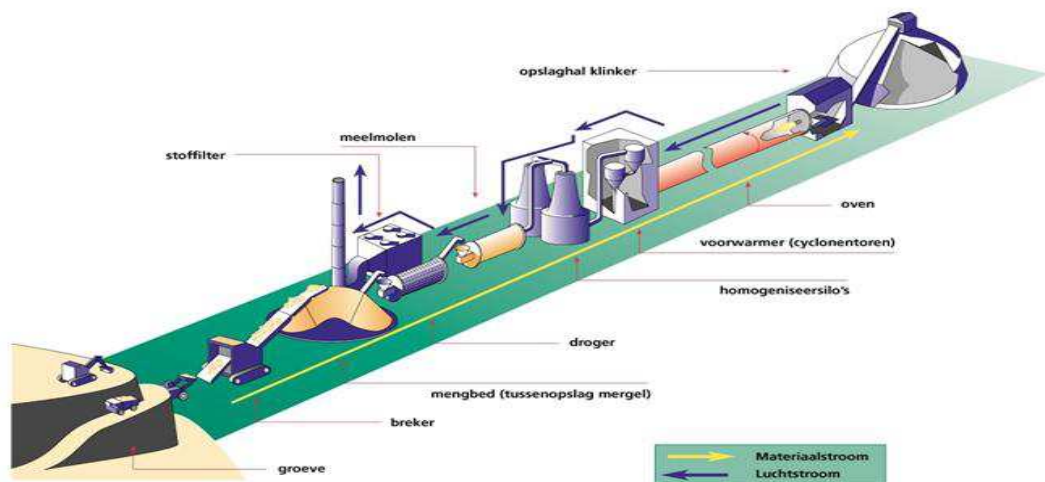
#### Evaluation of the Monitoring Plan – interactive session (Charlotte Spitters, NEA)

- The minimum contents of the Monitoring Plan were presented, including the monitoring plan templates
- The audience was then invited to fill in the Monitoring Plan for a real case presented at the workshop (i.e. the Hydrogen plant to be visited on the next day). Please note that the data presented in the workshop are not included in this report for reasons of confidentiality. (Most participants were able to fill in the MP and only minor inconsistencies in data filling were detected).
- The tiers system for the hydrogen plant were addressed: For all major source streams for a category B installation the highest tier is required. The highest tier for quantity is defined as determination of the quantity with an uncertainty <1,5%: This is tier 4. The highest tier for determining the carbon content is analysing the materials/fuels: This is tier 3. For de-minimis source streams the plant may use estimation methods. No tiers are required.



### Allocation procedures (Alex Pijnenburg, NEA)

- The Phase 3 allocation methods on the basis of benchmarking were explained in detail. An example was presented for the clinker benchmark. The allocation is based on cement clinker production. Only historical production for the period 2005-2010 was needed for the free allocation.



- Also a complex situation was presented including many processes and source streams (heat flows, fuel flows, emissions, productions, electricity).
- The Phase 3 allocation process in terms of data collection. Preparation time needed for operators and competent authority: For this purpose guidance documents for operators and verifiers were prepared and used in workshops. Formats for data collection reports and calculation were prepared and there was a help desk at NEA.
- The Data collection process was described with all steps from Operators data reports until the final determination of allocations for operators, including the timelines.
- Key learning points: Allocation rules are complex
  - Need for simplification
  - Good balance between generic and simple  $\leftrightarrow$  specific and detailed
  - More product benchmarks would help
  - Heat data is complex
- It is recommended to allow sufficient time for implementation and data collection. Independent verification is a necessity. Organise training and ensure a continuous communication plan with and between operators, verifiers and CA.



## Day 2 , 24 September 2014:

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 in the Rotterdam harbour area at the company Air Products (Hydrogen production facility). This site visit was hosted by Mr J.F. Koetse, staff engineer at Air Products Nederland BV and Mr Juriaan Mieog, of Royal HaskoningDHV.

Please note that, for reasons of confidentiality some of the power point presentations could not be displayed on the website.

### Process description – (J.F Koetse, Air-Products Nederland BV)

Mr Koetse outlined the production process and provided insight on the products and customers. The highlights include:

- 300 ton H<sub>2</sub> production/day with pipeline delivery to Esso, Shell, BP and some small users
- 80 tonne/hour steam to Esso
- Utilises Steam-Methane Reforming (SMR) and Water-Gas Shift reactions to convert hydrocarbon feedstock to H<sub>2</sub>
- 3 Hydrocarbon feeds; natural gas, 2 x refinery fuel gas (RFG) streams
- Globally one of Air Products most efficient plants
- High reliability design

### Implementation of the EU ETS at air products – (Juriaan Mieog, Royal HaskoningDHV)

The first step for implementing the MRR requirements is the definition of boundaries. For hydrogen production the specific monitoring requirements are set out in the annex IV of the MRR. The choices regarding monitoring were explained. For this particular case the Mass Balance Method was used, using a mass spectrometer with an online-analyser. The calculations to the total CO<sub>2</sub> emissions are:

$$\text{Total CO}_2 = (\text{Total\_C\_RFGgas} = \text{Total\_C\_SJHGgas} + \text{Total\_C\_NH}) * 3,664 \text{ [ton CO}_2\text{/ton C]}$$

Where

$$\text{Total\_C\_RFG\_gas} = \text{Amount\_RFG[ton/year]} / \text{MW\_RFG [kg/kmol RFG]} * \text{C\_content\_RFG [kmolC/kmolRFG]} * \text{MW\_C [kg/kmol]}$$

With:

- Amount\_RFG [ton/year] = summed of measured values MI3
- Molecular\_Weight\_RFG [kg/kmol RFG] = measured values mass spectrometer MI5
- C\_content\_RFG [kmolC/kmolRFG] = measured value mass spectrometer MI5 (continuous measurement)
- MW\_C [kg/kmol] = 12,0 (literature value)

It was outlined that the drafting of MP requires

- In depth knowledge of the MRR (a lot of details!)
- Technical knowledge of processes, data flows, metering at the site
- Good knowledge of Excel to build calculation sheets
- Knowledge of procedures and how to implement these



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It is time consuming and requires support and cooperation from various levels within the organization (e.g. investment decisions!). There are strict deadlines and time pressure! Support of competent authority is crucial (questions, approvals).

### **Day 3 , 25 September 2014:**

The third day was dedicated to the functioning of the Registry and the monitoring process and the validation of emission reports. In addition the importance of IT tools and electronic reporting was demonstrated with examples from Wallonia. The presentations were concluded with the last step of the compliance cycle: Supervision and enforcement.

The afternoon was dedicated to the country representatives discussing and indicating their priorities for individual TAEX assistance needs in relation to implementing the EU ETS in their countries.

### **CO2 Registry – (Bas Kroon, NEA)**

The presentation outlined the functioning of the Union Registry. It addressed security issues, accounts, units and transactions. (Some power point slides were confidential so they have not been displayed on the ECRAN website). There are approximately 8300 transactions per year, where 1,532.168.179 units are involved. The type of transactions were explained ranging from surrender and exchange to cancellation and issuance and retirements.

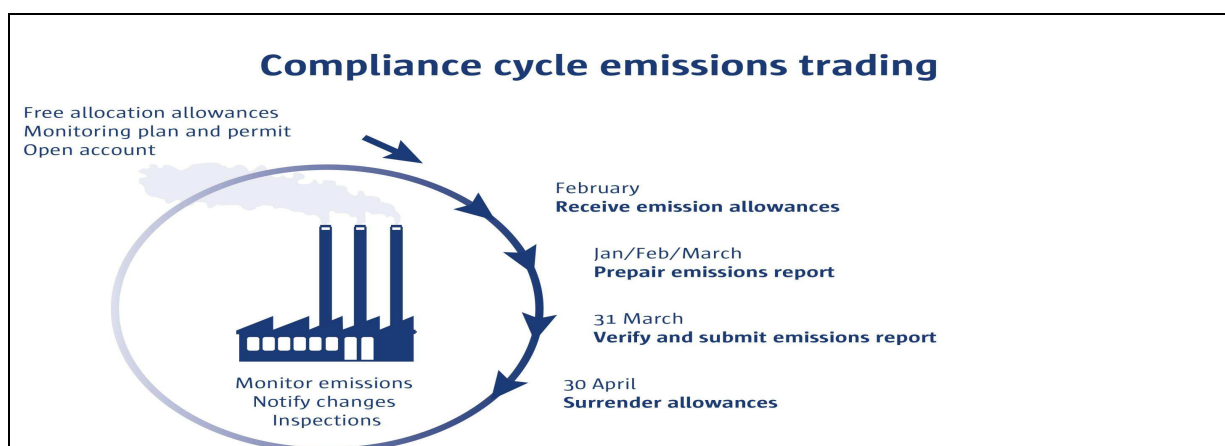
An example was provided:

- Installation A wants to sell allowances to installation B
- Installation A needs to put account of installation B on trusted account list: 4-eyes principle + 7 working days
- Installation A transfers allowances to installation B: 4-eyes principle + 26 hour checking period + between 10:00 and 16:00 hours

The organisation of registry department was outlined (IT/administrative – 6FTE; Helpdesk – 5FTE; Legal – 3 FTE). The presentation was concluded with a demonstration of the Registry.

### **The Monitoring process and validation of emission reports – (Astrid Pols, NEA)**

An overview was presented of the main dates and deadlines. The steps required in the validation process were outlined:



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These are:

- Step 1: Administrative checks (Are submitted documents complete, verified and on time (i.e. 1 April). An example of the Emissions Report was presented and the way the first checks are performed on them.
- Step 2: Contents check. A risk based approach is used. The focus is on the installations having the largest emissions. In addition special attention is put on reports that are verified with comments and where signals are given from the inspection.

In 2013 only 2 reports were submitted too late; 75 were verified with comments; 175 had remarks on Annex 1 and Annex 2 and 250 verified reports were submitted without comments. The follow-up actions on non-compliance were outlined briefly.

Finally, the mandatory information exchange between the Competent Authority and the verifier and Accreditation Body was outlined.

Lessons learned included:

- starting CA activities on time (Sept)
- communication strategy/plan
- CA team
- The need to improve templates

#### The importance of IT and electronic reporting in the EU ETS – (Heidi de Prez, Walloon Air and Climate Agency)

The concept of e-reporting was presented, outlining the pros and cons of the system. The pros include: a significantly lower administrative burden; better and faster access to information; better ability to track and trace workflows; data storage and improved quality of data. The cons include mainly the IT costs.

The available systems include ETSWAP which is used in the UK, Ireland, Iceland and Wallonia. Germany and Finland also use an electronic version but this is a tailor-made design for the country only. At this moment there is a discussion to set up an EU wide harmonized system (Declare).

The Walloon approach was explained; the initial options included (1) the development of a new system by the CA; (2) development of a new system by a consultant and (3) the use of an existing IT system with minor modifications. Option 3 was selected which is based upon UK version ETSWAP.

- Minimum content: phase III ETS-templates
- Modified for Walloon requirements
- Deadlines in Walloon legislation (assessment)
- No charges in Wallonia for operators
- Minor changes in workflow, due to specifications in Walloon legislation and role of the Competent Authority DPA/AwAC

The costs and the contractual documents were outlined. The practical implementation includes 2/3 FTE against 150 operators.

Experiences of the use of ETSWAP was explained:



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- It facilitated tasks of the operators and the CA users (time benefit)
- Central data storage for ETS information
- Reporting is easier
- Very professional partner (developers + support team), good awareness of requirements MRR, flexible and solution-oriented
- Benefits from 'lessons learnt' from ETSWAP UK
- Operators are positive
- Stable product
- Extraction of data foreseen in easily readable format
- Log of all communications with operators

ETSWAP Wallonia is still in English but translation in French foreseen (2014/2015). When you develop your system it is important to make available sufficient human resources, especially during development phases.

#### Supervision and enforcement – (Ton Grosjean, NEA)

The Compliance and Enforcement Unit was introduced, including the tasks and staffing.

There are three levels of quality & control divided in private and public domain.

Private domain:

1. Responsibility company (internal quality system, measurement and monitoring)
2. The verifier (checking the quality system, monitoring system and emission report of the company)

Public domain:

3. Compliance, inspection and enforcement by the Competent Authority

Accreditation alone does not give enough quality assurance (their assessment will check the possibility that a verifier or measurement institute is able to do the job but won't tell you anything about the fact the job will be well done in the future). Also the Dutch CA met several issues, which were not spotted by the verifier, that lead to differences in the Emissions Report.

The Dutch ETS enforcement strategy is based on the compliance chain which differs in the EU:

- There are Member states that rely almost only on private control
- Member states that require a certain level of public control beside the private part.
- Basis should be that a ton CO<sub>2</sub> should be a ton CO<sub>2</sub> in every member state
- Harmonization is needed (European commission started compliance forum to realize more harmonization between the member states)

The Dutch compliance and enforcement strategy in the period 2005 – 2008 was based on "Compliance assistance". It was perceived as a learning period for companies and CA. The strategy was to visit every company at least once in this period to check if the validated Monitoring Plan is correct and if the company does follow and understands the MRR requirements.

After the first period (in 2008 – 2013) there was more enforcement and penalties. A risk based approach was taken: 24 indicators defined out of 65 by expert judgment to create a Risk based tool for selecting companies. The selection of companies was based on one or more indicators (thematic investigations, regular visit list). Riskful companies are 'on top of the list' and 80% of site visits were from the top of this list, while 20% of site visits were from the bottom of list (random test).



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The Dutch compliance and enforcement strategy in the period 2014 – 2020 is still a Risk Based Approach with pre-selected categories of companies.

- A. Large and complex companies with a high emission, yearly inspection (partition of the plant).
- B. Complex companies with a medium high emission, once in 3 years inspection.
- C. Companies that will be inspected once in a trading period.
- D. Companies that won't be inspected unless they are selected by a random test.

D companies are quite simple because they only have a natural gas invoice, so you may rely on verification only.

Experience teaches that the enforcement tools are sufficient (provisional penalty payment or penalty payment). Inspectors sometimes need a high level of expertise.

Some issues that could occur if there is more financial pressure on the system and if there is a risk of criminal activities:

- Fraud in the allocation process of allowances: To provide false information concerning the historical emissions or expansion of the company (Advantage for a company during a period). Auctioning of allowances would prevent this.
- Money Laundering: The emission registry (?) notices only the amount of allowances that is transferred from one account to the other. Every individual or a company anywhere in the world could open accounts in the registry of each member state. The ETS system gives the possibility to realise a lot of international transfers, within a short time, with several individuals or companies involved, without information about the amount of money that is involved in these transfers.

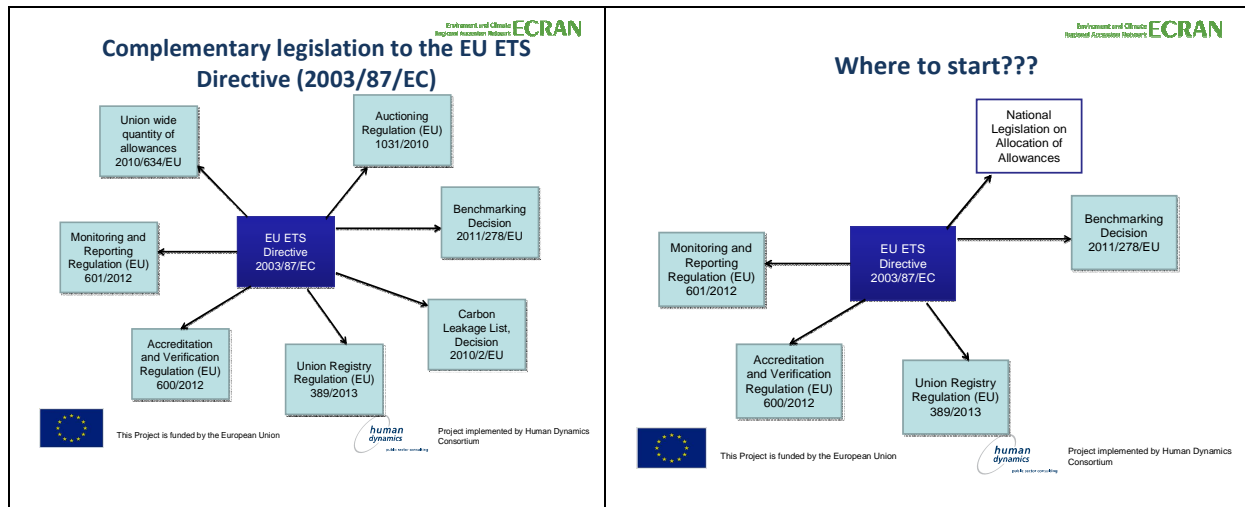
#### Formulation of action plan for EU ETS implementation – (Imre Csikós and Monique Voogt, ECRAN)

The potential steps for the accession countries were outlined:

- **Step 1. Prepare an ETS Implementation Plan to determine:**
  - Required tasks, costs and associated staffing
  - Identify the list of activities (operators of stationary installations of Annex I and Aircraft operators)
- **Step 2. Designate the Competent Authority to implement/regulate:**
  - Auctioning (decide to work with own or existing platform)
  - Issuing of permits and allowances
  - National Implementation Measures (NIMs)
  - Monitoring, reporting, verification, accreditation
  - Registry work (Union Registry)
  - Organise internal and external information streams including public access to information
- **Step 3. Develop necessary legislation :**
  - Recommended to start with MRV legislation and permitting legislation
  - Following that start developing legislation that regulates the inclusion of stationary installations (Annex I) and aviation sector; Allocation and issuing of allowances (NIMs); Registry functioning; Transfer, surrender and cancellation of allowances; Use of credits (accept only credits from LDCs and not from nuclear installations and not from LULUCF and



not from large hydropower); Auctioning (own platform or existing platform); Public participation and access to information.



- **Step 4: Determine Capacity Building requirements for implementation:**
  - For Authorities
  - For operators!
  - Information campaigning to explain in simple terms to general public
- **Step 5: Assess the following:**
  - Installations that are considered carbon leakage prone
  - Installations that may receive emission allowances for free (based on efficiency benchmarking)
- **Step 6. Consider Monitoring, Reporting, Verification and Accreditation as a first step:**
  - Prepare Guidance Materials (use the existing guidance and templates)
  - Develop an IT based system (electronic reporting) (recommended for large market!)
  - Establish Accreditation body to accredit verifiers
- **Step 7: Learn the actual trading**
  - Consider as a first step to use monopoly money (to learn)
  - Establish a National Registry (modelled along the requirements of the Union Registry so that linking with the ITL though the EUTL is possible)
  - Consider national or regional trading
- **Step 8. Set up compliance structures:**
  - Inspectorates to check verified emission reports
  - Ensure secure trading through national registries
  - Training of inspectorates



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- MRV (Monitoring, Reporting and Verification) is the backbone of the EU-ETS. It requires: (1) Precise, well-defined requirements on the monitoring, reporting and verification of emissions; (2) Adherence by the aircraft operators to the basic principles of MRV, i.e. Completeness; Consistency and Comparability; Transparency; Accuracy; Integrity of Methodology; Continuous Improvement; (3) A well-defined structure and format for the monitoring, reporting and verification of emissions and (4) Each actor in the Compliance Cycle plays its role as required and is aware of its own responsibility
- An overview of the web links to the corresponding legislation and templates was provided

#### Afternoon session – TALEX missions - Country priorities

Participants were requested to indicate what priorities would need to be addressed when the ETS missions would be organised in the countries. To this end participants prepared a draft programme for a potential TALEX mission to be held in their countries. A summary of the results is outlined here below:

- **Albania:** Workshops for competent authorities, with focus on setting priorities in transposition of MRR and AVR.
- **Serbia:**
  - Capacity building workshop for the larger industrial operators, with specific case studies at installation level
  - Peer-to-peer support for the accreditation body
  - In-house session with large industrial operators to complete monitoring plan
- **Kosovo\***
  - Support in preparation of legislation
  - Preparation of workshops for operators
- **Croatia:** Dedicated verification trainings (Similar to the UK verifier workshops; Target audience of 5 verification bodies and the energy inspectors; approx. 20 persons in total)
- **The former Yugoslav Republic of Macedonia:**
  - Tailor-made workshop with the operators and the competent authority to learn directly from each other
  - Develop a guideline for operators to complete the monitoring plan
  - Capacity building on accreditation
- **Montenegro:** Action plan for ETS requirements on implementation in the longer term







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## V. Evaluation

13 Participants (excluding the presenters) filled in the evaluation form which is a response of 100%.

The results of the evaluation shows that the workshop was very well received, where 12 participants indicated that attending the workshop was time well spent for them and only 1 participant consider this aspect as average. Also, 12 participants rated the workshop as high level (rated between excellent and good) and all participants rated the facilitators between excellent and good.

Furthermore 8 participants claim 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 (4 participants rated this aspect as average).

### Statistical Information

#### Statistical Information

1.1	Workshop Session	<b>Operating a Competent Authority for the EU ETS</b>
1.2	Facilitators name	Imre Csikós (ECRAN)/ Monique Voogt (ECRAN)/ Harm van de Wetering (NEA); Margreet Kleijn (NEA); Charlotte Spitters (NEA); Alex Pijnenburg (NEA); Bas Kroon (NEA); Astrid Pols (NEA); Ton Grosjean (NEA); Heidi De Prez, Walloon Air & Climate Agency; Juriaan Mieog (Royal HaskoningDHV); J Koetse (Air Products Nederland)
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
1. 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.	IIII III (67%)	III (33%)	
2. Insight in the approaches and experiences in the implementation of both regulations in EU Member States	IIII III (62%)	IIII (38%)	
3. Better understanding of the required human and institutional resources for the implementation of the two regulations as part of an ETS system conform to the EU ETS requirements.	IIII III (69%)	III (31%)	
4. Insights in the lessons learned, the risks involved and the bottlenecks of ETS implementation.	IIII III (62%)	IIII (38%)	

## Workshop and Presentation

Please rate the following statements in respect of this training module:

Aspect of Workshop	Excellent	Good	Average	Acceptable	Poor	Unacceptable
1 The workshop achieved the objectives set	IIII IIII (77%)	III (23%)				
2 The quality of the workshop was of a high standard	IIII II (54%)	IIII (38%)	I (8%)			
3 The content of the workshop was well suited to my level of understanding and experience	IIII III (62%)	III (23%)	II (15%)			
4 The practical work was relevant and informative	IIII I (50%)	III (25%)	II (17%)	I (8%)		
5 The workshop was interactive	IIII IIII (77%)	III (23%)				
6 Facilitators were well prepared and knowledgeable on the subject matter	IIII III (67%)	IIII (33%)				
7 The duration of this workshop was neither too long nor too short	IIII (38%)	IIII (38%)	II (15%)	I (9%)		
8 The logistical arrangements (venue, refreshments, equipment) were satisfactory	III (23%)	IIII (38%)	III (23%)		I (8%)	I (8%)
9 Attending this workshop was time well spent	IIII IIII (69%)	III (23%)	I (8%)			



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## Comments and suggestions

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

### **Workshop Sessions:**

- Too much information in limited time
  - Good
  - Well organised
  - More practical activities (fulfilment of MP, ER) could bring greater benefit
  - Excellent definitely
  - Interesting and well prepared
  - I have no remarks,, only maybe of more practical work was planned would be better
  - Some experts didn't adjust their presentations to the region needs. They were focused on the problems that MS are facing by implementing EU ETS
- 

### **Facilitators:**

- Good
  - Excellent
  - Very good
  - Excellent experts
  - Great, enthusiastic, interesting, gave really great insight
- 

### **Workshop level and content:**

- Very well
  - Very useful for further work
  - I expected a better organisation by TAIEX
  - Organisation was good, but TAIEX rule especially in regard to travel are almost unacceptable and could imply less participants in the future
  - More practical work needed
  - Excellent
  - Good, but too advanced from countries on the beginning of implementation of ETS
  - Great for Croatia, maybe too advanced for the other countries in the region
- 



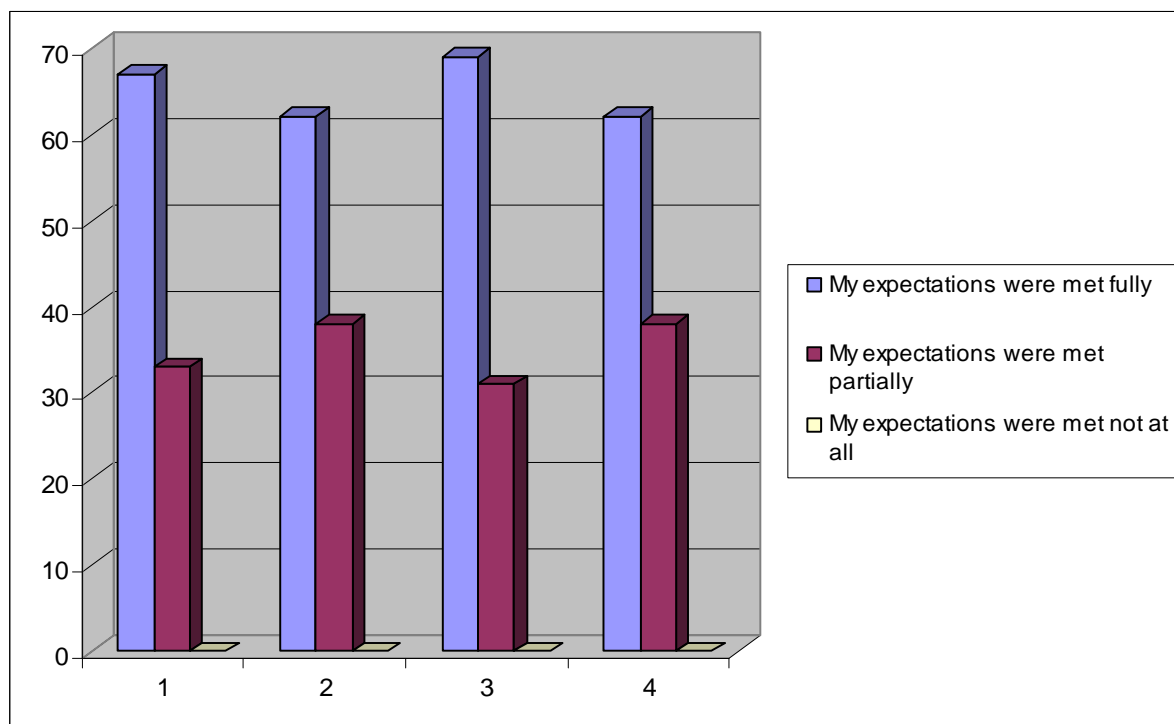
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## EXECTIONS OF PARTICIPANTS

1. 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.
2. Insight in the approaches and experiences in the implementation of both regulations in EU Member States
3. Better understanding of the required human and institutional resources for the implementation of the two regulations as part of an ETS system conform the EU ETS requirements.
4. Insights in the lessons learned, the risks involved and the bottlenecks of ETS implementation.

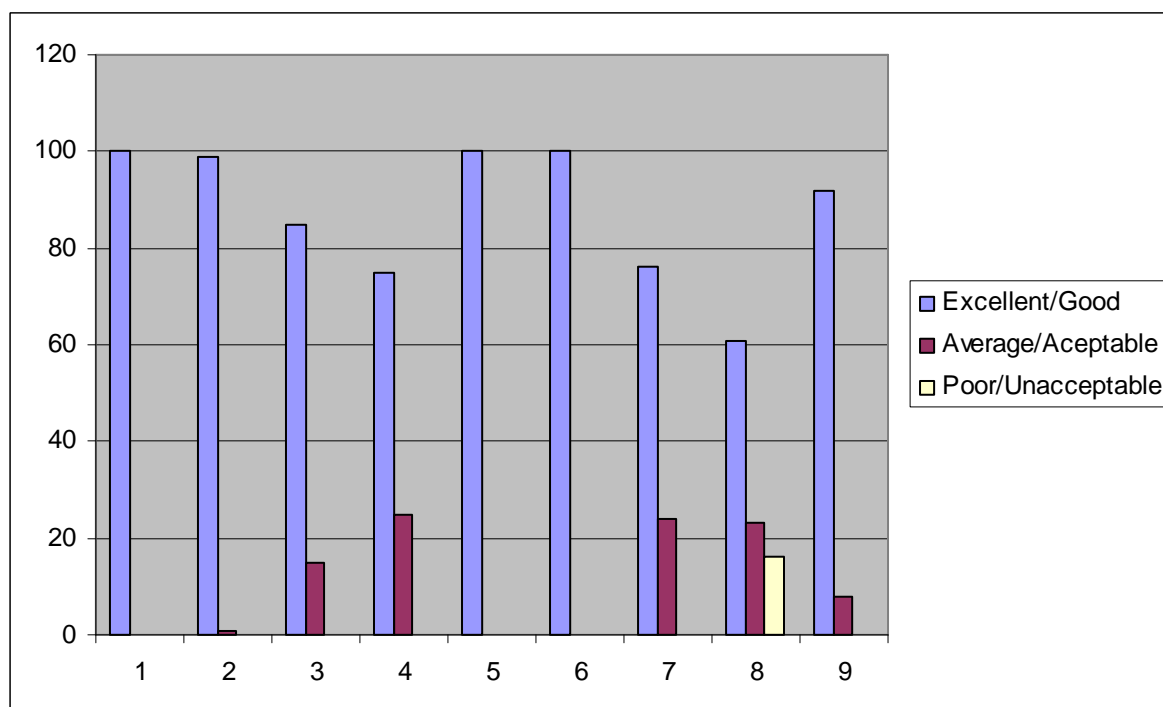


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- 1 The workshop achieved the objectives set
- 2 The quality of the workshop was of a high standard
- 3 The content of the workshop was well suited to my level of understanding and experience
- 4 The practical work was relevant and informative
- 5 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



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## ANNEX I – Agenda

Day 1: 23 <sup>rd</sup> of September. Location: Tauro office, Koninginnegracht 19, The Hague, the Netherlands				
Start	Finish	Topic	Speaker	Sub topic/Content
09:30	10:00	<b>Coffee and registration</b>		
10:00	10:15	Formal opening, word of welcome	Harm van de Wetering, Dutch Emission Authority	
10:15	10:45	ECRAN and the ambitions of this workshop	Monique Voogt, ECRAN	<ul style="list-style-type: none"> <li>• Introduction to ECRAN and the ETS Workgroup</li> <li>• Aims of the workshop and planned activities</li> <li>• Introductions to speakers, trainers and audience</li> </ul>
10:45	11:15	Setting up an ETS Competent Authority	Monique Voogt, ECRAN; on behalf of the European Commission, DG Climate Action	<ul style="list-style-type: none"> <li>• Needs and key choices for setting up an ETS CA</li> <li>• Exchange of knowledge and experiences in Europe</li> <li>• Requirements for CAs</li> </ul>
11:15	12:30	The NEa: overview of activities and organisation	Harm van de Wetering, Dutch Emission Authority	<ul style="list-style-type: none"> <li>• Historic setting</li> <li>• Key choices made, lessons learned and impacts</li> <li>• Practical organisation: the structure and capacity Requirements</li> <li>• Preserving market integrity in the system</li> </ul>
12:30	13:30	<b>Lunch</b>		
13:30	14:15	Starting ETS: Permitting procedure, issuing and registration	Margreet Kleijn, Dutch Emission Authority	<ul style="list-style-type: none"> <li>• Identification of installations (scope ETS)</li> <li>• Communication and education of operators</li> <li>• Organisation and responsibilities</li> <li>• Lessons learned and capacity requirements</li> </ul>



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Day 1: 23 <sup>rd</sup> of September. Location: Tauro office, Koninginnegracht 19, The Hague, the Netherlands				
Start	Finish	Topic	Speaker	Sub topic/Content
14:15	15:30	Evaluation of the Monitoring Plan	Charlotte Spitters, Dutch Emission Authority	<ul style="list-style-type: none"> <li>The evaluation procedure</li> <li>The checklist explained</li> <li>Practical exercise in working with the check lists</li> </ul>
<b>15:30</b>	<b>15:45</b>	<b>Coffee break</b>		
15:45	16:30	Allocation procedures	Alex Pijnenburg, Dutch Emission Authority	<ul style="list-style-type: none"> <li>Allocation procedures and the benchmarking agreement</li> <li>Process to establish the NIMs</li> <li>Handling of NEC requests</li> </ul>
16:30	16:45	Wrap-up 1 <sup>st</sup> day / organisational matters 2 <sup>nd</sup> day	Monique Voogt, ECRAN	

## Day 2: 24<sup>th</sup> of September: site visit to the Hydrogen plant of Air Products

- 9.00 Leaving The Hague by bus (pick up at the Carlton Ambassador hotel)
- 10.00 Welcome by Air Products
- 10.15 Introduction hydrogen plant
- 10.35 From production process to monitoring protocol and monitoring methodology
- 11.15 Monthly reporting
- 11.45 Annual verification and Annual reporting
- 12.15 Short site tour
- 13.00 Lunch
- 13.30 Bus trip back to The Hague



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Day 3: 25 <sup>th</sup> of September. Location: offices of the Ministry of Infrastructure and Environment, Plesmanweg 1-6, The Hague, the Netherlands				
Start	Finish	Topic	Speaker/trainer	Sub topic/Content
09:15	09:40	Coffee and registration		
09:40	10:00	Summary of first and second day	Monique Voogt, ECRAN	
10:00	11:10	CO2 registry	Bas Kroon, Dutch Emission Authority	<ul style="list-style-type: none"> <li>• The role and functioning of the CO2 registry system</li> <li>• European Union Transaction Log (EUTL) and communication link</li> <li>• Capacity requirements and time planning</li> <li>• Demonstration registry</li> </ul>
11:10	11:30	Coffee break		
11:30	12:15	The monitoring process and validation of emission reports	Astrid Pols, Dutch Emission Authority	<ul style="list-style-type: none"> <li>• Organisation process and overview of activities</li> <li>• Lessons learned</li> <li>• Capacity requirements and time planning</li> </ul>
12:15	12:45	The importance of IT and electronic reporting in EU ETS	Heidi De Prez, Walloon Air & Climate Agency	<ul style="list-style-type: none"> <li>• Concept of e-reporting, pros and cons</li> <li>• Availability of systems</li> <li>• Approaches to implementation</li> </ul>
12:45	13:45	Lunch break		



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Day 3: 25 <sup>th</sup> of September. Location: offices of the Ministry of Infrastructure and Environment, Plesmanweg 1-6, The Hague, the Netherlands				
Start	Finish	Topic	Speaker/trainer	Sub topic/Content
13:45	14:30	Supervision and enforcement	Ton Grosjean, Dutch Emission Authority	<ul style="list-style-type: none"> <li>• Risk based approach</li> <li>• Organisation process</li> <li>• Site visits</li> <li>• Capacity requirements and time planning</li> </ul>
14:15	15.15	Formulation of action plan for EU ETS implementation	Participants, supported by ECRAN staff	Working session to formulate national/regional action plans
15:15	15:30	<b>Coffee break</b>		
15:30	16:15	Formulation of action plan for EU ETS implementation	Facilitated by Imre Csikós & Monique Voogt	Plenary session <ul style="list-style-type: none"> <li>• Main steps identified in action plans</li> <li>• Points of discussion</li> <li>• Identification of key necessities</li> </ul>
16.15	16.30	Wrapping up, next steps and future ECRAN workshops	Monique Voogt , ECRAN	<ul style="list-style-type: none"> <li>• Lessons learned from last days</li> <li>• Next steps in ECRAN WG3</li> <li>• Identification of further needs</li> </ul>
16.30	16.45	Closing	Ton Grosjean, Dutch Emission Authority	



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## 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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