Report on the legal implementation of the EU ETS at Member State level

Prof. Jonathan Verschuuren, Dr. Floor Fleurke
Tilburg Sustainability Center, TSC

Publication Date: 09 / 2014
Executive Summary
The integrity of the European Union Emission Trading Scheme (EU ETS) relies upon consistent and uniform implementation and enforcement across all 31 participating states. The compliance cycle of the ETS - consisting of compliance assistance, inspection and enforcement - is a continuous dynamic, complex process. Although harmonisation of monitoring, verification and reporting (MRV) has improved, the functioning of the ETS compliance practice in the different Member States varies greatly. This is due to differences in underlying principles of enforcement strategies, institutional settings and in funding. While compliance rates are currently high, efforts should be afforded to ensuring more harmonized practice with a view to likely future price increases of allowances.
# Table of Contents

Executive Summary .................................................................................................................. 2

1 Introduction ........................................................................................................................... 6

2 Summary of Work Performed ................................................................................................. 7

3 Results and Conclusion ......................................................................................................... 8

3.1 Complying with the EU ETS: Theory and Existing Knowledge ..................................................... 8

3.1.1 Key legal obligations of participating operators in the EU ETS .................................................. 9

3.1.2 The Compliance Cycle of the EU ETS ..................................................................................... 11

3.1.3 Sanctions .................................................................................................................................. 12

3.1.4 Member State Sanctions ......................................................................................................... 15

3.2 Towards more harmonization and centralization: description of amendments to EU ETS legislation aimed at improving compliance .................................................................................. 17

3.2.1 Phase I (2005-2007) .............................................................................................................. 17

3.2.2 Phase II (2008-2012) ............................................................................................................ 19

3.2.3 Phase III (2013-2020) .......................................................................................................... 22

3.2.4 Conclusion ............................................................................................................................. 26

3.3 Case study: Germany ............................................................................................................. 28

3.3.1 Legal Implementation EU ETS .............................................................................................. 28

3.3.2 National competent authority .............................................................................................. 29

3.3.3 National Allocation Plan ....................................................................................................... 30

3.3.4 Enforcement tasks .................................................................................................................. 30

3.3.5 Other compliance mechanisms: help desk for operators, collaboration across the EU .......... 34

3.3.6 Supervision by the Commission ............................................................................................ 34

3.4 Case study: The Netherlands ................................................................................................ 35

3.4.1 Legal implementation EU ETS .............................................................................................. 35

3.4.2 National competent authority .............................................................................................. 35

3.4.3 National Allocation Plan ....................................................................................................... 36

3.4.4 Enforcement Tasks ................................................................................................................ 37

3.4.5 Other compliance mechanisms: help desk operators, collaborations across the EU .......... 40

3.5 Case study: Greece ................................................................................................................. 41

3.5.1 Legal Implementation EU ETS .............................................................................................. 41

3.5.2 National Competent Authority ........................................................................................... 42

3.5.3 National Allocation Plan ....................................................................................................... 43

3.5.4 Enforcement Tasks ................................................................................................................ 44
3.5.5 Other compliance mechanisms: help desks for operators, collaboration across EU 46

3.6 Case study: Poland ........................................................................................................49
  3.6.1 Legal implementation of EU ETS .................................................................50
  3.6.2 National competent authorities ...............................................................53
  3.6.3 National Allocation Plans .................................................................55
  3.6.4 Enforcement tasks ..............................................................................56
  3.6.5 Other compliance mechanisms: help desks for operators, collaboration across EU 61

3.7 Case Study: United Kingdom ...............................................................................64
  3.7.1 Legal Implementation EU ETS .................................................................64
  3.7.2 National competent authority ...............................................................65
  3.7.3 National Allocation Plan .................................................................65
  3.7.4 Enforcement tasks ..............................................................................66
  3.7.5 Other compliance mechanisms: help desk for operators, collaboration across the EU 70

3.8 Case Study: Hungary ..........................................................................................72
  3.8.1 Legal Implementation EU ETS .................................................................72
  3.8.2 National competent authority ...............................................................73
  3.8.3 National Allocation Plan .................................................................74
  3.8.4 Enforcement tasks ..............................................................................74
  3.8.5 Other compliance mechanisms: help desk for operators, collaboration across the EU 76

3.9 Evaluation of the EU ETS with a focus on compliance: conclusions ..................77

4 References ..............................................................................................................80

5 List of Abbreviations ...............................................................................................82
1 Introduction

In this report, we carry out an ex-post evaluation of the legal implementation of The European Union Emissions Trading Scheme (EU ETS) at Member State level. The EU ETS legislation originally left a considerable amount of discretion to Member States. Earlier reports have indicated that the decentralised approach pursued in the Directive has adversely affected the effectiveness of the system. Subsequent amendments to EU ETS legislation has gradually reduced the level of decentralization. The latest changes made to the ETS, the ones that apply to the current trading phase (2013-2020), have greatly centralized the ETS. Particularly regarding enforcement issues various elements of the ETS however remain within the domain of the Member States. The effectiveness and reliability of the ETS, therefore, partly depends on the effort of each of the 31 participating States. A lack of compliance in one or a few Member States may harm the functioning of the ETS in the entire EU.
This issue becomes even more pressing when third states are joining the EU ETS. The EU’s policy is aimed at a gradual expansion of the ETS, with the final aim of transforming the ETS into a global system. It is expected that harmonization of the compliance mechanism will form a central element of the legal arrangements aimed at the integration of ‘foreign’ ETSs into the EU ETS.
We focussed our research mainly on the implementation of the provisions aimed at enhancing compliance (monitoring, verification and enforcement), however, without losing sight of the broader functioning of the ETS. In order to fully understand our findings, it is necessary to also sketch the broader functioning of the ETS.

---

1 Participating States are the 28 Member States of the EU and Norway, Iceland and Liechtenstein.
2 Summary of Work Performed

As indicated above, many amendments were made to the ETS after the first two phases. Our evaluation therefore is mainly aimed at the first experiences in the current, third, phase. The research question for this report, therefore, was:

*Has the effectiveness of the compliance mechanism of the EU ETS improved in the third phase (2013-2020)? What further improvements (if any) are necessary?*

To answer this central research question, we set the following steps. First, in Paragraph 3.1, we will generally describe the theory of the compliance cycle of the EU ETS. Then, in Paragraph 3.2, we will in more detail review the various changes that were made in the various EU legal instruments that build the EU ETS, with a special focus on reporting, verification, monitoring and compliance. How has the EU legislature tried to improve the compliance mechanism? The methodology of these first two steps is the desk study method: we researched existing sources (academic literature, research reports and other type of evaluations, relevant case law of national and EU courts). The next five paragraphs (par. 4-8) hold the case study reports for the selected EU Member States (Germany, Netherlands, Poland, Greece, the UK and Hungary). These chapters present an analysis of the implementation of the obligations set out in the Directive in these Member States. Here, we turn to the question of how the compliance mechanisms have played out in the context of the EU ETS at domestic level, drawing on experiences in different Member States. In this part it is particularly important to examine whether recent amendments regarding the compliance chain are likely to improve the effectiveness of the system. National legislation has been examined and compared and the organizational and administrative structures have been analysed, including oversight instruments. Public data was gathered both by means of desk study and on the basis of interviews with persons from various institutions involved in the compliance mechanism. The selection of Member States was done in cooperation with the other research institutes involved in ENTRACTE (finalized in the Dublin meeting in 2013) and represents a mix of new and old Member States, large and smaller countries, as well as a regional spread across Europe. In Chapter 9, we will present our conclusions.
3 Results and Conclusion

3.1 Complying with the EU ETS: Theory and Existing Knowledge

The EU ETS is the largest trading program in the world designed to combat global climate change. The theory behind emissions trading is that a market mechanism is established in order to mitigate greenhouse gasses. After a cap is set and potential polluting firms have obtained allowances to emit, they can either (1) reduce their emissions and sell their allowances by for example investing in technological innovation; (2) use their allowances in order to cover their emissions; or, (3) increase their emissions by buying additional allowances on the market. However, the effectiveness of the system – scrutinized since its inception in 2005 by both economists and lawyers - thus far is disappointing.

The crucial importance of a well-developed and operationalized compliance chain has been neglected in the original design. In fact, a striking paradox of the EU ETS is that while the idea is that the market should be the place to regulate CO₂ emissions, the system only functions if it operates in a well regulated context. Market participants must have the confidence that the system is transparent and consistent, and that it guarantees a level playing field for all actors in the 31 participating States. In this regard, information on emission allowances, on the amount of allowances that are surrendered, and information on actual emissions is essential. Monitoring, reporting and verification of this process are therefore of vital importance for effective enforcement. Compliance in this sense means monitoring the operation of covered installations to ensure that they operate in accordance with the requirements of the EU ETS in order to determine whether further inspection or enforcement is necessary to ensure compliance.

As stated above, this report examines the legal implementation of monitoring, verification and compliance obligations of the EU ETS within different selected Member States. By learning lessons from how compliance has been effectuated in a system consisting of multiple jurisdictions, we are able to identify the key legal issues that will rise when the EU ETS is linked to other greenhouse gas trading systems.

The EU ETS legislation originally left a considerable amount of discretion to Member States. This particularly included operational elements of emission trading, such as registration, monitoring, verification, reporting and enforcement issues. Only after European law enforcement agencies signaled that in some European countries carbon trading fraudsters may have accounted for up to 90% of all market activity, with criminals pocketing billions, the compliance issue received increased attention. Moreover, different strategies for ensuring compliance among Member States give rise to distortions of the market for greenhouse gas allowances. The effectiveness and reliability of the ETS, therefore, to a significant extent depends on the effort of each of the Member States. Lack of compliance of only a few or even a single Member State can harm the functioning of the ETS in the entire EU. This issue becomes even more pressing when third states are joining the EU ETS. This is foreseen, as

---


6 Ibid., 171-172.

the EU’s policy is aimed at a gradual expansion of the ETS, with the final aim of transforming the ETS into a global system. Australia has expressed interest in linking to the EU ETS in the past, and most EFTA countries were linked earlier. From a theoretical perspective, linking emission-trading systems will increase efficiency of the system by exploiting marginal abatement costs of firms in the enlarged system.\textsuperscript{7} In practice, the success of the system will depend on how implementation challenges are tackled, in particular concerning monitoring, verification and enforcement. The Commission already emphasised the importance of oversight and enforcement in its Green Paper on emission trading in the year 2000, by stating that:

‘The purpose of strict compliance provisions and enforcement is to enhance confidence in the trading system, make it work in an efficient way in accordance with the rules of the internal market and at the same time increase the likelihood of achieving the desired environmental result.’\textsuperscript{8}

In reality, not much attention has been dedicated to this important aspect.\textsuperscript{9} Gradually, however, a series of amendments of the scheme’s operational aspects have been adopted.

### 3.1.1 Key legal obligations of participating operators in the EU ETS

**a. The Greenhouse Gas Emissions permit**

The essence of the EU ETS is that every installation falling within the scope of the system surrenders an amount of emission rights that is equal to the amount of emissions emitted during a year. This entails obligations for the operators covered, who need to be identified here first.

Since CO\textsubscript{2} may no longer be emitted by operators without a GHG emissions permit, this permit can be qualified as the core legal instrument in the Directive 2003/87 (hereafter: ‘The Directive). The competent authority can only issue a permit if it is satisfied that the operator is capable of monitoring and reporting emissions.\textsuperscript{10} In the permit, the specific activities of the installation(s) are described, as well as the main conditions for operating within the EU ETS.

The permit must include the core obligation for the operator to surrender allowances equal to the total emissions of the installation in each calendar year, within 4 months following the end of that year.\textsuperscript{11} In addition, the operator is required to inform the competent authority of any changes planned in the nature or functioning, or an extension, of the installation that might require updating of the emission permit.\textsuperscript{12} Of paramount importance is the monitoring plan, without which the permit cannot be granted.\textsuperscript{13} The EU provides for an extensive harmonized regulatory framework for the monitoring, reporting and the verification (MRV) to be implemented by the Member States to be discussed briefly next.


\textsuperscript{9} M. Peeters was an early signaller of this important issue. See M. Peeters, ‘Inspection and market-based regulation through emission trading: the striking reliance on self-monitoring, self-reporting and verification’ Utrecht Law Review (2006) 2(1), 177-195.

\textsuperscript{10} Directive 2003/87, art. 4.

\textsuperscript{11} Directive 2003/87, art. 6(2)(e).

\textsuperscript{12} Directive 2003/87, art. 7.

\textsuperscript{13} Directive 2003/87, art. 6(2)(c) and (d),14 and 15.
b. Monitoring, Reporting and Verification (MRV)

The Directive requires that the GHG emissions permit contain a monitoring plan, specifying detailed, complete and transparent documentation, including a risk assessment.\textsuperscript{14} Hence, emissions have to be monitored in accordance with the rules of the Commission Regulation 601/2012/EU on the monitoring and reporting of greenhouse gas emissions, and competent authorities must ensure that each operator of an installation reports the emissions from that installation during each calendar year after the end of that year.\textsuperscript{15} An update of the monitoring plan does not necessarily has to labeled as ‘a change’ that would require an update of the GHG emissions permit.\textsuperscript{16}

Monitoring provisions require the use of certain monitoring methodologies and detailed specific sector rules. Operator must take account of different aspects, such as the location of the measurement equipment, calibration and measurement, quality assurance and control, missing data and uncertainties.\textsuperscript{17} The principle of constant improvement of performance in monitoring and reporting emissions should encourage in continuously finding new improved approaches, herby supported by the verifier.

In addition to the monitoring requirements, according to Article 6(2)(d) of the Directive the operator must draft and submit an emission report.\textsuperscript{18} Ultimately, Member States have to confirm that each operator of an installation reports the emissions from that installation during each calendar year to the competent authority after the end of that year. The emission reports have to be verified by an independent and certified verifier.\textsuperscript{19} The verifier has to carry out the verification with the aim of providing a verification report that concludes with ‘reasonable assurance’ that the operator’s or aircraft operator’s report is free from material misstatements.\textsuperscript{20} This should guarantee the quality and reliability of the self-monitoring and self-reporting system that relates to very complex and technical matters. The verifier who is commissioned by the operator must carry out its activities with ‘an attitude of professional skepticism recognizing that circumstances may exist that cause the information in the operator’s or aircraft operator’s report to contain material misstatements’.\textsuperscript{21}

Importantly, since 2012 there is an obligation for the verifier to include irregularities in the competent authority even if the monitoring plan concerned approves the verification report. There are detailed rules regarding how verification should be conducted. For example, detailed testing of the data, including tracing the data back to the primary data source, cross-checking data with external data sources should be performed. During the verification process the verifier must also conduct a site visit in order to assess the operation of measuring devices and monitoring systems and to conduct interviews.\textsuperscript{22} Although it is very important that the verification tasks are carried out ‘in the public interest’, Member State authorities remain ultimately responsible in checking whether compliance exists.

\textsuperscript{14} Ibid., art. 6(2)(c), art. 12.
\textsuperscript{16} Directive 2003/87, art. 6(2)(c) .
\textsuperscript{17} 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 the Council, Section 3 and art. 57. There are specific provisions for the aviation sector.
\textsuperscript{19} Directive 2003/87, art 15 and Regulation 600/2012/EU of 21 June 2012 on the verification.
\textsuperscript{20} Regulation 600/2012/EU, art. 7.
\textsuperscript{21} Ibid.
\textsuperscript{22} Ibid., art. 21.
c. Register
All transactions must be electronically submitted in a Register in order to ensure accurate data on transfers and submission or cancellation of emissions. In that way, transaction logs are crucial for the functioning of a trading system such as the ETS. If the integrity of the Register is harmed this can lead to substantial fraud and cybercrime, including the double counting of surrendered allowances or identity theft. To secure this integrity, a EU-wide registry (European Union Transaction Log) has replaced the national registries during the third phase (2013-2020) of the EU ETS.

3.1.2 The Compliance Cycle of the EU ETS
The rules on compliance and enforcement have now been for the most been part harmonized. Nevertheless, Member States have an indispensable role to play in ensuring the effectiveness of the ETS. The active role of Member States in setting up compliance strategies is also important for ensuring that competition of the industry covered is not seriously distorted, and that there remains a ‘level playing field’. Therefore an examination of how Member States perform their implementation and enforcements duties is appropriate. The Commission has an important task to perform here, since there is an incentive not to be too strict on their own. Compliance issues in emission trading differ from standard command and control regulation in typical environmental law. As Peeters pointed out, the classical way of enforcement in the case of command and control comes in the form of static obligations for firms, like binding limit values for their emissions, or the obligatory application of specific techniques. These obligations for firms covered do not change unless the permit is amended. In emissions trading however, the obligations in the emission permit are dynamic: the amount of allowances that need to be surrendered fluctuates depending on the exact amount of gases emitted. This is a challenging and highly complex task to bear upon the operators of covered installations and continuous control and oversight of this task by Member State authorities is inevitable. Weishaar in this regard even suggests that the ETS ‘necessitates a system that may, perhaps, be even more stringent than in the case under comparable command and control instruments’.

When thinking of compliance and inspection as ongoing effort involving both operators and competent authorities, one has to bear in mind the complete compliance cycle from compliance assessment through undertaking site visits, compliance assistance by communication and persuasion and ultimately sanctioning. The carrying out of this compliance cycle includes the following activities:

- Information and communication facilities
- Site visits and consideration of the results
- Monitoring achievements
- Verification of self-monitoring and self-reporting

26 Peeters (2006), 171-172.
27 Ibid.
- Controlling equipments
- Controlling systems and procedures
- Controlling the relevant records and measurement systems
- Controlling the emission permit to ensure that the activities described in the monitoring plan reflect the reality of the site in relation to the consistency and completeness of the monitoring of the emissions
- Controlling the verified emissions report.\(^{29}\)

Ideally, a compliance assessment by the competent authority will be produced based upon a risk assessment taking into account the complexity of the installation, the level of emissions, the history of the installation and its operator, the time required for visits and the verifier report. Here, “instrument sequencing” whereby enforcement agencies dispose of a range of instruments, ranging from soft to hard is also of relevance. Regulators that are in a long-term relationship with regulatees, as is in particular the case within the dynamic context EU ETS, will want to foster good relationships that are conducive to sustained and long-term compliance. Therefore, upon becoming aware of an infringement, they will first seek to educate and persuade rather than to resort to the more extreme coercive measures that they also have at their disposal. In fact, it is the coercive powers enforcement agencies can yield which accounts for the effectiveness of less draconic enforcement policies. Socio-legal scholars refer to ‘negotiating under the shadow of the law’ to explain this dynamic. As will become clear from the country reports in this study, the extent to which these are undertaken depends to the regulatory approach chosen by the competent authorities. This approach in itself depends on factors such as regulatory tradition, the principles underlying the enforcement strategy, the form of implementation, but also to the available resources. Compliance systems differ among Member States and not all Member States will use the same instruments.

In this regard a EU ETS Compliance Forum has been brought to life. Purpose of this Forum where all Member States can participate on a voluntary basis to exchange information, best practices and difficulties concerning the operation of the EU ETS. Specific tasks forces are organized where priorities are placed on the agenda. Another instrument to foster harmonization is the use of standardized IT systems, which in particular in the case of such a complex and highly technical matter as emission trading could prove to be effective.

### 3.1.3 Sanctions

The EU ETS Directive requires Member States to put in place a system of penalties which is effective, proportionate and dissuasive but the nature of the penalties is largely left to Member State discretion. There exists however an important exception to this rule. Each year by 30 April the latest, the operator of an installation has to surrender a number of allowances equal to the total emissions from that installation during the preceding calendar year.\(^{30}\) Failure to comply with that obligation will result in a penalty, in addition to the publication of the name of the offending operators.\(^{31}\) The penalty of ‘naming and shaming’ is a novelty in European secondary environmental legislation. The idea is that covered installations are usually conscious about their reputation and therefore this penalty would


\(^{30}\) Directive 2003/87, art. 12(3).

\(^{31}\) Directive 2003/87, art. 16(3) and (4).
increase compliance.\textsuperscript{32} In addition to the excess emissions penalty, the operator is still obliged to surrender an amount of allowances equal to the excess emissions.\textsuperscript{33} In a recent preliminary ruling case the question was raised by the Swedish court whether Article 16(3) and (4) mean that an operator who has not surrendered a sufficient number of emission allowances by 30 April must pay a penalty regardless of the cause of the omission, for example, where, although the operator had a sufficient number of emission allowances on 30 April, as a result of an oversight, an administrative error or a technical problem it did not surrender them then.\textsuperscript{34} In addition, the Swedish court asked if Question 1 is answered in the affirmative, does Article 16(3) and (4) of Directive 2003/87 mean that the penalty will or may be waived or reduced for example under certain circumstances.

The case is significant, if only because it is the first time that the CJEU pronounces on issues pertaining to the enforcement of the emission trading system. It is therefore worth to elaborate on.

The circumstances that gave rise to the questions were chiefly as follows. As at 30 April 2007, the Billerud companies had not surrendered the allowances equal to their emissions for 2006 (10 828 and 42 433 tonnes respectively). Consequently, the Naturvårdsverket imposed the penalty provided for by Swedish Law No 2004:1109 implementing Directive 2003/87, in the amount of SEK 3 959 366 for one company and SEK 15 516 051 for the other (EUR 433 120 and EUR 1 697 320). The Billerud companies challenged those penalties before the national court essentially because, as at 30 April 2007, they had sufficient emission allowances in their holding accounts to cover their total emissions for 2006. They argued that this proved that they had not intended to circumvent their obligations, and that the alleged failure to surrender their allowances on time was due to internal administrative breakdown.

The Court of Justice summarized the first question as asking whether the concept of punishable ‘excess emissions’ must be construed as concerning excessively polluting conduct \textit{per se}, in which case the penalty would be payable only by operators who do not have the sufficient number of allowances on 30 April of each year, or whether it instead consists solely in the failure to surrender the allowances equal to the emissions for the preceding year by 30 April, irrespective of the reason for the non-surrender or the number of allowances actually held by the operators concerned.\textsuperscript{35} The first literal reading advocated by the Billerud companies, is based on a literal interpretation of the expression ‘excess emissions’ in Article 16(3) and (4) of Directive 2003/87, which would mean that the actual possession, on 30 April of the current year, of a sufficient number of allowances to cover the emissions for the preceding year would mitigate any penalty payable.

The Court of Justice rejected this argument on the following grounds. First, the obligation in Article 12 is the only one for which Directive 2003/87 itself provides for a specific sanction, whereas the sanction for any other conduct contrary to its provisions is, under Article 16, left to the discretion of the Member States. The key role of the allowance surrender process in the scheme of the directive is also apparent from the fact that being ordered to pay the penalty does not release the operator from the obligation to surrender the corresponding allowances during the surrender process the following year.\textsuperscript{36} Second, although the ultimate purpose of the emission trading regime is environmental protection, the infrastructure needed to attain that purpose is the strict accounting of the

\textsuperscript{33} Directive 2003/87, art. 16(3).
\textsuperscript{34} Case C-203/12, \textit{Billerud Karlsborg AB, Billerud Skärblacka AB v Naturvårdsverket} of 17 October 2013, n.y.r.
\textsuperscript{35} Ibid., para 23.
\textsuperscript{36} Ibid., para 25.
issue, holding, transfer and cancellation of allowances.\textsuperscript{37} Accordingly, Article 16(3) and (4) of the Directive has as its object and effect to penalise not 'polluters' generally, but rather those operators whose number of emissions for the preceding year exceeds, as at 30 April of the current year, the number of allowances listed in the section of the surrendered allowance table designated for their installations for that year in the centralised registry of the Member State to which they report under Article 52 of Regulation No 2216/2004. This – and not the emissions which are per se excessive - is how the concept of 'excess emissions' is therefore to be construed.\textsuperscript{38} The Court of Justice therefore concluded that the obligation imposed by Directive 2003/87 is not as a mere obligation to hold the allowances covering the emissions for the preceding year on 30 April of the current year, but is an obligation to surrender those allowances by 30 April in order to have them cancelled in the Community registry, which is intended to ensure that an accurate accounting record is kept of the allowances.\textsuperscript{39}

The Court of Justice interpreted the second question as whether Article 16(3) and (4) of Directive must be interpreted as meaning that it may be varied by a national court on the basis of the principle of proportionality. The Court denied such a role for the principle of proportionality for the following reasons. First, the European Union legislature must be allowed a broad discretion when it is asked to intervene in an area which entails political, economic and social choices on its part, and in which it is called upon to undertake complex assessments. Hence, in its judicial review of the exercise of such powers, the Court cannot substitute its own assessment for that of the European Union legislature. It could, at most, find fault with its legislative choice only if it appeared manifestly incorrect or if the resultant disadvantages for certain economic operators were wholly disproportionate to the advantages otherwise offered.\textsuperscript{40}

Similarly, when the European Union legislature has to assess the future effects of legislation to be enacted although those effects cannot be accurately foreseen, its assessment is open to criticism only if it appears manifestly incorrect in the light of the information available to it at the time of the adoption of the legislation in question.\textsuperscript{41} Therefore, the penalty for excess emissions provided for by Directive cannot be considered to be contrary to the principle of proportionality on the ground that there is no possibility for the amount to be varied by a national court.\textsuperscript{42} The European Union legislature viewed the surrender obligation provided for in Article 12(3) of the directive and the lump sum penalty enforcing that obligation provided for in Article 16(3) and (4), without any flexibility other than a transitional lowering of the amount, as necessary in the pursuit of the legitimate objective of establishing an efficient carbon dioxide equivalent allowance trading scheme, in order to prevent certain operators or market intermediaries from being tempted to circumvent or manipulate the scheme by speculating abusively on prices, quantities, time limits or complex financial products.\textsuperscript{43}

In addition, the four month time period gives operators a reasonable amount of time in which to comply with their surrender obligation, and the penalty of EUR 40 per tonne of carbon dioxide equivalent allowances not surrendered as at 30 April does not carry drawbacks which are incommensurate with the advantages to be gained by the European Union's fulfilment of its commitments under the Kyoto Protocol.\textsuperscript{44}

Although the two questions are closely related, the most important aspect resides in the role of the principle of proportionality (a fundamental principle of EU law) in the application of penalties pursuant to Article 16(3) and (4). That question, obviously, can only be assessed in

\textsuperscript{37} Ibid., para 27.
\textsuperscript{38} Ibid., para 28.
\textsuperscript{39} Ibid., para 30.
\textsuperscript{40} Ibid., para 35.
\textsuperscript{41} Ibid., para 37.
\textsuperscript{42} Ibid., para 38.
\textsuperscript{43} Ibid., para 39.
\textsuperscript{44} Ibid., para 40.
light of the purpose of Directive/EC, which is ultimately what the Swedish court’s first question helped to clarify.

Once the CJEU established in response to the first question that the immediate purpose of the Directive is the strict accounting of the issue, holding, transfer and cancellation of allowances, the assessment of the proportionality of an interpretation of Article 16(3) and (4) as meaning that the penalty specified is fully payable for any failure to surrender the allowances equal to the emissions for the preceding year by 30 April, irrespective of the reason for the non-surrender or the number of allowances actually held by the operators concerned, must be assessed in that light. For this reason, it is understandable that the Court has denied a role for the principle of proportionality in the way advocated by the Billerud companies. This outcome is not so much an example of the Court showing its technocratic pedigree as has been asserted by Peeters (an accusation rarely levelled against the CJEU mostly known for its activism), but rather is consistent with the teleological interpretation method traditionally employed by the Court.

The message for operators is a simple one: make sure you have your house in order or risk paying a substantial fine. The fact that this fine may reflect earlier expectations of market prices which, with the benefit of hindsight, have now proved to be unrealistically high is not in itself a reason to question the wisdom of the Court to deny a role for national courts to take the sharp edges off Article 16(3) and (4) by allowing them to sweeten the pill through a general recourse to the principle of subsidiarity. Rather, the proportionality of the sanctioning system must be assessed on the basis of the seriousness of the problem the Directive seeks to address (and, judging by the most recent IPCC reports, this problem has become more rather than less serious since the amount of € 40 was fixed by the EU legislator), and not with reference to fluctuating market values of each emission allowance surrendered. If, for whatever reason, the penalty system thus imposed proves disproportionate, it is for the EU legislator to intervene by amending the Directive’s relevant provisions. To allow national courts to perform this role by opening the door for national and inconsistent applications of the principle of subsidiarity would give rise to the kind of distortions which the Directive is precisely intended to prevent.

3.1.4 Member State Sanctions

For other breaches of the rules on MRV, or other obligations concerning the functioning of the ETS Member States have to put in place a system of penalties that is effective, proportionate and dissuasive. For instance, when monitoring and reporting obligations are not followed and as a result essential data is missing or not accurate. If this is the case, it will not be clear how many allowances must be surrendered in reality. This could obviously seriously impair the effectiveness of the ETS and Member States thus have an obligation to establish an enforcement strategy that includes sanctions for these infringements. Considering the diversity in enforcement strategies among the Member States, Article 21 of the Directive is of specific interest. According to this provision Member States are required to report every year on the application of the Directive. The Commission has developed a format for this questionnaire that also contributes attention to compliance issues as have been discussed above. This format has been improved as of 2013; reports now have to

46 Directive 2003/87, Art. 16(1).
include much more specified information on all issues relating the functioning of the EU ETS. On the basis of these reports the Commission has to publish a report on the application of the Directive within three months of receiving the reports of the Member States.\textsuperscript{48} In the past, the Commission has used the ‘Article 21 Reports’ for improvements in future trading periods.

3.2 Towards more harmonization and centralization: description of amendments to EU ETS legislation aimed at improving compliance

The EU legal framework for the ETS is both complex and wide in scope. Although the ETS is a market-based instrument, which leads an outsider to believe that the market mechanism will do the work that normally, with command-and-control instruments, would be performed by legal instruments, law actually plays a significant role in the functioning of the system. The amount of rules that had to be put in place to have the carbon market function orderly and reliably is enormous. In addition, EU ETS law is constantly changing. In part, these changes were intended from the start. It has always been planned to initially have three trading phases, with phase I being the start-up and learning phase, phase II the first “real” trading phase aimed at achieving the necessary reductions for the 2012 Kyoto Protocol obligations, and phase III the first post-Kyoto trading phase aimed at substantial further emission reductions. Lessons drawn during the first phase(s) lead to improvements in the next phase(s). Unexpected events took place as well, such as the discovery of the ETS being misused by criminals for money laundering and other criminal activities in 2009, and the extremely low price as a consequence of the economic and financial crisis around 2009-2013. This has led to constant changes in the legal framework. These changes will be dealt with below, with a special focus on monitoring, verification and compliance. This is appropriate since it enhances our understanding of how the EU ETS has been evolved.

3.2.1 Phase I (2005-2007)

a. General
In 2005, the EU ETS was launched. Phase I of the ETS was designed to be a start-up and learning phase, mainly meant to test the effectiveness of the ETS as set up by Directive/EC on the ETS and Directive 2004/101/EC on linking the ETS to the CDM and JI instruments of the Kyoto Protocol. It was a stand-alone trading period in the sense that allowances could not be banked for use in the 2nd phase. The number of allowances was mainly determined by the Member States in their National Allocation Plans (NAP) but had to be in line with the Kyoto Protocol target. These allowances were given away for free to power generators and energy-intensive industrial sectors. As these installations also require an integrated environmental permit under the IPPC Directive, the ETS Directive brought changes to the IPPC Directive so as to make sure that no permit conditions are included in the IPPC-permit that focus on emissions covered by the ETS Directive. In phase 1, the ETS Directive only covered CO₂ emissions. As a consequence of over-allocation by the Member States and the absence of reliable emissions data the total allocation of EU ETS allowances greatly exceeded demand. In 2007, the price of phase 1 allowances, therefore, dropped to 0.

b. Monitoring, reporting and verification

Directive 2003/87/EC set a few very basic and simple requirements on monitoring and reporting in Article 14 and on verification in Article 15. The duty to monitor emissions, to ensure a proper reporting of emissions after the end of each year, and the duty to ensure that the reports were verified is laid upon the Member States.\(^{53}\) A more detailed set of rules is given in the Annexes to this Directive and in European Commission Guidelines. Annex IV holds the principles for monitoring and reporting. It states, for instance, that emissions shall be monitored either by calculation or on the basis of measurement. The Annex then provides a formula for calculation (Activity data x Emissions factor x Oxidation factor) and states that for measurements, standardised or accepted methods have to be used that are corroborated by a supporting calculation of emissions. Finally, Annex IV lists the information that needs to be reported on for each installation. This includes not only the above mentioned information used in calculations and measurements, but also information about uncertainty in these calculations and measurements.

In addition to Annex IV, there is an extensive and very detailed set of guidelines for the monitoring and reporting of greenhouse gas emissions issued by the European Commission on the basis of Article 14.\(^{54}\) These guidelines are both general guidelines that apply to all installations, guidelines for combustion emissions for all installations, and activity specific guidelines for: mineral oil refineries, coke ovens, metal ore roasting and sintering installations, pig iron and steel installations, cement clinker production installations, lime production installations, glass manufacture installations, ceramic products manufacturing, and pulp and paper-producing installations.

Article 15 states that the installation’s report on emissions has to be verified as satisfactory. Annex V details the criteria for verification. It gives both general principles and methodologies. It is a general principle that verification has to have a high degree of certainty with regard to:

- reliability
- credibility
- accuracy.

This means that:

- the reported data are free of inconsistencies
- the collection of data has been carried out in accordance with the applicable scientific standards, and
- the relevant records of the installation are complete and consistent.

Another general principle is that the verifier is given access to all sites and information in relation to the subject of the verification.

As to the methodologies, it is regulated that the verification is based on a strategic analysis of all activities carried out in the installation, and that the verification ‘where appropriate’ is carried out on the site of the installation, using spot checks to determine the reliability of the reported data and information. A risk analysis has to show the risk of error of the monitoring and reporting procedure.

An important administrative element of the ETS, related to monitoring and enforcement, is the registry. Article 19 provides for a standardised and secure system of electronic registries.

---

\(^{53}\) In Arts. 14(2), 14(3) and 15 respectively.

which tracks the issuance, holding, transfer and cancellation of all allowances.\footnote{The legal basis for the establishment of these national registries is Decision 280/2004/EC of 11 February 2004 of the European Parliament and of the Council concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol, [2004] OJ L 49/1. The predecessor of this Regulation dates back to 1993 (Council Decision 93/389/EEC of 24 June 1993 for a monitoring mechanism of Community CO\textsubscript{2} and other greenhouse gas emissions).} Extensive and very detailed rules to standardise and secure an electronic registry system have been laid down in a separate Regulation 2216/2004.\footnote{Commission Regulation 2216/2004/EC of 21 December 2004 for a standardised and secured system of registries pursuant to Directive 2003/87/EC of the European Parliament and of the Council and Decision 280/2004/EC of the European Parliament and of the Council, [2004] OJ L 386/1. This Regulation was amended in 2007 by Regulation 916/2007/EC, [2007] OJ L 200/5, with the aim to improve the communication with the UNFCCC independent transaction log and to further detail the Central Administrator’s tasks.} These rules include, for instance, the duty for each Member State to designate a Registry Administrator, reporting requirements and provisions on confidentiality. The standards in the Regulation also aim at facilitating an effective communication between the EU ETS and the UNFCCC transaction log. A Central Administrator is designated by the Commission under Article 20. The Central Administrator conducts automated checks on each transaction in registries through the independent transaction log to ensure there are no irregularities in the issue, transfer and cancellation of allowances. The Central Administrator’s tasks have also been worked out in more detail in the Regulation mentioned above.\footnote{Supra note 8. The amendments made by Regulation 916/2007 were particularly aimed at detailing the Central Administrator’s powers, see the new Arts. 28 and 29.} When irregularities are identified, then the Member State is not allowed to register the transaction or any further transactions relating to the allowances concerned, until the irregularities have been resolved.

c. Compliance
The penalties for non-compliance with the ETS have been laid down in Article 16. Again, the Member States are the main players here: they bear the duty to lay down rules on penalties in national legislation and they have to make sure that these are implemented. Several sanctions apply:

- the names of the operators who are in breach of the requirement to surrender sufficient allowances have to be published (‘naming and shaming’) (Article 16(2));
- excess emissions penalty of EUR 40 for each tonne of CO\textsubscript{2} emitted by the installation without surrendered allowance (Article 16(4)) and
- duty to surrender ‘missing’ allowances next year (Article 16(4));
- suspension of trading in case of absence of satisfactory verification (Article 15).

3.2.2 Phase II (2008-2012)

a. General
The 2\textsuperscript{nd} phase was the first “real” trading phase. A number of changes were implemented:

- the European Commission tightened the cap by 6.5% compared to phase I as a reaction to the over-allocation in that phase. These tightened caps were laid down in a Commission Decision;\footnote{Commission Decision 2006/944/EC of 14 December 2006 determining the respective emission levels allocated to the Community and each of its Member States under the Kyoto Protocol pursuant to Council Decision 2002/358/EC, [2006] OJ L 358/87.}
- several Member States, most notably the UK and the Netherlands, distributed part of their allowances through auctions (under the revised Directive, they were obliged, though, to at least issue 90% of the allowances for free);
- businesses were allowed to buy ERUs and CERs on the market and exchange these for allowances (up to a certain maximum, set in the NAP), thus stimulating the financing of projects under the Kyoto Protocol’s flexible instruments;\(^{59}\)
- a Decision was implemented to avoid that emission reductions are counted twice (example: a wind farm project generates allowances but also feeds electricity in the electricity grid thus making allowances available for the market);\(^{56}\)
- the penalty was raised from € 40 to € 100 per tonne (Article 16(3), see further under ‘compliance’);
- during the last year of phase 2 (2012), emissions by aviation activities were included in the ETS, allowances were issued largely based on historical emissions;\(^{61}\)
- Iceland, Liechtenstein and Norway joined the EU ETS;
- the UK, the Netherlands and Austria used the voluntary unilateral option to extend the ETS to include nitrous oxide emissions from the production of nitric acid (Article 24);
- during the last year of phase II (2012), the registry of allowances was transferred from national registries to the single Union registry operated by the Commission (see below);\(^{62}\)
- the so-called ‘regulatory procedure with scrutiny’ was incorporated in the ETS-Directive for comitology decisions, i.e., the decisions of the Commission that are prepared by a committee (most Commission decisions under the ETS Directive are comitology decisions), giving the Council and Parliament the power to object against the proposed measures).\(^{63}\)

b. Monitoring, reporting and verification

The extension of the ETS to include airline activities resulted in many changes in the legal provisions on monitoring, reporting and verification, such as new provisions on:
- the duty for each aircraft operator to submit a monitoring and reporting plan to the competent authority in the administering Member State\(^{64}\) (Article 3g);
- changes to the provisions on monitoring (Article 14) and verification (Article 15) largely aimed at applying the existing monitoring and verification rules to aircraft operators.

\(59\) Although already regulated under Directive 2004/101/EC, this opportunity only became available in 2008 with the official start of the Kyoto Protocol’s first commitment period, effectively linking the EU ETS and the CDM and JI instruments of the protocol.


\(62\) At the same moment, the Community Independent Transaction Log (CITL), which automatically checked, recorded and authorised all transactions that took place between accounts in national registries, was succeeded by the EU Transaction Log (EUTL).


\(64\) This is the Member State where the airline is licensed, or the Member State where the greatest estimated attributed aviation emissions from flights occur (Art. 18a). This is specified for each air carrier in Commission Regulation 748/2009/EC of 5 August 2009 on the list of aircraft operators which performed an aviation activity listed in Annex I to Directive 2003/87/EC on or after 1 January 2006 specifying the administering Member State for each aircraft operator, [2009] OJ L 219/1.
- Big new sections on aviation activities were added to Annexes IV on monitoring and reporting, setting calculation formula for CO\(_2\) emissions (fuel consumption x emission factor) and tonne-kilometres for allowance allocation (distance x payload), and specific monitoring and reporting requirements for emissions and tonne-kilometre data.
- Annex V was amended to include specific verification requirements for aviation emission reports.
- The possibility for the Commission to request the assistance of Eurocontrol (Article 18b) was added.

Another important change in phase II was caused by the adoption of a new set of guidelines for monitoring and reporting.\(^{65}\) Many changes were made in comparison to the previous guidelines. In brief, the changes were particularly aimed at rendering the monitoring system more cost-effective by reducing costs associated to monitoring and reporting. Examples of this are the adoption of a more simple system for installations with annual emissions of less than 25,000 tonnes of CO\(_2\) and the adoption of less stringent uncertainty requirements for certain emissions.

Towards the end of phase I (July 2007), changes were also made to the registry system, as was already stated above, mainly aimed at improving communication with the UNFCCC independent transaction log and to further detail the tasks of the Central Administrator in Regulation 2216/2004/EC.\(^{66}\) Only one year later, though, in October 2008, that regulation was completely replaced by Regulation 994/2008/EC (although parts of the old Regulation remained active to the end of phase 2).\(^{67}\) The new Regulation further integrates the Member States’ registries and the Community registry into the newly established Community Independent Transaction Log (CITL). Substantial changes were also necessary because of decisions made at the level of the UNFCCC and the Kyoto Protocol. One of these, for instance, is the duty for each registry to contain at least one Party holding account, one cancellation account, one retirement account, and one ETS AAU (assigned account unit) deposit account, next to the national accounts (one national allowance holding account and one national allowance deletion account).

Two years later, in October 2010, Regulation 994/2008/EC again was replaced by the new Regulation 920/2010/EU.\(^{68}\) This regulation prepared major changes to be implemented as of 1 January 2012. As of that date, the Member State registries were replaced by a single Union Registry and a European Union Transaction Log (EUTL). This was deemed necessary to improve not only the coherence of the registry, but in particular also to make the system more robust and less vulnerable to fraud (see further below under compliance). Also, the inclusion of the airline sector in the ETS necessitated changes. Finally, a centralized Union Registry was also necessary to implement the profound changes enacted for the third phase (see further below).\(^{69}\)

---


\(^{66}\) Supra note 8 and infra.


\(^{69}\) To that end, again a new regulation was drafted, replacing Regulation 920/2010: Regulation 1193/2011/EU of 18 November 2011 establishing a Union Registry for the trading period commencing on 1 January 2013, and subsequent trading periods, of the Union emissions trading scheme pursuant to Directive 2003/87/EC of the European Parliament and of the Council and Decision 280/2004/EC of
c. Compliance
A number of changes in phase II were explicitly aimed at improving compliance. First of all, as already stated, the penalty was raised from € 40 to € 100 EUR per tonne CO\textsubscript{2} equivalent emitted by an installation for which the operator did not surrender allowances. This raise was already in the original text of the ETS Directive (from 2003), but only took effect as of phase 2 (Article 16(3)).

To accommodate the inclusion of the aviation sector in the ETS, a specific and severe sanction was added, which has to be used only as an ultimum remedium: the possibility to impose an operating ban on the aircraft operator who fails to comply with the requirements of the ETS Directive (Article 16(5)/6(12)).

As explained above, in Regulation 920/2010/EU, the rules on the registry were changed in 2010 to improve the integrity of the ETS. In 2009, it was observed that there was a significant increase in the occurrence of VAT-fraud, money laundering and other criminal activities. As a consequence, rules on persons involved in the transaction administration were tightened. National administrators, for instance, can now refuse to open an account in case the person requesting the account opening is under investigation for being involved in fraud involving allowances or Kyoto units, money laundering, terrorist financing or other serious crimes in which the account may be an instrument, or any other reason set out in national law.\textsuperscript{70} In addition, accounts have to have at least two authorised representatives next to the person opening the account, and the obligations of these persons (account holder and authorised representatives) have been laid down in Annex VI of Regulation 920/2010/EU, such as the duty to ensure that the posted data are accurate. Regulation 920/2010/EU also contains many provisions with technical requirements of the registries system aimed at preventing security breaches. If there is a security breach, the Central Administrator may suspend access to the EUTL. If one of the registries is not maintained or operated in accordance with the provisions of the Regulation, the Commission may instruct the Central Administrator to suspend the acceptance of some or all processes.\textsuperscript{71} Automated checking of all processes is required.\textsuperscript{72} If discrepancies are discovered, the process concerned has to be terminated and the relevant account holder has to be informed on this.\textsuperscript{73}

3.2.3 Phase III (2013-2020)

a. General
A major overhaul of the EU ETS took place in the years running up to phase 3, which started in 2013. Directive 2009/29/EC brought many profound changes to the ETS, largely aimed at centralizing the ETS.\textsuperscript{74} A more harmonized ETS ‘is imperative in order to better exploit the benefits of emission trading, to avoid distortions in the internal market and to facilitate the linking of emissions trading systems’.\textsuperscript{75} Following are the most important changes as of phase 3:
abolishment of the National Allocation Plans, and the adoption of one EU wide cap instead (Article 9);
- a linear decrease of the cap by 1.74% (Article 9).
- Allowances are in principle auctioned (Article 10). The auctioning process has been extensively regulated in Regulation 1031/2010/EU. Free allocation is only allowed in a limited number of cases and under strict conditions, such as for district heating, high efficiency cogeneration, new entrants (except in case of electricity production), in support of certain high-intensive industries in the event of carbon leakage, in support of modernisation of electricity production (Articles 10a/10c). The amount of auctioned allowances will rise from a little over 40% in 2013 to 70% in 2027.
- Small installations with emissions of less than 25,000 tonnes of carbon dioxide equivalent can be completely excluded from the ETS by a Member State provided equivalent emission reductions are achieved (Article 27).
- The Commission has the power to intervene in the market through postponing (‘backloading’) or bringing forward auctioning, in case of a surplus of allowances (Article 10(4)) or in the event of excessive price fluctuations (Article 29a) respectively. If the carbon market, more in general, is not functioning properly, the Commission has to report this to the Parliament and the Council, if necessary accompanied by proposals for improvement.
- Six options to more drastically reduce the high surplus of allowances have been discussed in 2013: a) increasing the EU's greenhouse gas emissions reduction target for 2020 from 20% to 30% below 1990 levels, b) retiring a certain number of phase 3 allowances permanently, c) revising the 1.74% annual reduction in the number of allowances to make the reduction steeper, d) bringing more sectors into the EU ETS, e) limiting access to international credits, f) introducing discretionary price management mechanisms such as a price management reserve. These discussions lead to a proposal, submitted by the Commission in 2014, for the establishment of a market stability reserve.78
- Phase III originally was supposed to see the expansion of the ETS to the first third country under Article 25: Australia was to fully link its ETS in 2018, with an interim-link available as of 2015. After the 2013 federal elections in Australia, however, it is unlikely that these plans will materialize. Negotiations with Switzerland are underway.
- A number of industries were brought under the ETS, and two greenhouse gases were added (perfluorocarbon emissions from the aluminium industry and nitrous oxide emissions from certain installations) through changes in Annex I.

---

77 As a reaction to the surplus of allowances that the EU had in 2012 and 2013 as a consequence of the economic crisis, it was decided to ‘backload’ a number of allowances from the 2014-2016 auctions to the 2019-2020 auctions. This has been laid down in Commission Regulation 176/2014/EU of 25 February 2014 amending Regulation (EU) No 1031/2010 in particular to determine the volumes of greenhouse gas emission allowances to be auctioned in 2013-20, [2014] OJ L 56/11.
79 Apart from the three EFTA countries that already joined during phase 2 (Norway, Iceland, and Liechtenstein).
80 As was decided in August 2012, see http://ec.europa.eu/clima/news/Arts../news_2012082801_en.htm.
**b. Monitoring, reporting and verification**

Although phase II already saw many changes on monitoring, reporting and verification, the start of phase III coincided with many more changes on these issues. First and foremost, the 'guidelines' on monitoring and reporting based on the old version of Article 14 of the ETS Directive, are now 'rules' laid down in Regulation 601/2012/EU, which means that they are directly legally binding for all authorities and all industries in the EU.\(^{81}\) The central element of this Regulation is the duty for each operator or aircraft operator to have a monitoring plan, approved by the competent authority, on the basis of which all monitoring will take place. Content, submission, modification and other aspects concerning the monitoring plan have been extensively regulated in Articles 11-16 of the Regulation. Many other, smaller, improvements to the monitoring and reporting rules were made as well.

A similar development took place with regard to verification. Following a change of Article 15 by Directive 2009/29/EC,\(^{82}\) Regulation 600/2012/EU was adopted with the aim to fully harmonize and integrate the rules for the accreditation of verifiers, more specifically the conditions for accreditation and withdrawal of accreditation, for mutual recognition and for peer evaluation of accreditation bodies.\(^{83}\)

As indicated under phase II, the rules on the registry were fundamentally changed to accompany the centralization of the EU ETS as brought about by Directive 2009/29 through the institution of one Union Registry. Regulation 1193/2011/EU incorporates most of the 2010 changes on verification, adds specific rules to make sure that aviation activities are well represented in the EUTL, and makes the necessary links to the Auctioning Regulation 1031/2010.\(^{84}\) In 2013, Regulation 1193/2011/EU was replaced by Regulation 389/2013/EU, in which a range of various amendments were made, for instance on keeping the Union Registry rules compatible with the post 2012 Kyoto agreements (or lack thereof), and on greater transparency of allocation of allowances free of charge by Member States.\(^{85}\)

The Auctioning Regulation grants a wide range of monitoring powers to three separate institutions:

1) the auction monitor  
2) the auction platform  
3) national authorities for the monitoring of financial and credit institutions.

The auction monitor monitors all auction processes (Article 24).\(^{86}\) The auction monitor has to report on the proper implementation of the auctions with respect to fair and open access, transparency, price formation, and technical and operational aspects. He has to report any failure to comply with the contract appointing an auction platform, any evidence of anti-

---


\(^{82}\) Supra note 26.


\(^{84}\) Supra note 21.


competitive behaviour or market abuse, the impact of the auctions on the market position of
the auction platform on the secondary market, information about the number, nature and
status of complaints, etc. (Article 25). The auction monitor is also entitled to observe the
conduct of the auctions and, in order to do so, has to be provided with all information in the
possession of auctioneers, auction platforms and all competent national authorities, including
the authorities supervising credit institutions and investments firms. All these institutions have
to actively cooperate with the auction monitor (Article 53).
The auction platform has to monitor the bidders. The auction platform has to scrutinize bids
to ensure that the bidding behaviour of bidders is consistent with the platform’s knowledge of
the customer, maintain effective arrangements and procedures for the regular monitoring of
the compliance of bidders, and monitor transactions undertaken by persons admitted to bid
in order to identify unfair or disorderly auctioning conditions or conduct that may invoke
market abuse (Article 54).
National authorities instituted to monitor financial and credit institutions for the use of the
financial system for the purpose of money laundering and terrorist financing, based on the
Anti-Money Laundering Directive, have to also monitor the auctioning under the ETS for
check for transactions for the same purpose (Article 55).

c. Compliance
Directive 2009/29/EC did not bring about changes as to the issue of compliance. The new
Regulations on the Union Registry and on Auctioning, however do, although the Union
Registry Regulation 1193/2011/EU more or less only incorporates the provisions on
compliance that were already present in Regulation 920/2010/EU as discussed above under
phase II. In 2013, both regulations (1193/2011/EU and 920/2010/EU) were repealed and
replaced by Regulation 389/2013, without major changes as to the rules on compliance.
The Auctioning Regulation 1031/2010 has many provisions on compliance. The provisions
grant enforcement powers to:

1) the auction platform, and to
2) national authorities for the financial markets, as established under:
   a. the Market Abuse Directive, or
   b. the Anti-Money Laundering Directive.

First of all, Article 21 states that persons wilfully or repeatedly breaching the Auctioning
Regulation have to be sanctioned by the auction platform by refusal, revocation or
suspension of admission to bid in auctions. The same sanction applies in case the auctioning
platform suspects money laundering, terrorist financing, criminal activity or market abuse
(unless this would frustrate efforts by the competent national authorities to apprehend the
perpetrators). Under some conditions (such as the duty to first allow the person concerned
to give a response to the allegations), similar sanctions can be imposed on persons
negligently in breach of the Regulation, or persons who otherwise behave in a manner that is
prejudicial to the orderly or efficient conduct of an auction. Another sanctioning power of the
auction platform is to set a maximum bid-size, or take any other remedial measures

---

prevention of the use of the financial system for the purpose of money laundering and terrorist
88 Commission Regulation 389/2013/EU of 2 May 2013 establishing a Union Registry pursuant to
89 In this case, the auction platform has to make a report for the financial intelligence unit instituted
under the Anti-Money Laundering Directive.
necessary to mitigate an actual or potential discernable risk of market abuse, money laundering, terrorist financing or other criminal activity, after consultation with the Commission (Article 57). Auctioning platforms are obliged to inform the financial intelligence unit instituted under the Anti-Money Laundering Directive when they suspect money laundering, terrorist financing or criminal activity is being or has been committed (Article 55). Auctioning platforms have to inform the competent national authorities for the investigation and prosecution of market abuse when they suspect market abuse (Article 56). These national financial authorities have an important compliance role under the Auctioning Regulation as well. The Auctioning Regulation has a set of rules to prevent market abuse, for instance through using inside information. There is a prohibition of insider dealing (Article 38-40) and a prohibition of market manipulation (Article 41). Supervision and enforcement of these prohibitions has been put in the hands of the authorities for the financial markets, as established under the Market Abuse Directive (Article 43). The rules of the latter Directive apply, so these authorities have the right to a) have access to any document in any form whatsoever, and to receive a copy of it, b) demand information from any person, c) carry out on-site inspections, d) require existing telephone and existing data traffic records, e) require the cessation of any practice that is contrary to the provisions adopted in the implementation of the above provisions, f) suspend trading, g) request the freezing and/or sequestration of assets, h) request temporary prohibition of professional activity. Member States have the obligation to impose effective, proportionate and dissuasive administrative sanctions against the persons responsible for non-compliance. Criminal proceedings may also be instituted if a Member State so decides. The Market Abuse Directive is currently being revised. One of the aims of this revision is to reinforce the investigative and administrative sanctioning powers of regulators, for instance by criminalising offenses against the Directive at the EU level. The national authorities under the Anti-Money Laundering Directive have the power to take the necessary measures to ensure compliance of an auction platform with the customer due diligence requirements and the monitoring and record keeping requirements of the Auctioning Directive.

3.2.4 Conclusion

Contrary to general belief, it is clear that monitoring and enforcement efforts of an emissions trading mechanism are much more intensive than with regular command and control type instruments. The EU adopted literally dozens of rules and regulations of various legal forms to achieve a reliable compliance mechanism of the EU ETS. Several conclusions can be drawn from the above overview of the continuous changes brought about to the compliance mechanism:

- The entire compliance cycle of monitoring, reporting, verification and sanctioning is essential for the success of the ETS, but by nature very complex.

---

91 Art. 12 of Directive 2003/6/EC.
92 Art. 14 of Directive 2003/6/EC.
- The regulatory framework for compliance has improved considerably over the 2005-2013 period, mostly thanks to tightened rules at the EU level and, generally, centralization of the EU ETS.
- The instances of fraud and criminal activities in the past have been addressed through tightened rules under market abuse and anti-money laundering legislation.
- The compliance cycle, although now more harmonized at EU level, still largely depends on the activities of domestic competent authorities in each EU Member State.
3.3 Case study: Germany

In the 2008-2012 commitment period, German emissions were 24.7 percent lower than 1990 levels. Germany has an ambitious climate policy in place that coincides with the decision to face out nuclear power. A wide range of instruments is applied to convert the energy sector into renewables (with the aim to have an 80% supply of renewable energies by 2050). Much attention, therefore, is focused on instruments that promote renewable energy and energy efficiency like taxes and subsidies. The ETS is “just” one of the instruments among many in the energy and climate legal package, and is considered to play only a modest role in the package. The successful reduction of emissions in the 2008-2012 period, therefore, cannot be attributed to the ETS, but to the much wider energy policy aimed at sharply reducing dependence on fossil energy sources (known as the Energie Wende). Nevertheless, the ETS clearly contributes to the good results. In the second emissions trading period, installation operators reduced emissions by 57 million tonnes annually; the German cap went down with 7 percent compared to the first trading period.

In 2012, 1,709 installations participate in emissions trading in Germany (as of September 2012). The German Emissions Trading budget on average amounted to 451.8 million annual emission allowances in the second trading period. In 2012, emissions were slightly higher at 452.6 million tonnes. In that year, 457 million emission allowances were available to the operators: about 416 million were issued for free. In 2012, German companies surrendered 139.9 million carbon credits (CERs/ERUs) from CDM or JI projects to meet their obligations. Compared to the 457 million newly issued emission allowances, then a surplus of 144.5 million allowances resulted in 2012. The situation is quite different for individual installations and industries: in total the operators of large energy installations must acquire additional allowances. In this period, all other industries can retain or sell some of their free emission allowances.\(^95\)

3.3.1 Legal Implementation EU ETS

In Germany, an extensive set of Acts and Ordinances was created to implement the EU’s ETS Directive. The core legal framework is provided by the Greenhouse Gas Emissions Trading Act (TEHG; Gesetz über den Handel mit Berechtigungen zur Emission von Treibhausgasen).\(^96\) The TEHG has provisions on all elements of the ETS, such as the issuing of the GHG permit, monitoring and control, the keeping of a national record and national and international reporting. There exists a range of ordinances and other Acts on some specific elements, such as Data Collection Ordinances for the various trading phases\(^97\), Auctioning Ordinances for various periods\(^98\), Allocation Act\(^99\), Allocation Ordinance\(^100\), Project Mechanisms Act\(^101\), Project Mechanisms Fee Act\(^102\), Emissions trading

---

\(^95\) UBA/DEHSt, Carbon Dioxide Emissions from Installations subject to Emissions Trading in 2012 (summary), Berlin 2013, p. 2-3, see http://www.dehst.de/EN/Service/Publications/publications_node.html.
\(^96\) Act of 8 July 2004, BGBl I p. 1578, with many subsequent changes.
\(^97\) E.g., Datenerhebungsverordnung 2012 of 11 July 2006 (BGBl. I p. 1572) with subsequent changes.
\(^98\) E.g., Emissionshandels-Versteigerungsverordnung 2012 of 17 July 2009 (BGBl. I p. 2048).
\(^99\) E.g., Zuteilungsgesetz 2012.
\(^100\) E.g., Zuteilungsverordnung 2012 of 13 August 2007 (BGBl. I p. 1941).
Cost Ordinance. Some of these have been repealed after parts of the ETS have been centralized at EU level as part of the preparation for the third trading phase.

In Germany, it was decided to have two permits to implement the EU ETS Directive: the Emissions permit (Emissionsgenehmigung, § 4 TEHG) and the Monitoring permit, issued after the approval of the Monitoring plan (Überwachungsplan genehmigung, § 6(2) TEHG). For installations that need a permit under the Industrial Emissions Act (BlmSchG: Bundesimmissionsschutzgesetz), which is used to implement the EU Industrial Emissions Directive, the GHG emissions permit has been integrated into that permit (§ 4(4) TEHG). Almost all installations that are part of the EU ETS need such a permit.

### 3.3.2 National competent authority

**a. Deutsche Emissionshandelsstelle**

The agency responsible for emissions trading in Germany is the Deutsche Emissionshandelsstelle (DEHSt, German Emissions Trading Authority). It was set up within the framework of the Federal Environment Agency (Umweltbundesamt, UBA) and has approximately 150 employees. They coordinate and inform the other authorities involved (both at federal and Länder level), support the work of the verifying bodies and they are the Designated National Authority for CDM projects and the Designated Focal Point for JI projects. DEHSt primarily works electronically with their partners. This applies to the application and allocation of allowances as well as Registry account management and annual emissions reporting. The DEHSt play a central role in the monitoring and compliance cycle, as it is responsible for the approval of the monitoring plan, and, hence issuing the Monitoring permit and checking whether the installation complies with the Monitoring permit. With DEHSt, there specific enforcement arrangements for the ETS. Of the 135 inspectors working at DEHSt, 40-50 are devoted to inspecting compliance by installations (i.e., checking emission reports, monitoring reports etc.).

**b. Federal Emissions permit authorities**

The GHG emissions permit is issued (and enforced) by the federal authorities for industrial emissions, responsible for environmental permitting system under the BlmSchG (see above). As, for most installations, the Emissions permit has been integrated into the general environmental permit under the BlmSchG, the competent federal authority in the relevant region (Land) for that permit inspects and enforces the GHG emissions permit. As most installations fall under this category, these authorities are important players in Germany. Others, however, may be competent as well for the GHG emissions permit. Enforcement of the GHG emissions permit can be in the hands of (§ 19 TEHG):

- a) For installations that also need a permit under the BlmSchG, the competent authority under that Acts, which is a federal authority with offices in each region (Land).
- b) For aviation activities, the federal aviation agency (Luftfahrt-Bundesamt),
- c) For all other activities, the federal environment agency (Umweltbundesamt), in particular the DEHSt.

The federal emissions authorities, in their inspections, do not specifically check GHG emissions. They primarily focus on the environmental issues covered by the EU Industrial Emissions Directive.

---

103 Emissionshandelsskostenverordnung 2007 of 31 August 2004 (BGBl. I p. 2273).
104 Interview DEHSt 7 April 2014.
c. Cooperation between DEHSt and federal emissions authorities
Both competent authorities work together in a joint platform. In 2013, it was decided to do joint inspections. According to the DEHSt, cooperation with the federal emissions authorities is important because they have the local expertise: they know the installation, the operator. The DEHSt has its own inspection powers, but they deliberately chose opt for collaborative inspections.106

3.3.3 National Allocation Plan
As in all Member States, national allocation plans were abolished for the third trading phase. Like in a number of countries, there has been an over-allocation under the national allocation plans, particularly in the first trading phase. This first phase is generally considered to be a failure, not just because of over allocation, but also because the energy companies charged the costs of the allowances to the consumers, although they got these allowances for free. The outcome of the first trading period, therefore were high additional revenues for the fossil fuel industry, higher electricity prices for consumers, and next to no reduction in German CO2 emissions.107 This was partly corrected in the second trading period, when allowances were partly (10%) auctioned.

3.3.4 Enforcement tasks

a. Monitoring and Reporting Obligations
The operator has to hand in the allowances equal to its emissions and the verified emissions report by March 31st of the following year (§ 5 TEHG), following the specific provisions of the Monitoring plan. In absence of specific provisions in the Monitoring plan, the EU Monitoring Regulation 601/2012/EU applies (Appendix 2, Part 2, TEHG). Operators of existing installations had to submit the Monitoring plan for the third trading period five months before the start of the trading period (Appendix 2, Part 1, §1(a) TEHG). For new installations, a Monitoring plan has to be submitted for approval before the start up of the installation (Appendix 2, Part 1, § 1(b) TEHG).108 The DEHSt can only grant approval of the Monitoring plan when it meets the requirements of the EU Monitoring Regulation 601/2012/EU. If a submitted monitoring plan does not comply with the specifications of the Regulation, the operator is obliged to remedy the deficiencies noted within a period determined by the competent authority and to submit a revised monitoring plan (§ 6(2) TEHG). The operator is obliged to immediately adapt the existing Monitoring plan in case of changes in the EU Monitoring Regulation, changes in the GHG emissions permit, and other changes of the operator’s activities (§ 6(3) TEHG). In addition, the DEHSt has the power to make subsequent arrangements to ensure the fulfillment of the obligation to submit a Monitoring plan (§ 6(3) last sentence, TEHG).

There is an ex-ante and ex-post control of the monitoring plan by DEHSt. The ex ante approval process is an elaborate process, which is largely done in an electronic way. The monitoring plan is an electronic file that is checked electronically with the DEHSt’s database, which has all data for each installation. The ex post control is an ongoing process, which involves a continuous measuring system (source streams), information on new emission sources, new scales, etc. New items for the monitoring plan are constantly added. Updating

106 Interview DEHSt 7 April 2014.
107 Th. Schomerus, German climate and energy legislation: an ambitious but fragmented framework, in: M. Peeters et al., Climate Law in EU Member States (EE 2012), p. 195.
108 For aircraft operators other rules apply, see Appendix 2, Part 1, § 1 under c, d, e and f, TEHG.
the monitoring plan for each installation is a constant process. As of 2014, site visits will also generate input for this process (see below). For ex post control the yearly emissions registry cycle is important as well, because here the annual emissions reports are checked against the monitoring plan by the verifiers.\textsuperscript{109}

In early 2014, DEHSt was checked by the European Court of Auditors, the EU’s independent external auditing body. The Court of Auditors performed a detailed check of how DEHSt did the monitoring during the 2nd trading phase.\textsuperscript{110}

\textit{b. Verification}
As of the adoption of Regulation 600/2012/EU, the rules for the accreditation of verifiers, more specifically the conditions for accreditation and withdrawal of accreditation, for mutual recognition and for peer evaluation of accreditation bodies, are completely harmonized, hence the TEHG simply refers to those rules (§ 21). It is stipulated that the verifiers are obliged to comply with Regulation 600/2012, and that they must fulfil their task strictly in the public interest (§21(2) and (3)).

In Germany, there are 18 verifiers active. In addition, a handful of foreign verifiers (accredited in other countries) are active on the German market as well. There is one natural person as an accredited verifier (this option only exists recently).

The DEHSt, checks the emission report after the verifiers did their work. The DEHSt does not double check the work of the verifiers, but, instead, does different checks than those done by the verifiers. They, for instance, compare different years and different source streams.\textsuperscript{111}

\textit{c. Inspection}
As stated above, enforcement tasks primarily rest with the DEHSt (Monitoring plan) and with the federal emissions authorities (GHG emissions permit for installations that fall under the BImSchG). Inspectors of these agencies have the power to (a) get access to installations, aircraft and places where installations and aircraft are, during business hours, (b) to carrying out tests, including the determination of emissions, during business hours and (c) to demand all information and documents that are needed to fulfill their tasks (§ 20 TEHG). Operators are obliged to inform and cooperate with the inspectors immediately. Failure to do so is a criminal offense (§ 20(3) TEHG and §55 Strafprozessordnung).

Until 2013, the inspection was mainly an administrative process relying much on automated support: suspicious data are automatically reported (e.g., when the system finds big differences compared to previous years); these will then be checked in-depth. Data from various sources are compared and cross-checked. Until recently, DEHSt did not do physical inspections of installations. This was only done by the federal emissions authorities. They, however, did not focus on GHG emissions. Looking back, this was considered the biggest loophole in the German EU ETS compliance mechanism.\textsuperscript{112} As stated above, in 2013, it was decided to do site inspections together with the federal emissions authorities. The DEHSt is now (April 2014) in the process of setting up an inspection tool for its inspectors.

\textit{d. Sanctions and cases}
Chapter 5 of the TEHG deals with sanctions. There, basically, are three types of sanctions: a) the automatic sanction stipulated in the EU ETS directive in case an insufficient number of allowances are handed in compared to the actual emissions, b) administrative sanctions for not complying to the rules of the TEHG and associated regulations, c) criminal sanctions for infringing either the TEHG and associated regulations, or provisions of the criminal code.

\textsuperscript{109} Interview DEHSt 7 April 2014.
\textsuperscript{110} Interview DEHSt 7 April 2014. Report not yet available at the time of writing (April 2014).
\textsuperscript{111} Interview DEHSt 7 April 2014.
\textsuperscript{112} Interview DEHSt 7 April 2014.
(such as fraud). Under German law, these three pathways can all be pursued against a single operator.

**e. Administrative sanctions based on EU ETS Directive**

The EU ETS Directive stipulates that the excess emissions penalty is EUR 100 for each tonne of CO2 equivalent emitted for which the operator did not surrender allowances by April 30th.\(^{113}\) This has been laid down in § 30(1) TEHG. This is an automatic fine for which there are no exemptions, except in case of force majeure (höhere Gewalt). The authorities can estimate the number of missing allowances. In addition to the fine, the missing allowances must still be handed in before January 31\(^{st}\) of the next year (this is an obligation under the Directive).

Another sanction which has to be imposed according to the Directive, is the publication of the names of the operators that did not surrender sufficient allowances (‘naming and shaming’ sanction, Article 16(2) of the EU ETS Directive). As a consequence, DEHSt make information publicly available through the official journal. They do not publish the data on their own website, but there is a link on the website to the official journal. According to the DEHSt, NGOs do not follow up on this information (so far). NGOs do identify the dirtiest power companies from the reports, but they do not focus on compliance.\(^{114}\)

The DEHSt blocks access to the account of every installation for which insufficient allowances were surrendered. Each case in which insufficient or no allowances were surrendered, the imposing of sanctions is initiated.\(^{115}\)

Aircraft operators that do not comply with the requirements of the EU ETS Directive, in addition, can be sanctioned with an operating ban, be it only when various conditions have been met (Article 16 sections 5-11). These sanctions can only be imposed by the European Union upon request of the national authorities. In Germany, this sanction has been laid down in similar wording as the Directive, in § 31 TEHG.

**f. General administrative sanctions**

Infringement of almost all other obligations under the TEHG can lead to administrative fines under § 32 TEHG with a maximum of EUR 500.000 per individual infringement (note that with multiple infringements, the total fine for one company may rise to millions of euros).\(^{116}\) These are not automatic sanctions. For administrative offenses sanctions, the competent authorities have to show negligence.\(^{117}\)

**h. Administrative sanctions in practice**

In the first year of emissions trading, 2005, DEHSt imposed administrative sanctions on operators in 180 cases. Numbers fell to 58 in 2006 and to 32 in 2007. In 2008, DEHSt took action only in 21 cases. For the year 2011, 17 installations had not rendered allowances.\(^{118}\) According to the DEHSt, the rapid fall in the number of sanctions imposed shows that emissions trading procedures have become business routine. It is clear that there is a continuous decline of non-compliance. At the moment, there are an estimated 30 cases on non-compliance per year out of 1900 installations.\(^{119}\)

\(^{113}\) Art. 16(3) Directive 2003/87/EC. This amount increases in accordance with the European index of consumer prices (Art. 16(4) of the Directive).

\(^{114}\) Interview DEHSt 7 April 2014.

\(^{115}\) According to the German federal government in answer to questions from a member of Parliament in September 2012, see: Deutscher Bundestag, Drucksache 17/10762, p. 4.

\(^{116}\) This is not just a theoretical possibility, as is shown by the penalty payment of 900.000 EUR which was imposed on the power plant in Voerde, owned by Steag and RWE Power, for non-compliance in the 2005-2007 period.

\(^{117}\) Oberverwaltungsgericht Berlin-Brandenburg, Az. OVG 12 B 5.11 and OVG 12 B 19.10.

\(^{118}\) Data published by the DEHSt on its website.

\(^{119}\) Interview DEHSt 7 April 2014.
Non-compliance, so far, has been detected in two ways. First and foremost by automated support: suspicious data are automatically reported (e.g., when the system finds big differences compared to previous years); these will then be checked in-depth. Secondly, by clever inspectors who compare data from various sources and do cross checks. It is expected that the newly planned site visits will further increase the detection rate of non-compliance. When non-compliance is detected, DEHSt corrects the report, if necessary, and then the operator has to pay the sanction that follows from the corrected data. The total amount of sanctions imposed by DEHSt in the 2005-2011 period is around 20 million EUR, of which (by Sept. 2012) only 3.2 million was actually received. The difference between what was imposed and what was actually received is caused by two factors:

- Decisions to impose sanctions are always challenged before a court, in 100% of the cases. The competent authority has to wait until the final court decision before it actually can collect the money. At the moment (April 2014), an important preliminary case is pending before the Court of Justice of the EU, which was referred to the Court by the Bundesverwaltungsgericht, the highest administrative court in Germany. This case deals with the question whether DEHSt has to apply the sanction regime in case the amount of allowances is in accordance with the Verified Emissions Report, but when later it is discovered that more emissions actually took place, and the operator surrendered these additional allowances in the next year (so: are the sanctions to be based upon the verified emissions report or on actual emissions?). Because of this preliminary case, other similar cases have put on hold.
- Insolvency of companies in some instances (mostly smaller installations).

i. Criminal sanctions
In case infringements of the TEHG or associated regulations go hand in hand with the infringement of the criminal code, which for instance is the case when fraud is committed, criminal sanctions can be imposed as well. The VAT fraud hit Germany hard (in 2011, German prosecutors announced that the German state lost € 850 million in this scheme). In December 2011, a German court sentenced six people to jail terms of between three years and seven years and 10 months in a trial involving evasion of taxes on carbon permits. Many more criminal law suits are still ongoing as a consequence of the VAT fraud.

j. Conclusions on compliance rate
As is shown by the above details about the number of sanctions imposed, there is a high compliance rate. According to the DEHSt, most operators want to be compliant. Non-compliance usually is caused by negligence and by the complexity of the rules. It is also thought that the verifiers do a good job. They find a lot of mistakes that then are rectified, and hence are not observed by the DEHSt. In general, there is quality pressure within competent authorities in Germany. Operators know that DEHSt, as a consequence, is very thorough. In addition, sanctions in Germany are high.
An important question that arises is whether the same conclusions can be drawn in case the carbon price is much higher than the current price of 3-4 EUR. It is assumed that the low price also is an important factor contributing to a high level of compliance. When asked, the DEHSt officials acknowledged that the higher the price, the more incentives exist to cheat the

---

120 Interview DEHSt 7 April 2014.
121 Interview DEHSt 7 April 2014.
122 BVerwG 7 C 37.11, OVG 12 B 20.10 (Decision of 20 February 2014). The case is currently pending before the Court of Justice of the EU.
123 Interview DEHSt 7 April 2014.
124 Interview DEHSt 7 April 2014.
system. That is why DEHSt is determined to further improve the monitoring and enforcement activities, especially through the introduction of site visits.

### 3.3.5 Other compliance mechanisms: help desk for operators, collaboration across the EU

In Germany, much effort is put in assisting companies to comply with the ETS. DEHSt has a busy helpdesk, regular mailings, they organize conferences etc., all aimed at helping installations to comply. Questions that they get with the helpdesk regularly lead to follow-up actions by the DEHSt.¹²⁵ Germany actively participates in the Forum on EU ETS Enforcement which has 4-5 task forces on various topics, one of which is on monitoring and reporting. Together with the Netherlands, Germany considers itself to be the main driver of the forum. DEHSt regrets that this is only a voluntary forum. There are only a handful of active members: Netherlands, Germany and UK, and to some extend Italy. With 28 MS, there are a lot of them not participating at all…¹²⁶ In addition, DEHSt pointed at the Technical Working Group of the European Commission on all regulatory issues on climate change. Depending on the topic of the agenda, DEHSt participates in this as well (when monitoring and reporting regulations are discussed). Bilaterally, DEHSt has very good contacts with the Netherlands emissions authority Nea (regular meetings and exchange of information).

### 3.3.6 Supervision by the Commission

There have been no infringement procedures against Germany on the EU ETS. With the DEHSt officials, we discussed whether it is needed to further harmonize the monitoring and enforcement process at the EU level.¹²⁷ They considered this a very important question and had just commissioned a research project on the question whether there should be a central EU emissions authority. According to the DEHSt, there seem to be advantages and disadvantages to such a central authority. A disadvantage, for instance, is the fact that such a central EU authority will probably have to operate in a quite bureaucratic way and cannot have the close contact to individual operators that decentralized authorities have. Generally, it is thought that a more personal approach increases compliance levels.

---

¹²⁵ Interview with DEHSt 7 April 2014.
¹²⁶ Interview with DEHSt 7 April 2014.
¹²⁷ Interview DEHSt 7 April 2014.
3.4 Case study: The Netherlands

In the Netherlands there were two emissions trading systems, one for emissions of carbon dioxide (CO\textsubscript{2}) and one for emissions of nitrogen oxides (NO\textsubscript{x}). The latter has been ended by January 1\textsuperscript{st} 2014. The main reason for this is the lack of ambitious long-term (international) NO\textsubscript{x} commitments and other competing policy climate initiatives. According to the Dutch Allocation plan 2008-2012 349 installations fell within the scope of the Directive. In total these installations are responsible for almost 90% of the CO\textsubscript{2} emission of the industry and energy sector.

3.4.1 Legal implementation EU ETS

The EU ETS legislation in primarily implemented in the Dutch Environment Management Act ('Wet Milieubeheer': Wm) A specific Chapter in this Act is dedicated to the EU ETS.\textsuperscript{128} In this chapter all elements of the ETS are arranged, such as the issuing of the GHG emissions permit, the monitoring and inspection by the Dutch Emission Authority, the national record, auctioning and international reporting. For specific elements there is the possibility and sometimes the obligation to establish an ordinance.\textsuperscript{129} Every participant in the ETS has to obtain a GHG emissions permit before participating in the ETS. In the Netherlands the Dutch Emission Authority (Nederlandse Emissie Autoriteit, hereafter NEa) decides on the application for such a permit. The most important element of the permit is that the operator has to submit a monitoring plan that shows that the company will count and calculate her emissions accordingly.\textsuperscript{130} This requirement has to ascertain careful and reliable monitoring and enforcement of the EU ETS. Once the monitoring plan is approved and the permit is granted, the company has to submit a yearly report that has to be verified by an independent verifier. This report has to be submitted to the NEa before April 1\textsuperscript{st} of the following year that has until to make its decision if the installation is complying with the norms.\textsuperscript{131}

The GHG emissions permit exists next to the general environmental permit for installations and companies. In theory, it would have been possible to integrate both permits and the requirements concerning monitoring and registration. However, the separation between the two permits has important advantages, for instance, when one of the permits shows a flaw. More importantly, in this way the competences to ensure the implementation of the ETS can be more easily concentrated at one expert competent authority.

3.4.2 National competent authority

The agency responsible for the functioning of the EU ETS is NEa. The Agency was set up in 2005 by the Ministry of Housing, Spatial Planning and the Environment to be responsible for the compliance cycle of the EU ETS. From January 1\textsuperscript{st} 2012 it has the statutory status of an independent authority (zelfstandig bestuursorgaan). As such, the agency falls under the central government, but is independent from the Minister. The Minister does however have budgetary powers and every year the NEA submits a tender to the Minster containing a specific inspection strategy for the coming year. The Ministry of Infrastructure and

\textsuperscript{128} Chapter 16 Wm.
\textsuperscript{129} For example the Regeling Monitoring Emissiehandel.
\textsuperscript{130} Art. 16.10 Wm.
\textsuperscript{131} If the NEa does not respond before 30 September the report is deemed to be silently approved.
Environment together with the Ministry for Economic Affairs, Agriculture and Innovation remain responsible for the development of the policy of the ETS, while the NEa is in charge of the implementation of the ETS. The NEa has the following tasks:

- Issuing and actualization of the emission permit
- Allocation of emission rights
- Inspection and site-visits
- Imposing sanctions
- Supervision on the surrender of emission allowances
- Supervision on compliance of regulations concerning bio-fossils.

The NEa has 48 employees divided over four departments: First, Validation and Permits, responsible for the validation of the monitoring plan that is the backbone of the emission permit. Next, there is the department for Registration of Emission trading. This Department controls the Dutch part of the EU register on emission trading where transactions are conducted by accountholders. Third, the department Inspection and Enforcement. This department is concerned with the control and inspection of operators participating in the EU ETS. If necessary, this department will take enforcement actions. Lastly, is the Management bureau dealing with finance, HR and Communication.

Strikingly, all tasks regarding the functioning of the ETS are thus bundled within the NEA. This was a deliberate choice to enhance communication and quality throughout the compliance chain. All employees however operate according to a functional division between departments to in order to account for checks and balances.

Cooperation with different enforcement agencies
The NEA cooperates when necessary with local police (in case of suspected fraud), the FIOD (tax authorities) or the ACM (Authority on Consumer and Market).

3.4.3 National Allocation Plan

The last National Allocation Plan (NAP) was for the period 2008-2012; for the third phase (2013-2020) the NAPs are abolished. For this period a total of 77,2 Mton CO2 per year were allocated for free; the distribution of the allowances was specified in the national distribution decree (nationaal toewijzingsbesluit).\(^{132}\) In addition 16 million CO2 allowances were auctioned (revenue 180 million euro). In the third phase free allocation shall be gradually replaced by auctioning.\(^{133}\) From an enforcement perspective, this method of allocation is more transparent and efficient. The Netherlands participates together with 25 Member States in the 'common auction platform'. Dutch allowances (EUAs) are auctioned there. The NEa has been appointed by the Ministry of Infrastructure and Environment to act as auctioneer. Since the NEA has no inspection powers regarding the functioning of the market it has to cooperate with the Authority Financial Markets (Autoriteit Financiële Markten). An example of this cooperation was the establishment of more transparent entrance conditions for market players wishing to participate at the auctioning.\(^{134}\) The NEa issues an annual report on the

\(^{132}\) Nederlands nationaal toewijzingsplan broeikasgasemissierechten 2008-2012, Stcrt. 2008, nr. 132. The NAP was approved by the Commission on 28 August 2008, however the NAP a lot of criticism was voiced for over-allocation.

\(^{133}\) As a consequence of the backloading decision 900 million less allowances will be auctioned in the period 2014-2016. Subsequently, at the end of the period (2019-2020) these will be offered for auctioning.

\(^{134}\) Jaarverslag NEa 2012.
auctioning in the Dutch context.\textsuperscript{135}

### 3.4.4 Enforcement Tasks

\textbf{a. Monitoring and Reporting Obligations}

As mentioned before, the monitoring plan is the central element of the GHG emissions permit. For the drafting of the monitoring plan an electronic template is provided by the NEa, as well as a standard application form for the emission permit. The monitoring plan has to conform to requirements of Regulation 601/2012 on the monitoring and reporting of greenhouse gas emissions and the Dutch decree Trade in Emission Allowances (Regeling handel in emissierechten). The drafting of the monitoring plan is considered to be a complex task taking on average approximately 2 months. This process is heavily guided by the NEa helpdesk. The NEa can only grant the permit once the monitoring plan satisfies the requirements of the Regulation, and thus checks every monitoring plan individually.\textsuperscript{136} The operator also has to submit data on uncertainties concerning measurements per source stream, on risk assessment and data on sampling.

After the application for permit and the monitoring plan are submitted the NEa has to make a decision on granting the permit within four months. This validation process involves active correspondence between the applicant and the NEa, and usually means that at least once omissions have to be remedied. Once the monitoring plan is approved and the permits has been granted, there exists a continuously obligation for the operator to maintain the monitoring plan up-to-date if significant changes occur. This also means that there has to be constant oversight. For this purpose, the yearly emission reports that have to be verified and submitted to the NEA are extremely important.

\textbf{b. Verification}

The emission report has to be verified by an independent verifier. The verifier – in accordance with Regulation 600/2012 – takes the monitoring plan as a baseline to test the requirements and procedures laid down in the verification protocol.\textsuperscript{137} The emission report has to be approved and signed by the verifier before it is to be submitted to the NEA before 31th of March of the following year. In the Netherlands 7 verifiers are accredited the Dutch Council for Accreditation (Raad voor de Accreditatie). Not all verifiers are accredited to verify all industrial activities.

The NEa does not test all emission reports to examine the requirements are met, but takes a random sample. If inaccuracies are detected the NEa will substitute the report by conducting its own measurements. There have been incidences where the NEa found omissions in the verified reports, and subsequently send a complaint to the verifier and the Council for Accreditation.\textsuperscript{138}

\textbf{c. Inspection}

The NEa is solely responsible for the enforcement of the Dutch part of the ETS. Its main task is to control how the operator assesses its emissions, and how the relevant data is being processed and reported. For that purpose inspectors of the NEA have certain inspection powers. First, it has access to all information related to the functioning of the ETS, and can in that regard demands all information and documents. Second, it can demand access to a

\textsuperscript{135} The report for 2013 is available on the Internet at: \url{https://www.emissieautoriteit.nl/mediatheek/emissierechten/copy_of_publicaties/veilingen-emissierechten-2013} (last visit 27 April 2014).

\textsuperscript{136} Art. 16.16 lid 2 Wm.

\textsuperscript{137} Available on the website of the NEa.

\textsuperscript{138} Interview NEa 14 April 2012.
installation in order to inspect for instance determination of emissions. Thirdly, it can conduct its own tests.

The NEA has developed an Inspection strategy that is published on its website. All new entrants operating in the EU ETS shall be audited within three years to test their monitoring plan. The frequency of audits for other operations depends on a risk based assessment, depending on the location and complexity of the operation, the amount of emissions, past compliance behavior and external signals. In addition, random audits will be conducted. The audits are generally announced and the NEA provides a ‘what - to - expect’ list to help prepare operators for the audit. This exemplifies the strategy of persuasion of the NEA: throughout the whole compliance cycle the NEA deliberately communicates and assists operators in complying with the EU ETS.

The standard audit involves an administrative investigation, but the investigation can also be extended to several days of testing measurements and financial administration. After a breach has been detected the NEA will re-visit the operator within a reasonable period of time.139

d. Sanctions

Key to the enforcement strategy of the NEA is – as mentioned above – compliance assistance rather than applying sanctions. If non-compliance is detected the NEA will first issue a warning and try to persuade the operator into compliant behavior. However, this is not possible for so-called core provisions. For the following offences an administrative penalty will always be imposed:

- Emitting without a permit;
- Non-reporting of significant changes;
- The lack of a continuous measurement system;
- Not submitting the annual report;
- Surrendering of insufficient allowances

These are so-called essential obligations. If an installation has surrendered insufficient allowances, the NEA will impose the EU harmonized sanction of 100 euro per ton of allowances that were not covered.140 These penalties will be published including the name of the non-compliant operator in the Dutch official journal (‘naming and shaming’).141 Since this can be qualified as a punitive sanction, the requirements of art 6 of the European Convention on Human Rights (ECHR) have to be taken into account. The Dutch legislator has therefore chosen to only publish the name of the offender once there is no longer a possibility for appeal of the lump sum.

In an Ordinance containing guidelines for determining the level of penalties, a distinction is made between ‘essential obligations’, ‘important obligations’ and ‘other obligations’.142 For each obligation the amount of the penalty is indicated. Infringements of obligations of Chapter 16 of the Environmental Management Act can lead to a lump sum between 500 and 450.000 euro; a penalty payment can amount to 4500 per day that the infringement lasted.

139 In 2008 NEa undertook 86 audits, 78 ad hoc visits and 3 thematic investigations; In 2009 there were 83 audits, 84 ad hoc visits and 3 thematic investigations; in 2010 116 audits took place, 89 ad hoc visits and 1 thematic investigation; In 2011 119 audits, 54 ad hoc visits and in 2012 74 audits, 38 ad hoc visits and 1 thematic investigation. In 2012 less inspectors performed audits because regulating Biofuels and the developments regarding aviation required more attention.

140 Art. 16.37.

141 Art. 18.16p Wm.

142 Besluit van 8 september 2011, nr. I&M/BSK-2011/114418, houdende wijziging van Beleidsregels voor het bestuur van de Nederlandse emissieautoriteit inzake het bepalen van de hoogte van een last onder dwangsom of een bestuurlijke boete bij de handhaving van regels voor de handel in emissierechten. In this Ordinance Aviation is also included.
continuous. Penalties are considered to be high. 143 However, these are only guidelines. In practice, the NEa will only reach for these when a non-complying operator is very persistent. Thus, NEa takes seriousness of the infringement and past performance into account when weighing the imposition of a sanction. It will first send a draft decision to which the addressed operator can respond. This response has to be taken into account by the NEA when reaching its final decision on sanctioning (appealable in court).

In fact, not many sanctions have been imposed in Phase II (2008-2012). Between 2008-2011 50 administrative penalties were imposed, with only 3 in the 2012 per 119 permits. In the same period 14 lump sums were imposed, again two in 2012. 144 The first obvious reason for this is the falling price of emissions; there is simply not an incentive for deviant behavior. However, according to the NEa it can also be attributed to the compliance assistance offered by the NEa. In fact, most of the non-compliance can be attributed to unfamiliarity with the legislation and the fact that the ETS is not part of the core business of operators. Most of the offences concerned the operation of a CO2 installation without holding the needed permit, breaching the deadline for submitting the emission report or not monitoring conformance the monitoring plan. 145 The mandatory excess penalty has only been imposed three times in the past nine years; two of them were imposed in 2013.

e. Registration Integrity

Emission trading is vulnerable for fraud as evidenced in the past years, and registration integrity is particularly important in this regard. Since the 20th of June of 2012 an EU Register has been launched to ensure this integrity. 146 The NEa is no longer responsible for technical maintenance, however has remained account manager of the Dutch part of the Register. 147 The NEa actively deploys a fraud prevention strategy that can be summarized as ‘know-your-customer’: NEa periodically checks register holders, and reexamines again on the basis of the Registration Regulation. 148 The NEa also applies the strict requirements of the Registration Regulation, such as the obligation to submit a declaration of (good) behavior before opening an account. In 2012, the NEa has decided several times to reject an application to register or to close an account on the basis of gathered information. In addition, the NEa cooperates closely with other enforcement agencies, such as the tax authorities or the Authority on Consumer and Market. Interestingly, there exists no market inspection yet. 149 The NEa has previously indicated that they it does not possess specific expertise in the area of criminal market behavior. 150

143 Interview NEa 14 April 2014.
145 Interview NEa 14 april 2014.
147 There are approximately 400 accounts of operators that have a GHG emission permit and approximately 250 other accounts.
148 Interview NEa, 14 april 2014.
149 Since a CO2 allowance is not considered to be a financial product.
3.4.5 Other compliance mechanisms: help desk operators, collaborations across the EU

The NEa has a very active helpdesk to ensure its ‘Compliance Assistance’ strategy. 98% of all questions are answered within 1.5 day. Interestingly, 50% of all questions are answered in English. In addition, much effort is afforded to different forms of information dissemination: the NEa Website is very transparent and accessible, there is a newsletter, information gatherings for ETS participants are organized, as well as a yearly NEa-day is organized.

At the EU level, both the NEa and the Ministry of I&M are very active in the Compliance Forum. This Forum organizes ‘task forces’ on different themes (such as ‘Monitoring’) and ‘best practices’ are being exchanged. The Compliance Forum meets once a year; the task forces more often. There exists huge differences between the different Member States and not many Member States are particularly active in this Forum. This could harm the level playing field that is needed throughout the EU to ensure an efficient and effective EU ETS.\textsuperscript{151}

\textsuperscript{151} Interview NEa, 14 April 2014.
3.5 Case study: Greece

Adopting the EU ETS along with a number of other environmental policies and measures reflects the effort of Greece towards combating Climate Change. Due to the severe economic recession in Europe and in Greece in particular, the interest in buying allowances has not been as strong lately. As a result there is an important accumulation of allowances that could lead to the ineffectiveness of the emissions trading mechanism. However, so far it has been shown that the Greek installations that are covered by the mechanism, 141 at the point of its initiation (2005-2007) and 160 today have complied at a very high rate.

3.5.1 Legal Implementation EU ETS

In order to implement the obligations laid down in Directive 2003/87/EC, Greece elaborated the joint ministerial decision 54409/2632/2004. According to this decision the Competent Authority involved in the implementation of the EU ETS Directives in Greece is the Ministry of Environment, Physical Planning and Public Works, renamed to Ministry of Environment, Energy and Climate Change in October 2009 (YPEKA) and more specifically the Emissions Trading Office of the Ministry (GEDE). The ministers taking part in the decision were the Minister of Interior, Public Administration and Decentralization, the Minister of Economics and Finance, the Minister of Development and the Minister of Environment, Physical Planning and Public Works.

The scope of the decision applies to a number of activities. Activities include the ones related to energy (for example oil refineries), to production and processing of ferrous metals, to industry of inorganic materials and others such as industrial installations for the production of pulp out of wood or paper and cardboard that exceeds the 20 tons per day. There is an important clarification considering installations to which this decision does not apply. Such installations, or part of them, are the ones that are used for research, development and testing of new products and processes. The competent authority, i.e., the Minister of Environment, Physical Planning and Public Works, is responsible for the enforcement of this decision, as well as for the coordination between the co-competent Ministries and the public and private sector. He has to make sure the required measures are taken.

For the realization of this coordinating responsibility, an Interministerial Commission is established. This Commission consists of seven members: three representatives from the Ministry of Environment, Physical Planning and Public works, two from the Ministry of Development and two from of the Ministry of Economics and Finance. This Interministerial Commission holds, among others, the following responsibilities:

1. final elaboration of NAP after consulting with the operators, amendment of the NAP (in consultation with the operators in the case that the EU commission declines it), advising the Minister of Environment, Physical Planning and Public Works in several issues related to this

* The authors would like to thank Sofia Biniari who has provided much appreciated research assistance in preparing this case study.

152 WWF And Sandbag Report on the EU ETS in Greece, February 2013.
153 Interview GEDE 28 March 2014.
158 Konstantinos Sioulas, Guide to EU ETS in Greece, pdf,2005(Οδηγός Εφαρμογής του ΣΕΔΕ στην Ελλάδα) as a part of the «Applying European Emissions Trading & Renewable Energy Support Mechanisms in the Greek Electricity Sector (ETRES)». 
decision and, suggesting to the Minister of Environment, Physical planning and Public Works, legislative and administrative measures for the implementation of this decision. In the 25 Articles and five Annexes of joint ministerial decision 54409/2632/2004 are also provisions about the procedure that should be followed in order for the greenhouse gas emissions permit to be issued (content of the permit and conditions for granting it), provisions concerning the National Allocation Plan and its approval among with the method that should be followed in the allocation of allowances, provisions about the registries and other. Article 10 stipulates the obligation for monitoring and reporting while in Article 11 it is mentioned that the reports should be verified. Both the decisions that approve the National Allocation Plans and the distribution of the allowances and the reports that are required in order for the permits to be issued, should be accessible to the public. In the five Annexes, there are several clarifications about the different activities that fall under the scope of this decision, the criteria that should be followed concerning the NAPs and the principles according to which the monitoring, reporting and verification should take place. The Emissions Trading Office (GEDE) of the Department for the Control of Atmospheric Pollution and Noise of the Ministry of Environment, Physical Planning and Public Works, is established as the independent Competent Authority.

To include aviation into the Greek ETS rules, Greece amended joint ministerial decision 54409/2632/2004. Result of this amendment is the joint ministerial decision 57495/2959/E103, published in December 2010. Since then, GEDE is also responsible for Aviation, together with the Hellenic Civil Aviation Authority of the Ministry of Infrastructure, Transport and Networks. 159

3.5.2 National Competent Authority

As stated above, the national Competent Authority of Greece is the Ministry of Environment, Energy and Climate Change (YPEKA), and consequently GEDE, which is part of the General Direction of the Environment of YPEKA, established within the Department for the Control of Atmospheric Pollution and Noise.161 GEDE, among others, during the first two trading periods of the mechanism prepared the National Allocation Plans (NAPs), modified them and notified the Commission for the changes in the case that a NAP was declined. GEDE also published the NAP, taking in consideration the public comments during the preparation until the final approval.162 In addition, it recommends the Minister of Environment about the allocation of allowances or the temporary exception of some installations, the imposition of sanctions and, generally, about other legislative or administrative measures for the implementation of the joint ministerial decision by the competent authority. GEDE is also responsible for monitoring and reporting every transaction, as well as every return or cancellation of allowances. Furthermore, it is responsible for the annual reports and for making sure that the public will get the required access to information. It also used to collaborate with the National Center of Environment and Sustainable Development for the preparation of the national registry. Each year, operators have to report their emissions to the Competent Authority. The same goes for every change in their installation.163 The personnel of GEDE comes either from YPEKA or from other public sector bodies.

159 K.Y.A 57495/2959/E103.
160 In 2012, following a proposal of the Greek Prime Minister, it was renamed to Ministry of Development, Competitiveness, Infrastructure, Transport and Communications. In 2013, though, the Ministry was again reconstituted into Ministry of Infrastructure, Transport and Networks.
161 Art. 4,K.Y.A.
162 Art. 4,K.Y.A
163 Interview GEDE 28 March 2014.
As indicated above, during the second phase of the EU ETS, in December 2010, joint ministerial decision 57495/2959/E103 was published, which included the aviation sector. In the case of aviation, GEDE has to collaborate with the Hellenic Civil Aviation Authority (H.C.A.A.), which falls under the responsibility of the Ministry of Transport and Communication. Some of the responsibilities undertaken by the H.C.A.A. are the control and approval of the monitoring plans and the submission to the Competent Authority of an annual report concerning aircraft operators (issue of new permits, renewal or recall of old ones). The number of employees in GEDE has always been very low. Including the aviation sector, four people plus a superior, are currently employed. The workload is very big since GEDE is not only responsible for the EU ETS but also for the rest of the climate change sector.

The greenhouse gas permit is issued by the Minister of YPEKA after a request/proposal from GEDE. In practice the issuance of the permit due to the workload of the Minister can also be signed by the General Secretary of this Direction of YPEKA. For the issue of a greenhouse permit, the operator of the installation shall submit an application to GEDE. Then, after a proposal by GEDE, the permit is granted by the Minister of YPEKA. The operators shall keep GEDE updated for any changes. In addition GEDE should submit a copy of the permit to the Ministry of Development and YPEKA.

During the first trading period (2005-2007), 141 industrial installations were included in the EU ETS in Greece. These installations were granted temporary permits that would be valid until the approval of the NAP for the period 2005-2007.

3.5.3 National Allocation Plan

GEDE, during the first two periods of the mechanism, after collecting all the necessary data and information, prepared the National Allocation Plans and handed them in to the interministerial commission for final elaboration. Then, the commission in order to complete the NAP proceeded to a consultation with the private and public operators that are involved in its implementation and then suggested its approval to the Minister of Environment, Physical Planning and Public Works. Once the NAP was approved, GEDE published it and notified the European Commission and the Member States. The publication in the daily press included also notification that the public could address to GEDE and get information concerning the NAP. The NAP was approved by a joint ministerial decision made by the Ministers of Environment, Physical Planning and Public Works and Minister of Development. The NAP that Greece prepared for the period 2005-2007 was approved by the Commission. As a result, it was adopted by the ministerial decision 36028/1604/2006.

For the phase II, the NAP that Greece submitted initially was not approved by the Commission due to an insufficient compliance to specific requirements. More specifically, some of the arguments of the Commission were the following: 1) The allowances allocated were more than needed in order for the mechanism to function in Greece; 2) the procedure under which the allowances were allocated was not clear enough, especially when it came to new entrants; 3) Greece did not follow the principle according to which any adjustments of the allowances allocated should be done before the adoption of the NAP and in no case after its approval. Furthermore, the quantity of allowances allocated to the industrial installations of Greece exceeded the needed ones by 21.6 million, while the value of this surplus is

---

164 Interview GEDE 28 March 2014.
165 Interview GEDE 28 March 2014.
166 Interview GEDE 30 April 2014.
estimated to be 335,000,000 Euros. Also, for the period 2008-2011 the 87% of the total surplus was allocated in only ten installations.\textsuperscript{170} Greece had to proceed to an amendment of the NAP which finally led to its approval and to its adoption by the ministerial decision 52115/2970/E103/2008.

3.5.4 Enforcement Tasks

a. Monitoring and Reporting Obligations
According to the Annual Reports submitted by Greece, the Community Decision 2007/589/EC is applied to monitoring and reporting. In addition to this Decision, as mentioned in the Annual Report 2009,\textsuperscript{171} two clarifying Ministerial Circulars were sent to the verifiers and operators.\textsuperscript{172} The operators are obliged to monitor the greenhouse gas emissions of their installations and submit a report to GEDE (Joint ministerial decision, Article 10). Providing that the reports have been verified, the operators are obliged to hand them in to GEDE before the 31\textsuperscript{st} of March each year.\textsuperscript{173}

In Greece it is a common practice that most of the operators send the verified report to GEDE on the last day.\textsuperscript{174} This is quite problematic because everything then has to be checked within a very short period. But in the end, operators, after being pressured by GEDE, hand in what is needed also because of the verifiers.\textsuperscript{175} In 2008, one installation with emissions below 50 Kt per year did not submit a verified report because of technical and financial difficulties until 31 March 2009.\textsuperscript{176} As mentioned in the Annual Report, the competent authority was informed by the installation about this delay and eventually the report was submitted in April leading to the surrender of the allowances on April 30 of the same year. In the Annual Report of Greece of the year 2009 towards accomplishing an improvement on the monitoring and reporting, the Competent Authority, after the examination of the verified reports, sent a letter to some installations giving them some more clarifications and at the same time asking for some more information.\textsuperscript{177} In the 2007 Annual Report\textsuperscript{178} it is mentioned that reports were not submitted for the 31 installations of the DEI\textsuperscript{179} due to a strike of the employees during March 2008, a period in which many of the installations were occupied. The reports were eventually submitted on 15 April 2008. Three other operators with annual emissions under 50kt did not submit verified reports on time either due to severe technical and financial issues.

b. Verification
The operator is obliged to assign the verification of the report to an independent verifier. The verifiers had to meet the minimum requirements derived from the ministerial decision

\textsuperscript{170} WWF And Sandbag Report on the EU ETS in Greece, February 2013.
\textsuperscript{171} Report under Art. 21 Directive 2003/87/EC.
\textsuperscript{172} Circular no.100915 of February 9, 2009, “Basic guidelines for reporting and verification of CO\textsubscript{2} emissions that will be submitted in 2009”.
Circular no.101761 of March 13, 2009 “Clarifications in the use of the oxidation factor for the 2009 emission verification process”.
\textsuperscript{173} Art. 11,KYA 54409/2632/2004.
\textsuperscript{174} Interview GEDE 28 March 2014.
\textsuperscript{175} Interview GEDE 28 March 2014.
\textsuperscript{176} Report under art 21 Directive 2003/87/EC.
\textsuperscript{177} Report under Art. 21 Directive 2003/87/EC.
\textsuperscript{178} Report under Art. 21 Directive 2003/87/EC.
\textsuperscript{179} Public Power Corporation S.A Hellas(Δ.E.H)
In Greece there are five accredited verifiers at the moment. In the case that the report gets approved by the verifier, it has to be submitted to GEDE before 31 March of each year, otherwise the operator has not the right of transferring allowances until the submission of a verified report. The verifier shall be in any case independent from the operator and shall be very well informed about both the legislation and the operation of the particular installation. The Hellenic Accreditation System (ESYD) is an agency responsible for checking the verifiers. It is not a recently established agency but the last years the legislation has changed and as a result this agency has been playing a more active role in the control of the verifiers. The verifiers visit the installations to make sure that everything that has been reported is accurate (site visits). A representative of ESYD has also the right to join these site visits, but we could not ascertain that they actually made use of this right. From the period 2013-2020 the verifiers are obliged to notify ESYD and the Competent Authority on their schedule of site visits. ESYD can choose to join them in these site visits as part of the verification process. The permit of verifiers is issued by the Ministry of Development. GEDE cannot accept a verified report from a verifier that does not have a permit issued by the Ministry of Development and has not been accredited by ESYD. There is a procedure that has to be followed which consists of the following steps. The verifier (to be) goes to ESYD and gets a certificate of accreditation. Then the verifier submits this certificate to the Ministry of Development along with the other documents that are required for the issue of the permit. The Ministry of Development notifies the Competent Authority of this permit and ESYD also notifies the Competent Authority of the companies that it has accredited as verifiers. ESYD has sent an Excel sheet with details on the companies that have been accredited by them to the Competent Authority. Since 2013, once the Competent Authority gets the verified reports, it is obliged to also evaluate and grade the verifier in detail. The verifier visits the installations, checks all the bills and verifies if the data that the operator submitted were accurate. Then, GEDE is obliged to check these data. Not every report is being checked: there are randomly controls of some of the reports. It has happened sometimes that the GEDE finds small mistakes that needed to be checked.

c. Inspection
The legislation provides GEDE with the ability to perform site visits to the installations but so far such thing has not happened. The low number of employees (four), the time and the funding are not sufficient. This in combination with the high number of operators (160 installations and 15 air companies) has made site visits very difficult.

d. Sanctions
If the operators do not comply with this present decision, administrative, criminal and civil sanctions will be imposed. Every operator that does not surrender sufficient allowances in
order to cover the emissions of the last year, until the 30\textsuperscript{th} of April of each year, has to pay a fine of 100 euro per ton of emissions equivalent to CO\textsubscript{2}. Despite the payment of the fine, the operator still has to surrender allowances equal to the excessive admissions the following year. For the first phase, starting January 1\textsuperscript{st} 2005 (2005-2007), a smaller fine should be imposed. For the excessive admissions the fine was 40 euro per ton of emissions, with the obligation to surrender equal allowances the following year.

In addition, every individual that fails to comply with the rest of the provisions of this decision, by act or omission, is obliged to pay a fine between 1500 and 3000 euro and temporarily close down the installation for a period from 5 to 20 days. During the present period the administrative sanctions (fines) are still at the same level (1500-3000euro). They can be imposed to the operators through the Tax Office (public economic service/Δ.Ο.Υ.)\textsuperscript{192}

If an installation has problems and does not comply or does not hand in the required documents, a fine should be imposed. GEDE is responsible for recommending the fine imposition to its superiors in YPEKA. At first, though, GEDE notifies the operator and invites them for an interview. There the operator is being asked to comply and also explain why such compliance has not taken place already. If the installation insists on not complying after the interview GEDE turns to YPEKA as mentioned.

For the year 2013 there were only two incidents of non-compliance.\textsuperscript{193}

According to the Annual Report of Greece (2007) the method of naming and shaming is possible through the joint ministerial decision that implemented Directive 87/2003. However, in Greece this method has not been used so far. These cases are not published by the competent authority itself, but they are available online\textsuperscript{194}.

### 3.5.5 Other compliance mechanisms: help desks for operators, collaboration across EU

During the last two years, one conference has been held by GEDE (as part of YPEKA) for which all the installations were invited to get informed on the EU ETS, with the main focus on the upcoming changes from 2013.\textsuperscript{195} Another conference was held by a verifier in which GEDE made a presentation and answered questions of the operators. In addition, the operators can reach GEDE by telephone (which, according to the interviewee at GEDE, they do constantly) in order to get more information, although GEDE does not seem to have a dedicated help desk for operators. The opening hours are the ones that apply generally to the Greek public sector (approximately 8.00 am to 16.00 pm).\textsuperscript{196} The webpage is currently being updated. At the moment, the webpage only has the legal texts of the EU Directives and Regulations, the joint ministerial decision which implemented the EU ETS in Greece and the ones that implemented the approved NAPs. No specific guidance documents are provided here for participants in the EU ETS. In addition the National Allocation Table for the period 2013-2020 is available along with directions on the procedure that have to be followed for the issuance of the greenhouse gas permit, information about new entrants and guides on the structure of the annual emissions reports that the operators have to submit.\textsuperscript{197} In the English version of the webpage there is less information. Concerning the level of collaboration

\textsuperscript{192}Interview GEDE 28 March 2014.
\textsuperscript{193}Interview GEDE 30 April 2014.
\textsuperscript{194}‘Transparency and Openness Policies of the Greek Government’ ‘under the Ministry of Public Administrative Reform and e-Government.
\textsuperscript{195}Interview GEDE 28 March 2014.
\textsuperscript{196}Interview GEDE 30 April 2014.
\textsuperscript{197}http://www.ypeka.gr/Default.aspx?tabid=456&language=el-GR.
between the EU Member States: Greece does not participate in the EU ETS Compliance Forum. Sometimes officials from GEDE participate in conferences and meetings that are held abroad and where employees from different competent authorities meet and exchange knowledge.
3.6 Case study: Poland

It was only after 1989 that policy makers in Poland started to focus on environmental and climate change issues. Until Poland’s EU accession on 1 May 2004, Polish policy and law on climate change were shaped by the goals of the United Nations Framework Convention on Climate Change (UNFCCC) and to its Kyoto Protocol. One of the main obligations resulting from ratification of the Kyoto Protocol by Poland was to reduce the greenhouse gas emissions by 6% in 2008-2012 in relation to the base year which was chosen as 1988 according to Article 4.6 of the UNFCCC and Decision 9/CP.2. Poland succeeded in fulfilling its obligations under the UNFCCC and the Kyoto Protocol. According to Poland’s Fifth National Communication under the UNFCCC, ‘an efficient system of emission permits, thermal modernization, penalties and fees, and the financing of emissions reduction and new low-carbon technologies from environmental protection funds, have largely contributed to the achievement by Poland of a reduction of about 30 per cent in greenhouse gas emissions compared to the base year 1988’. Karski even highlights that, ‘thanks to instruments provided for in domestic environmental law and energy law, significantly better results have been achieved than in case of most other countries that have reduction commitments under the Kyoto Protocol’.

However, Karski also underlines that ‘the role of the socio-economic transformation, which resulted in the collapse of a broad spectrum of highly polluting enterprises and a growing importance of environmental values, cannot be underestimated here.’ Also the recent Sandbag report Sharing the load – Poland’s coming of age on climate policy mentions the fact that ‘the transition to a market economy has seen a dramatic decoupling of growth from emissions. Since 1988 Poland’s emissions have fallen by 31% and the carbon intensity of the economy has fallen by 90%’. Nonetheless, the report strongly emphasizes that Poland remains the fourth largest emitter in the EU28, with CO2e emissions of 387 million in 2012 and is also the 10th largest EU emitter on a per capita basis, emitting 10 tonnes per person in 2012, and criticizes the fact that ‘despite its sizeable emissions, the carbon budgets set for Poland under the Climate and Energy Package for 2013-2020 are, on average, 3% higher than its current emissions levels.’ Poland was granted these carbon concessions in

---

* This case study was conducted by Dr. Anna Meijknecht, assistant professor Tilburg University.


199 Ratified by Poland on 13 December 2002 (signed on 5 June 1998).


202 Ibid., p. 254.

203 Ibid., p. 254.

204 While most Kyoto countries use 1990 as a baseline year, Poland managed to secure an exceptional baseline of 1988. That year was significant for being the last full year of Communist rule in Poland, but notably emissions had fallen by a staggering 19% in the two years between 1988 and 1990. Sandbag, Sharing the load – Poland’s coming of age on climate policy, 20 March 2014, pp. 3 and 5.

205 Sandbag (2014), pp.3 and 5.
acknowledgement of the special challenges it has faced in its transition from Communism to a market economy.\textsuperscript{207}

The Sandbag report concludes that ‘as Poland’s economy matures it should be weaning itself off special concessions\textsuperscript{208} and taking on more climate responsibilities, not shirking them, and certainly not holding back the wider European effort.’ The report subsequently points out that ‘despite all of the special arrangements that have been put in place to assist Poland in the transition to a lower carbon economy, Poland has been steadfast in resisting efforts to agree new climate targets after 2020, vetoing council conclusions on both the Low Carbon Roadmap and the Energy Roadmap to 2050, and warning that they will veto a 2030 climate target if leaders attempt to agree one in the European Council this March.’\textsuperscript{209}

3.6.1 Legal implementation of EU ETS

Compared to Poland’s successful fulfilment of its UNFCCC and Kyoto obligations, the situation of the implementation of EU law and policy\textsuperscript{210} looks different. According to arski this area of Polish law ‘is characterized by weak links between its instruments’.\textsuperscript{211} He gives the following background to this development

‘When the process of negotiation on Poland’s accession to the EU was initiated and continued, the EU acquis in the area of climate issues had not yet been developed. The significant reduction of greenhouse gas emissions seemed to leave Poland some leeway in the implementation of EU tasks. When going through the transformation, Poland had not focused adequately on creating an impulse to modernize the economy. A rude surprise came in the form of the consequences of Directive 2003/87/EC of October 2003. (…),The EC directive of 2003 was implemented by the Act of 22 December 2004 [see further below]\textsuperscript{212}, however, the EU ETS did not begin to function in Poland until the summer of 2006. This was due largely to the lack of adjustment of the system provided for in directive 2003/87/EC to the accession of Member States which had already reduced their emissions.’\textsuperscript{213}

Since Poland became member of the EU as of 1 May 2004 and as mentioned, the EU ETS system did not begin to function in Poland until the summer of 2006, his case study of the enforcement of EU ETS in Poland will focus on the end of the First Phase (2005-2007) and the Second Phase (2008-2012) linked to the implementation of the initial directive governing the ETS system, Directive 2003/87/EC of 13 October 2003 and the first amending Directive 2004/101/EC of 27 October 2004 establishing a scheme for greenhouse gas emission allowance trading within the Community in respect of the Kyoto Protocol’s project mechanisms.

Subsequently, this case study will discuss some aspects of the (legal) preparation for the Third Phase (2013-2020) as set out Directive 2008/101/EC of 19 November 2008, amending Directive 2003/87/EC so as to include aviation activities in the scheme for GHG emission

\textsuperscript{207} Sandbag (2014), p. 3.
\textsuperscript{208} See also the cases brought by ClientEarth: http://www.rp.pl/artykul/696027.html
\textsuperscript{210} Karski (2012), p. 236.
\textsuperscript{211} Ibid., p. 254.
\textsuperscript{213} Karski (2012), p. 237.

The emission trading system in Poland is based on several Acts and Ordinances. The legal basis for the ETS system in Poland was established by the Act of 22 December 2004 on trade of allowances to emit greenhouse gases (GHG) and other substances to the air (hereinafter: “Emission Trading Act” or “ETA”)(214) that implemented Directive 2003/87/EC. The subsequent Act of 17 July 2009 on the management of emissions of GHG and other substances (hereinafter: “Emission Management Act” or “EMA”)(215) focuses on monitoring and management of the Kyoto units, thus implementing Directive 2004/101/EC. The most recent act, amending the two previous acts, is the Act on the emission trading system of 28th of April 2011 (hereinafter: ETS Act)(216) aims to implement Directive 2008/101/EC and Directive 2009/29/EC. The amendments to national law were made to facilitate the implementation and approval of projects (e.g. renewable energy sources, Joint Implementation projects) for the reduction of greenhouse gas emissions from installations covered by the EU ETS.

The Polish Emission Trading Act (ETA)(217).

The Emission Trading Act established the general framework for the Polish emission trading system(218) and provided for the necessary procedures and the administrative structure to make emission trading operational in Poland. (219) It regulates its scope(220), the permit procedure(221), the procedure for issuing allowances(222), the design of a national emission trading registry(223), the tasks of the National Administrator of the ETS (“NAETS” or “KASHUE”)(224), as well as provisions on the transfer of allowances and compliance instruments(225). The ETA system includes two sub-systems: 1) a community emission trading system and 2) a national emission trading system. (226) The system covers GHGs(227) and other substances(228). The community emission trading system covers GHGs. The national emission trading system covers the emission of ‘other substances’ into the air. A detailed list of the types of installations that have to be included in the system and their respective thresholds

---

214 USTAWA z dnia 22 grudnia 2004 r. o handlu uprawnieniami do emisji do powietrza gazów cieplarnianych i innych substancji. Polish Journal of Laws no. 281, item 2784.

215 USTAWA z dnia 17 lipca 2009 r. o systemie zarządzania emisjami gazów cieplarnianych i innych substancji. Polish Journal of Laws no. 130, item 1070.


217 USTAWA z dnia 22 grudnia 2004 r. o handlu uprawnieniami do emisji do powietrza gazów cieplarnianych i innych substancji. Polish Journal of Laws no. 281, item 2784.

218 Art. 1 ETA.


220 Arts. 5-8 ETA.

221 Arts. 33-39 ETA.

222 Arts. 22-33 ETA.

223 Arts. 10-13 ETA.

224 Art. 9 ETS.

225 Arts. 40-52 ETA.

226 Art. 5(1) ETA.

227 GHGs are described in Annex II to the ETS Directive as: carbon dioxide (CO2), methane (CH4), nitrous oxide(N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulphur hexafluoride (SF6).

228 ‘Other substances’ covered by the system are sulphur dioxide (SO2), nitrogen oxides (NOx) and dusts.
are set out in the Ordinance of the Minister of the Environment of 27 July 2009 on the types of installations covered by the Community emission allowance trading.\textsuperscript{229}

\textit{The Emission Management Act of 17 July 2009 (EMA)\textsuperscript{230}}

The Act of 17 July 2009 on the management of emissions of GHG and other substances (Hereafter: “Emission Management Act” or “EMA”)\textsuperscript{231} transposes regulations of the so called Linking Directive (2004/101/EC). This Act sets forth the responsibilities of the National Centre for Emission Balancing and Management (KOBIZE)\textsuperscript{232} and the principles of the operation of the National System for Emission Balancing and Forecasting. Further, it regulates the principles of the management of emissions of greenhouse gases and other substances; the principles of the operation of the National Registry of the Kyoto Units and emission allowance and the principles of trading in and managing the Kyoto units. It also provides the legal framework for the operation of the National Green Investment Scheme and the Climate Account and of the management of the Joint Implementation projects and Clean Development Mechanism projects in the territory of the Republic of Poland.\textsuperscript{233}

The list of greenhouse gases and other substances released into the air and covered by the system for the management of emissions of greenhouse gases and other substances is set out in the Annex to this Act.\textsuperscript{234}

\textit{Act on the Emission Trading System of 28th of April 2011 (ETS Act).\textsuperscript{235}}

The ETS Act on the emission trading system of 28 April 2011 entered into force on 21 June 2011 and replaces the law of 22 December 2004 on the Polish Emission Trading Act (ETA). It regulates the functioning of the of the ETS scheme in the current trading period (2008-2013) – which in many important aspects differs from the rules that will be binding as from 2013. The Act relates only in certain provisions to the trading period 2013-2020.\textsuperscript{236} The ETS Act encompasses the emission of GHG from: 1) installations carrying out an activity causing emission if the installations meet the capacity thresholds 2) aircraft operations which begin or and at the territory of the EU Member State.\textsuperscript{237}

The law implements provision relating to 1) qualification of the installations to be covered by the scheme\textsuperscript{238} 2) inclusion into the ETS scheme of aircraft operation performed by the aircraft operator\textsuperscript{239} 3) rules for disposing of emission allowances\textsuperscript{240} 4) rules for auctions\textsuperscript{241} (relating to the second trading period) 5) the system for effective sanctions safeguarding the performance of the obligations imposed by the law.\textsuperscript{242}

\begin{itemize}
  \item \textsuperscript{229} http://www.kobize.pl/materialy/krajowe/rozp_MS_z_27_lipca_2009.pdf
  \item \textsuperscript{230} USTAWA z dnia 17 lipca 2009 r. o systemie zarządzania emisjami gazów cieplarnianych i innych substancji. Polish Journal of Laws no. 130, item 1070.
  \item \textsuperscript{231} USTAWA z dnia 17 lipca 2009 r. o systemie zarządzania emisjami gazów cieplarnianych i innych substancji. Polish Journal of Laws no. 130, item 1070.
  \item \textsuperscript{232} Art. 3 EMA.
  \item \textsuperscript{233} Art. 1(1) EMA.
  \item \textsuperscript{234} Art. 1 (2) EMA.
  \item \textsuperscript{235} USTAWA z dnia 17 lipca 2009 r. o systemie zarządzania emisjami gazów cieplarnianych i innych substancji. Polish Journal of Laws no. 130, item 1070.
  \item \textsuperscript{236} USTAWA z dnia 28 kwietnia 2011 r. o systemie handlu uprawnieniami do emisji gazów cieplarnianych, Polish Journal of Laws no. 122, item 695
  \item \textsuperscript{238} Art. 1 (1) and (2) ETS Act.
  \item \textsuperscript{239} Art. 68 and Annex A en B
  \item \textsuperscript{240} Arts. 22-28 ETS Act.
  \item \textsuperscript{241} Arts. 4050 ETS Act.
  \item \textsuperscript{242} Arts. 51-67 and 70-77 ETS Act.
\end{itemize}
As regards the contribution of the ETS Act to the functioning of ETS in Poland, Jaś concluded the following: “the ETS Act combines provisions of the Phase II with the provisions of the Phase III. As a matter of fact, the implementation of provisions of the Directive 2009/29 and other provisions of the Community law relating to the functioning of the ETS into the Polish legal system by the Act of 28 April 2011 is work in progress. The issues to be regulated include the terms of purchase of missing allowances at auctions, rules for allocation of free allowances (under Articles 10(a) and 10(c) of the Directive 2009/29/EC) and the way of spending funds received from the sale of emission allowances. Much as these changes to the Act are absolutely necessary, it seems hardly possible that this will be done before the end of the second accounting period. It can be expected that it will rather be the period of the creative interpretation of the law and the close cooperation between the national administration and the government in terms of negotiating the scope of application and enforcement of the provisions of law.”

Stoczkiewicz is even more critical about the current ETS Act. He points particularly at the lack of transposition of Article 10(a), 10(c) and 3 (h) of Directive 2009/29/EC and the fact that “due to these deficiencies in transposition, Polish legislation does not exclude the possibility of free allowances for new entrants, i.e. installations that have obtained their first greenhouse gas emissions permit after 30 June 2011.” In fact, the Polish legislator forgot to transpose and implement the principles concerning auctioning and, instead, only took care of the exceptions to this principle. Stoczkiewicz therefore concludes that “this partial and faulty transposition has a significant impact on the implementation of the amended Directive 2003/87/EC and jeopardizes the achievement of the Directive’s objectives.”

It can be concluded that, whereas directive 2003/87 has been transposed correctly in Polish law, so far, (April 2014) Poland did not adopt any legal act that would fully transpose Directive 2003/87/EC as amended by Directive 2009/29/EC. As Poland did not transpose Directive 2009/29/EC on time, on 31 January 2013 the European Commission sent to the Polish authorities a formal notice, based on Article 258 of the Treaty on the Functioning of the European Union. The Polish government is currently preparing a draft act on the greenhouse gas emission allowance trading scheme.

### 3.6.2 National competent authorities

Poland is a regionalised unitary state, with 3 levels of sub-national government: 16 voivodeships (województwa - regions); 314 powiaty (powiat - upper tier local government -

---


248 Questionnaire ClientEarth, received 26 April 2014.


Due to the complexity of the administrative system and of the environmental regulations in Poland, different administrative authorities of the national and sub-national/regional level are involved in the process of EU ETS enforcement:

- Ministry of Environment – main supervisor of the system, responsible for law implementation/transposition;
- KOBIZE – central Competent Authority (registry, allocation, annual emission reports);
- Network of regional administration institutions (assessment and issuance of permits and accepting of monitoring plans);
- Chief Inspectorate of Environmental Protection (GIOŠ) and sixteen Voivodship (Regional) Inspectorates for Environmental Protection (WIOŚ) (irregular situations, financial fines, etc);
- Polish Centre for Accreditation (PCA) – supervision of verifiers accreditation process;

**National Centre for Emissions Management (KOBIZE)**

The EMA of 17 July 2009 established the National Centre for Emissions Management (hereinafter: ‘National Centre’ or ‘KOBIZE’), which took over the tasks of the National Administrator of Emissions Trading System (KASHUE) established under the abovementioned ETA of 22 December 2004.

The responsibilities of the National Centre for Emissions Management (KOBIZE) as established in Article 3 EMA, concern a range of different tasks relating to the operation of the National System for Emission Balancing and Forecasting, including the keeping of the National Database on Emissions of Greenhouse Gases and Other Substances, keeping the National Registry of the Kyoto Unit and keeping the list of the Joint Implementation projects, and drawing up sets of information and reports, in particular for the purposes of the public statistics.

As regards the administration of the greenhouse gas emission allowance trading scheme, KOBIZE in particular has the following tasks:

a) keeping the electronic database containing information about installations subject to the scheme necessary for the development of the draft national greenhouse gas allocation plan (…);

b) keeping the electronic database containing information about aircraft operators (…)

c) providing opinions on monitoring plans, referred to in Article 51(1) of the Act of 28 April 2011 on the greenhouse gas emission allowance trading scheme;

d) collecting data and performing analyses on the scheme;

e) developing of the draft national greenhouse gas allocation plan for the installations subject to the scheme;

---


252 Art. 41 (2) ETS Act.

253 Questionnaire KOBIZE, received 7 May 2014.

254 Art. 3 EMA.

255 Art. 9 ETA.


257 See also Art. 6 EMA.
f) compiling reports on the scheme in terms of participation in the system of installations and aircraft operators;
g) providing explanations, preparing information and training materials;
h) cooperation with public administration authorities and fulfilment of international commitments;
i) keeping the list of the entities authorised to verify the reports specified in the Act of 28 April 2011 on the greenhouse gas emission allowance trading scheme prepared by the aircraft operators and installation operators;
j) conducting emission allowance;
k) providing opinions on draft legal acts and documents concerning the scheme;
l) drawing up lists of the installation operators and aircraft operators who infringed their obligations related to the participation in the scheme, and forwarding them to the Minister responsible for the environment.

KOBIZE also keeps the list of the entities authorised to verify the reports.

According to article 4 EMA, the performance of duties of the National Centre is a responsibility of the Institute for Environmental Protection in Warsaw. It is a research institute supervised by the Minister of the Environment under the provisions of Chapter 7 of the Act of 30 April 2010 on Research Institutes. The Minister responsible for the environment supervises the performance of its responsibilities by the National Centre. By 31 January of each year, the National Centre submits a report on the performance of its responsibilities to the Minister. Where the report is incomplete or gives rise to objections, the Minister may request that the report should be supplemented or additional clarification should be provided. If by the set date the National Centre fails to supplement the report or to submit the clarification required, or if the report submitted still gives rise to objections, the Minister may order to carry out an inspection in the scope of the tasks performed by the National Centre. If any significant irregularities are found in the scope of the performance of its responsibilities by the National Centre, the Minister may dismiss the Director of the Institute of Environmental Protection.

### 3.6.3 National Allocation Plans

National allocation plans (NAPs) determined - during the period 2008-2012 - for each Member State the ‘cap’ or limit on the total amount of CO2 that installations covered by the EU ETS can emit, and set out how allowances will be allocated to individual installations. In Poland the procedure for the drawing up the NAP was follows: The national Centre prepared a draft of the National Allocation Plan. After public consultations the National Centre forwarded the draft of a national plan to the Minister of the Environment. The Minister consulted the project with the Council of Ministers and subsequently the national plan was presented to the European Commission and the Member States. The Commission assessed the Member States’ proposed NAPs against the 12 allocation criteria listed in the Directives.

---

259 Art. 5 (1) EMA.
260 Art. 5 (2) EMA.
261 Art. 5 (3) EMA.
262 Art. 5 (4) EMA.
263 Art. 5 (5) EMA.
264 See, for instance, Art. 12 (1) of the Polish ETS Act.
265 Art. 14 (1) ETS Act.
266 Art. 14 (2) ETS Act.
The National plans had to be consistent with the EU's and Member States’ Kyoto commitments, with the actual verified emission levels reported in the Commission's annual progress reports and with the technological potential to reduce emissions. Article 13(1) of the ETS Act determines what issues should be regulated in the national allocation plans.  

The acceptance of the Polish NAPs by the European Commission was beset by long procedural disputes, including proceedings before the Court of First Instance of the European Community. According to Karski: this 'bad experience with the community trading system negatively influenced the reception of this extremely interesting market-based instrument by generating general reluctance towards climate issues. The consequence has been a destabilization of the EU ETS and thus of this part of emission reduction law in Poland. Emission trading is associated with constant changes, low predictability and unclear rules.'

3.6.4 Enforcement tasks

a. Monitoring and Reporting Obligations

GHG emissions permit

Entities using installations covered by the system are obliged to obtain a permit for emissions of greenhouse gases from the relevant authority at the level of sub-national government. The body competent for issuing permits to take part in the trading scheme is the starost [powiat or county governor], or in the case of plants incorporating an installation which qualifies as an undertaking likely to have a significant impact on the environment, the environmental impact, and in respect of which the compilation (submission) of a report on the undertaking’s environmental impact is compulsory - the competent marshal of the voivodship. As mentioned, there are 16 voivedeships and 314 (380) powiats (counties) in Poland. Permits are granted for a maximum period of 10 years. The permit is one of the tools that helps supervise the system, but it is up to an independent decision of each regional administration institution if they conduct inspection during the process of issuing the permit. The starost [powiat or: county governor] and the marshal of the voivodship are supervised by the Ministry of Environment and are not directly linked to, or accountable to, the monitoring and compliance system of the National Center (KOBIZE) and the Regional Inspectorates for Environmental Protection (Wojewódzki Inspektor Ochrony Środowiska).

267) the total quantity of emission allowances available for distribution in a commitment period; 2) the total quantity of emission allowances for particular types of installations covered by the system; 3) installations covered by the system along with the quantity of allocated emission allowances for each year; 4) the quantity of emission allowances which in the commitment period will constitute a national reserve of emission allowances for new installations and for those installations whose system was changed, referred to as ‘national reserve’; 5) the quantity or percentage of emission reduction units and certified emission reductions units whose installations may be used to settle the annual emission level and the use of these units in the commitment period; 6) the quantity of emission allowances representing a reserve for JI projects with letter of approval, which help to reduce the level of carbon dioxide (CO2) emissions in installations covered by the system.


270) Art. 41 (1) ETS Act.

271) Art. 41 (2) ETS Act.

272) Art. 41 (3) ETS Act.

273) Questionnaire KOBIZE, received 7 May 2014.
This structure makes the control on the issuance of GHG permits rather weak as became clear in e.g. the case of the Łęczna coal plant near the Ukrainian border. In this case permits were issued for the coal plant worth of €33-million of free allowances. Under EU rules, exemptions from the ETS until 2020 – ‘10 c derogations’ - can only be granted to power plants if their investment process was ‘physically initiated’ before 31 December 2008, and if their greenhouse gas permits were issued before 30 June 2011. However until this date (1 May 2014) there is no visible evidence that any construction work has begun.

Under article 3(16) of the ETS Act, a permit is an administrative decision allowing for emission of greenhouse gases from an installation covered by the system and defining duties of an entity using the installation as regards control. The lack of such a permit means that using an installation in the area of emission of greenhouse gases covered by the system during the accounting period is not permitted. Where the entity using the installation does not possess a permit a penalty of 50,000 Euro can be imposed. So far, this has never happened.

The monitoring plan
According to article 56 of the ETS Act, an entity using an installation covered by the system is obliged to draw up an emission monitoring plan. The monitoring plan goes through both ex-ante and ex-post control. Ex-ante control is conducted by regional administration institutions [see under Permits] during the process of acceptance and issuing of a monitoring plan. Ex-post control of a monitoring plan and all related monitoring procedures is performed annually by verifiers during the verification process in accordance with Art 16,17 and 27 of ETS Act [see under Verifiers]. The entity using an installation is bound to change the plan, inter alia, in the case the monitoring methodology applied has changed or contains mistakes.

Monitoring plan for air operations
Directive 2008/101/EC of 19 November 2008 amended Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community. This incorporation of aviation emissions in the EU ETS is one of the major developments in the EU ETS Phase III. Consequently, one of the new aspects in the ETS Act is the regulation of the functioning of the scheme of aircraft operations performed by aircraft operators.

The ETS Act introduces separate regulations for control plan for air operations. The control plan prepared by an aircraft operator consists of set of information about the manner of running the register and data gathering for preparation of the annual report on CO2 emissions.

---

277 Art. 72 ETS Act.
278 Art. 56 (1) ETS Act.
279 Questionnaire KOBIZE, received 7 May 2014
280 Art. 56 (2) en (3). In 2012 operators changed their monitoring plans often - 576 times - to be in line with new requirements included in the Monitoring and Reporting Regulation. Questionnaire received form KOBIZE, 7 May 2014.
emissions and balance of tonne-kilometre in a given accounting year.\textsuperscript{282} The aircraft operator is obliged to prepare two separate control plans: the emission amount control plan and control plan for the amount of tonne-kilometres made during the air operations.\textsuperscript{283}

The acceptance of a monitoring plan drawn up by an aircraft operator differs from the acceptance of the installation emission monitoring plans. An aircraft operator is obliged to issue a motion for the acceptance of the plan by the Minister of the Environment.\textsuperscript{284} The Minister hands over control plans to the National Centre for the purpose of checking their consistency with the Commission's decision 2009/29/EC.\textsuperscript{285} Subsequently the National Centre informs the Minister of the compliance of the plans within 14 days from receiving such plans.\textsuperscript{286} The Minister accepts the monitoring plans by issuing a decision.\textsuperscript{287}

**Reporting**

Every year, before 31 March, entities managing installations and aircraft operators have the obligation to submit\textsuperscript{288} to the National Centre a verified report on the amount of GHG emission. The assessment by the National Centre includes an evaluation of completeness, correctness of calculation, compliance with MRR requirements and monitoring methodology approved in a monitoring plan.\textsuperscript{289} The National Centre contacts the entity or operator for further explanations where it finds any irregularities. It can also require adjustments to be made in the report within 30 days.\textsuperscript{290} If the deadline of 31 March is not met, the National Centre blocks the operator’s or entity’s account in the National Registry.\textsuperscript{291}

In case of detection of non-compliance (lack of emission report, emission report submitted after the deadline, lack of surrendered allowances in registry, number of surrendered allowances is smaller than annual emission)\textsuperscript{292} the National Centre draws up a list of these cases and forwards it to the Regional Inspectorates for Environmental Protection\textsuperscript{293} by 15 May, and to the Minister of Environment. The latter publishes the list in the Public Information Journal. (Biuletyn Informacji Publicznej).\textsuperscript{294}

Non-compliance may finally lead to the imposition, by the Regional Inspectorates for Environmental Protection, of financial fines of up to 10,000 Euro - an amount considered to have a deterrent effect.\textsuperscript{295} Where the National Centre has not been notified in due time of the

\begin{itemize}
\item \textsuperscript{282} Art. 55 ETS Act.
\item \textsuperscript{284} Art. 52 (1) ETS Act.
\item \textsuperscript{285} Art. 52 (4) ETS Act.
\item \textsuperscript{286} Art. 52 (5) ETS Act.
\item \textsuperscript{287} Art. 53 ETS Act.
\item \textsuperscript{288} Also see Art. 8 EMA regulating the submission and uploading of the report in the National Database.
\item \textsuperscript{289} Questionnaire KOBIZE, received 7 May 2014.
\item \textsuperscript{290} Art. 62 (4), (5), (6), (7) ETS Act.
\item \textsuperscript{291} Art. 62 (1) and (3) ETS Act.
\item \textsuperscript{292} Art. 66 (1) ETS Act. Questionnaire KOBIZE, received 7 May 2014.
\item \textsuperscript{293} Different locations across Poland: http://www.gios.gov.pl/artykuly/418/Lista-Wojewodzkich-Inspektoratow-Ochrony-Srodowiska
\item \textsuperscript{294} Arts. 66-67 ETS Act.
\item \textsuperscript{295} Art. 70(1) ETS Act.
\end{itemize}
fact that an installation has stopped to fulfil the requirement of the system, a penalty of 5000 Euro can be imposed. \(^{296}\) So far, this has never occurred.

**b. Verification**

The institution responsible for accreditation of verifiers in Poland is the Polish Centre for Accreditation (a member of European Co-operation for Accreditation). Currently 8 companies are accredited by PCA as verifiers. In addition there is a number of verifiers accredited by national accreditation bodies in other Member States that provide their services in Poland. The website of the the National Centre contains a register of accredited verifiers.\(^{297}\) Articles 59-62 ETS Act (42-48 ETA for First and Second Phase) set out general requirements regarding the verification of the annual report and accreditation of the auditors.\(^{300}\) Entities using installations and aircraft operators pay the costs of the verification of the reports.\(^{299}\)

Remarkably, all annual reports submitted between 2007 until 2012 to the National Centre, have received positive feedback from the verification.\(^{300}\) Moreover, in the years 2008-2012, a special team by the National Centre carried out an analysis of the correctness of the calculation and checked compliance between annual emission reports and monitoring requirements included in permits for participation in the EU ETS (the methods of monitoring and reporting).\(^{301}\) During these years no situations were reported where the National Centre had to instruct the registry administrator to correct the annual verified emissions for the previous year for any installation(s) to ensure compliance with the detailed requirements established by the Member State pursuant to Annex V to Directive 2003/87/EC.\(^{300}\)

The National Centre confirms that the non-compliance level is very low in Poland and adds that cases of non-compliance are usually related to meeting the deadline for the submission of annual emission reports. This is often due to the fact that there are not enough accredited verifiers on the market.\(^{303}\)

**c. Inspection**

As mentioned above, where the National Centre detects cases of non-compliance (lack of emission report, emission report submitted after the deadline, lack of surrendered allowances in registry, number of surrendered allowances is smaller that annual emission)\(^{304}\) it draws up a list and forwards it to the relevant Regional Inspectorate for Environmental Protection\(^{305}\) for further factual control.\(^{306}\) On the basis of this information the Regional Inspectorates for Environmental Protection plan and conduct their inspection activities. Inspection is

---

\(^{296}\) Art. 70(2) ETS Act.
\(^{297}\) Art. 3 EMA, Art. 60 ETS Act. Questionnaire KOBIZE, received 7 May 2014
\(^{298}\) The Regulation of the Minister for the Environment of 6 February 2006 concerning the conditions to be met by auditors authorised to verify annual reports (Journal of Laws of the Republic of Poland 2006.23.176).
\(^{299}\) http://www.mos.gov.pl/g2/big/2009_04/55ef9e226a1808b07493ab61150e9562.pdf
\(^{300}\) Art. 61 ETS Act.
\(^{301}\) Ibid.
\(^{302}\) Ibid.
\(^{303}\) Questionnaire KOBIZE, received 7 May 2014.
\(^{304}\) Art. 66 (1) ETS Act. Questionnaire KOBIZE, received 7 May 2014.
\(^{305}\) Different locations across Poland: http://www.gios.gov.pl/artykul/418/Lista-Wojewodzkich-Inspektoratow-Ochrony-Srodowiska
\(^{306}\) Art. 63 (1), (2) and (3) and Chapter 3 National Act of 20 July 1991 (o Inspekcji Ochrony Środowiska), Polish Journal of Laws, 2007, Nr 44, item 287, with later amendments.
considered ‘a useful tool that could be used in more problematic cases (like lack of an emission report in case of cessation, bankruptcy, closures etc). However, due to high cost and capacity limitations it is up to an individual decision of each institution when and how to organize the inspection.’

If the Regional Inspectorate for Environmental Protection finds any irregularities affecting the determination of the amount GHG emitted he determines the factual amount of the emission and notifies the National Centre. The excess emissions penalty is 100 Euro for each tone of CO2 equivalent emitted for which the operator did not surrender allowances by 30 April. So far, no penalties have been imposed.

d. Sanctions
The system for effective sanctions safeguarding the performance of the obligations imposed by the law is regulated in chapter 8 (Articles 51-67 ETS Act) on Monitoring and Balancing and in Chapter 11 (Articles 70-77 ETS Act) on financial sanctions of the ETS Act. In general possible sanctions are the following: blockade of an account in the registry (in case of lack of the report at the end of March); inspection and estimation of annual emission by a regional competent authority (in case of lack of the report or serious misstatements); financial fines (in case of lack of the permit, lack of the annual report or when insufficient number of allowances were surrendered); publication of company’s name in official journal (“name and shame”).

As mentioned above, the National Centre assesses the data and figures presented in the annual report and contacts the entity or operator for further explanations where it finds any irregularities. It can also require adjustments to be made in the report within 30 days. The total number of permits that were updated during the reporting period because of a change in the nature or functioning, or extension, of installations made by operators as specified in Article 7 of Directive 2003/87/EC was in 2007: 347, in 2008: 317, in 2009: 841, in 2010: 286, in 2011: 405, in 2012: 985.

If the deadline of 31 March is not met, the National Centre blocks the operator’s or entity’s account in the National Registry. The total number of allowances in the accounts blocked in 2009 was: 13 661 412 allowances for 55 of installations. In 2010: 4 476 835 for 34 of installations. In 2011: 1 651 925 Mg CO2 allowances for 18 of installations. In 2012: 92 472 Mg CO2 + 3000 ERUs for three installations.

The National Centre also draws up a list of entities managing installations and aircraft operators who did not submit a report in due time and forwards these lists to the Regional

---

307 Questionnaire KOBIZE, received 7 May 2014.
308 Art. 63 (5) and (6) ETS Act.
309 Art. 71 Ets Act.
310 Ibid.
311 Art. 62 (4), (5), (6), (7) ETS Act.
312 Art. 21 reports’ by Poland for the years 2007 – 2012. See: http://cdr.eionet.europa.eu/
313 Art. 62 (1) and (3) ETS Act.
314 In 2012 KOBIZE blocked 3 accounts in the registry as a sanction for incompliance. Some other accounts were temporary blocked for missing the deadline for submission of the annual emission report or when some mistakes were found in the emission report during the assessment in KOBIZE. Those accounts were later unblocked when the annual emission reports were submitted or when the corrected versions of the annual emission reports were provided. Source: Questionnaire KOBIZE, received 7 May 2014.
Inspectorates for Environmental Protection\textsuperscript{316} and to the Minister of Environment. The latter publishes the list in the Public Information Journal (Biuletyn Informacji Publicznej).\textsuperscript{317}

**Financial penalties**

Financial penalties are imposed by a Regional Inspectorate for Environmental Protection as executive orders. As of 2011 the fines have increased considerably. Regional Inspectorates for Environmental Protection are authorised to impose penalties in situations mentioned in Articles 70-72 ETS Act: A penalty of 10.000 euro for failure to submit a verified report on emissions in due time (Article 70 (1))\textsuperscript{318}; A penalty of 5.000 euro for the omission to notify changes to the installation (Article 70 (2))\textsuperscript{319}; A penalty of 50.000 euro for running an installation without permit (Article 72 (1))\textsuperscript{320}; An excess emissions penalty of 100 Euro for each ton of CO2 equivalent emitted for which the operator did not surrender allowances by 30 April (Article 71)\textsuperscript{321}.

Before 15 February, the Regional Inspectorates for Environmental Protection inform the National Centre and the National Funds about the amounts imposed by way of penalty; the names of the users of the installation or the airplane operators, and the type of infringement.\textsuperscript{322} With regard to penalties for airplane operators, abovementioned information is also forwarded to the Minister of Environment.\textsuperscript{323}

There is a high compliance rate in Poland. According to the National Centre, the financial fines are quite high so operators try to do everything on time. In addition to that the National Centre sends reminders before each important deadline.\textsuperscript{324} Between 2007 and 2012 no penalties were imposed pursuant to Article 16(1).\textsuperscript{325}

### 3.6.5 Other compliance mechanisms: help desks for operators, collaboration across EU

Permanent assistance is available in Poland for companies that have questions regarding their obligations under the EU ETS. KOBIZE as a central Competent Authority provides help for both companies covered by EU ETS and other institutions. Those support activities include:

- Helpdesk (including allocation, MRV, registry, legal);
- Annual workshops for verifiers (together with PCA);
- Dedicated workshops (introduction of new MRV requirements or templates);
- Preparation of guidelines, templates and examples or translation of EU level support documentations.

Further, representatives of Ministry of Environment or KOBIZE are participating actively in all official Technical Working Groups (benchmarking, monitoring & reporting, accreditation &

\textsuperscript{316}Different locations across Poland: http://www.gios.gov.pl/artykuly/418/Lista-Wojewodzkich-Inspektoratow-Ochrony-Srodowiska

\textsuperscript{317}Arts.. 66-67 ETS Act.

\textsuperscript{318}In the period 2006-2010: no penalty.

\textsuperscript{319}In the period 2006-2010: no penalty.

\textsuperscript{320}In the period 2006-2010: regional environmental protection inspector can impose a fine.

\textsuperscript{321}In the period 2006-2010: the same penalty.

\textsuperscript{322}Art. 76 ETS Act.

\textsuperscript{323}Art. 77 ETS Act.

\textsuperscript{324}Questionnaire KOBIZE, received 7 May 2014

verification, aviation) and many additional forums like Compliance Forum task forces (TF MR, TF AV, TF Aviation). In addition a KOBIZE representative is a Member of the Compliance Forum Steering Committee.  

As regards the legal implementation of the EU-ETS system in Polish law and policy it can be concluded that the transposition in Polish law of Directive 2003/87, including the establishment of several institutions for the monitoring and compliance of the EU-ETS, has occurred correctly, but that Poland has not yet managed to not adopt any legal act fully transposing Directive 2009/29/EC. Whereas this partial and faulty transposition of this Directive hampers the realization of the Third Phase of the EU-ETS in Poland, it does not directly affect the functioning of the Polish EU-ETS monitoring and compliance system and institutions as such.

Further, with regard to the EU-ETS monitoring and compliance system in Poland, it can be concluded that the control over permit issuance is a weak point in the system. One of the reason might be the deficient connection between the ex-ante monitoring and compliance conducted by regional administrative authorities which issue permits for GHG emission and the ex-post monitoring and compliance by the National Centre and the Regional Inspectorates for Environmental Protection.

Finally, the fact that between 2007 and 2012 no fines were imposed at all can probably be attributed to the deterrent effect of the high fines for the different infringements; to the fact that operators and entities have ample opportunity to update their permits; and to the fact that the National Centre sends reminders before each important deadline and regularly blocks the account of an operator or entity in the National Registry.

326 Questionnaire KOBIZE, received 7 May 2014.
327 Questionnaire ClientEarth, received 26 April 2014.
328 https://www.mos.gov.pl/kategoria/5469_projekt_ustawy_o_systemie_handlu_uprawnieniami_do_emisji_gazow_cieplarnianych/
329 Ibid.
3.7 Case Study: United Kingdom

The UK has been a forerunner in emission trading. Between 1999 and 2002, in a period of widespread optimism and faith in the efficacy of new economic policy instruments, the UK Emissions Trading Scheme (UK ETS) was created. This scheme was a voluntary, scheme covering six greenhouse gases, measured in equivalence to carbon dioxide (CO2e). On average, each of the 33 direct participants in the UK scheme made a commitment to reduce their emissions by roughly 12% from their 1998–2000 baselines, creating an aggregate reduction of 12 million tonnes of CO2e from 2002 to 2006 under the emissions cap. The scheme began in 2002 and finished quietly in 2007, at which time eligible participants moved into the EU emission trading scheme.

Currently around 1000 UK installations participate in the EU ETS. These include power stations, oil refineries, offshore platforms and industries that produce iron and steel, cement and lime, paper, glass, ceramics and chemicals. Sectors covered by the EU ETS, will account for over 50% of the emissions reductions needed to meet UK targets between 2013 and 2020. The EU ETS plays a key part in ensuring that the UK complies with its legally binding carbon budgets, which have to reduce UK emissions to at least 35% (below 1990 levels) in 2020. For the UK the total verified EU ETS emissions in 2012 was 231.2MtCO2. The average annual Phase II cap for the UK is 245.6MtCO2. The actual allocation to UK installations covered by the EU ETS in 2012 was 229.0MtCO2. Overall, the UK’s ambition to combat climate change is very high aiming at a reduction of 80% by 2050. For that purpose, it has drafted the Climate Change Act 2008.

3.7.1 Legal Implementation EU ETS

Directive 2003/87EC is implemented in the UK by The Greenhouse Gas Emissions Trading Scheme Regulations 2012 (hereafter ‘The Regulations’) and came into force on 1st January 2013 replacing a previous sets of regulations and their amending instruments. Significantly, enforcement and sanctions policy has been changed and has become more lenient in the Regulations 2012. Some additional changes were proposed in 2012 and public consultation was held on these proposals. The Regulations require all operators that carry out an activity covered by the EU ETS to hold a GHG emissions permit - in effect, a licence to operate and emit greenhouse gases covered by the EU ETS. IPPC regulators have to check whether ETS permit is necessary and inform ETS regulators. The inclusion of the aviation sector in the EU ETS is particularly relevant for the UK since as a leading aviation hub 409 airlines fall under UK jurisdiction, out

332 See more general on UK’s policy on climate change: M. Stallworthy, ‘Prospects for the UK’s national approach to climate law-making’ in M. Peeters, M. Stallworthy and J. de Cenra de Larragán, Climate Law in EU Member States (Edward Elgar, 2012), 113-137.
334 See par. 3.8.4 for further discussion.
335 Regulations, Art.9.
of the 1191 registered in the EU. The Regulations have implemented all legal obligations stated in Directive 2003/87EC, such as authorisation for changes in the installation type or operating mode required, authorisation for changes in the monitoring methodology required, Authorisation for changes in the monitoring methodology required, notifications of changes and closures and penalty in case of non compliance with request to update monitoring methodology.

3.7.2 National competent authority

It is important to note that the Regulations extend to the whole of the United Kingdom. However, greenhouse gas emissions trading is a devolved matter in Scotland, a transferred matter in Northern Ireland, and in Wales is an area where the Welsh Ministers exercise a wide range of executive functions. The Regulations accordingly provide for distinct “regulators” or “authorities” in relation to those different parts of the United Kingdom. The “regulator” may be the Environment Agency, the Scottish Environment Protection Agency, or the chief inspector in Northern Ireland; and the corresponding “authority” will be the Secretary of State or the Welsh Ministers, the Scottish Ministers, or the Department of the Environment in Northern Ireland. In the case of certain offshore installations, including those on the United Kingdom Continental Shelf, the Secretary of State is the regulator as well as the authority.

Policy responsibility for the EU ETS and the National Emissions Inventory lies with Department of Energy and Climate Change (DECC) (although policy for aviation emissions is shared with the Department for Transport (DfT)), together with the Northern Ireland Executive, the Scottish Government, and the Welsh Government.

The operator of an installation can apply to the regulator for a greenhouse gas emissions permit to carry out a regulated activity at the installation. The regulator for England and Wales is the Environment Agency, for Scotland the Scottish Environment Protection Agency (SEPA), for Northern Ireland, Northern Ireland Environment Agency (NIEA), Natural Resources Wales, the Department of Energy & Climate Change (DECC) for offshore installations. The national administrator for the UK is the Environment Agency, and is responsible for managing the accounts under the jurisdiction of the UK within the Union Registry. The EU ETS regulators are responsible for: enforcing compliance with the EU ETS Regulations, including operational functions such as granting and maintaining permits and emissions plans (for aviation), monitoring and reporting (including monitoring plans), assessing verified emission reports (and tonne-kilometre reports), determining reductions in allocations as a result of changes in capacity or cessation of activities, Receiving and supervising verified emission reports and exchanging of information with UKAS on verifier activities. Hence, most tasks regarding the functioning of the EU ETS are bundled in one Agency. The Environment has approximately 25 employees; NIEA and SEPA has a lot less staff. Every month a conference between the different regulators to exchange information and assistance is held. When needed the regulator exchanges information with other regulators, such as the police and market authorities.

3.7.3 National Allocation Plan

Since in Phase III centralized allocation of permits replaces the NAPs, the emphasis will be

336 Information obtained from governmental website: https://www.gov.uk/participating-in-the-eu-ets
on the greater share of auctioning of permits. The UK has submitted - in accordance with Article 11 of the revised ETS Directive 2009/29/EC - to the European Commission the UK’s National Implementation Measures (NIMs), consisting of the free allocation of allowances to installations under Phase III of the EU Emissions Trading System (2013-2020). Subsequently, the UK has made a small number of modifications to its NIMs as a response to the Commission’s questions regarding the preliminary NIMs. This included the introduction of preliminary levels of free allocation for four additional installations and amendments to the preliminary free allocation levels of seven installations that were included in the original NIMs submission.

3.7.4 Enforcement tasks

In England & Wales particular attention has been dedicated to the principles underlying its enforcement strategies. The principles that reflect the approach in enforcement are: proportionality, consistency, transparency and the targeting of actions are the key underlying principles of enforcement. Considering these principles it is not surprising that cost-effectiveness is taken into account when the regulator applies its enforcement strategy.

a. Monitoring and reporting obligations

When the operator applies for a GHG emissions permit it must satisfy the regulator that at the time that the permit is granted the applicant is capable of monitoring and reporting emissions from the installation in accordance with the monitoring and reporting requirements, otherwise the permit must be refused. Operators have to complete a monitoring and reporting plan template (monitoring plan), based on the Commission’s Guideline requirements. This is then submitted to the competent authority for approval. Already at an early stage the regulator is actively involved in providing the needed information and assistance. The monitoring plan then becomes part of the installation’s GHG permit conditions and therefore is a legally binding requirement upon the operator. Significant variations to the monitoring plan are likely to also require a permit change and have to be approved by the regulator.

Interestingly, The UK has developed and installed an online Emissions Trading System Workflow Automation Program (ETSWAP). All monitoring plans and reports are to be submitted in a standardised electronic format. This online system is capable of checking anomalies relative to previous entries. The online system may even refuse certain information that is to far of the values of previous years. There is hence ex-ante and ex-post control of the monitoring plan. The ex-ante process is an elaborate process, where the monitoring plan is scrutinized and that can be best qualified as a dialogue between the operator and the regulator. In this process regulators can for instance amend the monitoring methodology. There is a permit condition requiring compliance with the monitoring methodology.

339 Regulations, 10(2)(b).
340 The template was originally developed by the UK.
341 Regulations, 12.
methodology and it is an offence to fail to comply with permit conditions. Concerning the ex-post control the regulator must review a permit before the end of the period of five years beginning with the date on which the permit was granted, and afterwards at intervals not exceeding five years. Each year by 31 March the report of annual reportable emissions must be submitted to the regulator, relating to emissions arising during the previous calendar year. The report must be in accordance with the relevant provisions of the Monitoring and Reporting Regulation, and will be checked by the regulator.

b. Verification
The annual emission report must be verified in accordance with Regulation 600/2012 on Verification declaring that (a) in preparing the report, the operator has complied with the relevant provisions of the Monitoring and Reporting Regulation, (b) the operator has complied with the monitoring plan for the installation and (c) the report is free from material misstatement. In the UK 9 verifiers are accredited by the United Kingdom Accreditation Service (UKAS). During 2013, re-assessed all UK verifiers. In addition, a couple of verifiers that have been accredited in other Member States are active in the UK. The UKAS regularly performs surveillance on verifiers to ensure they are meeting their accreditation obligations and conforming with Government guidance on annual verification. If the regulator finds that the verifier is not performing well this is reported to UKAS. In the verified reports information on non-material non-conformities or non-material misstatements is included. Non-material misstatement and non-conformities are subsequently addressed in improvement reports by operators that are required to be submitted to the competent authority by 30th June each year. If operators do not provide an emission report by 31 March of the reporting period a formal warning letter is sent to operators, this has however not been followed by any sanction if the reports were received at a later time. If the report is late or missing the regulator determines the Reportable Emissions; other times the late verified data are used. The regulator carries out independent checks on all verified reports; comments of this assessment are made and send back to the operator. Certain reports are selected for detailed analysis; this is done on the basis of classification of an installation in one of categories laid down in Reg. No 601/2012. All Category C installations regardless of on their status after verification are subject to detailed analysis. In addition, since 2012 a selection of category A and B installations that were verified were subject to checks on the basis of a risk assessment. For example, when there is a new operator with high emissions.

c. Inspection
According to Regulation 46 an authority, the Secretary of State, the registry administrator or a regulator can, by notice served on any person, require that person to furnish such information as is specified in the notice, in such form and within such period following service of the notice or at such time as is so specified. In 2012 50% of the reports were subject to detailed analysis by the regulator, and were checked on their internal consistency.
The regulator regularly undertakes site visits; 5% of the operators are audited each year. These audits are announced since the purpose of these visits is more to check than to inspect, although formally the regulator could use its power of entry. Regulators in England and Wales have developed a common format for reporting the results of site visits. The results of the site visits are submitted into an electronic database into which the details of the site visit are entered. The details include a summary of the visit, any non-compliance identified and any subsequent actions that have been agreed with the operator. It is also considered whether the findings of the site visit need to be communicated to another body. Improvements are noted with the operator and vary permits if necessary. Non-compliance is explicitly recorded in order to create a database of historical performance for future reference. Follow-up gradually intensifies from a phone call or a visit to slightly more invasive forms such as a warning.

d. Sanctions
As mentioned in Chapter 1, the Directive 2003/87EC requires Member States to put in place a system of penalties which is effective, proportionate and dissuasive but the nature of the penalties is largely left to Member State discretion (with the exception of the penalty for failure to surrender sufficient allowances in certain circumstances). The Regulations set out the penalties to which a person is liable if they do not comply. Notably, for Phase III, DECC have changed its policy on penalties substantially by moving from a mixture of civil and criminal penalties to a scheme based entirely on civil penalties. The reasoning was that proportionality would improve greater compliance by widening the scope of regulator discretion over the imposition of penalties and levels imposed, to align penalties for installations and aviation as far as possible and to ensure that the penalties are sufficiently dissuasive to ensure high levels of compliance. Hence from January 2013 onwards the following amendments were introduced:

- A €20tCO2 penalty if an Operator initially failed to surrender the correct emissions, but advised the regulator of their mistake and surrendered the correct allowances before the regulator noted their non-compliance;
- Regulator discretion in imposing some penalties;
- Removed criminal penalties from EU Emissions Trading Scheme transgressions

The idea behind the first amendment was that operators are given the opportunity to self-rectify under-reporting of emissions in previous years since imposing the penalty in cases of

---

354 In 2008 37 site visits were undertaken; in 2009 31 visits took place; in 2010 44 site visits, in 2011 14 visits took place and in 2012 only 2 site visits were conducted. The reason for the limited number of visits is that when approaching the end of Phase to a database of operators had been built up. See UK Art. 21 Reports, available on the Internet at: http://cdr.eionet.europa.eu/
355 Regulations, Part 5.
357 See for a critical assessment, Sandbag Report – URN 13D/198 - Amendments to UK greenhouse gas emissions trading scheme and national emissions inventory regulations: a public consultation. The Sandbag report stated: 'The EU has led the world on emissions trading. As others, including China, look to the EU for guidance as they begin their own schemes, now is the wrong time to water-down EU ETS enforcement without strong evidence of benefit', p. 3.
358 Regulations, 54.
359 Regulations, 51.
self-rectification was seen as disproportionate. It was envisaged that operators that have not already been sent a penalty notice, and that self-report a shortfall in the verified emissions report and surrender the required amount of allowances are not liable to the 100tCO2 penalty. The UK Government is arguing is that this amendment is still within the aim of Directive 2003/87/EC to ensure that all relevant emissions of greenhouse gases are monitored and reported, and accounted for by means of the surrender of allowances. Therefore the lower penalty only applies to underreporting and not to under surrendering. However it has also been suggested that operators can deliberately leave reportable emissions out of their reporting obligation thereby using this possibility to benefit from a lower penalty.360

It is certainly questionable whether the mandatory penalty of Article 16(3) Directive 2003/87/EC is a discretionary penalty. The UK Government was well aware of the legal risk it took by including this new provision when it stated that ‘the legal position may in the longer term have to be clarified by the UK courts’.361 Considering the ruling of the Court of Justice in Case C-203/12 it seems that this question has now been answered. As discussed earlier the Court interpreted the question as whether Article 16(3) and (4) of Directive 2003/87 must be interpreted as meaning that it may be varied by a national court on the basis of the principle of proportionality. The Court clearly denied such a role for the principle of proportionality.362

The discretion given to the regulator is such that they can (a) refrain from imposing a penalty, (b) reduce the amount of a penalty, (c) extend the time for payment of the penalty, (d) withdraw a penalty or (e) modify a civil penalty notice by substituting a lower penalty. It still has to be clarified what the discretion exactly entails, but a detailed guidance of this is in the make.363 The discretion however does not apply to the mandatory penalty for failure to surrender sufficient allowances in certain circumstances.364 In the last incidence, the regulator must publish the name of the person on whom that penalty was imposed. This must be done as soon as possible after the expiry of the period for appealing the imposition of a penalty by the regulator under regulation 54(1), or if such an appeal is made, the determination or withdrawal of the appeal.365 Once the regulator is satisfied that a person is liable to a civil penalty the regulator must serve a notice of this on Person.366 The Regulations further specify what penalties under what conditions can be imposed.367 For the purpose of calculating civil penalties, DECC determines the value of the EU ETS carbon price used by the regulator. In February 2013, the Secretary of State issued a Ministerial Direction to instruct regulators on how the penalty for operating without a permit should be calculated.368 The Direction includes a transparent methodology for estimating the economic

362 Case C-203/12, Billerud Karlsborg AB, Billerud Skärblacka AB v Naturvårdsverket of 17 October 2013, n.y.r.; see also the assessment of this case in par. 2.4.
364 Regulations, 51.
365 Regulations, 71. Names are also published on the website of the Environment Agency.
366 Regulations.
367 In 2012 Infringements of the Regulations, such as operating without a permit or infringements of monitoring and reporting obligations can amount to max. £5,000 and to max. 24 months imprisonment.
benefits from operating without a permit. Regulators are also required to apply a 5% increase to ensure the penalty is above such benefits and the desired deterrent effect is produced. In reality, not many penalties have been imposed in the UK. In fact, between 2008-2011 no civil penalties were imposed pursuant to Article 16(1) of the ET Directive. In the same period a total of 21 excess emission penalties were imposed during the reporting period pursuant to Article 16(3) of the ET Directive. In England and Wales fines amounted to a total around £2 million across nine operators. All these penalties were the result of reporting mistakes according to the Environment Agency.

Some additional amendments have been proposed by DECC:

- Clarify the level of civil penalties to be imposed on operators carrying out unauthorised EU ETS activities and the discretion available to regulators to waive or reduce such penalties;
- Bring the penalty for under-reporting EU ETS emissions prior to 2013 into line with the penalty from 2013, enabling regulators to impose a lower level of civil penalty, or even waive a penalty entirely, where operators self-report and surrender the requisite number of allowances;
- Replace the National Emissions Inventory’s system of criminal sanctions with a civil penalty scheme and remove the associated powers of entry (not relevant for ETS).

On these amendments a public consultation was held. Taking these responses into account DECC decided to lay the legislation before the Houses of Parliament. It remains to be seen if they will be deemed 'effective, proportionate and dissuasive'.

### 3.7.5 Other compliance mechanisms: help desk for operators, collaboration across the EU

The regulator is very active in providing assistance through its helpdesk, in particular for small emitters. In addition it has published an extensive Compliance manual to assist operators in complying with the EU ETS that is accessible on the Internet. There is also guidance available on its website to assist in the permit application process. DECC and the regulators are actively notifying stakeholders of the new procedures that will be introduced through email, newsletters, stakeholder workshops and updating respective websites where appropriate. The regulator also participates in business-led Emission Trading Group (ETG) a forum for discussion of all aspects of emissions trading that enables communication to take place between commerce and industry, and the UK Government. This forum is particularly active in the formative stage of policy development.

---

369 See Art. 21 Reports 2008-2012.
370 Ibid.
373 Amendments to UK greenhouse gas emissions trading scheme and national emissions inventory regulations: a public consultation. Summary of responses and Government responses to consultation, URN 13D/198. This document is also available on the Internet at www.gov.uk/decc.
At the EU level, both DECC and the regulators are active in the Compliance Forum. This is regarded as most valuable to test thoughts, exchange best practices and frequently asked questions. The UK participates in several task forces and has the lead in the task force on Aviation. For instance it has ‘exported’ its advanced online Emissions Trading System Workflow Automation Program (ETSWAP).
3.8 Case Study: Hungary

As Hungary joined the European Union in 2004 it also had to adopt and implement the EU’s legislation governing the newly set up EU ETS. In this first introductory phase a new legislative framework was established in order to build the framework for the functioning of the EU ETS system. More generally, Hungary’s re-defined National Energy Strategy set the goals and tools for reduction of carbon intensity by generation of nuclear power, using renewables in cogeneration plants and shutting down old, inefficient capacities. The new targets are set in the Renewable Action Plan where the proportion of usage of renewables in various sectors is set at 14,65% reached by 2020. Based on the National Climate Change Strategy 2008-2025 (Nemzeti Éghajlatváltozási Stratégia) the greenhouse gas emission target is 16-25% below the 1990 level by 2025. Currently 234 installations participate in the EU ETS with an average total annual allowances of 30,733,313 during the second trading period.

3.8.1 Legal Implementation EU ETS

In Hungary, a large number of legal steps had to be taken to implement the EU ETS Directive and to set up the system (an implementing Act and executive Ordinances, Government and Ministerial Ordinances). The core Act XV of 2005 on the Greenhouse Gas Trading System established the legal basis for emissions trading in Hungary. It defined the scope of emissions trading for activities listed in Annex 1, with the exclusion of research and development and testing new products and technologies. As for their legal nature, the allowances belong to transferable exclusive rights of the Hungarian State Treasury. Furthermore, it set the rules for monitoring, reporting and verification, the guidelines for the government for the establishment of the National Allocation Plan, defined the requirements for issuing a GHG permit, regulated the acquisition, banking and surrendering of allowances, rules on compliance, on the Registry, sanctions (punitive fees and other sanctions), the obligation of the Government for reporting to the Commission and it introduced a fee for the operators to cover the supervisory tasks of the Inspectorate.

A range of subsequent Government and Ministerial Ordinances were issued to further detail the rules of the Act. These included the National Allocation Plan and National Allocation List for the period 2005-2007, Government Ordinance 213/2006 and its subsequent changes, the National Allocation Plan and National Allocation List for the period 2008-2012, Ordinances on the verification process and on verifiers and subsequent changes,

377 In force from 25th May 2005 until 1st May 2013.
an Ordinance on administration fees, and an Ordinance on supervisory fees, and an Ordinance aimed at integrating the aviation sector into the ETS.

For the implementation of the changes in EU ETS in the third trading period a new Act on the EU ETS and burden-sharing and its Execution Ordinance were adopted. Since the verification was harmonised, new rules for the accreditation of verifying institutions were adopted, and the Rules on Fees were revised and substituted with new legislation.

In Hungary, a separate (single) permit is necessary for the installations to carry out their activities based on Articles 3 (1)(2) and 4 (1)(2) of the Act on EU ETS and burden-sharing which is due to be requested within one year of the beginning of its activities. There is no coordination between the GHG permit and the permit required by the Industrial Emissions Directive 2010/75/EU.

The monitoring plan is one of the documents that need to be attached to the request along with other documents listed in Annex 1 of the Execution Government Ordinance.

3.8.2 National competent authority

In phase I the competences in EU ETS were shared between three ministries: the Ministry of Environment and Water Protection was responsible for the National Allocation Plan and the supervision of the system, the Ministry of Economy and Transport determined the maximum emissions per sector, and the Ministry of Finance was dealing with auctioning. Fazekas pointed out that the division of competences led to discrepancies within the ministries due to their different priorities. The Ministry of Environment prioritized reduction of emissions as the Ministry of Economy took part in bilateral negotiations with representatives of companies of the iron, steel and petrochemical sectors.

Currently only 4-5 employees are working at the national competent authority (hereafter: the Inspectorate). This National Inspectorate is responsible for the complete compliance cycle: from granting the GHG permits to imposing fines and penalties. This also includes the integrity of the Register. A member of the Hungarian Parliament has questioned the operation and daily work of the Inspectorate.

---

385 Act CCXVII of 2012 on the participation in the EU emissions-trading scheme and execution of the burden-sharing decision.
386 Governmental Ordinance on the participation in the EU emissions-trading scheme and execution of the burden-sharing decision 410 of 2012 of 28 December 2012.
387 Governmental Ordinance on accreditation and registration of verifying institutions 295/2012 of 16 October 2012.
388 Ministerial Ordinance on administration service fees and supervisory fees 80/2012 of 28 December 2012.
389 D. Fazekas, Szén-dioxid piac az Európai Unió új tagállamaiban magyarországi empirikus elemzés, PhD dissertation Corvinus University, Budapest (2009) at 93.
390 Ibid.
3.8.3 National Allocation Plan

Through the transposition of Article 11 (1)(3)(4) of Directive 2003/87/EC, Government Ordinance 66/2006 contained the National Allocation Plan and the National Allocation List.\(^{392}\) In the National Allocation Plan II for Phase II 30,733,313 tCO\(_2\)/year were allocated to installations for free in average, and in Hungary 5% of the allowances were to be auctioned.\(^{393}\) In the second phase, 24,166,474 tCO\(_2\)/year were allocated to existing installations. For new entrants, 2,193,902 tCO\(_2\)/year were reserved free of charge and 548,476 tCO\(_2\)/year could be allocated for charge, altogether 26,908,852 tCO\(_2\)/year. The aggregated sum of the allowances during the second trading period without the separated allowances for joint implementation projects was 134,544,260 tCO\(_2\).

For the third trading period 2013-2020 12,55394 tCO\(_2\)/year can be allocated free of charge based on the Decision 2013/448/EU\(^{395}\) after the final Decision of the Commission on 17 January 2014 the earliest allocation could start at 18 January 2014. Furthermore based on Article 15 (4) of Act EU ETS and burden-sharing the NIMs is needed to be published which was made through the 1022/2014 Governmental Decision.\(^{396}\) From 2013 free allocation is not allowed for the electricity sector with the exception of the temporal derogation for the modernisation of electricity generation Article 10c of the Directive. On 30 November 2012 the Commission accepted Hungary's request for derogation, consequently, free allowances are allocated for some electricity generators, but they have to pay their market price which is determined by the state based on Article 3 (1) and (2) of 341/2013 Government Ordinance.\(^{397}\)

3.8.4 Enforcement tasks

a. Monitoring and Reporting Obligations

Article 3 of the EU ETS and burden-sharing Act defines the GHG permit as a legal act of the competent environmental Inspectorate (National Inspectorate for Environment, Nature and Water).\(^{398}\) Based on Article 10(1) of the Act each operator of an installation falling under the Act is required to monitor their emissions and send the annual verified reports to the competent authority (Inspectorate) by 31\(^{399}\) March of the following year either per post or by electronically.\(^{399}\) Additionally, the Inspectorate is entitled to request further regular or occasional information from operators.\(^{400}\) For the monitoring plans, the annual emission

---


\(^{396}\) 1022/2014 Governmental Decision on the publication of the National Implementation Measure of 29 January 2014.

\(^{397}\) Government Ordinance 341/2013 of 25 September 2013.

\(^{398}\) See Act of CCXVII of 2012 on the participation in the EU emissions-trading scheme and execution of the burden-sharing decision.

\(^{399}\) Governmental Ordinance on the participation in the EU emissions-trading scheme and execution of the burden-sharing decision 410 of 2012 of 28 December 2012, Article 4 (4).

\(^{400}\) Ibid., Article 4 (6).
reports and the verification reports the Commission’s published template is used. No specifications have been added for Hungary.

b. Verification
During the first and second trading period verification could be carried out by independent verifiers (natural persons), verifier companies and EU verifiers. Several requirements applied for those verifiers – such as professional qualifications and experience- but there was not yet an independent accreditation process in place for verifiers that were active in Hungary.
As of 1st January 2013 - required by Regulation 600/2012/EU - only accredited verifiers are entitled to carry out verification activities. In Hungary, the newly harmonized rules on verification were not adopted in a timely manner. Therefore, Hungary requested the European Commission derogation in order to have extra time to take the necessary measures. During an interim period (between 1 January 2013 and 30 April 2013), verifiers who had been previously registered by the competent authority were entitled to verify reports, but were not formally accredited yet. From 1st May 2013 accredited verifiers can verify reports: accreditation must now be requested from the National Accreditation Body (NAB) by using the form published on its website. After the approval of the accreditation the NAB publishes on its website the names of natural and legal persons who are entitled to verify. There are currently 4 verifiers active in Hungary. In addition, there are presently two companies based in the UK and one in Belgium registered at the NAB.

c. Inspection
The National Inspectorate has the competence to check the GHG emissions permit, and has to do so at least every five years. If necessary, following the findings of this process, it can modify or withdraw the permit. The operator has the obligation to report all changes which affect the operation of the installation, and which result in an increase or decrease of its capacity. In these cases the authority has to examine whether the permit needs to be modified. When the latter is the case, the National Inspectorate has to request the operator to apply for modification of the permit; non-significant changes do not require a change of the permit. The reports pursuant to Article 21 of the Directive for the period of 2008-2012 noted that all of the verified reports were checked for completeness and most of the verified reports were checked fully in details. No non-satisfactory reports were provided. However, although inspection and enforcement obligations are implemented in national legislation, practice is quite different. There is no ex-ante control and no assistance available for companies falling under the scope of the Directive. There exists ex-post control of the monitoring protocol, but only in an electronic way. No individual checks are made and no site-visits are undertaken. During the first phase, a priority system for regular checks was developed; however, this has however never been used. A review by the Unit for GHG Inventory brought to light some un-clarified figures. However, this was treated as a delicate

403 http://www.hunetdata.hu/verifierpermit
404 Act of CCXVII of 2012 on the participation in the EU emissions-trading scheme and execution of the burden-sharing decision, Article 4 (3).
405 Ibid., Article 5 (1).
406 Ibid., Article 8 (2).
matter and no structural change has been made in the institutional structure or culture of the Inspectorate.

For the year 2013 it was reported that two inspections of installations that were carried out through site visits by the Inspectorate.\textsuperscript{409}

d. Sanctions

Different types of sanctions were implemented in order to enforce the EU ETS. For not (partly or fully) complying with the provisions on monitoring, reporting and verification obligations, or surrendering sufficient allowances the National Inspectorate can impose a punitive administrative fine on the operator. In addition, emissions trading can be suspended (by blocking the account) when the operator fails to surrender sufficient allowances or does not fulfil his reporting and verification obligations.\textsuperscript{410}

Since the third period, in case an infringement of Article 16(3) of the Directive is detected the National Inspectorate should also publish his name publicly (naming and shaming).\textsuperscript{411}

For the period 2008-2012 a few penalties were imposed, primarily for infringements of procedural rules (i.e., not sending the verified report by the deadline).\textsuperscript{412} In 2010 two excess emission penalties pursuant to Article 16(3) of the Directive were imposed; in 2011 and 2012 one penalty regarding Article 16(3) was imposed. In 2013 no fines or penalties were imposed.\textsuperscript{413}

3.8.5 Other compliance mechanisms: help desk for operators, collaboration across the EU

There is no help desk available for operators, and communication with the Inspectorate has proven to be difficult. During the allocation process of the first phase an informal newsletter was send around, but this has ceased to exist. No customized guidance is provided for industry and no workshops are organized. Operators have send complaints to the Ministry of Agriculture over access to information; however this Ministry has no competence over EU ETS matters. It was noted in the annual report pursuant to Article 21 of the Directive that regular meetings with industry and/or verifiers were set up in 2013.

Officially, Hungary is part of the EU Forum, but participation is limited (due to language barriers and capacity problems).

It has proven challenging to gain full access to documentation and the Inspectorate in Hungary despite having a native research assistant in our team. This resulted in unsatisfactory access to the necessary Hungarian sources.

\textsuperscript{409} Reports available on the Internet at: \url{http://cdr.eionet.europa.eu/}

\textsuperscript{410} Ibid., Article 33 (2).

\textsuperscript{411} Ibid., Article 33 (3).

\textsuperscript{412} Art. 21 reports under Directive 2003/87/EC by the Hungary for the years 2008 – 2012. For the years 2008-2012 fines were imposed for infringements related to operation without permit, omission to notify changes to the installation and Infringements of monitoring and reporting obligations. Reports available on the Internet at: \url{http://cdr.eionet.europa.eu/}

\textsuperscript{413} Ibid.
3.9 Evaluation of the EU ETS with a focus on compliance: conclusions

Under task 2.2, we did an ex-post evaluation of the legal implementation of the EU ETS at Member State level with a focus on compliance. Our central research question is:

Has the effectiveness of the compliance mechanism of the EU ETS improved in the third phase (2013-2020)? What further improvements (if any) are necessary?

To answer this central research question, we described the relevant EU law in each of the three phases, reviewed previous evaluations and relevant research projects, and evaluated the implementation of the EU ETS in selected Member States, both through existing sources and through interviews with key players in the compliance mechanism at Member State level. The Member States that we studied for the latter part of the project are Germany, Netherlands, Hungary, Greece, Poland and the UK.

The following conclusions can be drawn from the research project:

1. Contrary to general belief, it is clear that monitoring and enforcement efforts of an emissions trading market mechanism must be much more intensive than with regular command and control type instruments. The EU had to adopt literally dozens of rules and regulations of various legal forms to secure a reliable compliance mechanism of the EU ETS. The entire compliance cycle of monitoring, reporting, verification and sanctioning is essential for the success of the ETS, but inherently very complex due to fluctuations of emissions and allowances.

2. The regulatory framework for compliance has improved considerably since EU ETS commenced in 2005. This is mostly attributed to tightened rules at EU level and, generally, centralization of the EU ETS. In particular, the harmonization of the rules for verifiers by Regulation 600/2012/EU marked a necessary improvement.

3. Centralization and harmonization did not encompass the entire compliance cycle: national competent authorities have remained responsible for inspection and sanctioning, and are in charge of checking compliance of the MRV process. Therefore, achieving full compliance with the EU ETS still largely depends on the efforts of national competent authorities of EU Member States, Iceland, Norway and Liechtenstein.

4. The various measures to combat VAT fraud, money-laundering and other criminal activities that were discovered in 2009 have improved the resilience of the EU ETS to respond to such criminal activities, even though it should be acknowledged that these past criminal activities did not target the allowances as such. Similar improvements stem from linking the EU ETS to the EU's financial regulatory instruments (Market Abuse Directive and Anti-Money Laundering Directive), tightened rules on transactions, the range of available sanctions, centralizing auctioning and registration processes etc. the Registry.

5. The two tier-system, whereby a first check is performed by independent verifiers hired by operators and a second check is conducted by competent authorities on the verified emissions report, works well. Verifiers detect most of the anomalies and take the necessary follow up actions. Emissions authorities have to be notified of these, so as to include these data in the operator's compliance file. It should be noted though that a lack of certified verifiers constitute a problem in some countries (e.g. Poland). As a result thereof some operators were unable to timely submit their annual report.
6. Compliance with the EU ETS is very high (in 2012 there was only non-compliance between around 1 and 2%). Most infringements are caused by ‘genuine mistakes’ and lack of knowledge, not by deliberate actions to evade obligations. Since prices of allowances have been very low, the majority of allowances are surrendered and not traded. Hence, the EU ETS has not been tested to the full yet, and it remains to be seen whether compliance will be as high in a market under stress (with high prices due to limited availability of allowances).

7. Since most infringements are caused by ignorance or misunderstandings, usually related to the complexity of the rules, it is important that competent authorities offer compliance assistance throughout the whole compliance cycle. Currently, there are profound differences among countries in this respect: some have an active helpdesk, regular mailings and meetings. Other countries have hardly any assistance.

8. The use of ICT as a compliance assistance tool varies among Member States. The UK online ETSWAP system could serve as a basis for a more harmonized compliance in this respect.

9. There are important differences in organization and style of inspection and enforcement among the Member States that were researched. Some countries depend largely on the verification process; others have developed their own inspection policy. In addition, there are notable variations in capacity and staff employed at the competent authorities. The number of staff employed in the national emissions authorities differs enormously.

10. In some Member States (e.g. UK, the Netherlands, Hungary), all competences regarding the functioning of the ETS (issuing of permits, inspection and sanctioning) are bundled in one Agency. In other Member States competences are divided over different authorities. In general, it is considered wise to have separate authorities for the issuing of permits and for inspection and enforcement. This seems to be different for the EU ETS. Given the complexity of the EU ETS and the emphasis on compliance assistance, the emissions authority seems to be best placed overseeing the whole process, from the issuing of the GHG permit to possible sanctioning of non-compliance. However, cooperation with regular environmental inspection authorities is to be recommended (e.g. joint site inspections), since general environmental law inspectors will already have an established relationship with operators. Knowing the operator’s past (compliance) performance in other environmental areas can be useful when checking compliance with the EU ETS.

11. Site visits are not yet part of the standard enforcement strategy of most Member States we studied. Only the UK and The Netherlands have a well-developed blueprint for conducting regular site visits on the basis of a risk assessment. There is a considerable risk that non-compliant behaviour will remain undetected when inspectors rely on data provided by the automated system (“paper work”).

12. Although the automatic sanction of € 100 EUR per tonne CO₂ equivalent emitted by an installation for which the operator did not surrender allowances is harmonized, there are major differences in the other administrative and criminal sanctions that can be imposed in case of evasion of rules, fraud, etc. These additional penalties in some Member States include huge fines (in the range of millions of euros) and substantial terms of imprisonment (up to ten years of jail time), and in others rather low fines (as low as € 1500, and no possibility to impose criminal charges). Further harmonization of these additional penalties could be considered, or, alternatively, the EU ETS Directive could be brought under Directive 2008/99/EC on the protection of the environment through criminal law.

13. The UK has recently amended the ‘excess allowances’ sanction; if operators underreport and self-rectify, the penalty of € 100 EUR per tonne CO₂ can be reduced to a €20 penalty; considering the recent ruling of the CJEU it is questionable whether Article 16(3) of the Directive sanctions this discretion.
14. It is remarkable that the sanction of ‘naming and shaming’ is not actively applied in all Member States researched. The names of the installations that did not surrender sufficient allowances can be found in reports on the website of the emissions authority, but are far from easy to find. In the Netherlands and in Poland the names of the offending operators are published in its Journal of State. The sanction therefore seems to have lost a bit of its intended effect of reputation loss.

15. The EU ETS Compliance Forum is regarded as highly valuable. Information and best practices are exchanged, frequently asked questions discussed and ideas are tested among peers. In addition, specific task forces on current issues are set up. However, given the voluntarily nature of the Forum, only very few Member States (particularly Germany, Netherlands, UK, France and to some extent Italy) are particularly active here.

16. The information provided by the Member States in the reports pursuant to Article 21 of the Directive do not provide a complete picture regarding actual compliance and enforcement of the EU ETS in the Member States. The new 2013 format for reporting has improved this somewhat (e.g. it is not sufficient anymore to state that checks were carried out on verified emission reports; it now needs to be specified what this checks entail).

17. Overall, more efforts should be undertaken to harmonize the practice of the national competent authorities responsible for the enforcement of the EU ETS. This is not easily achieved; the case studies clearly show that compliance assistance is regarded as the most important element of the compliance cycle of the EU ETS. This compliance assistance is best offered at the national level in the national context. In addition, one could hold that the EU, with its extensive legislative framework, has exhausted its legislative powers in this field. Therefore, other forms of harmonization (e.g. network based peer review) need to be explored.
4 References


Fazekas, D., *Szén-dioxid piac az Európai Unió új tagállamaiban magyarországi empirikus elemzés*, PhD dissertation Corvinus University, (Budapest,2009)


UBA/DEHSt, Carbon Dioxide Emissions from Installations subject to Emissions Trading in 2012 (summary), Berlin 2013, p. 2-3,


5 List of Abbreviations

DECC- Department of Energy & Climate Change UK
CDM – Clean Development Mechanism
CITL - Community Independent Transaction Log
CJEU – Court of Justice European Union
DfT- Department for Transport (UK)
DEHSt - Deutsche Emissionshandelsstelle (German Emissions Trading Authority)
ECHR - European Convention on Human Rights
EUTL - European Union Transaction Log
EU ETS – European Union Emission Trading Scheme
ESYD - The Hellenic Accreditation System (Greece)
ETSWAP - Emissions Trading System Workflow Automation Program
ETG - Emission Trading Group
GEDE - Emissions Trading Office of the Ministry
H.C.A.A - Hellenic Civil Aviation Authority
IPPC - integrated pollution prevention and control
JI – Joint Implementation
MRV - monitoring, reporting and the verification
NAPs- National Allocation Plans
NEa - Nederlandse Emissie Autoriteit (Dutch Emission Authority)
NIEA- Northern Ireland Environment Agency
NIMs - National Implementation Measures
VAT – Valued Added Tax
Wm - Wet Milieubeheer (Dutch Environment Management Act)
UKAS - United Kingdom Accreditation Service
UK ETS - UK Emissions Trading Scheme
UNFCCC – United Nations Framework Convention on Climate Change
SEPA – Scottish Environment Protection Agency
TEHG - Gesetz über den Handel mit Berechtigungen zur Emission von Treibhausgasen
YPEKA - Ministry of Environment, Energy and Climate Change (Greece)