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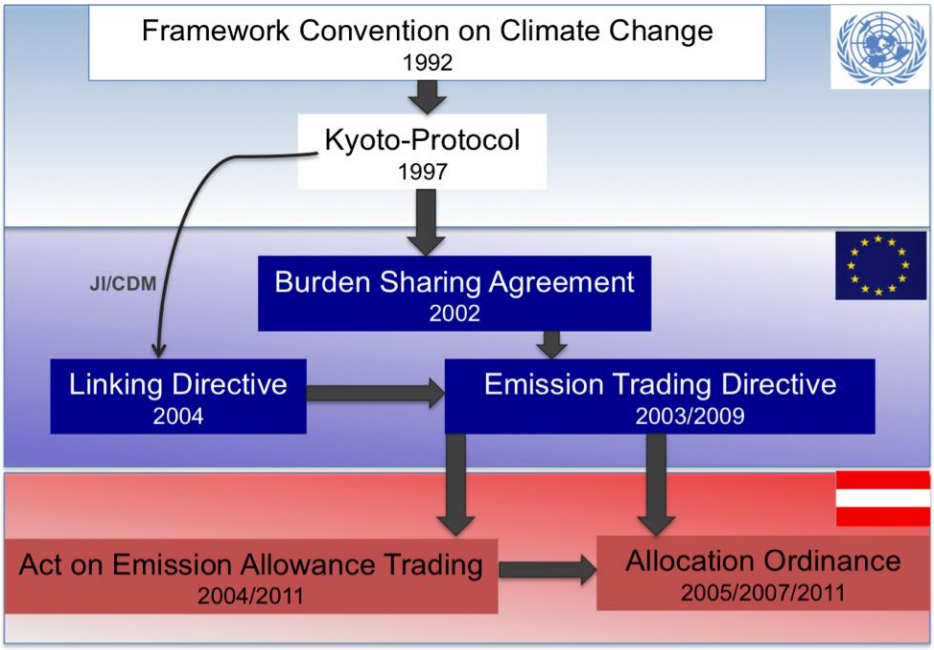
List of Abbreviations

AAU	Assigned Amount Unit
AEA	Annual Emission Allocation
AEAT	Act on Emission Allowance Trading
AFCL	Austrian Federal Constitutional Law
ATA	Air Transport Association of America
BAT	Best available technique
CCS	Carbon Capture and Storage
CDM	Clean Development Mechanism
CJEU	Court of Justice of the European Union
COP	Conference of the Parties
COP/MOP	Conference of the Parties serving as the Meeting of the Parties
ETS	Emission Trading System
EU	European Union
EU-ETS	European Emission Trading System
EUA	European Union Allowance
GHG	Greenhouse gases
ICAO	International Civil Aviation Organisation
IGO	Intergovernmental Organisation
ILC	International Law Commission
IPCC	Intergovernmental Panel on Climate Change
ITL	International Transaction Log
JI	Joint Implementation
LDC	Least Developed Country
MS	Member State
NAP	National Allocation Plan
QELRO	Quantified Emissions Limitations and Reduction Objectives
TEU	Treaty on European Union
TFEU	Treaty on the Functioning of the European Union
UNEP	UN Environment Programme (UNEP)
UNFCCC	United Nations Framework Convention on Climate Change
WMO	World Meteorological Organisation
ZuG	Zuteilungsgesetz

1 Introduction

Albeit still a relatively new field, international environmental law has become very complex in the last twenty years. As pollution does not respect political territories, the need for a common effort to address environmental protection – and later in the process the prevention of climate change – became subject of serious debate in international negotiations towards the end of the last century. In the wide field of environmental law, this study concentrates on the development of the international climate change regime as well as its influences on European and Austrian legislation.

Graph 1 shows the relationship between the different layers of the international climate change regime. It is important to be aware of the links and interdependencies of the various legal acts in order to assess the consequences thereunder.



Graph 1 Layers of the international Climate Change Regime

This study is written at the end of the first period with international emission reduction commitments. The developments of the first commitment years are known, some data analysis was done and projections regarding the compliance with the reduction targets at the end of the period are available. As latest data suggest that some Member States of the European Union will not comply with their commitments, the study will investigate what consequences are to be expected. As illustrated in Graph 1, consequences may arise based

on different legal grounds. Of particular interest is the role of the European Union, as some of its Member States are part of a group that has a joint reduction target, whereas the new Member States (i.e. the countries joining the European Union after the enlargements of 2004 and 2007) have individual reduction commitments.

The next part of this study discusses the European Emission Trading System (EU-ETS), the developments since its introduction as well as problems along the way. There have been several legal challenges in connection with the EU-ETS, showing weaknesses of the system and providing guidance on necessary improvements. From 2013 onwards, the systematic of the EU-ETS will change drastically in order to tighten emission reduction commitments on the one side and to close loopholes of the past on the other.

Despite the substantial changes to the EU-ETS, the year 2012 was marked by intense discussions on further significant interventions in the existing system. Prices for emission allowances had fallen and were much lower than forecasted at the beginning of the trading period. The price decline was triggered by the economic crisis, which led to lower industrial production and hence less emissions. As a consequence, there were too many emission rights in the market for not enough actual emissions. Discussions on further interventions therefore centred on measures that would take this surplus of emission allowances out of the market. While the elimination of surplus allowances may be a noble goal to reinstate a balanced market in the short term, the danger of such ad-hoc measures lies in the unpredictability of the future (as experienced in the past).

At the end, the Austrian situation in the emission-trading framework will be discussed. Particular attention will be paid to the implementation of the new emission trading rules from 2013 onwards.

2 The International Climate Change Regime

Although public awareness of the term "climate change" is a relatively recent phenomenon, first considerations of the problem of rising air pollution and the ensuing negative consequences for the living environment of human beings date back several years. The Geneva Convention on Long-range Transboundary Air Pollution from 1979 was the first international legally binding document addressing the adverse effects of air pollution and is one of the building blocks for the development of international environmental law in the following years.

The World Meteorological Organisation (WMO) and the UN Environment Programme (UNEP) established the Intergovernmental Panel on Climate Change (IPCC) in 1988 in order to review the available scientific, technical and socio-economic information with regards to climate change. In its First Assessment Report in 1990 the IPCC found that "*emissions resulting from human activities are substantially increasing the atmospheric concentrations of the greenhouse gases carbon dioxide, methane, chlorofluorocarbons (CFCs) and nitrous oxide. These increases will enhance the greenhouse effect, resulting on average in an additional warming of the Earth's surface*"[1]

These findings intensified international efforts to develop a comprehensive framework to address the global threat of climate change and led to the conclusion of the UN Framework Convention on Climate Change (UNFCCC), which was opened for signature at the United Nations Conference on Environment and Development in Rio de Janeiro in 1992. At this conference three other milestone documents on international environmental law were adopted: Agenda 21, which sets a plan for the support of sustainable development on a global basis, the Rio Declaration on Environment and Development, which defines principles and responsibilities for environmental protection and the Statement of Forest Principles, promoting the sustainable management of forests.

[1] IPCC (1990), p.19.

2.1 The United Nations Framework Convention on Climate Change (UNFCCC)

After being opened for signature at the "Earth Summit" in Rio in 1992, the UNFCCC entered into force on 21 March 1994, 90 days after the fiftieth state's instrument of ratification had been deposited (see Article 23). At the time of writing, 195 countries have ratified the Convention ("Parties to the Convention")[2]. The European Community ratified the UNFCCC on December 21st, 1993, and is therefore also Party to the Convention.

The UNFCCC acknowledged that the adverse effects of climate change are "*a common concern of humankind*" and that "*Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures[…]*"[3] The Convention aims to coordinate efforts to mitigate the effects of climate change by establishing an international legal framework to reach the ultimate objective in Article 2: "*[…] stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system."* The main measures are to increase knowledge by collecting and publishing relevant data and information on climate change, develop and implement policies to reduce anthropogenic emissions as well as raising public awareness[4].

The guiding principles of the convention are[5] :

1) the principle of equity in the commitment of the parties to protect the climate;
2) the recognition of special needs and circumstances of developing countries;
3) the precautionary principle according to which measures should *"[…] anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects […]*";
4) the promotion of sustainable development and growth.

Recognising that the Parties have "*common but differentiated responsibilities and respective capabilities*"[6] to combat climate change, the UNFCCC reiterates the general

[2] http://unfccc.int/essential_background/convention/items/6036.php, Access: March 10, 2012.
[3] UNFCCC (1992), Art 3 (3).
[4] UNFCCC (1992), Art. 4.
[5] UNFCCC (1992), Art. 3.
[6] UNFCCC (1992), Art. 3 (1).

principles of equity in international law while taking account of the historical differences in the contributions of developed and developing countries to global environmental problems, and differences in their capacity to address these problems. This means that developed countries should take over the lead in the actions against climate change, while developing countries should contribute within their respective capabilities.

The principle of "common but differentiated responsibilities" has since then become the cornerstone of the legal framework founded by the UNFCCC. At the annual meetings of the Parties to the Convention called the "Conference of the Parties" (COP, Art 7) this redistribution of responsibilities are at the core of the discussions about the future progress and success of the Convention. Particularly during the negotiations for the period post-2012 the concept of "common but differentiated responsibilities" has been subject of harsh scrutiny of developed countries, which felt that they have shown enough leadership in past years and future periods should be marked by equal responsibilities for all parties.

Annex I of the UNFCCC lists the industrialised countries that have committed themselves to reducing GHG emissions to the levels of 1990 by 2000. Annex II lists parties that are obliged to help developing countries to comply with the convention by providing new and additional financial resources necessary to prepare and submit the national GHG inventories and to adapt to the adverse effects of climate change. Annex II countries are also required to promote the transfer of technology and know-how[7].

It is important to point out that the phrasing of the UNFCCC with regards to the specific reduction targets is not very precise. Art 4 (2)b states that information on national policies *"[...] with the aim of returning individually or jointly to their 1990 levels [...]"* should be regularly communicated by the parties. This wording is a far cry from a definite obligation or target to reduce anthropogenic emissions. This lack of preciseness together with increasing scientific evidence of the dangers of climate change made a further elaboration of the provisions of the UNFCCC inevitable. The first Conference of the Parties in 1995 addressed the inadequacy of the commitments for industrialised countries in Art 4 (2)a and 4 (2)b of the UNFCCC and agreed on the Berlin Mandate, which was the starting point for negotiations on an international level to define quantifiable limitations and reduction

[7] UNFCCC (1992) Art 4.

targets for GHG emissions in a specific commitment period. These negotiations led to the adoption of the Kyoto Protocol in 1997.[8]

2.2 The Kyoto-Protocol

At the third Conference of the Parties (COP3) in Kyoto in 1997 the negotiations under the Berlin Mandate were finalised in a protocol to the UNFCCC- the Kyoto Protocol. In this protocol the general reduction goal of the UNFCCC was translated into legally binding targets for industrialised countries to reduce GHG emissions by 2012.

The Protocol entered into force on February 16th, 2005, after the Russian Federation submitted its instrument of ratification 90 days earlier. Due to the refusal of the USA and Australia to ratify this agreement, it was necessary that a big Annex I emitter joins the ranks of the Kyoto Parties as otherwise the complex rules of Art 25 (1) regarding the entering into force of the agreement would have not been adhered to.

Kyoto Protocol Art 25 (1):

"This Protocol shall enter into force on the ninetieth day after the date on which not less than 55 Parties to the Convention, incorporating Parties included in Annex I which accounted in total for at least 55 per cent of the total carbon dioxide emissions for 1990 of the Parties included in Annex I, have deposited their instruments of ratification, acceptance, approval or accession."

At the time of writing, there are 191 Parties to the Protocol.[9]. The European Community ratified the Kyoto Protocol on May 31st, 2002, and is therefore also Party to the Protocol. After the UN Climate Change Conference in Durban in December 2011, Canada announced its withdrawal from the Kyoto Protocol. According to Art 27 (2) of the Protocol, such withdrawal takes effect one year after receipt by the depositary of the notification of withdrawal, which was December 15th 2012.[10]

[8] United Nations (2006), p.85.
[9] http://unfccc.int/kyoto_protocol/status_of_ratification/items/2613.php, December 19, 2012.
[10] United Nations (2011), Depositary Notification.

2.2.1 Reduction target

Kyoto Protocol Art 3 (1):

"The Parties included in Annex I shall, individually or jointly, ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A do not exceed their assigned amounts, calculated pursuant to their quantified emission limitation and reduction commitments inscribed in Annex B and in accordance with the provisions of this Article, with a view to reducing their overall emissions of such gases by at least 5 per cent below 1990 levels in the commitment period 2008 to 2012."

Art 3 (1) of the Kyoto Protocol defines the target to reduce GHG emission by at least five percent below the levels of 1990 in the commitment period 2008-2012. The use of the word "shall" in this provision signals the legally binding nature in contrast to the soft wording in the UNFCCC. The non-compliance procedure established in Art 18 further enhances the binding character of this reduction target.

The approach to use a multi-year commitment period in contrast to the single target year of the UNFCCC was first presented by the US delegation in order to reduce the impact of annual fluctuations in GHG emissions that might be caused by reasons beyond the influence of the parties (e.g. natural factors). The multi-year approach is also essential for provisions that provide flexibility within the boundaries of the agreement such as emission trading.[11]

Specifics regarding the overall reduction goal of Art 3 can be found in the two Annexes to the Protocol. Annex A defines the six GHG, which are regulated under the Protocol as well as sectors and sources responsible for GHG emissions. Annex B lists the countries and their respective reduction targets relative to a base year.[12] The countries of Annex B are the same as in Annex I of the UNFCCC, with the exception of Belarus and Turkey, which were not Parties to the UNFCCC when the Kyoto Protocol was adopted. The relevant base year is for most Annex I Parties the year 1990. For Annex I Parties undergoing the process of transition to a market economy the relevant base year was established during COP2 and is also used to comply with the obligations under the Kyoto Protocol.[13]

[11] United Nations (2000), p. 36.
[12] See Annex 1 and Annex 2 of this document.
[13] Kyoto Protocol (1997), Art 3 (5).

Each country in Annex B has committed itself to limit its aggregate emissions of the six GHG listed in Annex A to the assigned amounts. According to Art 3 (7), the assigned amounts correspond to the total amount of GHG emissions expressed in CO_2-equivalent that a country is allowed to emit during the commitment period. The Kyoto Protocol does not provide for any binding reductions for non-Annex I countries. This is in line with the principle of "common but differentiated responsibilities", as developing countries at that point in time could not be burdened with legally binding reduction targets. According to Art 3 (9) of the Protocol, commitments of Annex I Parties after 2012 have to take the form of an amendment to Annex B and negotiations about the range and intensity of the future climate change regime has to start in 2005. The Conference of the Parties (to the UNFCCC) serving as the Meeting of the Parties (to the Kyoto Protocol) gave its approval to start this process in Montreal in 2005 (COP/MOP1), and the following annual COP/MOPs were marked by intense discussion of the redistribution of the reduction burden towards developing countries.

Art 4 of the Protocol gives the Parties the choice to fulfil their commitments jointly. The European Community used this possibility to form a "bubble" over the then existing Members States (EU-15). In its decision to approve the Kyoto Protocol the European Community declared that its Member States would form a group to comply with the obligations under the Protocol[14]. For more details on the obligations of the European Union[15] under the Protocol see Chapter 3.2.

2.2.2 Flexible Mechanisms

The Kyoto Protocol has shaped international environmental law not only because it establishes firm goals to reduce GHGs for the first time, but also because it offers Parties some flexibility to reach the defined goals. By considering also economical aspects, the applicability of such a global scheme is significantly enhanced.

[14] Decision 2002/358/EC, OJ 2002 L130, p.1, Art 1 and Art 2.
[15] With the entering into force of the Treaty of Lisbon on December 1st 2009 the European Union has acquired legal personality and has replaced the European Community.

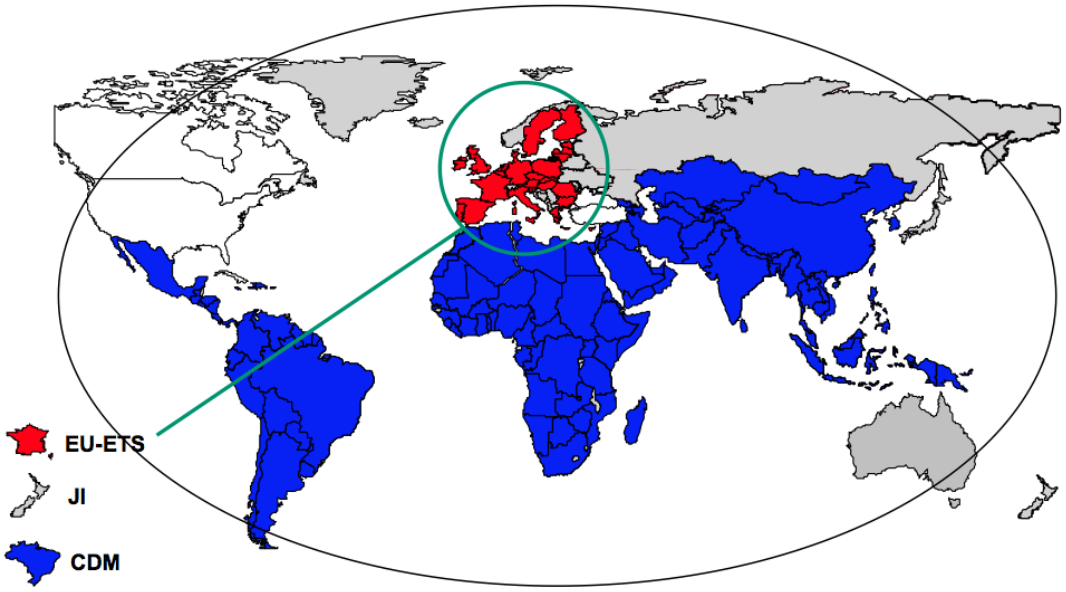
The flexible mechanisms are instruments to reduce GHG emissions in a cost-effective way by giving Annex I countries the possibility to make investments in countries where the marginal cost of abatement is lower than for domestic projects. The only limit to the use of the flexible mechanisms to comply with the Kyoto obligation is the "supplementary principle"[16]. This means that Annex I Parties have to ensure that the focus of their measures to comply with the reduction target come from domestic actions and the flexible mechanism only support these measures, i.e. are supplemental.

The Kyoto Protocol includes three flexible mechanisms:

1) Joint Implementation (Art 6)
2) Clean Development Mechanism (Art 12)
3) Emission Trading (Art 17)

The operative rules of these instruments were laid down in the Marrakesh Accords in 2001[17]. After the Kyoto Protocol entered into force in February 2005, it was important to ensure that any decisions regarding procedures and rules of its functioning that were taken at the COP-meetings before 2005 were approved. It is interesting to point out that countries participated in these discussion and decisions that were Parties to the Convention, but - due to the lack of ratification of the Kyoto Protocol - not Parties to the Protocol. The COP/MOP1 in Montreal adopted the Marrakesh Accords in 2005.[18] Graph 2 shows the dissemination of the three instruments around the globe.

[16] Kyoto Protocol (1997), Art 6 (1d), Art 12 (3b) and Art 17.
[17] United Nations (2002), Addendum 2.
[18] United Nations (2006), Addendum 2.



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Graph 2 Flexible Mechanisms around the globe

2.2.2.1 JI and CDM

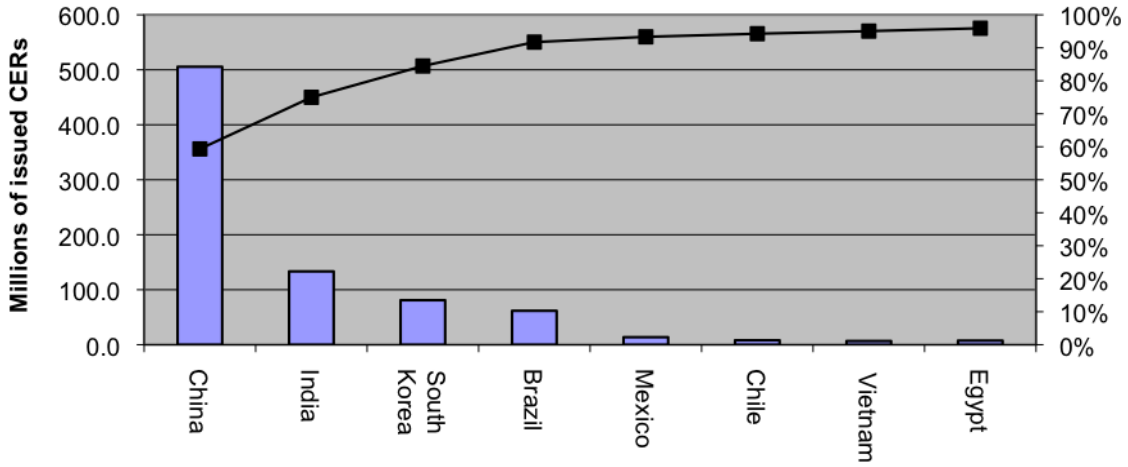
Joint Implementation (JI) and the Clean Development Mechanism (CDM) are project-based instruments. Parties can invest in activities aimed at the mitigation of GHGs in other countries and the resulting emission reductions are then transformed into reduction units. These reduction units are transferred to the investor who can use them to fulfil his obligations under the Kyoto Protocol. The reductions are calculated based on the difference between a business-as-usual scenario benchmark and the real emissions of a specific JI or CDM project activity. Both instruments have to undergo a validation process before the reduction units are issued.

Joint Implementation is investment between two Annex I countries creating "emission reduction units (ERU)". This mechanism does not create additional reduction units within the overall Kyoto regime. The equivalent of the ERUs created under a JI-project is subtracted from the assigned amounts of the host country[19]. This means that in total the host country has less assigned amounts (i.e. has lost its right to emit a certain amount of GHGs), and the investor has gained additional rights to emit.

[19] Freestone D, Streck C (2009), p.553.

The Clean Development Mechanism is the investment made by an Annex I country in a non-Annex I country generating "certified emission reduction units (CER)". As non-Annex I countries do not have reduction targets under the Kyoto regime, the generated CERs are truly "additional" to the total assigned amounts under the Protocol. Investments through the Clean Development Mechanism are also means to transfer environmental-friendly technology from industrialised countries to the developing world.

Graph 3 shows that so far most CERs were issued in China. The eight countries included in the graph account for more than 96% of all issued CERs. This demonstrates that the Clean Development Mechanism succeeded particularly in Asia, where countries already had a certain technological standard and knowledge, but where environmental concerns had not been part of investment decisions before.



Graph 3 Top countries by issued CERs[20]

2.2.2.1 Emission Trading

The third flexible mechanism is a combination of a market-based approach and a regulatory element. The "right to emit" is transformed into tradable emission units and the total available amount of these units is limited (regulatory element). After a certain commitment period market participants have to surrender emission units equivalent to their total emissions in that period. If not enough emission units are surrendered, penalties apply. With this system, market participants have to ensure that they have enough emission units

[20] http://cdmpipeline.org/cers.htm#3, Access: March 24, 2012.

at the end of the commitment period. If their emissions are higher than their initially assigned emission units, they may choose to buy additional emission units on the market or implement measures to reduce emissions. If all market participants buy additional emission units on the market, the price for these units would increase until it becomes more economical to put emission reduction measures into place (market-based element).

Art 17 of the Kyoto Protocol provides Annex B countries with the possibility to participate in emission trading to comply with their reduction obligations under the Protocol. This provision establishes the International Emission Trading (IET) of assigned amounts units (AAUs) between Annex B countries. The trading of CERs, ERUs and RMUs is also allowed. RMUs are "removal units" generated from GHG reductions due to afforestation, reforestation and deforestation.[21] The UNFCCC secretariat maintains the international transaction log (ITL), which keeps track of all transactions of the different units.

The European Emission Trading System (EU-ETS) is currently the most widely known emission trading scheme. In contrast to the IET, market participants under the regional EU-ETS are not countries but installations. The emission units traded are called European Union Allowances (EUAs). The EU-ETS is not directly linked to Art 17 of the Kyoto Protocol, but is one of the means how the European Union and its Member States try to fulfil their obligations under the Protocol. The "Linking Directive" established the direct link to the project-based flexible mechanisms of the Protocol.[22] For more details on the Linking Directive see Chapter 3.2.

There are several other emission trading systems currently in operation or planned around the world (see Table 1). Some European countries had their own trading schemes in the past, but with the establishment of the EU-ETS those system were increasingly linked or incorporated into the EU-ETS.

[21] Kyoto Protocol (1997), Art 3 (3) and (4).
[22] Directive 2004/101/EC OJ 2004 L338, p. 18.

Country/Region	Area of Application	Period	Mandatory	Comments
Australia	New South Wales	2003-	Yes	
Australia	Australia	2012-	Yes	Started with fixed price for CO_2, trading system starts 2015 with link to EU-ETS
Canada	Alberta	2007-	Yes	
China	4 cities and 2 provinces	2013		
European Union	EU	2005-	Yes	
Iceland	Iceland	2008-		Integrated into EU-ETS
Japan	Tokyo	2010-	Yes	
Japan	Japan	Planned		
Liechtenstein	Liechtenstein	2008-		Integrated into EU-ETS
New Zealand	New Zealand	2008-	Yes	
Norway	Norway	2005-2007	Yes	Integrated into EU-ETS in 2008
South Korea	South Korea	Planned		
Switzerland	Switzerland	2008-2012	No	Plan to link to EU-ETS from 2013 onwards
United Kingdom	United Kingdom	2002-2006	No	Integrated into EU-ETS in 2007
United Kingdom	United Kingdom	2010-	Yes	Carbon Reduction Commitment Energy Efficiency Scheme for non EU-ETS sectors
USA	10 Northeast States	2009-	Yes	Regional Green House Gas Initiative (RGGI)
USA	California	2012-	Yes	Plan to link to EU-ETS from 2013 onwards
USA/Canada	11 States	Planned		Western Climate Initiative

Table 1 Emission Trading Systems around the world

2.2.3 The Compliance Mechanism

Addressing breaches of obligations laid down in international agreements can be done via specific clauses directly in the treaty itself. In Art 14 (2) of the UNFCCC any Party to the Convention accepts the compulsory submission of any disputes regarding the interpretation or application of the Convention to the International Court of Justice and/or submission to arbitration.

However, states usually prefer to settle any disputes in a more diplomatic way, avoiding direct confrontation. General provisions for dispute settlement such as in Art 14 (2) of the UNFCCC are often not specific enough to provide an efficient handling of the increasingly

complex international agreements and parties therefore more and more prefer tailor-made non-compliance proceedings.[23]

The Kyoto Protocol establishes such a tailor-made compliance mechanism, which – together with the specific reduction targets defined in Annex B – strengthens the binding character of the Protocol. Art 18 of the Protocol mandates the COP/MOP to define procedures to handle non-compliance and to formally adopt them in the form of an amendment to the Protocol insofar they entail binding consequences. Similar to the procedures regarding the flexible mechanisms, the details of the non-compliance measures were also laid down in the Marrakesh Accords of 2001[24] and adopted at Montreal in 2005.[25]

At the heart of the compliance regime of the Kyoto Protocol is the Compliance Committee, which consists of a facilitative branch and an enforcement branch. The former assists the Parties of the Protocol to comply with their obligations, while the enforcement branch is a quasi-judicial body with the power to impose restrictions and other measures on non-compliant parties.

The enforcement branch has to determine whether Parties are compliant with the following provisions under the Protocol:

1) Monitoring, reporting and verification (MRV) requirements according to Art 5 (1), 5 (2) and Art 7(1) and 7 (4) – Type 1
2) Eligibility requirements for the flexible mechanisms as defined in Art 6, 12, and 17 – Type 2
3) Reduction target according to Art 3 (1) of the Protocol – Type 3.[26]

While the first and third type of non-compliance in the list above is a real obligation of the Parties under the Protocol, the use of the flexible mechanisms is only an additional possibility for the Parties to fulfil their reduction target. The use of flexible mechanisms is

[23] Treves T (2009), p. 502.
[24] United Nations (2002), Addendum 3.
[25] United Nations (2006), Addendum 3.
[26] United Nations (2006), Addendum 3, Decision 27/CMP1, section V.

not an obligation of the Kyoto Protocol as such. Nevertheless, if a Parties wishes to use these instruments, it has to comply with certain requirements.

The Marrakesh Accords also define the consequences of non-compliance with the Kyoto Protocol. The procedures are neutral determinations of compliance rather than criminal guilt or civil liability. It is rather an administrative process than a judicial system.[27] The consequences are automatic without any discretionary power of the enforcement branch.

In cases of violation of the obligations regarding monitoring, reporting and verification (Type 1) the enforcement branch declares the non-compliance of this party and a plan including a time line to remedy the non-compliance has to be submitted.

In the event of violation of the eligibility criteria of the flexible mechanisms (Type 2) the Party is not allowed to use the relevant flexible mechanism as long as the non-compliance persists. The eligibility criteria for emission trading, Joint Implementation and the Clean Development Mechanism are the same:[28]

1) Party to the Kyoto Protocol
2) Have an assigned amount pursuant to Article 3 (7) and (8)
3) Maintains a national system for the estimation of anthropogenic emissions by sources and anthropogenic removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, in accordance with Article 5 (1)
4) Has a national registry in accordance with Article 7 (4)
5) Annual submission of the most recent required inventory, in accordance with Article 5 (2) and Article 7 (1)
6) Submission of supplementary information on assigned amount in accordance with Article 7 (1).

Thus, violation of the first non-compliance type automatically causes non-compliance with the second type (eligibility for flexible mechanisms). This also means that in this event the non-compliant party is excluded from using all three mechanisms at the same time. Upon

[27] Ulfstein G, Werksman J (2005), p.40.
[28] United Nations (2006), Addendum1 Decision 3/CMP1 and Addendum 2 Decision 9/CMP1, Decision 11/CMP1.

request by the respective Party to reinstate its eligibility for the flexible mechanisms the Enforcement Branch may decide to revoke the non-compliance consequences.

The consequences of violating the reduction target of Art 3 Kyoto Protocol (Type 3) causes:

1) Declaration of non-compliance
2) Deduction of an assigned amount equal to 1.3 times the amount of the excess emissions from the budget of the following commitment period
3) Submission of a compliance action plan
4) Suspension of eligibility to make transfers in emission trading.

The Marrakesh Accords refer in the non-compliance procedures regarding violation of the reduction target only to "transfers" under the emission trading according to Art 17 of the Protocol. The Accords clearly differentiate between "acquire" and "transfer"[29], which leads to the conclusion that a mere purchase of emission units is still allowed although a non-compliance with the reduction target has been determined. It is important to note that none of these non-compliance consequences include direct financial penalties.

Compliance with Art 3 of the Kyoto Protocol will be determined only in 2015. Parties have to submit annual reports to show the development in their emissions.[30] These reports have to be submitted by April each year. Due to the time needed to perform these inventories, the national annual report for 2012 will be submitted by April 2014. According to Art 8 of the Kyoto Protocol an expert review team then controls these reports. The review has to be completed within a year of submission, which means that the inventory data for 2012 is finalised by April 2015 at the latest.[31] This is the starting date for a 100-day true-up period, during which Parties can still undertake transactions necessary to achieve compliance with their Kyoto target.[32] Only after the end of this true-up period compliance will be determined.

The enforcement branch declared the non-compliance of Greece in April 2008, as the Greek national system did not meet the requirements according to Art 5 (1) of the Kyoto

[29] United Nations (2006), Addendum 3, Decision 27/CMP1, section XIII.
[30] Kyoto Protocol (1997), Art 7.
[31] Umweltbundesamt (2011), p. 22.
[32] United Nations (2006), Addendum 3, Decision 27/CMP1, section XIII.

Protocol regarding the estimation of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol. This constitutes a breach of the first and second non-compliance type as described above and Greece was temporarily suspended from the use of the flexible mechanisms. Later, also the non-compliance of Croatia, Bulgaria, and Romania was declared on the same grounds.

Although these examples show that the non-compliance regime of the Kyoto Protocol worked in the past, the negative consequences of non-compliance were rather limited so far. The most negative effect has been the suspension from the use of the flexible mechanisms, which lasted a few months at the most, and was mainly uncomfortable from a political point of view since it was at the beginning of the commitment period. The real test of the non-compliance procedure will come when the results of the first commitment period (2008-2012) will be available and compliance with the reduction target determined. Whether these consequences are legally binding and thus enforceable without the cooperation of the Parties will be discussed in the next chapter.

2.2.4 Binding Character of Non-Compliance Consequences

Art 18 of the Protocol mandates the COP/MOP to define procedures to handle non-compliance and to formally adopt them in the form of an amendment to the Protocol insofar they entail binding consequences.

Kyoto Protocol Art 18:

"The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session, approve appropriate and effective procedures and mechanisms to determine and to address cases of non-compliance with the provisions of this Protocol, including through the development of an indicative list of consequences, taking into account the cause, type, degree and frequency of non-compliance. Any procedures and mechanisms under this Article entailing binding consequences shall be adopted by means of an amendment to this Protocol."

At the time of writing the Kyoto Protocol has never been amended. COP/MOP2 adopted the amendment regarding the inclusion of Belarus in Annex B, but this has not entered into force due to the lack of a sufficient number of parties accepting the amendment. Art 20 (4) of the Kyoto Protocol requires that at least three fourths of the Parties to the Protocol have submitted their acceptance of the amendment, upon which the amendment enters into force ninety days later.

Kyoto Protocol Art 20 (4):

"Instruments of acceptance in respect of an amendment shall be deposited with the Depositary. An amendment adopted in accordance with paragraph 3 above shall enter into force for those Parties having accepted it on the ninetieth day after the date of receipt by the Depositary of an instrument of acceptance by at least three fourths of the Parties to this Protocol."

The details of the non-compliance measures were laid down in the Marrakesh Accords of 2001[33] and adopted at Montreal in 2005 through a Decision of the COP/MOP1.[34] Based on a strict legal interpretation of Art 18 of the Protocol, the conclusion is therefore that the non-compliance procedures defined in the Marrakesh Accords are not legally binding for the Parties. The question remains, if such a strict interpretation of the wording of Art 18 is too narrow and if a binding effect can be nevertheless derived from the Marrakesh Accords. The Accords are a COP/MOP1 Decision, which was taken upon consensus of the Parties to the Protocol. This means that the Parties to the Protocol agreed to be bound by this decision. Although not fulfilling the requirements of Art 18, this nonetheless expresses the wish of the Parties to be bound to these measures at least from an ethical or political point of view.[35]

A practical reason for not choosing to make a proper amendment to the protocol might have been the procedural difficulties until an amendment enters into force. As shown above, the amendment takes only effect after the ratification by three-fourths of the Parties to the Protocol, which may lead to the unwanted situation that the non-compliance procedure does not apply to all Parties at the same time. The ratification procedure in some countries takes longer than in others, and only the Parties that have ratified the amendment

[33] United Nations (2002), Addendum 3.
[34] United Nations (2006), Addendum 3.
[35] Massai L (2011), p. 142.

would be bound by it.[36] The delayed proceedings regarding the amendment of Annex B mentioned above is the best example that the official amendment procedure may take too long.

In reality the question if the non-compliance consequences of the Kyoto Protocol are legally binding only arises in case of non-fulfilment of the eligibility criteria for the flexible mechanisms (Type 2) or the breach of the reduction target of Art 3 (Type 3). The declaration of non-compliance and the requirement to submit a compliance plan in case of a breach of the monitoring, reporting and verification obligations is more a political inconvenience than a real burden.

As explained above, the use of the flexible mechanisms is not an obligation under Kyoto Protocol but rather a privilege. It provides another possibility to fulfil the reduction requirement of Art 3. Some scholars argue that the organs of the Kyoto Protocol (e.g. the enforcement branch) have similar powers to those of organs of IGOs, particularly the "implied powers", and that granting of such privileges is part of these implied powers.[37] The Court of Justice of the European Union referred to the implied powers in the case "Fédération charbonnière de Belgique v High Authority" in 1956 as follows:

"The Court considers that without having recourse to a wide interpretation it is possible to apply a rule of interpretation generally accepted in both international and national law, according to which the rules laid down by an international treaty or a law presuppose the rules without which that treaty or law would have no meaning or could not be reasonably and usefully applied."[38]

This means that implied powers are not directly defined in the treaty itself but are derived from it, to the necessary extent, to ensure that the objectives of the treaty are achieved. The eligibility criteria to use the flexible mechanisms ensure that Parties fulfil some of their obligations under the Protocol and support therefore the achievement of the Protocol's goals. From this argument can be derived that the enforcement of the eligibility criteria is part of the implied powers of the enforcement branch and it is therefore in the discretion of the enforcement branch to exclude certain parties from the use of the flexible mechanisms

[36] MacFaul L (2005), p.8.
[37] Churchill R, Ulfstein G (2000), p. 647.
[38] Court of Justice of the European Union (1956), C-8/55, p.299.

under predefined conditions. Therefore, even without an amendment to the Kyoto Protocol, the suspension from the use of the flexible mechanism is legally binding.

The nature of the non-compliance consequence in case of a breach of the reduction obligation is completely different. Firstly, the target of Art 3 is an obligation under the Protocol and not a privilege such as the flexible mechanisms. Secondly, the deduction of a certain amount of emission allowances from the next commitment period constitutes a real burden for the defaulting party. The justification based on implied powers can therefore not be applied to the deduction of emission allowances.

Generally it has to be noted that postponing the penalty for a breach of the agreement to the next commitment period is not optimal. What happens if there is no second commitment period? What happens if there is a second commitment period but there are no reduction goals? This approach can be particularly dangerous for the overall goal of combating climate change, as possibly defaulting parties of the first commitment period are the ones deciding on the design of the next commitment period. This could lead to the unwanted effect that such parties deliberately prolong the discussion or postpone the decisions regarding the definition of the future scheme or define future reduction goals in such a way that their penalties from the first commitment period are counterbalanced.

The fact that the Marrakesh Accords were not adopted in form of an amendment to the Kyoto Protocol constitutes a sound argument that the deduction of emission allowances is not legally binding. However, it can be argued that the long amendment procedure was the reason why the Parties adopted the Marrakesh Accords as a COP/MOP Decision to ensure its equal applicability for all Parties. This decision was also based on the consensus of all Parties. While such consensus decision certainly illustrates the common position of the Parties on this matter, decisions by the COP/MOP are not generally considered legally binding.[39]

[39] Brunnée J (2000), p. 242.

Based on legal argumentation a party therefore cannot be forced to accept the punishment in relation to a breach of Art 3. The whole concept of the Kyoto Protocol depends on the willingness of the parties to comply with its rules and regulations. The participation in the Protocol is voluntary, and even if the compliance rules were legally binding, the withdrawal from the Protocol would still be an option to avoid punishment. The downside of such a move is a likely weaker position of the Party in future climate negotiations and a damaged reputation on the political stage. The crucial factor in this discussion is hence the willingness of the Parties to be bound by the rules of the Marrakesh Accords and to voluntarily implement self-punishment.[40]

[40] Barret S (2003), p. 386.

2.3 The International Climate Change Regime after 2012

In 2007 the UN Climate Change Conference in Bali (COP/MOP3) started a process with the goal to identify the parameters of a post-2012 global climate regime to be adopted by the COP/MOP5 in Copenhagen in 2009.[41] Unfortunately, the conference in Copenhagen was not able to fulfil this ambitious target. The outcome was the "Copenhagen Accord", a legally not-binding agreement, which supported the continuation of the Kyoto Protocol beyond 2012 and recognised that the increase in global temperature should be below 2 degrees Celsius in order to prevent dangerous climate change.[42] The following conference in Cancún in December 2010 did not bring any substantial news; only the "2°Celsius Target" was confirmed.

With the end of the Kyoto period approaching, the hopes for the next COP/MOP in Durban, South Africa, in 2011 were high. This meeting finally resulted in the confirmation that the Kyoto Protocol would be extended for another period starting 2013, with the end being either 2017 or 2020. Annex I parties were invited to submit their intended reduction targets for the second Kyoto commitment period (QELRO- quantified emissions limitations and reduction objectives) by May 2012.[43]

The other big result was the agreement to negotiate a *"[...] protocol, another legal instrument or an agreed outcome with legal force under the Convention applicable to all Parties [...]"* by 2015 to ensure the implementation of such instrument by 2020.[44] Although the wording regarding the legal form of such agreement remained soft, it nevertheless ensures a binding character. The other major achievement was that such agreement would be binding for "all Parties", also the developing countries. This does not explicitly mean binding reduction targets, but it was the first step towards binding commitments of non-Annex I countries in the future.

[41] United Nations (2008), Decision 1/CP.13, Art 2.
[42] United Nations (2010), Decision 2/CP.15, Art 1 and Art 4.
[43] United Nations (2012), Decision 1/CMP. 7, Art 1 and Art 5.
[44] United Nations (2012) Decision 1/CP.17. Art 2 and Art 4.

The last COP/MOP in Doha in December 2012 brought the following results:

1) It was confirmed that the second Kyoto commitment period (Kyoto II) would last from 2013 to 2020.[45] The EU and its 27 Member States as well as ten other Parties to the Protocol committed themselves to reduction targets in the second Kyoto period. The EU target remains at -20% by 2020. So far, the proposed reduction targets are rather conservative.[46] The countries are asked to submit more ambitious reduction objectives by April 30th 2014[47].

The big emitters are again not part of the reduction agreement. China, India and the United States do not have reduction targets until 2020. Canada withdrew from the Protocol. Japan, Russia and New Zealand refused to commit to binding targets in the next eight years.

2) The continuation of the Clean Development Mechanisms was confirmed. With the approval of the second Kyoto commitment period, the obstacle for CDM was overcome. The Doha agreement however limits the transfer and acquisitions of CERs to nations with a reduction target under Kyoto II. [48] This means that Japan and New Zealand, which used CERs also for compliance under domestic reduction schemes, will be cut off this market.

No decision was taken regarding the future of Joint Implementation. ERUs units, the credits generated by JI projects, are backed by AAUs, which will not be issued for the second commitment period for some time. With no agreement on an interim solution, only ERUs from emission reductions realised in 2008-2012 may be issued after December 31st 2012.

3) Unlimited banking of surplus AAUs of the first commitment period is allowed. Only countries with a reduction commitment in 2013-2020 may sell or buy surplus units with Australia, the EU, Monaco, Liechtenstein, Japan, Switzerland and Norway making a

[45] United Nations (2012), Decision 1/CMP.8, I (4).
[46] United Nations (2012), Decision 1/CMP.8, Annex I.
[47] United Nations (2012), Decision 1/CMP.8, III (9).
[48] United Nations (2012), Decision 1/CMP.8, IV (12) and (13).

political declaration that they will not buy such units.[49] Other buyers can only purchase such units corresponding to a maximum of 2% of their own allocation[50]. With this agreement, surplus AAUs from the first commitment period are not cancelled and could be used in a third period starting 2021.

4) Another big step was the agreement that at the conference in 2013 reduction targets for all Parties starting with 2021 will be discussed. This ends the resolute position of the developing countries that only the developed world should be bound by legally binding reduction targets.[51] Industrialized countries have argued for many years that developing countries have to participate in the emission reduction scheme to reach a more equitable sharing of the burden of global abatement costs. However, the continuation of the CDM discourages this goal, as the low-cost abatement measures for developing countries are already tied up in CDM projects, and only high-cost options are left to count towards a potential reduction goal for the third Kyoto commitment period. A phasing out of the CDM would therefore make it easier for developing countries to accept a reduction goal for post-2020.[52]

5) Nitrogen trifluoride (NF_3) was added to the greenhouse gases covered by the Kyoto Protocol starting 2013.

The talks in Doha brought desperately needed clarifications on some points, but the international climate change regime remains a battlefield where national interests preside over diminishing ambitions to reach a powerful global agreement. It remains to be seen if the international community is able to stick to its own timeframe, having an agreement with binding reductions targets from 2021 onwards ready by 2015.

[49] United Nations (2012), Decision 1/CMP.8, Annex II.
[50] United Nations (2012), Decision 1/CMP.8, VI (26).
[51] United Nations (2012) Draft Decision 1/CP.18, I (2).
[52] Klepper G (2011), p. 696.

3 The European Climate Regime

The competence of the European Union in environmental protection matters is laid down in Art 191 TFEU, which defines the following objectives[53]:

"[...] 1. Union policy on the environment shall contribute to pursuit of the following objectives:

— preserving, protecting and improving the quality of the environment,

— protecting human health,

— prudent and rational utilisation of natural resources,

— promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change. [...]"

The European Union shall observe the following principles in its environmental policy:

1) Promotion sustainable development (Art 11 TFEU)
2) High level of protection (Art 191 (2) TFEU)
3) Precautionary principle (Art 191 (2) TFEU)
4) Principle of prevention (Art 191 (2) TFEU)
5) Polluters-pay principle (Art 191 (2) TFEU)

The objectives and principles of the European Union with regards to environmental protection are therefore rather broad. In order to establish some boundaries for the Union a safeguard clause, which allows Member States to adopt provisional measures for environmental protection, is included in Art 191 (2) TFEU. These provisional measures are nonetheless subject to control by the Union. Furthermore, Art 193 TFEU allows Member States to introduce more stringent measures. The environmental competence therefore lies not exclusively with the European Union but is shared with the Member States, although the power of the Member States in these matters is – though existing – not very pronounced.

The legal basis for the European Union to conclude international agreements regarding environmental protection (i.e. external competence) can be found in Art 191 (4) TFEU, which states that "*Within their respective spheres of competence, the Union and the Member States shall cooperate with third countries and with the competent international organisations.*" This implies that the European Union has no exclusive external competence in this respect. Generally speaking, in sectors where the Union shares its

[53] European Union (2008), OJ 2008 C115, p. 47.

internal power with Member States such as environmental protection, the Union also does not hold exclusive external competence.[54]

3.1 European Climate Change Legislation

The first legislation on a European level regarding environmental protection established a monitoring mechanism for CO_2 and other greenhouse gas emissions not controlled by the Montreal Protocol in the Member States in 1993. The Council Decision also required the Member States to implement national programmes for limiting CO_2 emissions.[55] Since then, legislation regarding the combat against climate change and emissions has grown significantly. The following gives and indicative list of relevant EU legislation:

- Council Directive 96/62/EC on ambient air quality assessment and management
- Council Directive 96/61/EC concerning integrated pollution prevention and control (IPPC)
- Council Directive 1999/32/EC on the reduction of sulphur content of certain liquid fuels
- Directive 2001/81/EC on national emission ceilings for certain atmospheric pollutants
- Directive 2001/80/EC on the limitation of emission of certain pollutants into the air from large combustion plants
- Directive 2002/3/EC relating to ozone in ambient air
- Directive 2003/17/EC amending Directive 98/70/EC relating to the quality of petrol and diesel fuels
- Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community (EU ETS)
- Directive 2003/30/EC on the promotion of the use of biofuels
- Council Directive 2003/96/EC on the taxation of energy products and electricity
- Directive 2004/8/EC on the promotion of cogeneration of heat and electricity

[54] MacLeod I, Hendry ID, Hyett S (1996), p.325.
[55] Council Decision 93/389/EEC, OJ 1993 L167, p. 31.

- Directive 2008/101/EC amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community
- Directive 2010/75/EU on industrial emissions (IPPC)

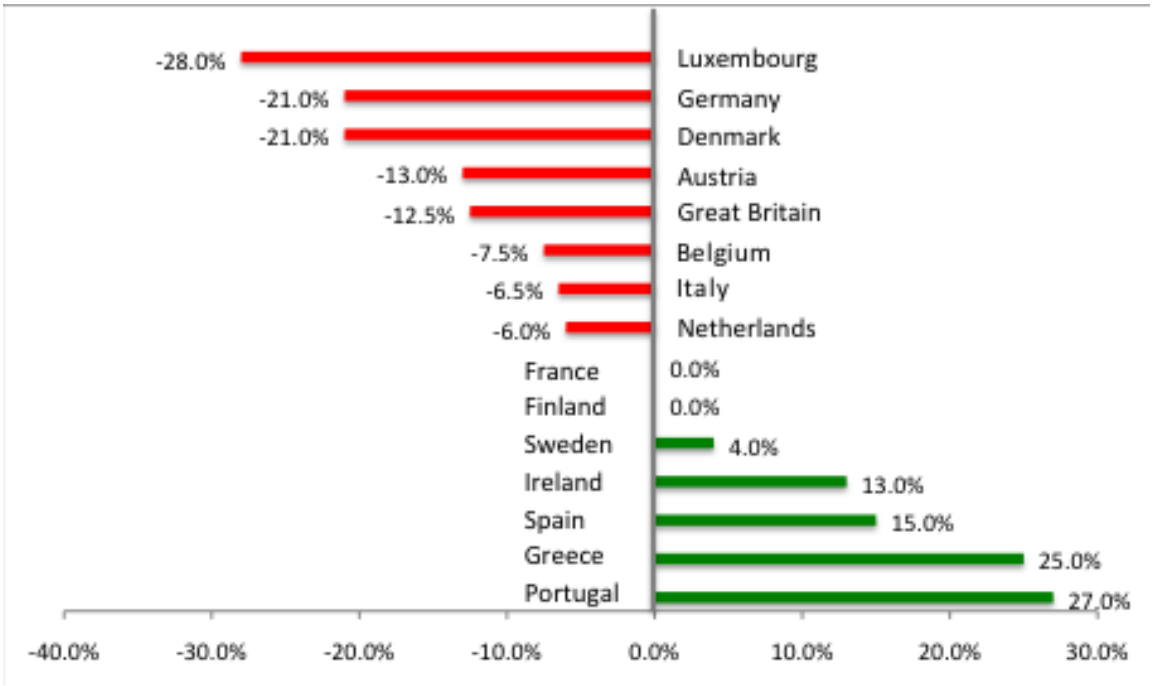
3.2 The Kyoto Protocol in Europe

The Council approved with its Decision 94/69/EEC[56] and Decision 2002/358/EC[57] the UNFCCC and Kyoto Protocol, respectively, and satisfied by this means the requirement to involve the Member States, as the external competence to conclude international agreements in the sector of environmental protection does not lie exclusively with the European Union (then European Community). With its ratification by the European Community on May 31st, 2002, the Kyoto Protocol is part of the *acquis communautaire* of the European Union, which means that it is binding for all Member States.

The scope of Decision 2002/358/EC is twofold: firstly, the approval of the Kyoto Protocol and the corresponding obligations of the European Union and its Member States as Parties to the Protocol. Secondly, the Decision, also commonly known as the "Burden Sharing Agreement", specified that the European Union and its Member States fulfil their obligations jointly in accordance with Art 4 of the Kyoto Protocol. The joint fulfilment of the Union-wide reduction of greenhouse gases by -8% compared to 1990 in the period of 2008-2012 is further specified in Annex II to the Decision, where the specific reduction targets of the Member States are defined. These reduction targets are different to the individual obligations of the Member States as Parties to the Kyoto Protocol. To serve as an example, under the Kyoto Protocol Austria's reduction target is -8%, whereas the Burden Sharing Agreement set the country's reduction target at -13%. With the notification of Decision 2002/358/EC as the instrument of ratification of the Kyoto Protocol to the UNFCCC, the reduction targets in Annex II have become the relevant reduction targets for the EU-15 to fulfil their Kyoto obligations.

[56] Council Decision 94/69/EC, OJ 1994 L 33, p.11.
[57] Council Decision 2002/358/EC, OJ 2002 L130, p.1.

It is important to note, that the joint fulfilment of the European Union, or "European bubble", only refers to the fifteen Member States of the European Community at the time of the adoption of the Kyoto Protocol (EU-15). Any change in the composition of the European Community after this point in time (i.e. enlargements of 2004 and 2007) is not relevant for the joint fulfilment under Art 4 of the Kyoto Protocol.[58] Insofar the new Member States have obligations under the Kyoto Protocol, they have to comply individually with their reduction targets. Ten out of the twelve new Member States have indeed such obligations, whereas Cyprus and Malta are Member States without a reduction target.



Graph 4 EU-15 Reduction Targets for 2008-2012

After the European reduction goals were defined in the Burden Sharing Agreement, instruments to achieve these targets were necessary. Chapter 3.1 gives an indicative list of EU legislation aiming at reducing greenhouse gas emissions, but the key instrument introduced by the EU is the EU-ETS. As explained before, the EU-ETS is not the "emission trading" mentioned in Art 17 of the Kyoto Protocol. The idea of trading the "right to emit" in form of allowances is the same. However, the emission allowances under the Kyoto Protocol (AAUs) are not the same emission allowances as under the EU-ETS

[58] Kyoto Protocol (1997), Art 4 (4).

(EUAs). Simplified, Kyoto allowances (AAUs) and other credits such as CERs and ERUs can only be used to fulfil the Kyoto target. Along the same line of argumentation, EUAs can be used only to fulfil obligations under the EU-ETS. The reason behind this separation is that the two regimes regulate two different markets. The Kyoto Protocol addresses the international community on the state level, whereas the subjects of the EU-ETS are installations. For more details on the EU-ETS please refer to Chapter 5.

However, there are exceptions to this rule. Art 6 (3) and Art 12 (9) of the Kyoto Protocol allow the participation of legal entities in Joint Implementation and the Clean Development mechanism. The authorization on the European level was granted in form of the "Linking Directive" which opened the door for European installations subject to the EU-ETS to use Kyoto credits (CERs and ERUs) for compliance under the EU-ETS.[59] This created more options for compliance for installations and supported the liquidity in the international Kyoto credit market. In order to protect the environmental integrity of the EU-ETS limitations on the use of these credits were implemented.

The limits imposed by the Linking Directive concerned the amount and quality of Kyoto credits to be used for compliance under the EU-ETS. Member States had to specify in their National Allocations Plans to what percentage of the allowance allocation installations may use CERs and ERUs.[60] The National Allocation Plans (NAPs) are the instrument through which EUAs were distributed among national installations.

The following credits are not allowed to be used for compliance under the EU-ETS[61]:

1) CERs and ERUs generated from nuclear facilities
2) CERs and ERUs from land use, land use change and forestry activities

Credits from hydroelectric power production project activities with a generating capacity exceeding 20 MW can only be used if relevant international guidelines, such as the World Commission on Dams November 2000 Report "Dams and Development — A New Framework for Decision-Making", are respected.[62]

[59] Directive 2004/101/EC OJ 2004 L338, p. 18.
[60] Directive 2004/101/EC, Art 11a (1).
[61] Directive 2004/101/EC, Art 11a (3).
[62] Directive 2004/101/EC, Art 11b (6).

The Linking Directive introduced further restrictions in order to ensure the additionality of emission reduction efforts and to avoid double counting of credits from projects within the EU. These rules are relevant for potential CDM projects in Cyprus (non-Annex I party) and JI projects in other EU Member States. The Directive forbids that emission reductions that would have anyway occurred due to compliance with the *acquis communautaire* are included in the calculations leading to the issuance of credits. Furthermore, if CDM or JI projects at installations that are subject to the EU-ETS regime lead to direct (or indirect) emission reductions, CERs and ERUs may only be issued if the same amount of allowances is cancelled in the installation's account (in the case of indirect emissions the Member State's national account).[63] Decision 2006/780/EC lays down the specific rules how these restrictions have to be implemented.[64] The double-counting prohibition makes JI and CDM projects in sectors covered by the EU-ETS not feasible and limits them to the non-ETS sectors.

Initially the use of CERs and ERUs for compliance in the EU-ETS has been limited. In the first three years of the Phase II (2008-2010) European installations used 22% of their CER/ERU quota for compliance[65]. Figures on 2011 compliance show a strong increase in the offset-use, probably due to the rising price spread between CERs and EUAs, making CERs a economically more attractive compliance instrument. Furthermore, new quality restrictions on CERs eligible for the EU-ETS from May 1 2013 onwards also spurred the handing in of CERs for 2011 compliance. This brings the use of Kyoto offset units for EU-ETS in 2008-2011 to around 40%.[66]

Eastern European countries with a surplus of Kyoto AAUs are targeting another connection between the two regimes. In April 2012 Poland submitted a proposal arguing that the use of AAUs for compliance under the EU-ETS should be allowed. So far this position is not shared by the majority of Member States, especially as it comes at a time where the EU-ETS is oversupplied and legislator aims at a reduction of allowances suitable for compliance use.[67]

[63] Directive 2004/101/EC, Art 11b (1), (3), (4).
[64] Decision 2006/780/EC OJ 2006 L316, p. 12.
[65] European Environment Agency (2011), p. 48.
[66] Point Carbon (2012), Carbon Market Daily 2 May 2012, p. 3.
[67] Point Carbon (2012), CDM & JI Monitor 2 May 2012, p. 6.

3.3 Europe after the first Kyoto Period

In 2009 the **"**Climate and Energy Package" of the EU became law. The package consists in total of six legislative acts:

1. Directive 2009/29/EC amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community
2. Decision 406/2009/EC on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020 ("Effort-Sharing-Decision")
3. Directive 2009/28/EC on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC
4. Directive 2009/31/EC on the geological storage of carbon dioxide and amending Council Directive 85/337/EEC, European Parliament and Council Directives 2000/60/EC, 2001/80/EC, 2004/35/EC, 2006/12/EC, 2008/1/EC and Regulation (EC) No 1013/2006
5. Regulation (EC) No 443/2009 setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO2 emissions from light-duty vehicles
6. Directive 2009/30/EC amending Directive 98/70/EC as regards the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and reduce greenhouse gas emissions and amending Council Directive 1999/32/EC as regards the specification of fuel used by inland waterway vessels and repealing Directive 93/12/EEC.

The „Climate and Energy Package" formalised the „20-20-20" target to be reached by 2020 that was already established by the Council in March 2007[68]:

- 20% reduction in EU greenhouse gas emissions of at least 20% below 1990 levels
- 20% of EU energy consumption from renewable resources
- 20% increase in energy efficiency.

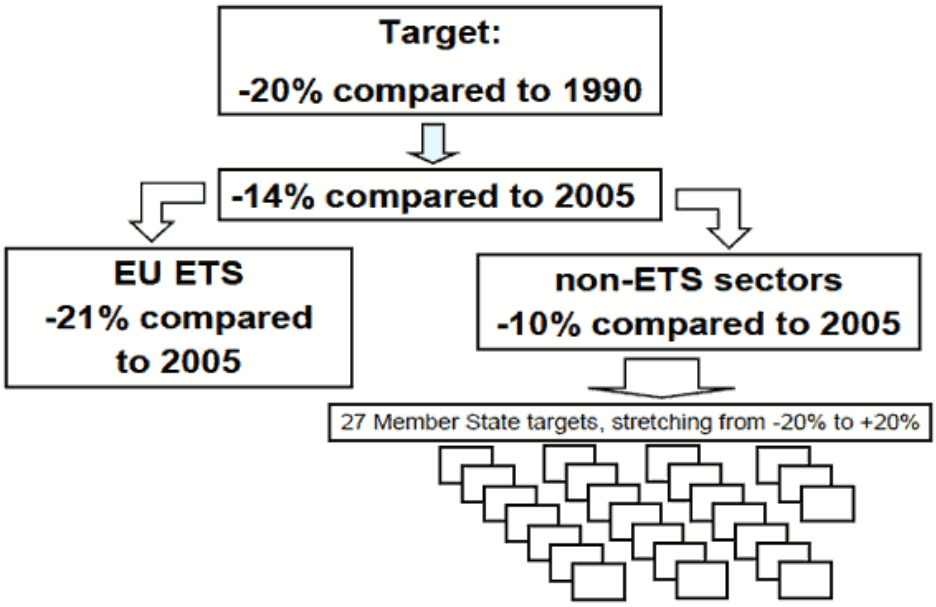
[68] European Community (2007), Presidency Conclusions 7224/1/07, p.12, 20-21.

While the directives in the package define specific goals how to reach the reduction in greenhouse gases and the increase in the use of renewable resources, there are no detailed rules on how to reach the energy efficiency goal. The package addresses energy efficiency only indirectly through the other two targets, as this topic is reserved for the Energy Efficiency Action Plan.

The core elements of the package to achieve the reduction in greenhouse gases are the tightening of the EU-ETS and the establishment of reduction goals for non-ETS sectors in the Effort-Sharing Decision. From 2013 auctioning of emission allowances will increasingly replace free allocation in the EU-ETS regime and the coverage of the regime in terms of gases and sectors will be wider. For more details on the EU-ETS rules from 2013 onwards please see Chapter 6.

The Effort-Sharing Decision establishes firm reduction goals for sectors not covered by the EU-ETS such as transport, housing, agriculture and waste. The targets reflect each Member State's wealth and range from a reduction of -20% to increases of 20% in the period 2013 to 2020. In total, a reduction in EU emissions from the non-ETS sector of 10% compared to 2005 is planned. In the event of the approval of a comprehensive international agreement on climate change leading to emission reductions of more than -20% compared to 1990 by 2020, the -20%-reduction target of the EU may increase to -30%.[69] The -30%-reduction target has been widely discussed within the EU with several Member States calling for an immediate implementation of the stricter target. However, in light of the lengthy and difficult negotiations on the international level when it comes to specific reduction goals, the EU will commit itself to an even stricter goal only if other industrialised and developing countries commit themselves to comparable efforts. At this point, such discussions are in any case only of theoretical nature, as latest figures show that the EU will no reach the -20%-reduction target by 2020 with the current national domestic measures. With no additional measures implemented by the Member States, the EU will only reach an emission reduction of -19% compared to 1990 levels.[70]

[69] Decision 409/2009/EC, OJ 2009 L140, p.136, Art 1 and Annex II.
[70] European Environment Agency (2011), p. 12.



Graph 5 Emission reduction targets for ETS and non-ETS according to the Effort-Sharing Decision[71]

Based on their reduction target by 2020, each Member State has a defined annual reduction goal (Annual Emission Allocation –AEAs). In the event of an exceedance of the annual target, up to 5% of the annual emission allocation can be borrowed from the following year[72]. Member States may also use CERs and ERUs corresponding to up to 3% of their emissions in 2005 to comply with their annual targets under the Decision.[73] If a Member State does not comply with these rules, the excess emission multiplied by a factor of 1.08 is subtracted from next year's emission allocation.[74]

With the "Climate and Energy Package" defining the line of action until 2020, the European Union acknowledged the need to consider environmental legislation on a longer-term basis. After the European Council confirmed the EU objective of reducing greenhouse gas emissions by 80-95% by 2050 compared to 1990 in order to keep climate change below 2°C[75], the Commission published the "Roadmap 2050" in March 2011[76]. According to this study, an emission reduction of 40% by 2030 and a reduction of 60% by 2040 compared to 1990 are necessary to reach this goal. The energy production sector

[71] European Community (2008), Memo 08/34, p.2.
[72] Decision 409/2009/EC, Art 3(3).
[73] Decision 409/2009/EC, Art 5 (4).
[74] Decision 409/2009/EC, Art 7(1).
[75] European Union (2011), European Council Conclusions EUCO 2/1/11, p.6.
[76] European Union (2011), Roadmap 2050, COM(2011) 112 final.

should become quasi carbon neutral, while the residential sector should reduce its emission to one tenth. The roadmap assumes that the technology of carbon capture and storage (CCS) will contribute large parts of these emission reductions. This technology aims at the capture of carbon dioxide emitted by industrial processes and to store it in underground geological formations. Although, the individual components of CCS are already available, the application of this technology in an economically viable manner on a commercial scale is still years from its realisation. Any contributions from this side before 2020 would therefore be unrealistic, and a big impact in the early years after 2020 is rather unlikely based on today's state of development and acceptance in Member States. Concerns regarding the risk of leaking underground storages and its consequences for human health as well as environmental integrity are not sufficiently explored yet and hinder the widespread acceptance in EU Member States.

The Roadmap was adopted on March 15th 2012 by the Parliament, but so far Poland is blocking an agreement in the Council. Unanimity in the Council conclusion regarding this matter would be a strong political signal of Europe's willingness to take all necessary actions to drastically reduce emissions.

4 Non-Compliance with the Kyoto Reduction Target

In the following chapters the possible consequences for the European Union and its Member States in case of non-compliance with the Kyoto reduction target will be discussed.

As explained in Chapter 2.2.4, the binding character of at least the deduction of allowances from the budget of the next commitment period as a consequence of non-compliance can be challenged. The following analysis is based on the assumption that the non-compliance procedures as laid down in the Marrakesh Accords will be enforceable. It is therefore vital to determine who will have to bear what burden in the event of non-compliance.

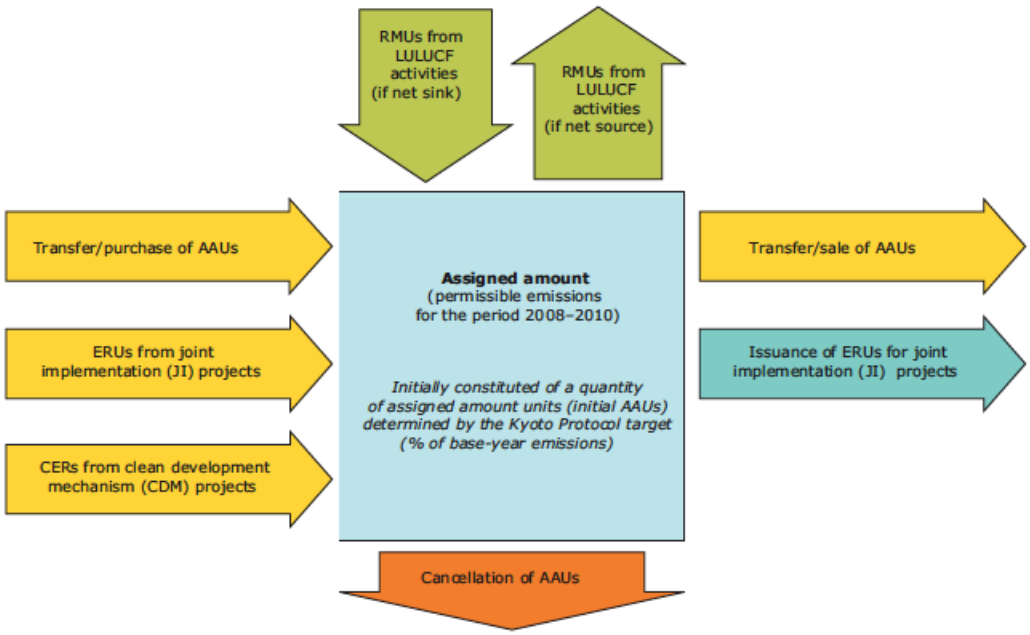
4.1 Status of Compliance

For the EU-15 group the reduction target to achieve in order to comply with the Kyoto Protocol is defined in Annex II of the Burden Sharing Agreement. The other Parties of the Protocol have their targets defined in Annex B of the Protocol. To be compliant with the respective reduction targets, the Party's emissions in 2008-2012 must be equivalent or lower than the assigned amount, which represents the allowed amount of emissions in that period. There are several ways how the initially assigned amount can be altered during the period in order to reach compliance (see Graph 6).

Parties not on track to reach their emission goal may increase their compliance by buying Kyoto compliance units through international emission trading. There is no defined limit to what extent a Party may fulfil its reduction target by use of the flexible mechanisms. However, the Kyoto Protocol and the Marrakesh Accords emphasize that the use of flexible mechanisms is only supplemental to domestic actions fighting global climate change.[77] European legislation differed in this respect, as Member States had to submit National Allocation Plans in which the allowed use of credits from flexible mechanisms to comply with the EU-ETS regulation was defined. From 2013 onwards, the extent to which

[77] Kyoto Protocol (1997), Art 6 (1) and Art 17; United Nations (2006) Addendum 1 Decision 2/CMP.1.

credits from JI and CDM are allowed to use for compliance under the EU-ETS is directly defined in Directive 2009/297EC Art 11a (8).



Graph 6 Possible changes in the assigned amount under the Kyoto Protocol[78]

The EU-15 plan to buy around 550 million units provided by the flexible mechanisms in the commitment period. [79] In contrast, the new EU Member States with a reduction target (EU-10) are very likely to have a surplus of AAUs ("hot air") at the end of the first Kyoto period. There are two main reasons for this phenomenon: firstly, many of these new Member States negotiated base years different to 1990 when they ratified the Kyoto Protocol. Those with a different base year chose a year prior to 1990, when their emissions were relatively high compared to the years of recession in the early 1990s in Eastern Europe. Choosing a year with low emissions due to the economic difficulties after the end of the Soviet Union would have made the reduction goal very tough for these countries. Secondly, with their accession to the European Union, these countries had to comply with the *acquis communautiare*, which also led to improvements in the efficiency of industrial processes and therefore to considerable reductions in emissions.

[78] European Environment Agency (2011), p. 20.
[79] European Environment Agency (2011), p. 31.

According to latest data available at the time of writing, the EU-15 is on track to over-achieve its Kyoto target by around 5% of its base-year emissions. With historical information available until 2010 and up-to-date projections for 2011 and 2012, the data shows that only three Member States fall short of their commitment. These countries are namely Austria, Italy and Luxembourg.

Austria is aware of its problems in achieving the Kyoto target. With the Burden Sharing Agreement increasing its reduction obligation, Austria started a JI/CDM Programme in March 2003 through which Kyoto compliance units (AAUs, CERs, ERUs, RMUs) are acquired. The Austrian Climate Strategy of 2007 defined that for the compliance period 2008-2012 45 Million emission allowances should be secured to support the achievement of the reduction target. [80]. Despite national measures and the JI/CDM Programme Austria still expects to fall short of its reduction obligation by around 30 Million tonnes of CO_2 equivalent (corresponding to 30 Million compliance units) by the end of the commitment period. [81] As a consequence, in April 2012 Austria decided to buy another 32 Million AAUs for compliance purposes.[82] As the relevant point in time for determining compliance under the Kyoto Protocol is in 2015, Austria can follow the development in its emissions until the end of the compliance period in 2012 and determine then whether this purchase plan needs to be completed to its full extent.

The other twelve Member States are projected to fulfil their obligations, with some most likely realizing a considerable over-achievement. In particular Germany, Greece, France, Sweden and the United Kingdom are expected to end the first Kyoto period with a considerable surplus of compliance units. Such surpluses can be transferred to another Party that may need these credits for compliance purposes. A Party is also free to cancel any surplus units or request that the surplus is carried over to the subsequent commitment period. The banking of CERs and ERUs is limited to an amount equivalent to 2.5% of the Party's assigned amount, while RMUs are not allowed to be transferred into the next commitment period at all.[83] The carry-over was a regular discussion topic at the Climate

[80] Österreichisches Bundesministerium für Land-und Forstwirtschaft, Umwelt und Wasserwirtschaft, (2007), p. 9.
[81] Umweltbundesamt, Klimaschutzbericht (2011), p. 7.
[82] Point Carbon (2012), Carbon Market Daily 4 April 2012, p. 4.
[83] United Nations (2006), Addendum 2, Decision 13/CMP1, Annex (16).

Change Conferences in the last few years. Please refer to Chapter 2.3 for details on the agreement reached regarding this topic.

According to the UK Carbon Accounting Regulation, any Kyoto compliance unit in excess of the UK carbon budget shall be cancelled.[84] With the carbon budget the United Kingdom pledged to reduce its emissions even more than required under international or European law. So far, a total of four carbon budgets have been defined. Each carbon budget covers five years, with the first covering the period 2008-2012. By achieving the domestic reduction target of -23% compared to 1990 emission levels set by the carbon budget[85], the UK would clearly overachieve its reduction target under the Burden Sharing Agreement (-12.5%)

According to the European Environment Agency, only with the surplus AAUs being made available to the EU-15 in order to compensate the shortfall of the failing three Member States, the EU-15 will be able to reach the Kyoto goal.[86] The question therefore is what happens if the EU-15 do not reach their Kyoto reduction goal and can the over-achieving Member States be forced to make their surplus AAUs available in order to reach compliance?

4.2 Consequences under international law

According to Art 1 of the Draft Articles on Responsibility of States for Internationally Wrongful Acts adopted by the International Law Commission (ILC) "*Every internationally wrongful act of a State entails the international responsibility of that State*". [87] Such wrongful act must be attributable to the State and must constitute a breach of an international obligation of that State (Art 2). In case the EU-15 bubble target under the Kyoto Protocol is not achieved, a breach of an international agreement has materialised. Art 4 (6) of the Kyoto Protocol defines that the EU (comprising of 15 Member States) and the Member States together are responsible for the emission reduction target to the extent nominated in the Burden Sharing Agreement. This means that in this case the

[84] Carbon Accounting Regulation No 1257, Art 8 (3).
[85] Carbon Budget Orders 2009 No 1259, Art 2.
[86] European Environment Agency (2011), p. 9.
[87] International Law Commission (2001).

internationally wrongful act of not reaching the bubble goal is attributable to the single Member States and to the EU-15 group (see also Chapter 4.3).

The consequences for such an internationally wrongful act under the ILC Articles are:

1) Cessation and assurance of non repetition (Art 30)
2) Reparation (Art 31), in the following three forms, either singly or in combination
    a. Restitution: Re-establishment of the situation which existed before the wrongful act (Art 35)
    b. Compensation: compensation for the damage caused (Art 36)
    c. Satisfaction: e.g.: acknowledgement of the breach, expression of regret (Art 37)

In the particular case of not reaching the Kyoto reduction goal restitution is not possible, while compensations seems unrealistic due to the problem of financially assessing the damage caused. What remains is the instrument of satisfaction, which may take the form of an official acknowledgement of the breach, a formal regret or an apology. This outcome is similar to the declaration of non-compliance under the compliance mechanism of the Kyoto Protocol.

As the Kyoto Protocol has specific non-compliance procedure, it is questionable if the ILC rules are applicable at all.

ILC Draft Articles, Art 55:

"These articles do not apply where and to the extent that the conditions for the existence of an internationally wrongful act or the content or implementation of the international responsibility of a State are governed by special rules of international law."

The ILC Draft Articles provide the general framework regulating state responsibility to fall back on in case there are no specific rules defined. As the Kyoto Protocol has an extensive compliance mechanisms defined, the "exception clause" of Art 55 ILC Draft Articles may be applied. If the legally binding character of the non-compliance procedure were challenged as described in Chapter 2.2.4, the general rules of the ILC Draft Articles would be applicable again. However, as described above, the consequences under the ILC Draft

Articles are much weaker than the deduction of allowances from the budget of the next commitment period under the Kyoto non-compliance mechanism.

4.3 Consequences under Kyoto

Through the notification of the Decision 2002/358/EC as the instrument of ratification of the Kyoto Protocol the European Union and its Member States (EU-15) committed themselves to jointly reach an emission reduction of -8% below the levels of 1990. If this target is reached, the Kyoto obligation is met and there are no consequences under the Protocol. The situation is different from a European law point of view and will be discussed in Chapter 4.4.

As we have seen in Chapter 2.2.3, one of the consequences of non-compliance with Art 3 of the Kyoto Protocol – and the most severe one - is the deduction of an assigned amount equal to 1.3 times the amount of the excess emissions from the budget of the following commitment period. Does this mean that in the event of a EU-15 bubble failure a certain amount will be deducted from a future EU-15 budget, or does the failure of the EU-15 bubble has consequences for the individual Member State?

Kyoto Protocol Art 4 (5):

"In the event of failure by the Parties to such an agreement to achieve their total combined level of emission reductions, each Party to that agreement shall be responsible for its own level of emissions set out in the agreement."

The term "agreement" used in Art 4 of the Kyoto Protocol refers to the agreement through which Parties to the Protocol commit themselves to reach their reduction targets under Art 3 jointly. In the case of the EU-15 bubble, the "agreement" is Decision 2002/358/EC (Burden Sharing Agreement). This means that in case of non-compliance of the EU-15 bubble, Member States are bound by the reduction targets set out in the Burden Sharing Agreement. The reduction targets defined in Annex B of the Kyoto Protocol are overruled by the voluntary commitments in the Burden Sharing Agreement.

Kyoto Protocol Art 4 (6):

"If Parties acting jointly do so in the framework of, and together with, a regional economic integration organization which is itself a Party to this Protocol, each member State of that regional economic integration organization individually, and together with the regional economic integration organization acting in accordance with Article 24, shall, in the event of failure to achieve the total combined level of emission reductions, be responsible for its level of emissions as notified in accordance with this Article."

Art 4 (6) addresses the special case where the joint fulfilment includes a regional economic integration organization. As the EU is a regional economic integration organization, Art 4 (6) is the relevant rule to apply in the event of failure of the EU-15 bubble, while Art 4 (5) constitutes the *lex generalis*. The consequence of the bubble failure are similar to those in Art 4 (5), the difference being that not only each of the EU-15 Member State is responsible for its reduction target as defined in the Burden Sharing Agreement, but also the EU (consisting of the 15 Member States) can be held responsible. This means, with regards to international law, the responsibility lies with the EU and the failing EU-15 Member States collectively.

Unfortunately it is not clear, where the line between the responsibility of the EU and its failing Member States is drawn. Art 22 (2) of the UNFCCC and Art 24 (2) of the Kyoto Protocol both require the regional economic integration organization and its Member States to decide on the distribution of their respective responsibilities to fulfil their obligations under the treaty to which they are party. In Annex III of the Burden Sharing Agreement the matter of the respective competences is addressed, however, no clarification on the exact distribution of competences is provided.

2002/358/EC Annex III para 3:

"The European Community declares that its quantified emission reduction commitment under the Protocol will be fulfilled through action by the Community and its Member States within the respective competence of each and that it has already adopted legal instruments, binding on its Member States, covering matters governed by the Protocol."

It therefore remains unclear how the responsibilities of the EU-15 group and the single Member States in this matter are distributed.

4.4 Consequences under Union law

4.4.1 EU Infringement Proceedings

Under Union law, the failure to comply with Union legislation results in the infringement procedure according to Art 258 and Art 259 TFEU. While the Commission may bring a case of alleged infringement by one Member State before the Court of Justice of the European Union (in the following "CJEU" or "the Court") under Art 258 TFEU, the active legitimation to sue lies with another Member State under Art 259 TFEU. In both cases there is a pre-litigation phase in which the Member Stated alleged to be non-compliant has the chance to explain its position. Only if this information proceeding is not successful the matter is brought before the CJEU.

Once before the CJEU, the Member State is "*required to take the necessary measures to comply with the judgment of the Court*" (Art 260 TFEU). If the Member State does not comply with the judgement of the CJEU, the Court may impose a lump sum or penalty payment according to Art 260 (2) TFEU.

The EU ratified the Kyoto Protocol by submitting Decision 2002/358/EC as the instrument of ratification. The Kyoto Protocol is therefore part of the Union legislation with the reduction obligations of the single Member States defined in Annex II of the Burden Sharing Agreement and binding for all Member States (Art 216 (2) TFEU and Art 288 TFEU). The EU-ETS Directive is not relevant in this case, as the EU-ETS regulates on an installation level, not on a country level. The EU-ETS is a mere instrument to reach the reduction targets under the Burden Sharing Agreement.

Two cases of non-compliance have to be differentiated under Union law:

1) the EU-15 bubble goal has been achieved, but single Member States have failed their goal under the Burden Sharing Agreement (case 1)
2) the EU-15 bubble goal has not been reached (case 2).

In case 1, there are neither consequences under the ILC Articles on state responsibility nor under the Kyoto compliance mechanism. On the Union law level however, there is a breach of the obligations set out in the Burden Sharing Agreement. Each of the 15 Member

States that is part of the EU bubble and that has failed to reach its reduction target as defined in the Burden Sharing Agreement may be subjected to the infringement procedure of Art 258 TFEU or Art 259 TFEU.

In case 2, there are consequences under the ILC Articles on state responsibility and under the Kyoto compliance mechanism. On the Union level, each of the 15 Member States of the EU bubble can be subjected to the infringement procedure. However, the Burden Sharing Agreement always refers to the "*European Community and its Member States*" with regards to the reduction target and lists the "*European Community*" separately on top of the reduction target list in Annex II. Can the European Union be sued on the same grounds as the EU-15 Member States? No, because according to Art 258 TFEU and Art 259 TFEU only "Member States" can be subjected to the infringement proceedings, while the European Union itself cannot be sued because of non-compliance with its own legislation.

An interesting point is nevertheless, if only the EU-15 Member States can be held responsible for the failure of the EU-15 bubble or if all Member States are accountable for the EU reduction goal. This matter is discussed in detail in the next chapter.

4.4.2 Responsibility of EU-27[88]

The Burden Sharing Agreement refers to the "*Member States*", meaning all Member states not only specific ones.

2002/358/EC Preamble:

"(10) […] Consequently, and in accordance with Article 10 of the Treaty establishing the European Community, Member States individually and collectively have the obligation to take all appropriate measures, whether general or particular, to ensure fulfilment of the obligations resulting from action taken by the institutions of the Community, including the Community's quantified emission reduction commitment under the Protocol, to facilitate the achievement of this commitment and to abstain from any measure that could jeopardise the attainment of this commitment."

[88] For the avoidance of doubt, in this chapter "EU-27" does not include Malta Cyprus, as these two countries do not have a reduction goal under Kyoto. Technically, it would therefore be EU-25.

(12) "[…] The Community and its Member States have an obligation to take measures in order to enable the Community to fulfil its obligations under the Protocol without prejudice to the responsibility of each Member State towards the Community and other Member States to fulfilling its own commitments." (emphasis added)

2002/358/EC Art 2:

"The European Community and its Member States shall fulfil their commitments under Article 3(1) of the Protocol jointly, in accordance with the provisions of Article 4 thereof, and with full regard to the provisions of Article 10 of the Treaty establishing the European Community.

The quantified emission limitation and reduction commitments agreed by the European Community and its Member States for the purpose of determining the respective emission levels allocated to each of them for the first quantified emission limitation and reduction commitment period, from 2008 to 2012, are set out in Annex II.

The European Community and its Member States shall take the necessary measures to comply with the emission levels set out in Annex II, as determined in accordance with Article 3 of this Decision." (emphasis added)

This means that the Burden Sharing Agreement refers to all of the Member States of the EU, which at the time of writing are 27. The limitation to the EU-15 matters only in relation to the Kyoto Protocol compliance mechanisms, as the Kyoto Protocol specifies in Art 4 (4) that no alterations in the composition of the group after the date of ratification are relevant. The new Member States ratified the *acquis communautaire* by means of the accession treaties. The Kyoto Protocol and the Burden Sharing Agreement are consequently fully binding also for the New Member States. This means that, on a Union-law level, the New Member States are part of the EU-bubble in the same way as the EU-15 are on the international level. Admittedly, the responsibility of the EU-27 based solely on this wording in the Burden Sharing Agreement may be contestable.

This argument is, however, further supported by the fact that the Burden Sharing Agreement refers several times to Art 4 (3) TEU (ex Art 10 TEC)[89], which calls for the loyal cooperation of all Member States to ensure the fulfilment of the Union's commitments (see citation above). The Principle of Loyal Cooperation is one of the fundamental principles in Union law. It obliges Member States to cooperate with the EU and not hinder the efficient application and implementation of Union law.

[89] European Union (2008), OJ 2008 C115, p.13.

Art 4 (3) TEU:

"Pursuant to the principle of sincere cooperation, the Union and the Member States shall, in full mutual respect, assist each other in carrying out tasks which flow from the Treaties.
The Member States shall take any appropriate measure, general or particular, to ensure fulfilment of the obligations arising out of the Treaties or resulting from the acts of the institutions of the Union.
The Member States shall facilitate the achievement of the Union's tasks and refrain from any measure which could jeopardise the attainment of the Union's objectives."

This principle is necessary to create responsibility in the absence of a breach of Union law. If Union legislation is specific enough to ensure the correct enforcement of Union law through the infringement procedure, recourse to Art 4 (3) TEU is not necessary. The Principle of Loyal Cooperation is therefore the *lex generalis*, which is only applied due to lack of a *lex specialis*.[90]

Supposing that the wording alone in the Burden Sharing Agreement does not include all Member States as argued above, Union legislation is not specific enough to justify an infringement proceeding against the New Member States and recourse to Art 4 (3) TEU is possible. Actually, this reasoning is not necessary as the Burden Sharing Agreement itself explicitly refers to the applicability of the Principle of Loyal Cooperation (see Art 2).

The conclusion is therefore that under EU-law all Member States are responsible for the fulfilment of the EU-15 bubble reduction target. While the EU-15 Member States are responsible for their specific reduction goals and the overall EU-bubble goal, the New Member States are required to support the other Member States in their efforts to reach this bubble goal.

As explained in Chapter 4.1, latest data suggests that in order to reach the EU-15 bubble goal, over-compliant Member States must make some of their surplus allowances available. The UK Carbon Accounting Regulation regarding the cancellation of any surplus allowances is clearly counteracting this requirement. In the *Kupferberg* case the CJEU emphasised the duty to abstain from any measure which could put the Community in a non-compliance situation with a treaty to which the Community is a party.[91] Based on

[90] Temple Lang (2001), p. 91.
[91] Court of Justice of the European Union (1982), C-104/81 – Hauptzollamt Mainz v Kupferberg &Cie, p.3662.

this jurisprudence and the obligation to honour Art 4 (3) TEU according to the Burden Sharing Agreement, the UK Carbon Accounting Regulation may prevent the fulfilment of the EU-15 bubble goal and provides sufficient ground for an infringement procedure against the UK.

With the EU-27 being accountable for the fulfilment of the bubble goal, can the New Member States be forced to give preference to the EU-15 group in their use of surplus allowances ("hot air")? As discussed before, the New Member States will have a considerable surplus of emission allowances (AAUs). These allowances can be sold under the International Emission Trading to countries that lag behind their Kyoto emission reduction goal. According to the CJEU it is against the Principle of Loyal Cooperation that Member States enter into bilateral international agreements, if the content of such agreements may interfere with the objectives of the Union.[92] The sale of AAUs under IET to a non-EU-15 country can be regarded as such a bilateral agreement. Again, the jurisprudence and the reference to Art 4 (3) TEU in the Burden Sharing Agreement provide sufficient legal basis to trigger an infringement procedure in case New Member States do not give EU-15 countries preference in sales of their surplus allowances.

While some limitations in the freedom of action of Member States were discussed above, the full extent of the term "loyal cooperation" remains questionable. To what extent can Member States be forced to make their surplus AAUs available? The interpretation of Art 4 (3) TEU cannot lead to the conclusion that surplus AAUs have to be provided for free. However, the above discussion has shown that countries with surplus AAUs have to make sure that these allowances are available for the EU-15. The terms of transfer of such AAUs are subject to negotiation and, in the event of a potential non-compliance with the Kyoto target, mostly politically driven.

[92] Court of Justice of the European Union (2002), C-471/98 – Commission of the European Communities v Kingdom of Belgium, p.9732.

The below table summarises the conclusions regarding the responsibility in different scenarios of non-compliance.

Law	Bubble Goal Reached	Bubble Goal NOT Reached
ILC	No consequences	State responsibility
Kyoto	No consequences	Art 4 (6) Kyoto Protocol: differentiation between EU's and EU-15 MS' responsibility not clear
European Union	Infringement proceedings against EU-15 MS not compliant	Infringement proceedings against EU-27 MS not compliant

Table 2 Summary of non-compliance consequences under different perspectives

5 The European ETS 2005-2012

The EU-ETS is the Union's key instrument to fulfil its reduction goals of the Burden Sharing Agreement. As explained before, the EU-ETS is not the "emission trading" mentioned in Art 17 of the Kyoto Protocol. The idea of trading the "right to emit" in form of allowances is however the same. The first trading period from 2005-2007 was generally considered to be a "test phase", while the second trading period from 2008-2012 went parallel to the Kyoto commitment period.

Through incorporation of Directive 2003/87/EC into the Agreement on the European Economic Area (EEA), Iceland, Liechtenstein and Norway were linked to the EU-ETS effective with the second trading period.[93]

5.1 Allocation rules and trading systematic

The legal basis for the start of the emission trading in Europe was Directive 2003/87/EC ("ETS-Directive 2003"). The ambitious scope was to *"[...] promote reductions of greenhouse gas emissions in a cost-effective and economically efficient manner.*" (Art 1). Installations performing activities that according to Annex I of the Directive shall be subjected to emission trading must have a greenhouse gas emission permit for the greenhouse gases listed in connection with such activity starting with January 1st, 2005.[94] By April 30th of the following year, installations had to surrender allowances equal to the total emissions of the relevant greenhouse gases from that installation during the preceding calendar year.[95] In order to know how much of the relevant greenhouse gases were emitted each year, installations had to include a monitoring and reporting concept in their permit application[96].

At the time, activities were limited to large energy producers and some industry sectors, while carbon dioxide was the only relevant greenhouse gas. The goal was to ensure the

[93] EAA Joint Committee (2007), Decision 146/2007.
[94] Directive 2003/87/EC, OJ 2003 L275, Art 4.
[95] Directive 2003/87/EC, Art 12 (3).
[96] Directive 2003/87/EC, Art 5.

biggest impact with a relative small number of installations with the vision to expand the types of activities and the relevant greenhouse gases over time.[97] Despite the relatively limited scope of Annex I, in 2009 around 11,000 installations accounting for around 43% of the Union's total greenhouse gas emissions were part of the EU-ETS. [98] The goal was to expand the scope of the EU-ETS over time with the first substantial change being implemented with Directive 2008/101/EC by which aviation activities were included into the EU-ETS from January 2012.

The ETS-Directive 2003 did not prescribe a definite number of allowances for the trading period. Each Member State had to prepare a National Allocation Plan in which the number of allowances and the methodology of this allocation had to be defined.[99] The total number of allowances was derived based on the reduction goals under the Burden Sharing Agreement and the Kyoto Protocol.[100] By determining the absolute number of emission allowances available under the EU-ETS in each country's National Allocation Plan for 2008-2012 ("cap"), the EU Member States fixed the contribution of the EU-ETS towards reaching their Kyoto reduction goal. These caps represented a certain amount of AAUs that are allocated to installations in form of EUAs. Annual fluctuations of over-or underallocation in the EU-ETS would not change the level of compliance regarding the Kyoto target.

The National Allocation Plans were published and notified to the Commission, which could reject the plan or any parts of it within a three-month scrutiny period. [101] The Commission used this power particularly for the NAPs of the second trading period. Except for the NAPs of France, Slovenia and the United Kingdom it contested all plans submitted by the Member States. [102] The strong intervention of the Commission with regards to the NAPs of the second trading period resulted in several appeals of Member States and a slew of court cases (for more details see Chapter 5.3.1).

[97] Directive 2003/87/EC, Art 30 (2) a.
[98] European Energy Agency (2011), p. 41.
[99] Directive 2003/87/EC, Art 9 (1), Art 11 (1) and (2).
[100] Directive 2003/87/EC, Annex III.
[101] Directive 2003/87/EC, Art 9 (2) and (3).
[102] European Community (2007), IP/07/415.

The primary method of allocation in the first two trading periods was free allocation (at least 95% in 2005-2007 and at least 90% in 2008-2012).[103] The NAPs did not only define the total number of allowances for each Member State, but specified also how many of these allowances would be allocated for free and also how many international credits may be used to fulfil the obligations under the EU-ETS. The use of Kyoto credits became possible due to the Linking Directive (see Chapter 3.2 for more details).[104] The primary principle behind the calculation of the total amount of allowances per Member States was the so-called "grandfathering". This means that the total number of allowances was calculated based on historic emissions. The justification for this approach can be found in Annex III of the ETS-Directive 2003 where it says *"[…] Member States may base their distribution of allowances on average emissions of greenhouse gases […]"*.

Allowances were generally valid for the trading period for which they were issued. Four months after the beginning of the next trading period allowances of the previous trading period had to be cancelled. However, at the beginning of the second trading period Member States could choose whether they issue "new" allowances to replace the ones that were cancelled ("banking").[105] All Member States with the exception of France and Poland did not use this possibility to bank Period I allowances into Period II.[106] Starting with the second trading period, Member States did not have the choice anymore, but were obligated to allow banking.

Art 13 (2) and (3) Directive 2003/87/EC:

„2. Four months after the beginning of the first five-year period referred to in Article 11(2), allowances which are no longer valid and have not been surrendered and cancelled in accordance with Article 12(3) shall be cancelled by the competent authority.
Member States may issue allowances to persons for the current period to replace any allowances held by them which are cancelled in accordance with the first subparagraph."

3. Four months after the beginning of each subsequent five year period referred to in Article 11(2), allowances which are no longer valid and have not been surrendered and cancelled in accordance with Article 12(3) shall be cancelled by the competent authority.
Member States shall issue allowances to persons for the current period to replace any allowances held by

[103] Directive 2003/87/EC, Art 10.
[104] Directive 2004/101/EC OJ 2004 L338, p. 18.
[105] Directive 2003/87/EC, Art 13 (2).
[106] Ellerman AD, Joskow PL (2008), p.49.

them which are cancelled in accordance with the first subparagraph." (emphasis added)

To ensure the accurate accounting of issuance, transfers, surrenders or cancellation of allowances national registries in each Member States were established.[107] The information contained in the registries, which includes the total amount of allowances allocated and the total verified emission, is publicly available since May 2009 and satisfies thereby the requirements of the Directive on public access to environmental information (see Table 3).[108]

Detailed Commitment Period Information - Compliance

Installation/Aircraft Number	Installation/Aircraft Name	Permit/Plan ID	Permit/Plan Date	Allowance Allocation *	Total of allowances surrendered *	Total verified emissions *	Compliance code on last 30 April	Account Status
1	Baumit Baustoffe Bad Ischl	IKA119	2005-06-01	43171	195038	195038	A	open
2	Breitenfelder Edelstahl Mitterdorf	IES069	2005-11-23	26429	69629	69629	A	open
3	Ziegelwerk Danreiter Ried im Innkreis	IZI155	2004-01-01	5927	13597	13597	A	open
5	Isomax Dekorative Laminate Wiener Neudorf	ICH113	2004-01-02	27343	99226	99226	A	open
6	Sandoz Werk Kundl	ICH106	2004-01-01	74886	270668	270668	A	open
7	Ziegelwerk Martin Pichler Aschach	IZI150	2004-01-02	13646	30988	31177	E	open
8	FHKW Süd StW St. Pölten	EFE041	2004-01-02	14294	39117	39117	A	open
9	FHKW Nord StW St. Pölten	EFE040	2004-01-02	52900	160543	160543	A	open
10	Vetropack Pöchlarn	IGL173	2004-01-01	49161	225753	225753	A	open
11	Vetropack Kremsmünster	IGL172	2004-01-01	63496	273552	273552	A	open

* in current ETS period before last 30 April

Table 3[109] Excerpt of the Austrian registry for 2011

5.2 Problems 2005-2007

The Commission admitted shortcomings of the system during the trial phase.[110] Inconsistencies in the transposition in the single Member States as well as the scope of the Directive itself led to several problems. The following sub-chapters will highlight the main challenges during 2005-2007, whose common denominator was the (supposedly) lack of equal treatment.

5.2.1 Overallocation

As explained above, Member States could determine their cap (i.e. the total amount of allowances) by means of the National Allocation Plans. They had to comply with the

[107] Directive 2003/87/EC, Art 19 (1).
[108] Directive 2003/4/EC, OJ 2003 L41, p.26.
[109] European Union, Transaction Log, http://ec.europa.eu/environment/ets/allocationComplianceMgt.do Access December 12, 2012.
[110] European Commission (2008), COM (2008) 16 final, p.2.

guidelines given in Annex III of the ETS-Directive 2003; however, the phrasing of Annex III was rather wide, leaving quite some room for manoeuvre.

The result was a considerable overallocation of allowances in the first trading period. The overallocation was the consequence of preferential treatment of single sectors as well as a fundamental difference in the understanding of the term "emission" in different countries. As a case in point, the cement industry in the Czech Republic received much more allowances than needed in the first trading period.[111] Another example is the disregard of process-related emissions in Slovakia during the first trading period. [112] Both examples show that there had been significant differences in the treatment of installations in different Member States. A cement producing installation in the Czech Republic was much less likely forced to buy allowances on the market than a similar installation in another Member State. The relevant emissions for which installations had to surrender allowances were much less in Slovakia, as part of emissions that were relevant in other Member States were just not counted in Slovakia. Both cases demonstrate that national implementation measures during the first trading period were not in accordance with the principle of equal treatment, which requires *"[...] that comparable situations must not be treated differently and different situations must not be treated alike unless such treatment is objectively justified[...]"*[113].

As the EU-ETS is a volume-based system, the overallocation in the first trading period led to a massive deterioration in the allowance price. The floor was reached in week 49 of 2007, when the price for Period I EUAs stood at 0,01 EUR per tonne. This price shock raised awareness with the European Commission, who examined the NAPs of the second trading period much more critically.

5.2.2 Limited Scope of Directive 2003/87/EC

The national implementation measures were not the only dispute during the first trading period. The ETS-Directive 2003 itself was contested due to its selection of sectors that were subjected to its rules.

[111] Spaun (2007).
[112] Beyrer/Eder/Draxler/Orisich (2007).
[113] Court of Justice of the European Union (2006), C-313/04, p. 33.

Annex I listed of sectors and the corresponding activities that are governed by the rules of the ETS-Directive 2003. This list included the production and processing of ferrous metals, which comprises the steel sector, whereas the chemical industry and the non-ferrous metal sector, which comprises aluminium, were not covered. In 2007, eight French companies sued in the Conseil d'Etat for abrogation of the transposition of the ETS-Directive 2003 into French law.[114] The claimants – one of them was steel producer Arcelor Atlantique et Lorraine – complained that the ETS-Directive 2003 discriminated the sectors covered by Annex I at that time, because those sectors were burdened with the new rules, while competing sectors such as the aluminium industry where not affected. For the claimants this situation was a breach of the principle of equal treatment. The Conseil d'Etat referred this question for preliminary ruling to the CJEU (Art 267 TFEU).

In its ruling from December 2008 the Court stated that "*The steel, chemical and non-ferrous metal sectors are […] from the point of view of the principle of equal treatment, in a comparable position while being treated differently*."[115] Such a differentiated treatment of similar situations can only be justified based on objective and reasonable criteria.

The Court found that the emission trading system was a new and complex scheme and that it was therefore in the discretion of the Community legislator to limit its scope to certain sectors in order to avoid unmanageable administrative requirements. The initial scope was designed to guarantee a critical mass of participants to start with the emission trading system and to expand the scope via a step-by-step approach along with more experiences with the system. The chemical sector alone would have added another 34,000 installations, more than three times the scope of the ETS-Directive 2003. Additionally, emissions from the non-ferrous metal sector were less than a tenth of the emission of the steel sector. The Court concluded that there was no infringement of the principle of equal treatment in this case as the different treatment of comparable situations was justified by objective and reasonable criteria.[116]

[114] Journal Officiel de la République Française (2004), p. 7089.
[115] Court of Justice of the European Union (2008), C-127/07, p.38.
[116] Court of Justice of the European Union (2008), C-127/07, p.60ff.

With Directive 2009/29/EC, which applies from January 1st 2013, the scope of the EU-ETS was enlarged. The new Annex I also includes the chemical and non-ferrous metal sector, which means that the unequal treatment contested in the case Arcelor Atlantique et Lorraine ends with the beginning of the third trading period.[117]

5.2.3 Small Emitters

The question of equal treatment was also discussed in relation to small emitters. Only a few activities listed in Annex I of the ETS-Directive 2003 are linked to certain quantitative limits (e.g. combustion installations with a rated thermal input exceeding 20 MW). Most activities are subject to the ETS-rules regardless of the size of the operation. However, at small installations costs for monitoring of emissions could be unproportional to the benefit of emission reductions. The Commission identified the need for a redesign of the rules with special regard to small emitters as early as 2006.[118] Germany privileged small emitters already in its NAP for the period 2008-2012. The legislative basis was Art 6 (9) ZuG 2012 according to which the free allocations to installations with annual average emissions less than 25,000 tonnes CO_2 were not reduced by a compliance factor. The change on a European level came with Directive 2009/29/EC. Art 27 grants Member States the choice to exclude installations with less than 25,000 tonnes of carbon dioxide equivalent per year and a rated thermal input below 35 MW from emission trading under the condition that such installations conduct equivalent measures to reach equivalent emission reductions. Starting with the third trading period the special situation of small emitters is therefore finally considered and compliance with the principle of equal treatment – meaning that different situation must not to be treated alike – established.

[117] Directive 2009/29/EC OJ 2009 L140 p.63.
[118] European Community (2006), IP 06/1548.

5.3 Problems 2008-2012

While the problems during the first trading period mostly centred around the question of equal treatment as described in the previous chapter, the second trading period was characterised by discussions of two topics: firstly, the National Allocation Plans of several Member States; and secondly, the inclusion of the aviation sector in the EU-ETS.

5.3.1 Legal actions against the European Commission

As mentioned in Chapter 5.1, the European Commission reviewed the National allocation plans for the second trading period quite critically. Many Member States were requested to lower their proposed emission caps drastically, which led a total of nine Member States suing the Commission at European courts. Bulgaria, Lithuania, Romania and Slovakia later withdrew their cases.[119] Of the remaining five cases, so far Poland and Estonia have received the final ruling at the CJEU.

Plaintiff	Court	Status of proceedings	Cause of Action	Outcome
Poland	CJEU	Case closed	Exceeding of review power by EC	Won
Estonia	CJEU	Case closed	Exceeding of review power by EC	Won
Latvia	CJEU	Pending	Exceeding of deadline with reduction decision	In progress
Czech Republic	General Court	Pending	Exceeding of deadline with reduction decision	On hold
Hungary	General Court	Pending	Exceeding of review power by EC	On hold

Table 4 Summary of Court Cases against European Commission regarding NAP II

Poland

In March 2007 the Commission decided that the submitted Polish NAP II infringed several criteria in Annex III of Directive 2003/87/EC and that the total annual quantity of allowances was to be reduced by more than 76 million tonnes. Poland contested this

[119] Point Carbon (2012), Carbon Market Daily 19 October 2012, p. 3.

Decision at the General Court[120], arguing that i) the Commission adopted this Decision after the expiry of the prescribed three-month period Article 9(3) of Directive 2003/87/EC[121] and that ii) Article 9(1) (Member State's power to make and implement NAPs) and (3) (Commission's power to review) of the Directive were infringed[122].

Art 9 Directive 2003/87/EC:

"1. For each period referred to in Article 11(1) and (2), each Member State shall develop a national plan stating the total quantity of allowances that it intends to allocate for that period and how it proposes to allocate them. The plan shall be based on objective and transparent criteria, including those listed in Annex III, taking due account of comments from the public. The Commission shall, without prejudice to the Treaty, by 31 December 2003 at the latest develop guidance on the implementation of the criteria listed in Annex III. For the period referred to in Article 11(1), the plan shall be published and notified to the Commission and to the other Member States by 31 March 2004 at the latest. For subsequent periods, the plan shall be published and notified to the Commission and to the other Member States at least 18 months before the beginning of the relevant period.

2. National allocation plans shall be considered within the committee referred to in Article 23(1).

3. Within three months of notification of a national allocation plan by a Member State under paragraph 1, the Commission may reject that plan, or any aspect thereof, on the basis that it is incompatible with the criteria listed in Annex III or with Article 10. The Member State shall only take a decision under Article 11(1) or (2) if proposed amendments are accepted by the Commission. Reasons shall be given for any rejection decision by the Commission." (emphasis added)

ad i)

The Republic of Poland notified its NAP II to the Commission in accordance with Article 9(1) of Directive 2003/87/EC by letter on June 30th, 2006. The notification was accompanied with the information that the submitted NAP II was not complete and the missing information would be supplied as soon as possible. On August 30th, 2006, the Commission informed Poland that based on a first examination, the NAP was incomplete, and therefore not compliant with certain criteria of Annex III to the Directive. On January 9th, 2007 Poland submitted the missing information and in March 2007 the Commission decided that the Polish NAP II had to be amended. Poland argued in its claim that the three-month period to reject a NAP had started to run on June 30th, 2006, whereas in the Commission's view the period had only started to run once a complete NAP was submitted

[120] Then still the Court of First Instance.
[121] Court of First Instance (2009), T-183/07, p.9.
[122] Court of First Instance (2009), T-183/07, p.48

(i.e. January 9th, 2007). The General Court stated in its judgement that the mere incompleteness of the NAP as of June 30th, 2006 could not prolong the – by the Directive intentionally limited – time for the Commission to decide. However, the Commission informed Poland about their objections to the submitted NAP by letter on August 30th, 2006, which was within the three-month period and which suspended the expiration of the deadline. The first plea was therefore dismissed.[123]

ad ii)

Poland claimed that the Commission overstepped its powers by using data from its own economic analysis to evaluate the Polish NAP rather than using the data provided by the Member State in the submitted NAP. Furthermore, based on the Commission's analysis, a new emission cap was set in the Commission Decision. According to the Polish plea the Commission had a limited role consisting exclusively of assessing the notified NAP in the light of the criteria laid down in Annex III of the Directive.[124] The General Court ruled in favour of Poland stating that *"[…] by laying down in the contested decision such a ceiling for allowances above which the NAP would be regarded as incompatible with the Directive, the Commission exceeded the limits of its review power under Article 9(3) of the Directive. […]"*.[125] The Commission Decision C(2007) 1295 final of 26 March 2007, with which the Commission requested Poland to reduce their allowance cap for 2008-2012 was consequently annulled.

In the following the Commission appealed against the judgement at the CJEU arguing that the General Court committed an error of law in disregarding the objective of the Directive when interpreting Article 9(3) of Directive 2003/87.[126] The CJEU dismissed the Commission's appeal because *"[…] the General Court was […] correct to hold, in paragraph 89 of the judgment under appeal, that it is unequivocally clear from Article 9(3) of that Directive that the Commission's role is limited to verifying the conformity of a Member State's national allocation plan with the criteria set out in Annex III to the Directive and the provisions of Article 10[…]"*.[127]

[123] Court of First Instance (2009), T-183/07, p.32ff.

[124] Court of First Instance (2009), T-183/07, p.48.

[125] Court of First Instance (2009), T-183/07, p.131.

[126] Court of Justice of the European Union (2012), C-504/09 P, p.70.

[127] Court of Justice of the European Union (2012), C-504/09 P, p.81.

Estonia

As for the Estonian case, the situation was very similar. Estonia submitted its NAP II on June 30th, 2006 and a new version of the NAP II in February 2007. On May 4th, 2007 the Commission adopted the decision that the submitted NAP did not comply with the criteria in Annex III of Decision 2003/87/EC and set a new emission cap.[128] In contrast to Poland, Estonia did not argue that the Commission adopted this Decision after the expiry of the prescribed three-month period Article 9(3) of Directive 2003/87/EC. However, Estonia claimed the infringement of Article 9(1) (Member State's power to make and implement NAPs) and (3) (Commission's power to review) of the Directive. The General Court came to the same conclusion as in the Polish case stating that "*[…] by imposing, in the operative part of a decision rejecting a national allocation plan, a specific limit, calculated on the basis of its own economic model and its own choice of data, for the total quantity of allowances which a Member State has the right to fix, the Commission effectively substitutes itself for the Member State for the purposes of fixing that total quantity. […]*"[129] The contested Commission decision was therefore annulled.

The Commission appealed also against this judgement at the CJEU. The ground of appeal was the same as in the Polish case: the General Court allegedly committed an error of law in disregarding the objective of the Directive when interpreting Article 9(3) of Directive 2003/87.[130] The CJEU dismissed also this appeal by the Commission because "*[…] the General Court was therefore correct to hold, in paragraph 54 of the judgment under appeal, that it is unequivocally clear from Article 9(3) of that directive that the Commission's role is limited to verifying the conformity of a Member State's national allocation plan with the criteria set out in Annex III to the Directive and the provisions of Article 10 thereof. […]*"[131]

Latvia

On August 16th, 2006 Latvia notified its NAP II, which was rejected by Decision of the Commission on November 29th, 2006. On December 29th, 2006 Latvia notified an amended NAP II, which included a much higher annual allowance cap than the

[128] Court of First Instance (2009), T-263/07, p.6ff.

[129] Court of First Instance (2009), T-263/07, p.64.

[130] Court of Justice of the European Union (2012), C-505/09 P, p. 39ff.

[131] Court of Justice of the European Union (2012), C-505/09 P, p. 83.

Commission's November Decision would have had allowed. On March 30th, 2007 the Commission informed Latvia that the revised NAP II was incomplete. After Latvia submitted additional information in April 2007, the Commission rejected the amended NAP II on July 13th, 2007.[132]

Latvia then sued the Commission at the General Court arguing that the Commission adopted the contested Decision after the expiry of the prescribed three-month period Article 9(3) of Directive 2003/87/EC. According to Latvia, the NAP II was duly notified on December 29th, 2006, which means that the three-month period to reject the plan had ended with March 29th, 2007. The Commission Decision in July 2007 was therefore too late and should be annulled. The Commission in contrast argued that the three-month period in Directive 2003/87/EC referred to the originally notified NAP and not to its amendments.[133] In its judgement the General Court stated that the Directive does not indicate that the three-month period refers only to the originally notified NAP and not to any of its amendments. Furthermore, "*[…] the purpose of the procedure under Article 9(3) of Directive 2003/87, apart from permitting the Commission to exercise a prior review, is to provide legal certainty for the Member States and, in particular, to permit them to be sure, within a short time, how they may allocate emission allowances and manage the allowance trading scheme on the basis of their NAP during the allocation period in question. […] Those considerations apply to any NAP, irrespective of whether it is the version as initially notified or as revised and subsequently notified.*"[134] The notification of the amended NAP on December 29th, 2006 therefore triggered the three-month period, which ended with March 29th, 2007. The Commission's request for information on March 30th, 2007 was too late and the revised NAP II became effective with March 30th, 2007.

The Commission appealed against this judgement of the General Court and the case is in progress at the CJEU at the time of writing.

[132] General Court (2011), T-369/ 07, p.8ff.
[133] General Court (2011), T-369/ 07, p.38ff.
[134] General Court (2011), T-369/ 07, p.54-55.

Hungary, Czech Republic

Both countries filed claims at the General Court in 2007, but the proceedings were on hold until there were final rulings in the other pending cases. The reason for this approach was that both Hungary and the Czech Republic based their claims on arguments that were also used by Poland, Estonia and Latvia.

Hungary:
Article 9(1) and (3) of the Directive 2003/87/EC were infringed[135] – same as Poland and Estonia

Czech Republic:
The Commission adopted this Decision after the expiry of the prescribed three-month period Article 9(3) of Directive 2003/87/EC[136] – same as Poland and Latvia

The above described legal proceedings against the Commission show that Member States were not willing to accept the Commission's intervention when it comes to significant changes of the emission allowance cap. The fact that the CJEU twice confirmed the limited authority of the Commission in the determination of the allowance cap indicates that firstly, the Commission has only the powers that are explicitly conferred to it by the Directive; and secondly, that there is no wide interpretation of the wording of the Directive 2003/87/EC. These rulings have significance beyond the definition of how many allowances are allocated in the trading period 2008-2012. There are different approaches how the Commission wants to influence/adapt the total amount of allowances available in the trading period 2013-2020. In light of above described CJEU rulings it must be evaluated whether such attempts by the Commission find legal backing in the EU-ETS rules. For more details on the planned measures of the Commission influencing the number of emission allowances in 2013-2020 see Chapter 6.2.

[135] Court of First Instance (2007), T-221/07.
[136] Court of First Instance (2007), T-194/07.

5.3.2 Incorporation of aviation activities into the Emission Trading System

With Directive 2008/101/EC aviation activities were included into the EU-ETS from January 1, 2012. By April 30th aircraft operators are required to surrender a number of allowances equal to their total emissions during the preceding calendar year, which are calculated on the basis of their fuel consumption for all their flights falling within that directive.[137]

Annex Directive 2008/101/EC:

"(c) the following category of activity shall be added:

'Aviation

Flights which depart from or arrive in an aerodrome situated in the territory of a Member State to which the Treaty applies."

With this extended scope all flights from and to EU-Member States are subjected to the rules of the EU-ETS. This means also flights from third countries landing in an EU-Member State and flights to third countries are covered by the emission trading scheme. This wide application of emission trading rules was rejected by several countries, most prominently the United States of America, China, India and Russia.[138] Industry reports suggested that the row on the inclusion of non-European flights into the scheme could even trigger a trade war between Europe and big Asian economies such as China and India.[139] On December 16th, 2009 the Air Transport Association of America (in the meantime renamed to Airlines for America, A4A), the trade organisation of the main American airlines, filed a lawsuit against the United Kingdom at the UK's High Court of Justice with the goal to reach the repeal of the national measures implementing Directive 2008/101/EC in the United Kingdom. ATA pleaded that the directive was unlawful in the light of and i) customary international law ii) international treaty law.

[137] Directive 2008/101/EC Art 12 2a.
[138] Point Carbon (2011), Carbon Market Daily 6 October 2011, p. 3.
[139] Point Carbon (2012), Carbon Market Daily 5 April 2012, p. 1.

With regards to i) the claimant invoked the principles that each State has complete and exclusive sovereignty over its airspace and the freedom to fly over the high seas. As to ii), the plaintiff referred to the Chicago Convention, the Open Skies Agreement and the Kyoto Protocol.[140]

Art 1 Chicago Convention[141]:

"The contracting States recognise that every State has complete and exclusive sovereignty over the airspace above its territory."

Art 11 Open Skies Agreement[142]:

"1. On arriving in the territory of one Party, aircraft operated in international air transportation by the airlines of the other Party, their regular equipment, […] and other items intended for or used solely in connection with the operation or servicing of aircraft engaged in international air transportation shall be exempt, on the basis of reciprocity, from all import restrictions, property taxes and capital levies, customs duties, excise taxes, and similar fees and charges that are (a) imposed by the national authorities or the European Community, and (b) not based on the cost of services provided, provided that such equipment and supplies remain on board the aircraft.

2. There shall also be exempt, on the basis of reciprocity, from the taxes, levies, duties, fees and charges referred to in paragraph 1 of this Article, with the exception of charges based on the cost of the service provided:

[…]

(c) fuel, lubricants and consumable technical supplies introduced into or supplied in the territory of a Party for use in an aircraft of an airline of the other Party engaged in international air transportation, even when these supplies are to be used on a part of the journey performed over the territory of the Party in which they are taken on board; […]" (emphasis added)

Art 2 (2) Kyoto Protocol:

"2. The Parties included in Annex I shall pursue limitation or reduction of emissions of greenhouse gases not controlled by the Montreal Protocol from aviation and marine bunker fuels, working through the International Civil Aviation Organization and the International Maritime Organization, respectively." (emphasis added)

[140] Court of Justice of the European Union (2011), C-366/10, p. 45.
[141] Chicago Convention (1944).
[142] European Community (2007), Air Transport Agreement, OJ 2007 L134, p.4.

The UK court then submitted the question to the CJEU for preliminary ruling. The CJEU stated in its ruling that Art 100 (2) TFEU gives the European Union the right to adopt appropriate provisions concerning air transport, and that certain matters falling within the Chicago Convention are covered by legislation adopted on a European Union level on exactly that legal basis. Furthermore, the European Union is neither a party to the Chicago Convention, nor has it completely resumed the powers previously exercised by the Member States in the field of application of the Convention. The European Union is therefore not bound by this treaty and the Directive consequently cannot infringe the Convention. The unsolved problem with this approach of the CJEU is that the Member States are parties to the Convention and may violate the Convention's provisions when enforcing the rules of Directive 2008/101/EC.

According to the CJEU the Open Skies Agreement is also not infringed by Directive 2008/101/EC because the ETS *"[…] by reason of its particular features, constitutes a market-based measure and not a duty, tax, fee or charge on the fuel load."*[143] With regard to the Kyoto Protocol, the Court did not consider the cited paragraph sufficiently precise so as to confer on individuals the right to rely on it in legal proceedings.[144]

As to the referred principles of international customary law the Court further elaborated that Directive 2008/101/EC does not infringe the principle of territoriality or the sovereignty over a country's air space, as the ETS rules only apply to aircrafts, which are physically in the territory of one of the Member States of the European Union and are thus subject on that basis to the unlimited jurisdiction of the European Union. The principle of freedom to fly over the high seas is also not affected, because aircrafts only flying over EU Member States without landing at an EU airport are not subjected to the ETS rules. According to the Court, the fact that the whole international flight falls under the ETS regulation and not only the part over European territory cannot be used to question the applicability of the regulation in its entirety, as it is a common phenomenon with matters concerning environmental legislation that pollution of the air, sea or land territory originate partly outside the territory of the legislative body. [145]

[143] Court of Justice of the European Union (2011), C-366/10, p. 147.
[144] Court of Justice of the European Union (2011), C-366/10, p. 65 ff.
[145] Court of Justice of the European Union (2011), C-366/10, p. 125 ff.

The CJEU therefore concluded that the pleaded reasons for the unlawfulness of Directive 2008/101/EC were not applicable. Considering the implications for climate change as well as the threat of signalling the contestability of EU legislation looming in the background, it seems the Court was determined to justify the Directive. The judgment however had also a sobering effect with regard to the reliability of international agreements.

The CJEU judgement did not end the discussion between international airlines and the EU. Chinese and Indian airlines did not comply with certain reporting requirements prescribed by Directive 2008/101/EC and many countries urged to regulate the matter by an international agreement at the level of the International Civil Aviation Organisation.[146] The ICAO is a forum for cooperation in all fields of civil aviation among its 191 Member States.

On November 12th 2012 EU Commissioner for Climate Action Connie Hedegaard announced that preliminary ETS-rules would not be enforced for flights to and from Non-EU countries. Behind the move were positive signals from the ICAO to reach an international agreement regarding emission reductions in the aviation sector at its next General Assembly in the fall of 2013.[147] Specifically, the enforcement of the provisions on surrendering allowances by April 30th for the emissions of the preceding year as well as the reporting requirements is suspended for Non-EU flights until January 1st 2014.[148]

Despite this temporary backing down by the EU, the US government passed a bill allowing US airlines not to comply with EU emission trading rules only two weeks later. US President Obama signed into law the "European Union Emissions Trading Scheme Prohibition Act of 2011", which empowers the US Transportation Secretary to forbid US airlines from participating or paying penalties in the EU Emission Trading System.[149]

[146] Deutsche Bank (2012), Commodities Special Report 10 August 2012, p. 3.
[147] European Union (2012), Memo 12/854.
[148] European Commission (2012), COM (2012) 697, Art 1.
[149] Congress of the United States of America (2012), S.1956.

The latest move by the European Commission buys some time and avoids the direct final confrontation with third country airlines in April 2013, when the first allowances for the compliance year 2012 would have had to be surrendered. However, as the developments in the US show, the major opponents of the EU emission trading system are taking a firm stand and are not afraid to show their resistance.

6 Emission Trading in Europe 2013-2020

Besides the inclusion of the aviation sector starting 2012, the EU-ETS was further fundamentally changed for Phase III, which started on January 1st 2013. The main changes, which will be discussed in this chapter, are the centralised allocation of allowances based on benchmarks with auctioning being the general rule of allocation, a central registry on EU-level and more sectors and gases subjected to the EU-ETS. The overall goal was to simplify the allocation process and harmonize the allocation rules.[150] This means that there will be no National Allocation Plans anymore. At the end of Phase II there were also intense discussions on whether the EU-ETS was a success or a failure so far. The starting point for these debates was the relatively low price for EUAs, which stabilised well below EUR 10 per tonne. This was far below the price levels expected. As a consequence, new ideas on how to restructure the EU-ETS were developed and will also be discussed in this chapter.

6.1 New rules for 2013- 2020

There are two central documents for the new rules for Phase III: firstly, Directive 2009/29/EC, which changed the original Directive 2003/87/EC. Secondly, Decision 2011/278/EU, which defines the rules for free allocation. As the topic is very complex these two documents can only set general rules. The application of these rules led to many questions from the industry side, resulting in a total of seven extensive Guideline Documents and additional Question & Answer Documents from the Commission.

6.1.1 Scope extension

As mentioned in previous chapters, while the initially limited scope of the EU-ETS has led to court cases (see Chapter 5.2.2), the first extension of the scope with the inclusion of the aviation sector was also not greeted with general acceptance (see Chapter 5.3.2). With Directive 2009/29/EC came a further extension – and a less problematic one – with the inclusion of the aluminium, ammonia and petrochemical industry as well as the gases

[150] Okinczyc S (2011), p.166.

nitrous oxide and perfluorcarbons.[151] This extension was the natural development that was intended from the beginning. As the CJEU stated in its judgement in the Arcelor Atlantique et Lorraine case, the initial scope was designed to guarantee a critical mass of participants to start with the emission trading system and to expand the scope via a step-by-step approach along with more experiences with the system. After this scope extension are three of the six gases of the Kyoto protocol covered by the EU-ETS.

6.1.2 Allocation rules

The critical changes of Directive 2009/29/EC concern the allocation rules. From 2013 onwards, there is a EU-wide cap for allowances. The Commission set with Decision 2010/634/EU this EU-wide cap at just below 2.04 billion allowances.[152] The cap will decrease by a linear factor of 1.74% each year.[153] Another aspect of this centralisation is the common registry on EU-level.[154] In the first two trading periods, Member States had their own national registry, which kept track of the transfer of allowances and the status of compliance with the EU-ETS. In Phase III, and actually already fully operational since June 2012, there is a common registry operated by the Commission. A practical reason for this change is that in Phase III the allocation of allowances is conducted by the Commission and not the Member States.

The next major change is that auctioning becomes the main method of allocation. The primary mode of allocation in the first two trading periods was free allocation (at least 95% in 2005-2007 and at least 90% in 2008-2012).[155] The NAPs did not only define the total number of allowances for each Member State, but specified also how many of these allowances would be allocated for free. Member States do not have this power anymore, as all allowances that are not allocated for free have to be auctioned.[156] The free allocation is laid down in Art 10a of the Directive, the key provision for EU-ETS participants.

[151] Directive 2009/29/EC Annex I.
[152] Decision 2010/634/EU, OJ 2010 L279, p. 34, Art 1.
[153] Directive 2009/29/EU Art 9.
[154] Directive 2009/29/EU Art 19 (a).
[155] Directive 2003/87/EC, Art 10.
[156] Directive 2009/29/EU Art 10.

Art 10a requests EU-wide and fully-harmonised implementing measures for the free allocation of allowances, which were later specified in Decision 2011/278/EU. Those harmonised rules are based on ex-ante benchmarks. The benchmark references are the average performances of the 10% most efficient installations in a sector in the years 2007-2008. The definition of the benchmarks in Annex I of Decision 2011/278/EU was the result of a consultation process with different stakeholders. The outcome was however not satisfactory for some market participants, especially the steel sector. According to the steel industry, the final benchmark was too strict, with not even the best steel-producing installation in Europe being able to meet this level of efficiency.[157] The General Court dismissed the ensuing claim for annulment of the Decision due to inadmissibility, and did not decide in the matter itself.[158] This means that a complaint on the allocation of allowances has to be judged by a national court after allocation of allowances. At the time of writing, this issue is not solved yet.

The benchmark system is a fundamental change to the previous allocation rules, where the free allocation was based on historic emissions altered by mostly optimistic production forecasts. Simplified, with the new benchmark system installations get only as many allowances as the most efficient (top 10%) competitors. Older or less efficient installations will therefore get a free allocation that covers only a fraction of their actual emissions. The free allocation calculated based on this benchmark system is then further reduced. According to Art 10a (11) only 80% of the allocation determined based on the benchmark system is allocated free of charge in 2013. In the following years the percentage is further reduced, reaching 30% in 2020.

The situation is even worse for the electricity sector, as the Directive states that there is no free allocation for such installations. There are three exceptions to this rule.

1) If such installations also produce heat during their electricity production (high efficiency cogeneration), they are entitled to free allocation based on this production of heat. [159]

[157] CO2 Handel (2012), Newsletter 13 June 2012.

[158] General Court (2012), T-381/11, p. 65.

[159] Directive 2009/29/EC Art 10a (3) and (4).

2) Art 10c grants the possibility for Member States to give free allocation to electricity producers if the domestic electricity market meets certain criteria of underdevelopment. This exemption rule is only applicable for the new Member States. The European Commission granted free allocation of allowances on this basis for utilities in the Czech Republic, Bulgaria, Romania, Estonia, Lithuania, Hungary, Poland and Cyprus.[160]

3) There is also an exception for major power users. As power prices may increase due to less free allocation, major power users may be confronted with higher production costs and become less competitive compared to producers outside the EU-ETS (indirect carbon leakage). To cater for this disadvantage, Member States may decide on measures to counterbalance this burden[161].

While auctioning is the general allocation principle of Directive 2009/29/EC there is one substantial exception for carbon-leakage exposed sectors. Carbon-leakage refers to the risk, that emission reduction measures in one jurisdiction may lead to an increase in emissions in another. In essence, European industries become less competitive amid rising production costs due to the costs of the EU-ETS and move their production to countries outside of the EU or non-EU competitors increase their market share. Carbon-leakage sectors are therefore privileged by getting 100% of their allocation determined based on the benchmark approach for free.[162] The Commission defined the carbon-leakage sectors in Decision 2010/2/EU.

According to Decision 2011/278/EU installations that are eligible for free allocation have to conduct a data collection and corresponding verification of such data and submit the results to the respective Member State.[163] Based on this information, Member States have to submit a list of all installations including the preliminary free allocation calculated based on the new allocation rules (National Implementation Measures). After the notification of the National Implementation Measures by all Member States, the Commission may define a cross-sectoral correction factor, if the sum of allowances to be freely allocated under the National Implementation Measures surpasses the total cap.[164] Only in mid-August 2012

[160] Point Carbon (2012), Carbon Market Daily 6 July 2012, p.1.
[161] Directive 2009/29/EU Art 10a (6).
[162] Directive 2009/29/EU Art 10a (12).
[163] Decision 2011/278/EU, OJ 2011 L130, p.1, Art 7 and Art 8.
[164] Decision 2011/278/EU Art 15.

the last Member State submitted its National Implementation Measure[165], almost one year later than the original deadline of September 30th, 2011[166]. As a consequence, the Commission has not decided on the cross-sectoral correction factor at the time of writing of this document. It remains to be seen, if Member States get the necessary information on the final free allocation for the compliance year 2013 in time, as the transfer of the allowances on the installation accounts has to be completed by the end of February 2013.

6.2 Set-aside of allowances

The question whether the EU-ETS has been a success so far or not is answered very differently by different stakeholders. Some argue that the price for EUAs, which has been below EUR 10 per tonne for the whole of 2012, is too low to provide an incentive for emission reductions and investment in low-carbon technologies. Others refer to the primary goal of the EU-ETS, which was to achieve emission reductions in the most efficient manner.

Art 1 Directive 2003/87/EC:

*"**Subject matter***

This Directive establishes a scheme for greenhouse gas emission allowance trading within the Community (hereinafter referred to as the 'Community scheme') in order to promote reductions of greenhouse gas emissions in a cost-effective and economically efficient manner."

The mechanisms of the system have worked properly. The problem was that there has been a worldwide economic crisis that was not considered in the parameters of the system for the period 2008-2012. The crisis led to lower industrial production and hence to less emissions. It is clear that a market-based system such as the EU-ETS, which is based on the equilibrium of demand and supply, reacts to an unexpected oversupply in emission allowances. As a consequence, prices for EUAs went down and are now a far-cry from the EUR 30-55 per tonne in 2020 used by the Commission in its models before the crisis.[167]

[165] CO2 Handel (2012), Newsletter 17 August 2012.
[166] Directive 2009/29/EU Art 11 (1).
[167] European Energy Review (2012), 23 January 2012.

There were also other – homemade – factors undermining the EU-ETS. The support for renewables in power generation further reduced demand for EUAs, because those installations cut demand for fossil-generated power. The new Energy Efficiency Directive also targets the reduction of emissions. These factors have to be taken into account in order to set the parameters of the EU-ETS correctly. Europe is therefore in need of a more balanced and cohesive environment and energy policy. The matter of emission reductions is very complex and inter-related with one measure affecting the effectiveness of other actions.

It is important to note that the EU-ETS was not designed to achieve a certain price for carbon emissions, but to reach a certain reduction level. In the current system, the price is the result of supply and demand. In the past the parameters for setting the supply where too optimistic for the period 2005-2007, while the supply for 2008-2012 was distorted by a massive global economic crisis and other Union legislation interfering with demand for allowances. As for the third trading period, there are several substantial exemptions from the otherwise quite restrictive allocation rules for the third trading period (see Chapter 6.1.2). The goal should therefore be to determine what reduction goal should be achieved and based on this target the supply of allowances should be determined. Simultaneously, legislators have to ensure that Union legislation supports the defined reduction goal, uses synergies between the different subject areas and does not interfere with each other's targets.

With such approach, the resulting carbon price would be irrelevant. Nevertheless, the discussion on the functioning of the EU-ETS has centred more and more on the "appropriate price" rather than on the "appropriate reduction target" and the calls to eliminate the oversupply of allowances has become louder. The main proponents outside the EU legislative bodies calling for ad-hoc supply adjustments are investors and environmental groups, who fear that without intervention prices may further deteriorate.[168] The opponents of such intervention argue with the legal uncertainty that this move would create and do not want a precedent for arbitrary interference in an existing system.

[168] Point Carbon (2012), Carbon Market Daily 4 January 2012, p.5.

The first move trying to reduce allowances in Phase III was done by the Environment Committee of the European Parliament at the end of 2011. Reviewing the proposal for the Energy Efficiency Directive (2012/27/EU), the Environment Committee requested the addition of a provision to withhold up to 1.4 billion allowances in the third trading period.[169] This amendment to the Energy Efficiency Directive was deleted during the following legislative stages, after the many stakeholders refused that such a massive intervention in the EU-ETS was done in a separate legal act.

At the end of July 2012 the Commission published its first proposal on how the oversupply in the market could be tackled. After a consultation phase over the summer, which did not result in any material changes to the documents, the final proposal was published in November 2012. The approach consisted of two tracks: i) a short-term measure and ii) suggestions for structural reforms of the market[170].

Short-term measure

The Commission proposed to change the timing of the planned auctions of allowances. According to Art 10 (4) of Regulation 1031/2010 all allowances that are not part of the annual free allocation, have to be auctioned.

Art 10 (4) Regulation 1031/2010:

"4. Without prejudice to Article 10a(7) of Directive 2003/87/EC, for any given calendar year each Member State's share of allowances to be auctioned covered by Chapter III of that Directive shall be the share determined pursuant to Article 10(2) of the same Directive, less any transitional free allocation made by that Member State pursuant to Article 10c of Directive 2003/87/EC in that calendar year, plus any allowances to be auctioned by that Member State in the same calendar year pursuant to Article 24 of that Directive."

The Commission proposed to reduce the auction volume in the years 2013-2015 and add the difference to the auctions in the years 2019-2020[171]. In total, the amount of allowances over the trading period remains the same, but there is an artificial tightening of supply in the early years, whereas in the last two years of the trading period there will be more supply of allowances (backloading). The previously discussed set-aside, that would entail

[169] European Parliament (2011), 2011/0172 (COD), Art 17 (2a).
[170] European Commission (2012), COM (2012)652 final.
[171] European Commission (2012), Proposal for Regulation to amend Regulation 1031/2010 12 November 2012, Art 1.

the permanent reduction of supply, was dropped for the short-term adjustment. However, it is included as one of the options for structural changes.

The Commission wanted to pass the amendment to the existing auctioning regulation through the regulatory comitology procedure with scrutiny[172]. At the time of writing, the Commission has not yet officially submitted its proposal to the Climate Change Committee, the relevant comitology committee in this matter. Once the Climate Change Committee agrees to the proposed amendment of the auctioning regulation the Council (qualified majority) and the European Parliament (simple majority) have three month to declare their veto.

The reason for the Commission's hesitance to submit its proposal is a legal concern. The question is whether the Commission has the competence to make an amendment with such implications for the EU-ETS. As stated before, the goal of the EU-ETS is to achieve emission reductions in the most efficient manner. The "*cost-effective and economically efficient manner*" referred to in Art 1 of Directive 2003/87/EC actually implies that emission reductions should be achieved at the lowest possible costs. Nothing in Directive 2003/87/EC or in Directive 2009/29/EC would imply the power of the Commission to implement measures to ensure a certain price level for emission allowances. On the contrary, this intervention would affect the predictability of the auctioning process and would therefore breach existing Union law.[173]

Art 10 (4) Directive 2003/87/EC:

"4. By 30 June 2010, the Commission shall adopt a regulation on timing, administration and other aspects of auctioning to ensure that it is conducted in an open, transparent, harmonised and non-discriminatory manner. To this end, the process should be predictable, in particular as regards the timing and sequencing of auctions and the estimated volumes of allowances to be made available." (emphasis added)

Art 29a of Directive 2003/87/EC further states that in the event of a prolonged substantial increase in allowance prices the Commission may initiate measures to increase the supply of allowances in order to normalise prices again. The possibility to interfere in the event of high prices was explicitly added in Directive 2003/87/EC and underwent the lengthy

[172] Directive 2003/87/EC recital 28 and Decision 2006/512/EC Art 5a.
[173] Directive 2003/87/EC Art 10 (4).

legislative co-decision procedure. From this can be derived that the power to interfere in the event of low prices would need a similar explicit authorisation and cannot be implicitly derived from existing legislation.

Art 29a Directive 2003/87/EC:

*"**Measures in the event of excessive price fluctuations***

1. If, for more than six consecutive months, the allowance price is more than three times the average price of allowances during the two preceding years on the European carbon market, the Commission shall immediately convene a meeting of the Committee established by Article 9 of Decision No 280/2004/EC.

2. If the price evolution referred to in paragraph 1 does not correspond to changing market fundamentals, one of the following measures may be adopted, taking into account the degree of price evolution:

(a) a measure which allows Member States to bring forward the auctioning of a part of the quantity to be auctioned;

(b) a measure which allows Member States to auction up to 25 % of the remaining allowances in the new entrants reserve. […]"

Not to forget the Commission's recent experience at the CJEU, where its intervention in reducing the amount of allowances available for individual Member States was contested (for more details see Chapter 5.3.1). The CJEU made very clear, that the Commission's power is explicitly laid down in Directive 2003/87/EC and unilateral actions by the Commission influencing the availability of allowances are *ultra vires*.

The Commission therefore proposed additionally to the change of the auctioning regulation also a change to the EU-ETS Directive by a Decision of the Parliament and the Counsel. According to the proposal the following sentence should be added to Art 10 (4) of Directive 2003/87/EC:

"The Commission shall, where appropriate, adapt the timetable for each period so as to ensure an orderly functioning of the market."[174]

This change – albeit only one sentence – bears nevertheless enormous potential for conflict. The wording is rather general, leaving open when such an intervention would be "appropriate". The proposed amendment of the Directive does not help at all to mitigate

[174] European Commission (2012), Proposal for Decision to amend Directive 2003/87/EC 12 November 2012, Art 1.

the concerns of market participants regarding the legal certainty in the emission trading system. The Commission meanwhile confirmed that the proposal to change the auctioning regulation would only be submitted to the Climate Change Committee once the European Parliament and the Council have agreed to the amendment of the EU-ETS Directive. While stakeholders still have not agreed if the wording as cited above is final or may be changed, the earliest vote in the Parliament regarding the amendment of the Directive will mostly likely be in April 2013. After the ensuing voting by the Council and the decision by the Climate Change Committee on the change of the auctioning regulation, there is a three-month scrutiny period before the backloading would take effect. As a consequence, the first year of backloading will almost be over when the measure will take effect in the last quarter of 2013.

Structural Measures

Apart from the short-term measure of backloading the Commission included a non-exhaustive list of six long-term measures. These proposed structural measures were only the starting point of a wider discussion on the future of the EU-ETS in the course of 2013.

1) Increasing the EU reduction target to 30% in 2020

Before, the EU made a 30%-reduction-target in 2020 dependent on the conclusion of a comprehensive international agreement on climate change[175]. To achieve this target, this option would need to be combined with either Option 2, Option 3 or both.

2) Retiring a number of allowances in phase 3

This measure would be the natural extension of backloading. First allowances are put to the side to be re-introduced in the market at the end of the period (backloading). By the end of the period legislation changes and these allowances are cancelled (set-aside).

3) Early revision of the annual linear reduction factor

As explained in Chapter 6.1.2 the EU-wide cap is reduced by 1.74% each year. Option 3 would increase this percentage, thus reducing the total amount of allowances available to

[175] Directive 2009/29/EC, Art 28 (1).

the market. In contrast to Option 2, this measure would also affect the free allocation, not only the auctioned volumes.

4) Extension of the scope of the EU-ETS to other sectors

This measure would be nothing new, as the EU-ETS has been expanded in the past. The question here is what sectors would be included in the future. The sectors with the largest emitters are already part of the scheme, the rest of emissions come from many small emitters (households, agriculture, transport). To include these large number of small emitters would mean substantial administrative burden and would require the restructuring of the reporting, monitoring and verification requirements of the existing system.

5) Limit access to international credits

This would also be nothing new to market participants, as the use of international credits for compliance under the EU-ETS was limited from the beginning. With Regulation 550/2011 the use of credits from HFC-23 and N_2O projects was also banned as of May 2013. It is however important that any changes in the eligibility of credits is communicated well in advance to give market participants the chance to adapt to the new rules. It would be against the principle of legal certainty if market participants suffer a loss because they relied on a legislation, which is then changed without sufficient time for subjects to prepare.

6) Discretionary price management mechanism

This change would be the strongest intervention of all proposed measures, because it would alter the basic structure of the EU-ETS. So far the EU-ETS has been a quantity-based instrument. Demand and supply define the price. This option would introduce either a price-floor or price-management reserve, which would adjust the supply of allowances once allowances reach a certain price level. The decisive element would therefore be the price according to which supply would be adjusted. The Commission itself admits that *"[…] the carbon price may become primarily a product of administrative and political decision […]"*[176].

[176] European Commission (2012), COM (2012)652 final, p. 10.

The introduction of emission trading was a deliberate departure from the command and control regulatory framework that has been at the centre of traditional environmental legislation in Europe. [177] The above-described measures for intervention in the current system would partly – if not totally – mean a return to the former system. There is the risk that legislators as well as market participants still believe or want to believe there is still a market-based mechanism, when in reality we are back to command and control.

6.3 Eligibility of Kyoto-Credits under the European Emission Trading System

The use of Kyoto credits under the EU-ETS was limited from the very beginning (for more details see Chapter 3.2). In line with the generally stricter rules for 2013-2020, Directive 2009/29/EC tightened also the standards for the use of the flexible mechanisms of the Kyoto Protocol for compliance under the EU-ETS[178].

According to the new rules, banking of CERs and ERUs from the second trading period into the third trading period is allowed. The banking procedure is actually an exchange of Phase II CERs/ERUs for Phase III EUAs. CERs/ERUs generated by projects that were registered before 2013 and issued from 2013 onwards may also be exchanged for Phase III EUAs. Both procedures will only be conducted insofar i) market participants have not used up their quota for such credits and ii) these CERs/ERUs would have been eligible for compliance under the EU-ETS in the second trading period. The relevant quota for each installation is either its allowed amount according to the NAP of the second trading period or an amount equivalent to at least 11% (it is up to the Member States to define the exact percentage) of its allocation during the period from 2008 to 2012, whichever is the highest.

The general rule from 2013 onwards is, however, that only CERs produced by projects registered in the least developed countries (LDCs) are allowed for compliance purposes under the EU-ETS. The Directive covers only CERs in this respect, as newly issued ERUs

[177] Dekkers C, Oudenes M (2007), p. 187.
[178] Directive 2009/29/EC, Art 11a.

depend on the existence of binding reduction targets and corresponding AAUs for the period 2013-2020. As discussed in Chapter 2.3, the commitment to such binding reduction targets was only finalised in December 2012, more than two years after the publication of Directive 2009/29/EC.

Additional credits generated in non-LDC countries may become eligible under the EU-ETS, if these non-LDC countries are signatories of a comprehensive international agreement with binding emission reduction targets. This international agreement must lead to mandatory reductions of greenhouse gas emissions exceeding 20% compared to 1990 levels by 2020. [179] The question is whether the agreement on Kyoto II with a group of 37 countries meets the criteria in order to alter the eligibility of other credits.

The small group of countries with reduction targets in the second Kyoto commitment period accounts for only 15% of global greenhouse gas emissions.[180] This means that the requirement of a "comprehensive international agreement" is not met with the Kyoto II reduction commitments. The agreement for the period after 2020, as it was envisioned in Durban and Doha, would most likely be comprehensive, with all Parties signalling their willingness to participate in such scheme and be responsible for a certain reduction target. The coming negotiations will show whether the big emitters are really ready to enter into mandatory emission reduction commitments. With such agreement valid from 2021 onwards, also credits from non-LDC countries could become eligible under the EU-ETS.

Art 28 (3) Directive 2009/29/EC:

"3. The proposal shall allow, as appropriate, operators to use, in addition to the credits provided for in this Directive, CERs, ERUs or other approved credits from third countries which have ratified the international agreement on climate change." (emphasis added)

It cannot be said for sure whether all such credits could be used under the EU-ETS. The Directive uses the term "as appropriate" in order to ensure some room for manoeuvre, in case there will be reasons not to allow these credits to enter the European system. As to the timing of so such eligibility, the Directive refers to two points in time: firstly, any changes in Union legislation due to the conclusion of a comprehensive international agreement

[179] Directive 2009/29/EC, Art 28 (1) and (3).
[180] Point Carbon (2012), Carbon Market Daily 9 December 2012, p.3.

would enter into force once the international agreement is approved by the European Union.[181] Secondly, credits from non-LDC countries can only become eligible after the ratification of the international agreement by the non-LDC country. This means that such credits may become eligible already before 2020. The relevant point in time is not the entering into force of the comprehensive international agreement.

Referring to the need to ensure of the environmental integrity of the system, the Union legislator introduced another provision that allows the limitation of international credits in the EU-ETS.

Art 11a (9) 2009/29/EC:

"9. From 1 January 2013, measures may be applied to restrict the use of specific credits from project types.[…]"

The first application of this competence was Regulation 550/2011, in which the use of credits from industrial gas projects involving the destruction of trifluoromethane (HFC-23) and nitrous oxide (N_2O) for compliance under the EU-ETS was prohibited starting January 1st, 2013. The last chance to use these credits in the EU-ETS is for compliance purposes covering emission of the compliance year 2012 (to be surrendered by April 30th, 2013). [182]

So far, more than two thirds of all CERs generated worldwide stemmed from such installations. The Union legislator argued that the European Union would not support these projects anymore, as it seems that these installations are only build to generate profit from the CER market and not to make an environmental contribution. Overall emissions may actually rise because of these projects.[183] A nice side effect of this measure is that the supply of CERs for the European market will drastically fall from 2013 onwards. Abundance of available CERs was a contributing factor to the low EUA price in 2012.

[181] Directive 2009/29/EC, Art 28 (2).
[182] Regulation 550/2011, Art 1.
[183] Regulation 550/2011, recital 8.

7 Emission Trading in Austria

The Kyoto Protocol is a state treaty that requires the approval of the National Council according to Art 50 (1) of the Austrian Federal Constitutional Law. The approval was granted and Austria ratified the Kyoto Protocol on May 31st, 2002.

The legal basis for all matters concerning emission trading in Austria is the Act on Emission Allowance Trading - AEAT ("Emissionszertifikategesetz"). The exact number of allowances allocated to installations is defined in the Allocation Ordinance. The AEAT 2004 was published on April 30th, 2004[184], while the Allocation Ordinance regulating the number of free allowances assigned to the single installations in the period 2005-2007 was published on January 21st, 2005.[185] As installations were required to hand in allowances for their 2005 emissions only by April 2006, the publication of the Allocation Ordinance was still in time. The AEAT underwent an amendment in 2006[186], the reason for which will be later discussed in more detail, and the Allocation Ordinance for 2008-2012 was published on October 12th, 2007.[187] The rules for emission trading from 2013 onwards were defined in the AEAT 2011[188] and the Allocation Ordinance 2011[189].

7.1 Regulative Framework 2005-2012

The AEAT 2004 transposes Directive 2003/87/EC into national Austrian law. Installations that fulfil the criteria listed in Annex 1 of the AEAT 2004 – these are big combustion plants and industry installations – have to have a green house gas emission permit starting January 1st, 2005 (Art 4)[190]. The term "greenhouse gas" at that point in time was limited to carbon dioxide (CO_2). The operator of the installation has to monitor the greenhouse gases addressed in this act (Art 7) and has to report the respective emissions within three months after the end of the calendar year. Prior to submission, the reported emissions have to be

[184] Federal Law Gazette (2004).
[185] Federal Law Gazette (2005).
[186] Federal Law Gazette (2006).
[187] Federal Law Gazette (2007).
[188] Federal Law Gazette (2011), AEAT 2011.
[189] Federal Law Gazette (2011), Allocation Ordinance 2011.
[190] Unless otherwise stated, references to Articles in this chapter always refer to the AEAT 2004.

verified by an independent third party (Art 9). If the operator does not report the emissions, the competent authority orders a third party to make an assessment. The result of this assessment is binding for the operator, who also has to bear the costs of the process (Art 8). Based on the amount of greenhouse gas emissions verified for the past calendar year, operators have to submit the respective amount of emission allowances by the end of April of the following year (Art 18). If the operator does not submit sufficient emission allowances, a penalty of 40 Euros (for the period 2005-2007) for each lacking allowance and a penalty of 100 Euros (for the period 2008-2012) shall apply. Additionally to the payment of the penalty, the operator is still obliged to submit the missing amount of allowances in his submission for the following calendar year (Art 28).

The systematic of the allocation of allowances in the periods 2005-2007 and 2008-2012 are laid down in National Allocation Plans (NAP) that are developed by the Federal Ministry of Agriculture, Forestry, Environment and Water Management. The AEAT names several criteria that these plans have to fulfil: consideration of i) the potential of emission reductions ii) production trends iii) energy intensity iv) BAT-benchmarks v) importance of combined heat and power production vi) coherence with national and international climate policy (Art 11). For installations that become subject to the act during these periods and can therefore not be considered in the ex-ante allocation Art 11 provides for a new-entrants reserve of 1% of the total number of allowances. On the basis of these NAPs the Allocation Ordinance with the exact number of allocated emission allowances by sectors is enacted. The individual installations receive a ruling on the number of emission allowances allocated (Art 13). The Federal Ministry of Agriculture, Forestry, Environment and Water Management transfers the allocated allowances for each year to the account of the individual installations by February 28th of the respective year.

7.1.1 The Austrian NAP I

In 2005 two Austrian utilities filed complaints according to Art 144 of the Austrian Federal Constitutional Law (AFCL) at the Constitutional Court to rescind the ruling identifying the number of free allowances allocated to their installations in the years 2005-2007. The complaints were based on the alleged infringement due to application of an unconstitutional law and an illegal ordinance. In concreto, the Allocation Ordinance and the National Allocation Plan were challenged.

Art 13 (4) AEAT 2004:

"Der Bundesminister für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft hat spätestens am 30. September 2004 im Einvernehmen mit dem Bundesminister für Wirtschaft und Arbeit auf der Grundlage des gemäß §§ 11 und 12 erstellten nationalen Zuteilungsplans mit Verordnung die Gesamtzahl der Emissionszertifikate, die für die Periode 2005 bis 2007 zugeteilt wird, sowie die Zuteilung dieser Emissionszertifikate auf die Tätigkeiten festzulegen. Die rechtsverbindliche Zuteilung hat dem an die Europäische Kommission gemäß Abs. 3 übermittelten Zuteilungsplan gemäß § 11 und allfälligen davon abweichenden Vorgaben der Europäischen Kommission zu entsprechen. Die Zuteilung an die Anlagen hat mit Bescheid des Bundesministers für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft zu erfolgen." (emphasis added)

In the ensuing examination of the constitutionality of Art 13 (4) AEAT 2004 the Court confirmed that according to this article the Allocation Ordinance and the subsequent individual rulings were based on the National Allocation Plan and potential adjustments by the European Commission. Due to the involvement of the Commission in a document that was the foundation for national legislative acts, the National Allocation Plan was a source of law with relevance in community and national legislation and could not be classified as an Ordinance according to Austrian law (Art 18 (2) and Art 139 AFCL). This means it was an act of law *sui generis* against which there were no means of remedy in Austria. This mixed character infringed the constitutional principle of "unity of sources of law".

As a consequence, Art 13 (4) AETA 2004 was rescinded as unconstitutional and the Allocation Ordinance 2005 revoked due to illegality (lack of legislative basis). The ruling took effect with December 31st, 2007, which meant that legislative changes had to be made

only for the next period. [191] With the amendment of the AEAT in 2006 the National Allocation Plan was clearly marked as „Planungsdokument“ (plan) and „Entscheidungsgrundlage“ (basis for decision-making) [192] . With this phrasing the normative character of the previous wording was avoided.

7.2 Regulative Framework post-2012

Due to the fundamental changes in Union-legislation regarding the European Emission Trading Scheme in the years after 2012, the Austrian national legislation had to be changed. These changes were transposed into Austrian national law with an amendment of the AEAT, which was published on December 12th, 2011 (“Emissionszertifikategesetz 2011). The general structure regarding permits, reporting and surrendering of allowances is unchanged in the AEAT 2011, while the major changes relate mostly to the free allocation of permits. As a more detailed explanation of the single changes is provided in Chapter 6.1.2, the following provides only a brief overview of the changes in the AEAT 2011.

§ 2 (2): Inclusion of aviation activities into the scope of the emission-trading scheme.

§ 20: Introduction of trading periods of eight years (previously 5 years).

§ 21: Auctioning is the primary method of allocation of certificates. Auctions are conducted via a Union-wide auction platform based on Regulation 1031/2010/EU.

In the previous trading periods free allocation was the main method of distribution of certificates. There are no National Allocation Plans (NAPs) anymore.

§22 (2): No free allocation for power producers. Exemption: Power producers with combined-heat-and power plants (CHP) to the extent of heat produced.

§23: The details on the calculation of the amount of free allocation is defined in an Allocation Ordinance based on the rules laid down in Decision 2011/278/EU.

§25 (5): The “new entrants reserve” is centralized on a European level. There are no national reserves anymore.

§39 (1): Qualitative restrictions on the use of international credits for compliance may be introduced. This provision corresponds with the Art 11a (9) of Directive

[191] VfGH (2006).
[192] Federal Law Gazette (2006), Art 11 (1).

2003/87/EC. Starting with the compliance year 2013 credits from HFC-23 and N_2O projects are not eligible anymore under the EU-ETS.[193]

Appendix 3: Introduction of new activities and new greenhouse gases that are subject to the emission-trading scheme from 2013 onwards (e.g. CO_2 emissions from petrochemical production processes and the production of ammonia; N_2O emissions from nitric acid production).

7.2.1 The fate of the Austrian "flexible reserve"

Apart from the change in phrasing regarding the National Allocation Plan (Art 11), the AEAT 2006 introduced also a special provision regarding the new entrants reserve in Art 13 (5).

Art 13 (5) AEAT 2006[194]:

„(5) Die Zuteilungsverordnung hat eine Reserve für neue Marktteilnehmer gemäß § 3 Z 5 zu enthalten. Mindestens 1 v.H. der Gesamtmenge der Emissionszertifikate ist als Reserve vorzusehen. Falls die Reserve nicht ausreicht, um die Zuteilung an diese Anlagen zu bedecken, kann der Bundesminister für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft im Einvernehmen mit dem Bundesminister für Finanzen eine dazu geeignete, mit dem Emissionshandel vertraute Stelle beauftragen, die benötigten Emissionszertifikate anzukaufen und diese für die kostenlose Zuteilung an die neuen Marktteilnehmer zur Verfügung zu stellen. Zum Ausgleich erhält die beauftragte Stelle in der folgenden Zuteilungsperiode aus der für diese Periode gebildeten Reserve eine Menge an Emissionszertifikaten zum Verkauf am Markt zugewiesen, die der Menge der in der vorigen Zuteilungsperiode durch die beauftragte Stelle für die im dritten Satz angeführten Zwecke zugekauften und zur Verfügung gestellten Emissionszertifikate entspricht. Falls keine Stelle mit dem Ankauf der Emissionszertifikate beauftragt werden kann, hat der Bundesminister für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft nach Maßgabe der für diese Zwecke im Rahmen des jeweiligen Bundesfinanzgesetzes verfügbaren budgetären Mittel Emissionszertifikate anzukaufen und diese den Anlageninhabern kostenlos zur Verfügung zu stellen. Die entsprechende Menge an Emissionszertifikaten ist von der Gesamtzuteilungsmenge für die jeweils folgende Periode in Abzug zu bringen. […]" (emphasis added)

[193] European Commission (2011), Regulation 550/2011 Art 1.
[194] Federal Law Gazette (2006), Art 13 (5).

According to this article the Federal Ministry of Agriculture, Forestry, Environment and Water Management can instruct an institution familiar with emission trading to purchase allowances on the market in case the new entrants reserve of 1% does not provide for enough allowances. These purchased allowances will then be used for free allocation to new entrants. For compensation, the institution will receive a corresponding amount of allowances from the new entrants reserve of the next trading period to sell on the market. In case no such institution can be instructed, the Federal Ministry of Agriculture, Forestry, Environment and Water Management must buy allowances using the available budget. The corresponding amount of allowances will then be deducted from the total allocation for the next trading period.

This particular new entrants reserve, which must be distinguished from the "fixed" reserve of 1%, is called "flexible reserve". This special provision is not an Austrian invention. Germany used a similar phrasing already for the period 2005-2007[195]. The reason for this additional reserve was that at the time the law was passed, it was foreseeable that the fixed reserve would not be sufficient as several big new entrants were planned to enter the system during the following trading period. In order to not discriminate those projects due to lacking sufficient allowances in the new entrants reserve, the possibility for a flexible reserve was introduced[196].

The wording of Art 13 (5) AEAT 2006 suggests that in the second case (no institution is instructed and the Ministry has to purchase the allowances on the market) the total free allocation of the next trading period will be reduced by the amount of the flexible reserve and the Ministry retains the allowances to sell on the market. This would mean that all sectors, not only the sector receiving allowances from the flexible reserve, would be affected due to a lower free allocation in the following trading period.

Contrary to this interpretation, the Environment Committee of the National Council saw that *"[…] die entsprechende Anzahl an Zertifikaten wird anteilsmäßig bei jenen Sektoren in Abzug gebracht, die während der 2. Zuteilungsperiode eine Zuteilung aus der flexiblen Reserve erhalten haben.*"[197] (*the corresponding amount of allowances will proportionally*

[195] German Federal Law Gazette (2004), Art 6 (3).
[196] National Council (2006), p. 1.
[197] National Council (2006), p. 3.

reduce the allocation of the sectors that have received allowances of the flexible reserve in the second trading period). There is therefore a fundamental difference between the wording of the law and the interpretation of the Parliamentary body whether all sectors or only the sectors receiving allowances of the flexible reserve should be affected by any reduction in the following trading period.

Art 13 (5) AEAT 2006 was discussed during the preparations of the AEAT 2011. The problem was that Art 13 (5) AEAT 2006 was based on the ability of the Austrian government to decide on the allocation of free allowances in the next trading period. However, according to the rules for 2013-2020, national governments have no say in the allocation of free allowances anymore. There are no National Allocation Plans in which the government could decide to withhold a certain amount of allowances from allocation as planned in Art 13 (5) AEAT 2006. The allocation as well as the new entrants reserve is centralized on a European level without the possibility of national governments to intervene. This means that due to the changes in Union legislation the planned means of compensation were not available anymore. Between 2008 and 2012 three companies from the power sector had received free allowances from this flexible reserve. Estimates suggest that the total costs of this allocation under the flexible reserve for the Austrian government was around 80-90 Million Euros by the end of 2012[198]. The following paragraphs will investigate on what legal grounds potential claims for compensation could be based.

May Austria withhold a certain amount of allowances from free allocation in 2013-2020 as compensation for the flexible reserve?

As explained above Union-legislation does not allow single Member States to decide on the free allocation of allowances in the trading period 2013-2020. The allocation of allowances is based on Union-wide harmonised rules and the intervention of single Member States is not allowed.[199] There is also only one Union-wide new entrants reserve, which is administered by the European Commission.

[198] National Council (2011), 1682/A(E) XXIV. GP.
[199] European Community (2009), Directive 2009/29/EC, Art 11 (2).

Austria's National Allocation Plan II for 2008-2012 included the provision on the flexible reserve[200]. However, the phrasing in the NAP II only explained the purchase of additional allowances on the market in case the fixed reserve was not sufficient. The consequence of reducing the reserve or the allocation in the next trading period was not explained in the NAP II. This means that the acceptance of the European Commission regarding Austria's NAP II never covered the reduction of allowance allocation in a future trading period. Additionally, rules in NAP II can only relate to the trading period 2008-2012 and cannot go beyond this timeframe. NAP II sets the framework for the 2008-2012 and cannot contain provision that would result in obligations or rights in the following trading period. The European Commission supports this view.[201] Withholding allowances from free allocation in trading Phase 3 can therefore be neither based on Union legislation nor on provisions of NAP II.

The original goal of Art 13 (5) AEAT 2006 was to ensure equal treatment of all installations and to avoid discrimination of new entrants that may happen to enter into the emission trading regime at a point in time when the new entrants reserve was already empty. The mechanism of the flexible reserve is in essence the bringing forward free allocation of the following trading period in exchange of a reduction of the free allocation in that period. Without the flexible reserve some new entrants would have been knowingly discriminated because it was known already in 2006 that the dimensions of the reserve were too small. It would have been also in the discretion of the legislator to re-dimension the new entrants reserve.[202] The decision to introduce a flexible reserve instead of enlarging the new entrants reserve should not be of any consequence for the installations involved.

As there is no free allocation to power producers in future trading periods according to the new Union-wide legislation, there is no free allocation from which the preponed free allowances could be deducted. By requesting the affected power producers to give back or to replace free allowances received under the flexible reserve the Austrian government would end up with much more allowances to auction as originally indented: the amount of allowances that are not freely allocated to power producers anymore due to the new

[200] Federal Ministry of Agriculture, Forestry, Environment and Water Management (2007), p.5.
[201] European Community (2006), COM (2006) 725 final, p.11.
[202] European Community (2003), Directive 2003/87/EC, Art 11 (3).

allocation rules plus the additional replacement of allowances received under the flexible reserve. Such a proceeding would be disproportional and would contradict the constitutional right of equal treatment.[203]

The situation in Germany was slightly different. The phrasing of Art 6 (3) of the German ZuG 2007, which covered the trading period 2005-2007, only included the case that a institution familiar with emission trading was instructed to purchase allowances on the market and that this institution would receive a corresponding amount of allowances from the new entrants reserve of the next trading period. There was no provision regarding the deduction of allowances from the allocation of the next period and at that point in time the Member State could still decide on the size of the new entrants reserve for the next trading period (i.e. 2008-2012).

Art 6 (3) ZuG 2007:

"(3) Soweit Zuteilungsentscheidungen nach § 11 dies erfordern, beauftragt das Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit im Einvernehmen mit dem Bundesministerium der Finanzen eine Stelle, auf eigene Rechnung Berechtigungen zu kaufen und diese der zuständigen Behörde kostenlos zum Zwecke der Zuteilung zur Verfügung zu stellen. Zum Ausgleich erhält die beauftragte Stelle in der Zuteilungsperiode 2008 bis 2012 aus der für diese Periode gebildeten Reserve eine Menge an Berechtigungen zum Verkauf am Markt zugewiesen, die der Menge der in der Zuteilungsperiode 2005 bis 2007 durch die beauftragte Stelle für die Zwecke des Satzes 1 zugekauften Berechtigungen entspricht."

Germany then adapted the phrasing in the ensuing ZuG 2012, which covered the trading period 2008-2012. According to Art 5 (5) ZuG 2012 institution familiar with emission trading could be instructed – if necessary – to purchase allowances on the market and that this institution would receive financial compensation for its expenses. Germany was therefore not limited to a specific way on how this compensation had to be raised.

Art 5 (5) ZuG 2012:

"(5) Soweit es zur Erfüllung der in Absatz 2 Nr. 1 genannten Ansprüche oder zur Deckung der Kosten nach Absatz 3 erforderlich ist, beauftragt das Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit im Einvernehmen mit dem Bundesministerium der Finanzen eine Stelle, auf eigene Rechnung Berechtigungen zu kaufen und diese der zuständigen Behörde kostenlos zur Verfügung zu stellen. Zum Ausgleich erhält die beauftragte Stelle die Beschaffungskosten sowie den mit der Beschaffung verbundenen Aufwand erstattet."

[203] Austrian Federal Constitutional Law, Art 7.

Apart from the legal argumentation above, it is very likely that a potential enforcement of Art 13 (5) AEAT 2006 would lead to massive opposition from all participants of the emission trading regime. Obviously from those who received free allocation under the flexible reserve and who would have to give allowances back, but even more so from other sectors of the regime. As explained above, the wording of Art 13 (5) AEAT 2006 would require the reduction of the total free allocation of the next trading period, which would mean that sectors that had not received allowances under the flexible reserve would also experience a reduction in their free allocation in the next trading period.

Is the free allocation of allowances under the flexible reserve a state aid according to Art 107 TFEU that can be reclaimed?

Art 107 TFEU:

"1. Save as otherwise provided in the Treaties, any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods shall, in so far as it affects trade between Member States, be incompatible with the internal market."

There are therefore four conditions that must be fulfilled:
1) intervention by State or using State resources
2) this intervention must constitute an advantage for certain undertakings (selectivity)
3) the intervention must distort or threaten to distort competition
4) the intervention must be able to affect trade between Member States

All conditions set out in Art 107 (1) TFEU must be fulfilled in order for a measure to constitute state aid.[204]

The flexible reserve is undoubtedly an intervention by the State using State resources for the procurement of allowances for the flexible reserve. Although the intention was to borrow allocations that would have been allocated free of costs for installations in the future trading period, there is no differentiation between measures of State intervention based on their causes or their aims according to settled case-law. Relevant for the

[204] Court of Justice of the European Union (2004), C345/02, p. 32.

determination whether a measure constitutes a state aid according to Art 107 TFEU are its effects.[205]

In this case the key question is whether the flexible reserve constitutes and advantage for certain undertakings. Emission trading itself is not *per se* an advantage for installations. Before the introduction of the emission trading system installations could emit for free.[206] Some scholars argue that companies may generate revenues by selling allowances, which constitutes an advantage. [207] This is only true in the event of an over-allocation (i.e. the installation has more free allowances than it would need to cover its emissions) or when emissions-reduction measures are cheaper than buying additional allowances. In the second case the profit from selling allowances reduces the expenses for the emission reduction measures. Hence, requiring installations to pay for the right to emit cannot be generally considered an advantage. Such an approach would put the whole EU-ETS into question, as free allocation was the main principle up until 2012 and there are still exceptions such as the carbon-leakage provisions for the trading period starting 2013.

The flexible reserve was installed as an "additional" new entrants reserve, serving for all installations subject to the emission trading scheme. There was no further differentiation made. What kind of installations are part of the EU-ETS is determined by the European Union. The Court of Justice recently found that objective criteria such as the installed thermal capacity itself are not sufficient to prevent the selectivity of a measure. [208] Following this argument, the emission trading system itself is *de facto* selective. As long as the emission trading system is not contested based on selectivity, measures applying the same criteria cannot be found "selective".

The CJEU also reiterates the necessity to assess whether measures *"[…] favour certain undertakings […] in comparison with other undertakings which are in a legal and factual situation that is comparable in the light of the objective pursued by the measure in question*."[209] The flexible reserve did not provide an advantage for certain companies but prevented certain companies from being discriminated against other installations in a

[205] Court of Justice (2011), para 75.
[206] Reuter A, Kindereit K (2004), p. 540.
[207] Sánchez Rydelski M (2006), p. 377.
[208] Court of Justice (2011), para 76.
[209] Court of Justice (2011), para 52.

comparable legal and factual situation. Without the flexible reserve competition would have been distorted.

The flexible reserve may affect trade between Member States as all new entrants in Austria were treated equally which also affected their activities on the carbon market.

In conclusion, as the flexible reserve was neither selective nor distorted competition it was not an unlawful state aid that can be recovered. In the end the AEAT 2011 reduced the provision regarding the flexible reserve for 2008-2012.

Art 17 (4) AEAT 2011:

(4) Die Zuteilungsverordnung hat eine Reserve für neue Marktteilnehmer gemäß § 3 Z 6 lit. a zu enthalten. Mindestens 1% der Gesamtmenge der Emissionszertifikate ist als Reserve vorzusehen. Falls die Reserve nicht ausreicht, um die Zuteilung an diese Anlagen zu bedecken, hat der Bundesminister für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft nach Maßgabe der im Rahmen des jeweiligen Bundesfinanzgesetzes verfügbaren budgetären Mittel Emissionszertifikate anzukaufen und diese den Anlageninhabern kostenlos zur Verfügung zu stellen. […]"

The adopted version now only states that if the fixed reserve was not sufficient to cover free allocation to new entrants, the Ministry of Agriculture, Forestry, Environment and Water Management – within the planned budget – would have to purchase allowances and provide them to new entrants free of cost. No further provisions on means of compensation for such expenses were included.

7.2.2 Definition of "New Entrant"

Directive 2009/29/EC defines three types of new entrants to the European Emission Trading scheme:

Art 3 (h) 2009/29/EC:

(h) 'new entrant' means:

— any installation carrying out one or more of the activities indicated in Annex I, which has obtained a greenhouse gas emissions permit for the first time after 30 June 2011,

— any installation carrying out an activity which is included in the Community scheme pursuant to Article 24(1) or (2) for the first time, or

— any installation carrying out one or more of the activities indicated in Annex I or an activity which is included in the Community scheme pursuant to Article 24(1) or (2), which has had a significant extension after 30 June 2011, only in so far as this extension is concerned;[…]"

Type 1 are installations that carry out activities which fall under the emission trading system according to Annex I of the Directive and that have not had an emission permit prior to 30 June 2011. Type 2 are installations which start activities that by decision of the Member State are subject to emission trading. Type 3 covers the criteria of the first two types, however, only to the extent that they have had a significant extension after June 30th, 2011. This means that Type 1 and Type 2 are installations that as a whole enter into the emission trading scheme, whereas Type 3 covers installations that are already part of the scheme but have had an significant extension and this extension enters the emission trading system.

Transposing Directive 2009/29/EC into Austrian law, the Austrian legislator had the problem that the new AEAT 2011 had to cover the rules for the period 2008-2012 and the new rules for the period 2013-2020. To make the wording of the new law easier, the definition of an "incumbent installation" (i.e. installation that is already in the emission trading system, "Bestandsanlage") was introduced.

Art 3 cit 5 AEAT 2011:

5. „Bestandsanlage" eine Anlage, in der in Anhang 3 oder in einer Verordnung gemäß § 2 Abs. 4 genannte Tätigkeiten durchgeführt werden,

a) für die vor dem 30. Juni 2011 eine Genehmigung zur Emission von Treibhausgasen gemäß § 4 erteilt wurde, oder

b) die am 30. Juni 2011 bereits in Betrieb und im Besitz aller maßgeblichen anlagenrechtlichen Genehmigungen ist, und

aa) die am 30. Juni 2011 alle anderen Voraussetzungen erfüllt hat, die zur Erteilung einer Genehmigung gemäß § 4 erforderlich gewesen wären, oder

bb) für die spätestens bis zum 31. Dezember 2011 ein Antrag auf Genehmigung gemäß § 4 eingebracht

wurde; […]"

According to the above, incumbent installations conduct activities that are subject to emission trading and have received an emission permit before June 30th, 2011; or they conduct such activities before June 30th, 2011 and have all necessary permits except the emission permit before that date. In this case the installation must have fulfilled all conditions for an emission permit on June 30th 2011, or the application for the emission permit was submitted by December 31st 2011.

Art 3 cit 6 AEAT 2011:

"6. „neuer Marktteilnehmer"

[…] b) ab der Handelsperiode 2013 bis 2020

aa) eine Anlage, in der in Anhang 3 oder in einer Verordnung gemäß § 2 Abs. 4 genannte Tätigkeiten durchgeführt werden oder die gemäß § 2 Abs. 5 in den Geltungsbereich dieses Bundesgesetzes einbezogen wurde, und für die zum ersten Mal nach dem 30. Juni 2011 eine Genehmigung zur Emission von Treibhausgasen erteilt wurde und die keine Bestandsanlage ist; oder

bb) eine Anlage, in der in Anhang 3 oder in einer Verordnung gemäß § 2 Abs. 4 genannte Tätigkeiten durchgeführt werden, an der nach dem 30. Juni 2011 wesentliche Erweiterungen vorgenommen wurden, jedoch nur hinsichtlich der Erweiterungen; […]"

The definition of the new entrant in the AEAT 2011 replicates the definition in Directive 2009/29/EC with June 30th, 2011 being the relevant date to determine whether an installation is a new entrant or not. As both types, incumbent installations and new entrants, were specifically defined there was no catchall element that would cater for potential special cases.

This absence of a catchall element became a problem in Austria. There were at least two projects with activities subject to emission trading that already received their emission permits but that would most likely start operations only in the trading period 2013-2020. The question was how these installations fit into the system of the AEAT 2011 and what rules apply to them. They were no "incumbent installations" because they have not conducted the requested activities yet, but they have had received the emission permit before June 30th, 2011. They were also no "new entrants" although they would only start operations during the trading period 2013-2020 because they have had received the emission permit before June 30th, 2011.

One solution would have been leaving this loophole as it is with these installations becoming immediately incumbent installations as soon as they start operations. The problem was that the allocation rules for the trading period 2013-2020 differentiated between incumbent installations and new entrants and with this solution the installations would have foregone any potential free allocation. Not being an incumbent installation at the time of application for potential free allocation (eight weeks after the entering into force of the AEAT 2011), those installations would have been unable to apply for free allocation (Art 24 (1) AEAT 2011). Immediately becoming an incumbent installation upon start of operations also would not have helped, because incumbent installations cannot apply for free allocation during the trading period. Only new entrants could hope for allowances out of the new entrants reserve.

The Austrian solution was – in a nutshell – to declare these installations to be incumbent installations being subject to the rules for new entrants once they are operational.

Art 24 (1) AEAT 2011:

„[…] Inhaber von Bestandsanlagen gemäß § 3 Z 5 lit. a, die zum Zeitpunkt des Inkrafttretens dieses Bundesgesetzes noch nicht in Betrieb sind, können auch ohne die Vorlage von geprüften Daten einen Antrag auf kostenlose Zuteilung stellen.“

Art 24 (1) AEAT states that incumbent accounts that have received their emission permit prior to June 30th, 2011 but that are not operational at the time of the entering into force of the AEAT 2011 may apply for free allocation without submitting verified data of the installation. This clarification is important because normal incumbent installations are required to submit a considerable set of data regarding the installation and its production based on which the preliminary free allocation for 2013-2020 is calculated. As installations that are not operational yet cannot report any production figures, their preliminary free allocation would have been zero (and remained zero for the whole trading period).

Art 12 (2) Allocation Ordinance 2011:

„(2) Bestandsanlagen gemäß § 24 Abs. 1 letzter Satz EZG 2011 müssen, abweichend von den Bestimmungen der §§ 4 bis 11, keine geprüften Daten vorlegen, um in das Verzeichnis gemäß § 24 Abs. 2 EZG 2011 aufgenommen zu werden. Die kostenlose Zuteilung ist im Verzeichnis für den Zeitraum 2013 bis 2020 mit Null festzusetzen. Die kostenlose Zuteilung hat unter sinngemäßer Anwendung des § 25 EZG 2011 sowie des 3. Abschnitts dieser Verordnung zu erfolgen, wobei die Anlagen bei der Berechnung der kostenlosen Zuteilung als Anlagen gemäß § 3 Z 6 lit. b sublit. bb EZG 2011 zu behandeln sind. Ein Antrag gemäß § 24 Abs. 1 letzter Satz EZG 2011 gilt dabei sinngemäß als Antrag gemäß § 25 Abs. 1 EZG 2011. "

The Allocation Ordinance 2011 further specifies how to deal with these "special" incumbent installations. Although they do not have to submit verified production data, they will be listed in the register containing the preliminary free allocation of all Austrian installations. The preliminary free allocation for 2013-2020 of such incumbent installations shall be zero in this register. The real free allocation to such installations – once they are operational – shall be governed by the rules for new entrants, treating the capacity of these installations as a "new significant capacity expansion".

Art 288 TFEU:

„[…] A directive shall be binding, as to the result to be achieved, upon each Member State to which it is addressed, but shall leave to the national authorities the choice of form and methods. […]"

Primary Union law requires the Member State to transpose directives into national law in a form that ensures the achievement of the directive's goal. Member States may choose the exact form and method of this transposition. In the case elaborated above, Austria has for the main part taken over the definitions used in the directive. The definition of "incumbent installation" is basically the negative definition of the directive's new entrant definition. The special treatment of installations that are not operational yet but have received their emission permit can be regarded as necessary addition, and during 2011 the European Commission also realised that this loophole must be addressed. As a formal legislative procedure would have taken too long, the Commission published its solution for this problem in an informal "Question and Answer" document:

"The incumbent installation should be allocated zero allowances in the NIMs and should be allocated according to new entrant rules as if it had a significant change in capacity after 30 June 2011. Guidance on these rules is still in development and will be part of Guidance Document 7."[210]

The NIMs are the National Implementation Measures, which list all installations subject to emission trading with their corresponding preliminary free allocations for 2013-2020. The Austrian solution therefore corresponds with the Commission's position on this problem.

7.2.3 Infringement of the Union-Registry Regulation

In the following some shortcomings of the AEAT 2011 with regards to the Union registry shall be pointed out. With Regulation 1193/2011 the European Commission established a Union registry, which substituted the national registries in each Member State (Art 4 (1)).[211] As regulations are directly applicable in all Member States, no transposition in national law is required. The AEAT 2011 nevertheless laid down some rules regarding the Union registry.

Art 43 (1) AEAT 2011:

"(1) Der Bundesminister für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft hat bis zum Zeitpunkt der Verfügbarkeit des Unionsregisters gemäß Art. 19 der Richtlinie 2009/29/EU, jedenfalls aber bis zum 31. Dezember 2011, ein Register zu führen, um die genaue Verbuchung von Vergabe, Besitz, Übertragung und Löschung von Emissionszertifikaten zu gewährleisten. Ab dem Zeitpunkt der Verfügbarkeit des Unionsregisters hat er sich dieses zu bedienen. […]" (emphasis added)

The second sentence of the quotation states that the Ministry of Agriculture, Forestry, Environment and Water Management shall use the Union registry when it is available. This phrasing contradicts the Registry Regulation according to which " *The Member State shall access and manage its own accounts and the accounts in the Union Registry under its jurisdiction through its national administrator."* (Art 7 Regulation 1193/2011). The Environment Agency Austria ("Umweltbundesamt") was appointed to be national administrator for Austria. This institution is the only one that may manage Austrian accounts in the Union registry.

[210] European Commission (2011), Q&A, p. 4.
[211] European Commission (2011), Regulation 1193/2011.

Art 43 (1) AEAT 2011:

„[…] Er hat nach einem geeigneten Verfahren, das im Einvernehmen mit dem Bundesminister für Wirtschaft, Familie und Jugend und dem Bundesminister für Finanzen durchgeführt wird, mit Verordnung mit der technischen Durchführung des Registers bzw. der Arbeiten im Unionsregister eine Registerstelle zu beauftragen, die auch die Funktion gemäß § 47 UFG ausübt. […]" (emphasis added)

The above quotation states that the Ministry of Agriculture, Forestry, Environment and Water Management shall appoint by ordinance a registry administrator that is responsible for the technical administration of the Union registry. This is clearly against Regulation 1193/2011, which states in Art 4 (2) that "*The central administrator shall operate and maintain the Union Registry*." The central administrator is a person designated by the Commission pursuant to Article 20 of Directive 2003/87/EC (Art 3 (2) Regulation 1193/2011). The technical administration of the Union registry lies with this central administrator. The national administrators mentioned before are not responsible for any technical processes but are the point of contact for account holders and have to manage the user accounts of their Member State.

Additional to these two inconsistencies with Union legislation there is no mentioning of a „national administrator" in the AEAT 2011. Art 43 (1) AEAT 2011 provides for the appointment of a registry administrator with responsibilities that – as shown above – lie with another entity, but there is no provision for a "national administrator". In practice, the not-needed "registry administrator" probably became the much needed "national administrator", which formed the basis for the Environment Agency Austria being appointed as such. Generally, as the Registry Regulation is directly effective in Austria, Union legislation prevails over contradicting Austrian legislation.

8 Conclusion

At the end of the first Kyoto commitment period the results of international efforts to reduce greenhouse gas emissions have to be evaluated. At the time of writing, actual data until 2010 and reliable forecasts until 2012 are available and show that the EU on the whole was on track to reach the target. As some countries are likely not to have reached their reduction targets, this study examined what the consequences of such non-compliance would be.

The first important finding is that – against media reports – there are no financial penalties as such under the Kyoto protocol. The tailor-made compliance mechanism of the Protocol demands stricter reduction goals in the following commitment period, which could lead to higher emission-abatement costs. However, the compliance mechanism of the Kyoto Protocol is not legally binding and its enforcement can be challenged, as the required legal form was not adhered to. This result shows that international agreements of this kind are based on the good-will and cooperation of the participating parties. Even if the non-compliance measure would be enforceable, the withdrawal of Canada and the refusal to ratify the Protocol by the United States show that countries cannot be forced to such commitments.

Regarding the consequences of non-compliance on the Union level, this study showed that all Member States of the European Union are obliged to provide their support in order to reach the Union's reduction goal of -8% at the end of the period. This means that Member States that are part of the EU-bubble and were able to reduce their emissions more than actually requested, may need to provide the resulting surplus of emission allowances to the group. New Member States that are not part of the EU-bubble and that most likely will end with a substantial surplus of emission rights have also the obligation to support the EU in reaching its group reduction target.

The European Union meanwhile develops its own emission trading system further. It is already the biggest in the world and serves as reference for many other emission trading initiatives. The system had its problems in the past, which were largely addressed with the

fundamentally new mechanism for allocation in the third trading period. The rules for compliance have become stricter and the scope wider. While market participants were busy to adjust to the new rules and conduct the necessary administrative processes in preparation for the third trading period, another heated discussion developed. The economic crises together with the support for renewables in the European energy mix led to a strong decline in industrial production and fossil-generated power consumption. This resulted in a considerable surplus of emission allowances in the European system in the second trading period, and with the permission to bank these allowances in the following trading period, this surplus will be transferred to 2013 and beyond.

The legislator, supported by environmental groups and investors, was concerned about the ensuing deterioration of the allowance price and started to discuss the possibility of an intervention that would take out a considerable amount of allowances. The final decision on this measure has not been taken at the time of writing, it looks however quite likely that there will be at least a temporary reduction in the permit supply in the third trading period. What seems to be easily forgotten in the whole discussion is that the EU-ETS is a market-based system and the price is the result of supply and demand. The current situation of oversupply was caused by an unexpected and unfavourable economic development together with lacking coordination of Union legislature. With the stricter reduction targets for 2013-2020 together with a potential improvement of the economic environment, parts of this surplus may evaporate in the coming years. The risk of taking measures based on experiences of the last two years in a system that is designed for a period of eight years should not be underestimated.

The new rules of allocation from 2013 had to be transposed into the national laws of the single Member States. Austria struggled with the new concept of harmonized allocation rules and the fact that Member States have no power of intervention in the free allocation of allowances to the single installations anymore. The problem was – and this is also a problem of the Kyoto protocol – that consequences of an action in one trading period were postponed to the following period. As the Austrian legislator experienced, such an approach is dangerous because the rules of the following period are unknown and it is not guaranteed that the planned consequences will be enforceable under a potentially new scheme.

Finally, the negotiations on the second Kyoto commitment period and the post - 2020 agreement showed that the international climate change regime is still a battlefield where national interests continue to prevail over ambitions to reach a powerful global agreement. The European Union meanwhile tries to retain its "green image" on the international stage and gets tangled up with counter-acting, ad-hoc environmental and energy legislation on the Union level. It remains to be seen if the various development paths that are currently discernable are suitable to eventually lead to a comprehensive legal framework for emission reductions.

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12 Annex 1 – Kyoto Protocol Annex A

Greenhouse gases

Carbon dioxide (C02)
Methane (CH4)
Nitrous oxide (N20)
Hydrofluorocarbons (HFCs)
Perfluorocarbons (PFCs)
Sulphur hexafluoride (SF6)

Sectors/source categories

Energy
- Fuel combustion
  - Energy industries
  - Manufacturing industries and construction
  - Transport
  - Other sectors
  - Other
- Fugitive emissions from fuels
  - Solid fuels
  - Oil and natural gas
  - Other

Industrial processes
- Mineral products
- Chemical industry
- Metal production
- Other production
- Production of halocarbons and sulphur hexafluoride
- Consumption of halocarbons and sulphur hexafluoride
- Other

Solvent and other product use

Agriculture
- Enteric fermentation
- Manure management
- Rice cultivation
- Agricultural soils
- Prescribed burning of savannas
- Field burning of agricultural residues
- Other

Waste
- Solid waste disposal on land
- Wastewater handling
- Waste incineration
- Other

13 Annex 2 – Kyoto Protocol Annex B

Party	Quantified emission limitation or reduction commitment (percentage of base year or period)
Australia	108
Austria	92
Belgium	92
Bulgaria*	92
Canada	94
Croatia*	95
Czech Republic*	92
Denmark	92
Estonia*	92
European Community	92
Finland	92
France	92
Germany	92
Greece	92
Hungary*	94
Iceland	110
Ireland	92
Italy	92
Japan	94
Latvia*	92
Liechtenstein	92
Lithuania*	92
Luxemborg	92
Monaco	92
Netherlands	92
New Zealand	100
Norway	101
Poland*	94
Portugal	92
Romania*	92
Russian Federation*	100
Slovakia*	92
Slovenia*	92
Spain	92
Sweden	92
Switzerland	92
Ukraine*	100
United Kingdom of Great Britain and Northern Ireland	92
United States of America	93

* Countries that are undergoing the process of transition to a market economy.

14 Annex 3 – Abstract

With the first Kyoto commitment period (2008-2012) coming to an end, the path for a comprehensive international emission reduction commitment in the coming years remains ambiguous. The international arena remains a battlefield where national interests continue to prevail over ambitions to reach a powerful global emission reduction agreement. The European Union meanwhile struggles with its showcase project, the EU-Emission Trading System. Amid this uncertain legal environment, national legislators in EU Member States are challenged with the suitable transposition of new rules regarding emission trading. This study shows interdependencies of developments on the international, European and national level and critically discusses potential consequences thereof.

The examination of the responsibility regarding compliance with the EU's joint reduction target under the Kyoto Protocol shows that this responsibility is not limited to the Member States that were part of the European Union at the time of adoption of this obligation. The principle of loyal cooperation requires that also the new Member States (part of the EU since the enlargement of 2004 and 2007) facilitate the achievement of the joint reduction target. On the same grounds, EU-Member States that have an individual reduction goal under the Burden Sharing agreement and that were able to reduce emissions more than requested, have to provide credits resulting from this overachievement if needed for compliance with the joint reduction target.

Despite the ambiguous developments on the international level, the European Union presses forward with its emission trading system. This study discusses the fundamental changes for emission trading starting 2013 and critically questions the latest attempts of the Union legislator to intervene in the existing system. Interventions by means of ad-hoc measures represent a return to command-and-control in European environmental legislation, a vital change to the established market-based mechanism.

15 Annex 4 – Zusammenfassung

Obwohl die erste Kyoto-Verpflichtungsperiode 2012 zu Ende ging, gibt es noch kein international verpflichtendes Regelwerk für die Zeit ab 2013. Die Verhandlungen für ein Kyoto-Nachfolgeabkommen haben die nach wie vor bestehende Priorität von nationalen Interessen gegenüber umfassenden internationalen Emissionsreduktionsverpflichtungen verdeutlicht. In diesem unklaren internationalen Umfeld versucht die Europäische Union ihr eigenes Emissionshandelssystem weiterzuentwickeln, während die nationalen Gesetzgeber in den einzelnen Mitgliedstaaten mit der Umsetzung der neuen Regeln kämpfen. Die vorliegende Arbeit untersucht die Zusammenhänge der aktuellen Entwicklungen auf internationaler, unionsrechtlicher und einzelstaatlicher Ebene und beleuchtet kritisch deren potentiellen Auswirkungen.

Die Untersuchung der Konsequenzen bei Nicht-Einhaltung der Reduktionsverpflichtung aus der ersten Kyoto-Verpflichtungsperiode zeigt, dass die Verantwortung im Zusammenhang mit dem gemeinsamen EU-Reduktionsziel nicht allein bei den Staaten liegt, die bei Abschluss der Verpflichtungsvereinbarung EU-Mitglied waren. Das Loyalitätsprinzip verlangt auch von den neuen Mitgliedstaaten, die erst mit den Erweiterungen 2004 und 2007 Teil der Union wurden, dass sie bei Bedarf ihren Beitrag zur Zielerreichung leisten. Auf Basis derselben Rechtsgrundlage sind auch Mitgliedstaaten mit einem individuellen Reduktionsziel unter der Lastenteilungsvereinbarung verpflichtet, im Falle von einer Übererfüllung dieses Zieles die daraus resultierenden Verschmutzungsrechte bei Bedarf zur Erreichung des Gruppenzieles zur Verfügung zu stellen.

Trotz der unklaren Rahmenbedingungen im internationalen Umfeld treibt die EU die Entwicklung ihres Emissionshandelssystems voran. Die vorliegende Arbeit erklärt die Änderungen im europäischen Emissionshandel ab 2013 und hinterfragt kritisch die von der EU geplanten preisunterstützenden ad-hoc Eingriffe in das bestehende System. Solche Eingriffe würden eine Rückkehr zur früheren Command-and-Control Systematik im europäischen Umweltrecht bedeuten und den derzeitigen markt-basierenden Mechanismus ablösen.

16 Annex 5 – Curriculum Vitae

Date of Birth: January 11th, 1983

1999-2000:	Exchange student in the United States of America US High School Diploma
2001:	Austrian High School Graduation
2001-2005:	Study of International Business Administration, University of Vienna Specialisation in Environmental and Energy Management
2004:	Erasmus Programme, Università degli Studi di Firenze
2006-2010:	Consultant in the Energy industry
2007-2010:	Study of Law, University of Vienna Specialisation: Environmental Law
Since 2010:	Strategic Business Development for public utility company
2011-2013:	Doctorate in law