The Emissions Trading Scheme: EU Leadership, Problems and Decision-Making

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It is now widely recognised that climate change is affecting the earth's atmosphere and that governments must act quickly and efficiently in order to halt this. The Intergovernmental Panel on Climate Change (IPCC) have produced an abundance of figures to prove that climate change *is* taking effect, and that something must be done. The IPCC Fourth Assessment Report in 2007 showed that "eleven of the last twelve years (1995-2006) rank among the twelve warmest years in the instrumental record of global surface temperature (since 1850)". Figures such as these have been the centrepiece of the climate change debate and are the reason for recent government legislation on climate change prevention. The European Union has been a significant actor in these legislative procedures. Harris (2007, p3) explains that "no-where has the response to this problem been greater than (in) … European Union". Therefore, the EU has prided itself on the belief that it is globally leading the fight against climate change. It is important to note that these beliefs exist for a reason. The EU's sheer dedication to the Kyoto Protocol has played a large role. Although the minimum requirement of the Kyoto Protocol was ratification, the EU went much further than this in two main ways. Firstly with the introduction of the EU Emissions Trading Scheme, and secondly with plans for emissions reduction targets going beyond 2012 (and therefore beyond the lifetime of the Kyoto protocol).

Reasons for the significant EU action, in particular in terms of the EU ETS vary with regard to different theories on EU integration. As the Commission has not always supported emissions trading it is also important to understand why this change came about. Three main EU integration theories are demonstrated within the decision-making process leading up to the ETS. These include Neo-Functionalism, Intergovernmentalism and Constructivism. Each of these theories argues a different reason for the implementation of such a market-based mechanism like the ETS. Neo-Functionalists would argue that it came about as a change in position via the Commission. Intergovernmentalists would argue, on the other hand, that is was due to a change within the member states. Finally, Constructivists present a much more modern argument and state that it was about the EU pursuing an identity, particularly one of leadership

The EU Emissions Trading Scheme is a market-based mechanism which regulates the CO^2 emissions by giving installations an allowance and a target. The industries must achieve this target or buy emission capacity from other industries through the allowance set. In theory, it is a well-thought out system which creates a market whereby industries can buy and sell emissions dependant on usage. However, a number of unforeseen events and failure to plan ahead meant that Phase I of EU ETS was deemed "worthless" (Department for Environmental, Food and Rural Affairs UK, 2007). This dissertation will focus mainly on the biggest emitters within the Union and their interests regarding the EU ETS – notably the UK, Germany and France.

Chapter One shall explain the EU's choice of a market-based mechanism for reduction of CO^2 emissions. It will also discuss other levels and models which could have been chosen in order to reduce emissions and lead within the climate change area. This will refer to different levels of Sustainable Development and their impact on the environment and economy.

Chapter Two will build on assessments made in Chapter One and discuss the process by which the trading scheme was implemented. This chapter will also analyse the decision-making process within the EU and discuss relevant EU

integration theories which can be linked to the decision making taken in the lead up to the ETS.

Chapter Three will look at the influences which have been made by various interest groups, green parties and industrial lobbies on the scheme and how these have affected the proposed Phase III (set to begin in 2012). Phase III is the most important part of the scheme as it will show whether the EU can "go it alone" without the need for international targets in the form of Kyoto.

1. TWO MODELS OF CLIMATE CHANGE POLICY: MARKET-BASED MECHANISMS AND SUSTAINABLE DEVELOPMENT

Through Directive 2003/87/EC the Council and the Parliament established "a scheme for greenhouse gas emission allowance trading within the Community" and amended Council Directive 96/61/EC (EURLex, 2003). Within this Directive the Council and the Parliament set down the rules for the EU Emissions Trading Scheme (or EU ETS). By passing this piece of legislation, the EU had chosen to focus on the use of market-based mechanisms in order to achieve emissions reduction targets. Directive 2003/87/EC works in conjunction with the 1997 Kyoto protocol which committed the EU "bubble" to an overall reduction of 8% and also proposed three flexibility mechanisms designed to aid the cost of reducing these emissions. Kyoto proposed a global emissions trading scheme, a Joint Implementation procedure and a Clean Development Mechanism (Carter, 2007, p253). However, in passing Directive 2003/87/EC, the EU went a step further and developed its own emissions trading scheme to operate within the EU "bubble". As a result, the EU has been highly commended due to distinct innovation in terms of EU ETS and has been held up as global leader on the climate change issue. The EU ETS is known as the "cornerstone" of this leadership (Doyle,

European Parliament, 2008). However, a number of criticisms have also been made of the scheme, particularly from green parties, on the lack of sustainability within this mechanism which may threaten the extent to which the EU is known as a leader in this area. Although the EU ETS is unique in style, it is not exhaustive in what it can achieve. It is possible that if more sustainable practices were included in the scheme, for example renewable energy strategies, then the scheme would be sustainable for future generations. However, as it stood during the initial Phase I, the scheme was merely a cap-and-trade system without any real long-term plans for major emissions reductions.

As a result of the Linking Directive signed in 2004, Joint Implementation (JI) and the Clean Development Mechanism (CDM) have also featured predominantly within the EU's climate policy. JI and CDM were both set up to "allow industrialised countries to meet their targets… (by)… gaining credits for emission curbing-projects" (Europa, 2003). JI refers to projects in countries with emissions reductions targets, and vice-versa, CDM refers to projects within developing countries with no clear target set. By focussing attention upon these Kyoto mechanisms in order to achieve an overall reduction of 8%, the EU has effectively supported the use of market mechanisms instead of choosing a long-term route such as strong Sustainable Development. However, in the 1990s, the EU did not support the introduction of market-based mechanisms, such as emissions trading and Joint Implementation. The flexible mechanisms of EU climate change policy are all due to the US (Michaelowa & Butzengeiger, 2005, p1-9). As will be discussed within this chapter, these mechanisms have been criticised greatly for their inability to achieve any real emissions reductions, within the EU or the member states.

Sustainable Development, on the other hand is "the ability of the present generation to meet its needs without undermining the ability of future generations to meet their needs" (Carter, 2007, p2). This term was coined from the 'Bruntland report' titled "Our Common Future" produced in 1987 which relevance can still be felt today (Hauff, 2007). However, the use of market-based mechanisms such as the ETS and JI and CDM projects is undermining the sustainability of future needs as outlined by the report. Firstly, by creating an emissions trading system, the EU has not directly faced the climate change issue. As well as reducing emissions, other changes need to be made, and these come in the process of Sustainable Development. The Department for Environment, Food and Rural Affairs in the UK stated that there is "need to adapt – at the same time as we act to reduce emissions – to better manage the future impacts of climate change on the environment, economy and society" (DEFRA, 2005). The EU has been held up as a leader within the climate change debate because of the unique emissions trading scheme it has implemented. However, by making sustainability a key feature of the EU's climate legislation it could take on more of a leadership globally. In turn it would protect future generations from the damaging effects of climate change instead of simply allowing businesses to continue to emit in the way they do so.

Baker (2006, p30) characterised four models of Sustainable Development: the Ideal Model, Strong Sustainable Development, Weak Sustainable Development and Pollution Control Model. The first three are known as "biocentric" models of Sustainable Development which are emphasised by the greens (Richardson, 1997, p43). These "biocentric" models require "a fundamental change in the relationship between humankind and nature, with consequential social, political and economic implications" (Ibid). First, the Ideal Model of Sustainable Development requires that "principles take precedence over pragmatic considerations". In other words, the economy should focus on a basis of "needs not wants" and self-sufficiency. Secondly, strong Sustainable Development advocates sustainable principles being enacted into international law and emphasises "non-material aspects of development" and third world development. In terms of nature, strong Sustainable Development, as discussed by Baker (2006, p30) focuses on maintaining "natural capital and biodiversity". Thirdly, there is the weak Sustainable Development model. This model is based on small but effective commitments (which may or may not be compulsory) such as recycling and so on. However, the model still heavily relies on the "harvesting of biodiversity resources" something which should be changed in order to create a coherent Sustainable Development policy. This model also realises the importance of environmental issues and their relevance within decision making but also believes they can be made "tradable against social and economic considerations" (Bulkeley & Betsill, 2003, p20), i.e. through the use of market mechanisms. The fourth model, Pollution control is said to be anthropocentric, believing technology will solve any problem within the environment. Many gas-guzzling countries such as the US are associated with the "Pollution Control" model as described by Baker (2006). They also believe that pollution will slow as industrialisation levels out. Although previously following the "Pollution Control" model, the EU now works to the Weak Sustainable Development model.

Although it is commendable that the EU has made this transition when many countries have not, it is possible that it could achieve even more. To move towards a method of strong Sustainable Development model could "regard environmental protection as a pre-condition for economic development" and also emphasise that there are some environmental areas which are "critical' such as "the ozone, tropical rainforests, coral reefs" (Carter, 2007, p212). Strong Sustainable Development would believe that these "cannot be replaced by technology" and therefore should be preserved. It is the strong element of Sustainable Development which shall be juxtaposed against the weak one in this chapter. It is important to understand why the EU chose a model which supports the use of the market-based mechanism and the benefits gained as a result. Market-based mechanisms, although effective in order to control emissions in the short-term do not combat climate change with the same rigour as sustainable methods do.

The idea of using a market-based mechanism to regulate the environment is not something entirely new to the climate change debate. The idea of the economy using a tax to "control externalities" was predominant in the Pigouvian tradition initiated by Arthur Cecil Pigou (1877-1959). He was responsible for the proposing that governments should "internalize the externalities" in order to control the economy. However, this type of tax proved difficult to regulate due to the "inability to measure social damage" in terms of economics and similar problems arise now. Baumol & Oates (1971) state that the "level of the Pigouvian tax upon the activities of the generator of an externality is equal to the marginal net damage produced by that activity". Similar problems arise when aiming to regulate the emissions within the EU. It is very difficult to total the net damage and for this to be assessed accurately in order to create a price for the sale of carbon. This problem featured predominantly in Phase I of EU ETS. The ETS entered force in January 2005 as the "largest multi-country, multi-sector" cap-and-trade system Greenhouse Gas Emission Trading System imposed on EU member states on emissions of CO^2 only (until 2012) (Europa, 2009). It focuses mainly on installations within the power and industry subsectors – for example – steel, cement, glass, paper and pulp account which for 40% of the total EU emissions (Fujiwara & Egenhofer, 2008). Allowances are allocated to individual installations and "each installation surrenders a number of allowances equal to the total emissions from that installation during the preceding year" (Fujiwara & Egenhofer). Once the cap has been allocated, an installation can either reduce emissions or choose to buy EU allowances set out through JI or CDM, or any mix of the two.

The scheme has operated under two phases – Phase I (2005-2007) operated as an early trial period with the possibility to "opt-out" and Phase II (2008-2012) is operating as the Kyoto protocol compulsory commitment period (Sorrell, 2003). Former British Environmental Minister David Miliband described the EU ETS as the "most innovative and efficient method yet invented for reducing carbon emissions" (Open Europe, 2007). However, despite being the largest scheme of its kind, it is possible that the ETS has not exhausted the EU's potential for climate change legislation. As an example of weak Sustainable Development, it relies on trade offs between the environment and the economy. Phase I of EU ETS applied only to the emission of CO^2. It included 12,000 installations that were "required to measure their emissions, report levels on an annual basis and have these verified". Although not a compulsory phase, a penalty charge was still put in place for those installations who failed to keep to their allowances. This was priced at €40 per ton CO^2 emission during Phase I, rising to €100 in Phase II (Bossley, 2007, p80). Phase I was an optional period, however it still appears to have achieved very little other than producing mistakes which could be learned from for use in Phase II. Egenhofer (2007, p453 – p463) highlights some of the main failures within Phase I of the scheme. He states that there was an "inconsistency of installation definitions, issues related to monitoring, reporting and verification, and insufficiently-operating CDM and JI programmes". Here, Egenhofer focuses on the failure of the EU in administrative terms – failures within installation definitions and faults within reporting and monitoring. Also, he highlights oversight in the Kyoto flexibility mechanisms currently used by the EU. In terms of monitoring and reporting, under 2004/156/EC, a Commission decision it stated that "the exact definition of the installation and activities carried out by the installation were to be monitored". According to Egenhofer, this was not carried out accurately and sufficiently within the initial Phase.

The proposal for an International Emissions Trading Scheme, the Clean Development Mechanism and Joint Implementation are all part of the Kyoto flexibility mechanisms and have grown to play an integral part of the EU's aim to reduce emissions by 2012. Joint Implementation (or JI) does not directly reduce emissions but operates a system which allows a country to gain Emissions Reduction Units (or ERUs) which will count towards their allocated Kyoto target. There are a number of eligibility protocols in place to ensure the appropriate use of JI. These include that a JI project must constitute a reduction in emissions "by sources or an enhancement of removals by sinks" which

is supplementary to what would have happened anyway (UNFCCC, 2009). An example of this would include, for example a country of the EU-15 aiding a country of the EU-25, for example Britain and Romania. Britain could fund the transfer from coal-fired energy supply to gas within a Romanian city and thus could receive ERUs in return. Although Kyoto targets set to expire 2012 are at present only compulsory for the EU-15, in future the EU as a whole will need to achieve an emissions reduction within the new EU-27 "bubble". This commitment will include the countries of Central and Eastern Europe. Projects carried out within these countries create Sustainable Development and build upon relationships between with the EU-15 which will aid their transition from industrialisation towards greening their economies. (UNEP RISOE, 2009). Some projects were eligible for recognition by JI in the initial Phase I of EU ETS, but ERUs were only issued as a credit in early 2008 (UNFCCC, 2009). JI also aids countries such as Russia and the Ukraine, which although are not current EU members, could face an emissions reduction target in the future. Such JI projects carried out in these areas beyond the EU show the positive effects which offsetting schemes have as they aid in creating the transition towards a greener economy and past the process of industrialisation.

However, carbon offsetting procedures such as JI and CDM have been greatly criticised. JI, on the one hand, does operate within countries that are closer to having an emissions reduction target to achieve, than for example, countries of the third world (where CDM operates). However, such offsetting schemes are looked down upon as they allow emission-heavy industries to continue to emit by simply funding projects abroad. Girling (2009) states that environmental activists believe that carbon trading schemes such as EU ETS simply allow polluters to "go on building coal fired power stations just by buying a few cheap offset credits in the developing world". Here, although referring to CDM in terms of the developing world, Girling puts forward the view held by a number of activists within this sphere. In short, what they argue is that the EU makes a CO^2 emissions reduction commitment on the surface, however, in reality not all emissions reductions will not relate directly to the EU itself. Therefore, when the EU Council and Parliament proclaim their failure or success, it is not entirely down to the emissions measured within the member states, but by those companies making an emissions reduction or transition to green economy themselves.

The Clean Development Mechanism (or CDM) used by countries within the EU-15 and is considered slightly more controversial than JI projects. CDM allows for the use of projects within host countries that do not have a Kyoto target set at all and do not have one planned for the near future. These projects are thought to contribute to Sustainable Development and aid developing countries in their transition towards becoming greener economies. However, this flexibility mechanism has also been criticised on the premise that the system "is not sufficiently policed and allows western polluters to buy their way out of more costly carbon-cutting measures" (Fortson & Warren, 2009). This statement follows recent allegations that Société Générale de Surveillance (or SGS UK), an organization which approves CDM projects for the EU has employed individuals who are insufficiently trained in approving projects. The staff vetted some projects which were not viable as a CDM project. SGS UK state, however, that they have been rigorous in their rejection of a number of projects (SGS Group, 2009). The issue surrounding SGS UK has shown that more than ever installations are given the opportunity to easily buy their way out of making an emissions reduction. For example, having claimed to be on track to achieve an emissions reduction of 12.5% below 1990s levels, the UK is commended by the EU and Kyoto protocol (Bossley, 2007, p85). However, this reduction may partly be due to CDM projects carried out abroad. In order to create real sustainable reductions in terms of greenhouse gas emissions projects such as CDM and JI should be a surplus to emissions reductions instead of a replacement.

However, the positive effects of these offset schemes cannot be denied. In some instances, the revenue gathered from the sale of carbon credits "was being passed directly to local farmers…well attended schools, clean drinking water…" However, as Girling (2009) discusses, these projects are not endorsed by the Kyoto agreement and so they are funded voluntarily instead. Projects such as these are vital to the people of the third world, in this case, Mozambique. If they were to be used as part of CDM/JI then possibly more green groups would be favorable to the scheme. The usage of CDM and JI mechanisms was planned for discussion at the Copenhagen Summit in December 2009. With the summit described as a "failure" (Vidal, Stratton & Goldenberg, 2009) the issue of CDM and JI continues to cause debate. It is important that the EU works internationally with the Kyoto Agreement and thinks outside the box to find the best possible compromise between offsetting and making clear reductions. However, for the third phase of EU ETS (post 2012), the usage of CDM and JI mechanisms have been limited at 50% for use in achieving the overall reduction target. Although, this is still a significant figure and it shows that companies are still being allowed to buy their way out of making an emissions reduction – whether it is through

buying an allowance or funding a Sustainable Development project. In theory, if the countries in need were significantly benefiting, it would not matter. However, as it appears; only a few projects are currently endorsed. Therefore, it is important that the EU and the Kyoto protocol work in conjunction to find the best possible outcome for the future of CDM and JI projects which are surplus to emissions reductions carried out at home.

However, failures within the initial stage of the EU ETS appear to go beyond administrative issues and focus more on the basics of the scheme stemming back to the initial proposal from the Commission. The Commission proposal failed to include the need to set a rough fixed price per ton of CO^2. During, Phase I of the scheme, this price fluctuated intensely thus causing major problems within the newly developed carbon trading market. This is another example of the failure of weak sustainability. A high carbon price is what is needed in order to deter installations from buying their way out of making a reduction; however prices have fluctuated in recent years, particularly during Phase I. As a result of six EU countries (Czech Republic, Estonia, France, the Netherlands and the Walloon region) emitting far less than expected in 2007, Phase I saw the price of carbon dropping by 50% (Euractiv, 2007). As it stood in 2007, parts of the EU were not on target to meet Kyoto obligations and were "emitting slightly more than would be expected from a linear progression" .On the other hand, the biggest emitters – the UK and Germany were on track to meet these targets and luckily account for a large amount of the "bubble". When a method of "weak sustainability" is chosen, a reliance on the economy is inevitable which can lead to various problems in price fluctuations at a later date.

When the price fluctuates so intensely like it did in the initial stage, it becomes easier for installations to buy their way out of the climate change problem and therefore avoid having to make any changes for a "greener" future. Glover (2009) has shown that is easier than ever to buy emissions allowances at a very reasonable price. In Phase II of the EU ETS (2008 – 2012) allocations have, as usual, been distributed amongst the highest polluters. These polluters were encouraged to reduce emissions and buy "spare permits" as they needed more. The theory is that the installations will reach their capped limit and therefore have to invest in "green energy" as trading will be too expensive. However, as Glover has highlighted, this is only possible when the price of carbon goes up and is therefore unaffordable, when it is low the way it is, there is no incentive for industries to "go green" (Glover, 2009) as it were. This has shown that the "buy and sell" theory which the EU hoped would create a market has not completely achieved what it set out to do in Phase I. Therefore, it has not significantly lowered emissions. Klepper and Peterson (2007, p101) believe that it is not only the fault of the EU as a decision making body, but the failure of the Kyoto agreement. They believe that the Kyoto protocol "will not lead to a significant reduction in greenhouse gas emissions worldwide" but create an "institutional structure" which will act as a base for future negotiations. Structure is undoubtedly essential in order to fulfill real climate obligations; however it is possible to see that a great deal of policy reform is needed to avoid problems which have occurred in the initial stages of the EU ETS. Phase III of the EU ETS planned for post 2012 will have the chance to rectify these problems.

Although having chosen a route of weak Sustainable Development, the Commission could have proposed a scheme which is advocated by the European Green Party. They believe that the "European pattern of production, consumption and commerce" should be changed (European Green Party, 2006). They argue that EU created industrialisation and therefore must be responsible for the reorientation of "its priorities towards an environmentally and socially sustainable model of development" (European Green Party, 2006). In 2006, the Council adopted the Renewed EU Sustainable Development Strategy (EU SDS). Between the last Sustainable Development Strategy in 2001 and in the review in 2006, the EU increased to 25 member states (in 2004, extended to 27 in early 2007). Grubb and Gupta (p12) believe that such wide diversity has led to the underlying slow progress of sustainability within the EU. They also stated (Ibid, p11) that the EU has had to overcome a number of difficulties in terms of "implementation and negotiation due to its structure" and that this undoubtedly has had an effect on the decision-making process. The EU also has recognised this, along with recent instabilities due to "terrorist threats and violence, further globalization and changes in the world economy" (Europa, 2009). In 2006, EU SDS stated it would focus on "gradually" altering unsustainable consumption practices" in order to deal with climate change (Europa, 2009). However, "gradually" may not be quick enough for critics such as the European Green Party.

To conclude, despite being lobbied by green parties to make changes based on unsustainable industrial practices, the EU chose to take a market-based route. Described as "cheap" and "effective", the use of an emissions trading

scheme within the EU has shown that targets can be met with this method. . In terms of success, the EU ETS appears to achieve what it set out to do. The annual progress report issued in November 2009 showed that through "existing policies and measures – those already implemented – are expected to reduce EU-15 emissions to 6.9% below the base target year" (Europa, 2009). With an overall burden sharing agreement of 8%, collectively as the EU-25 (minus Cyprus and Malta who have no current target set) the EU appears on track. However, uncertainty lies in the longevity of the scheme and perhaps greater thought in terms of the impact on future generations will be considered. Even if the EU does choose to go down a route of strong Sustainable Development by 2020, trade-offs will continue to be made economically and this shall be shown in the third chapter.

2. EU DECISION MAKING PROCESSES AND THE LEAD UP TO PASSAGE OF DIRECTIVE 2003/87/EC

The Commission was not always in favour of the idea of using market-based mechanisms to control the environment. In fact, the US was first to initiate such a scheme by implementing the Acid Rain Programme under the Clean Air Act of 1990. This allowed sulphur dioxide emissions to be traded amongst states in order to achieve an overall emissions reduction, similar to the case of CO^2 emissions today. However, the EU Council was keen to state that "mechanisms such as emissions trading are supplementary to domestic action" (Skjaerseth & Wettestad, 2008, p67). The US refused to accept a "binding numerical emissions target without flexibility" during the Kyoto negotiations, whereas the Europe would "not accept a protocol without a binding numerical target" (Ibid). It is likely that it was the idea of a binding target for the US to reduce emissions which caused President Bush to veto the Kyoto Agreement in March 2001. The combination of the decision to implement an emission trading scheme and the US pull-out from Kyoto is thought to have propelled the EU to the forefront of the climate change debate. It was at this time that the European Union showed it "could be innovative, courageous and effective" within the arena (Convery, 2009, p6). The US had shown previously that emissions trading could work effectively; it was now in the hands of the Commission to propose a scheme which could triumph in the fight against climate change.

It is important to understand how and why the Commission decided propose an emissions trading scheme given that it had previously supported methods of stronger Sustainable Development. Skjaerseth & Wettestad have suggested three propositions for the attitude change and the decision to implement an Emissions Trading Scheme. Firstly, they state that EU acted as a result of a request from the member states and therefore "anticipated broad based support". This argument would support the belief held by Intergovernmentalists who believe that the EU ETS came about as a result from Member States. Secondly, they go on to state that the ETS could have been the result of the Commission acting independently of member states with "support from non-state actors" and thus this would support the view of a Neo-Functionalist. Thirdly, they move internationally to propose that the International climate regime, the UNFCCC and the Kyoto Protocol are all behind the reasoning of the EU ETS in its infancy. This third reason gives a pragmatic reasoning behind the scheme to suggest that it was merely a system created to reduce emissions and thus meet Kyoto targets, with no other agenda. However, in terms of leadership within the climate arena, the EU certainly was moved by the need for identity. Constructivists would argue that the ETS therefore was created to aid the EU to pursue a distinct leadership identity through the climate change movement. To begin, this chapter shall discuss the EU decision-making processes and how these are

linked to each EU integration theory as discussed – Intergovernmentalism, Neo-Functionalism and Constructivism. This will aid understanding of the way the EU became a leader within this debate. It will also examine the stages in the decision making process and how these affected the passage of Directive 2003/87/EC on 13th October 2003.

Skjaerseth & Wettestad's third viewpoint that the Kyoto climate regime "facilitated EU initiations of emissions trading" displays the EU leadership skills within this arena and it's obligation to achieve the targets set. Three years following Kyoto and two following passage of Burden Sharing Agreement, the Commission presented the Green Paper (8th March 2000). It intended to initiate discussion on greenhouse gas emissions trading within the European Union (Green Paper, COM (2000) 87, p4). There are two reasons for the Commission's proposal. Firstly, the EU wanted to create a leadership status for itself and by pressing for such high targets to achieve these was mandatory. Secondly, it was the Commission who decided to propose the EU ETS to meet the 8% reduction, not the member states. By presenting the Green Paper, Skjaerseth & Wettestad (2010) state that the "Commission changed its position on emissions trading and initiated the EU ETS independently as an entrepreneurial leader". The idea of an

entrepreneurial leader is linked to the theory of Neo-Functionalism which would argue that the Commission acted in a business-like fashion to present the scheme aesthetically and simply, in order to grab the attention of the member states.

Ernest B. Haas (1958, in Cini, 2006, p87) was first to develop the theory of Neo-Functionalism based upon the "assumption that cooperation in one policy area would create pressures in a neighbouring policy area…ultimately leading to further integration". Thus, the EU ETS binds member states with a target set by supranational institutions (in this case the Commission through proposal, Parliament and Council through passage). However, they must cooperate with each other to achieve the overall EU "bubble" reduction of 8%. Neo-Functionalism also incorporates the influence of non-state actors, political parties and interest groups who have had an impact on the proposal and development of the EU ETS. Skjaerseth & Wettestad (2010) state that interest groups "mobilized at EU level" and thus influenced "the initiation of EU ETS". It is possible that if non-state actors and green political parties had been allowed to influence the scheme from an earlier stage then transition from weak to strong Sustainable Development would have thrived much earlier. However it was not until Phase III that this influence can truly be witnessed and this shall be discussed in the next chapter. Nonetheless, it is cannot be disputed that although the idea of emissions trading had been advocated previously, both in the US and the EU, it was the Commission who formally proposed the scheme through the Green Paper in 2000.

However, it is important to understand that although appearing to conform to the theory of Neo-Functionalism, the Commission had identity motivations. Constructivists think about "the way human agents interact" in order to create new institutions, legislature and discourses (Cini, 2006, p100). They focus on ideas rather than power and how these shape the emergence of new identities, and in the EU, particularly how these can lead to a leadership status. The Commission's role in establishing the EU ETS is central to this debate as it "provided several levers in establishing its leading role in climate change policy" (Convery, 2009, p4). Grubb and Gupta (2000, p4) believe that although the Commission dominates in terms of climate change policy, the member states also "aspire" to take on a leadership role but view the requirements of leadership in diverse ways. Therefore, it is possible to conclude that it is not merely the Commission who is motivated by issues of identity in pursuing a leadership role internationally, but the member states who wish to lead within the EU "bubble" as well. As this chapter progresses this shall be highlighted in more detail. In particular the efforts of member states to create their own emissions trading schemes shall be discussed.

The Commission proposed the largest emissions trading scheme ever witnessed, and, as a result, it wished to gain support from member states and particularly industry on the proposal. These actors were particularly driven by the issue of physical change to their businesses and also of the economic impact it could have. The EU ETS could be carried out effectively – meeting Kyoto targets and cheaply too – without a big cost to emitters and the Union itself. This further highlights Skjaerseth & Wettestad's third viewpoint that the EU ETS could have been a direct result of the impending Kyoto protocol targets. However it also could suggest that the Commission was acting as a result of member states as they were to be effected the worst economically by the scheme. The Green paper stated that the use of market-based mechanisms was mainly due to being able to "achieve a pre-determined environmental outcome to take place where the cost of the reduction is the lowest" (Green Paper, COM (2000) 87 Final). To prepare for the Green Paper, the Commission chose the PRIMES Energy Systems Model to research the economic effects of the proposed scheme. Research concluded that there would be a compliance cost of €9 Billion (Convery, 2009, p6), significantly less than schemes such as the Carbon Tax initiative. This highlights the entrepreneurial motivations of the European Commission. The Economic and Social Committee further this argument involving cost-benefit analysis. They state that the EU ETS will achieve the Kyoto targets "at the lowest possible cost and with the lowest impact on the economy and employment in the European Union". However, this clearly ignores any plans for the scheme to develop into a method of strong Sustainable Development in the future.

Industries have maintained that cost implications to achieve Kyoto targets through EU ETS will still be high. Grubb & Neuhoff (2006, p10) go as far as to state that the "sheer size of the EU ETS means that it could affect the costs of key industrial sectors" more than any other environmental policy beforehand. German industries were at the forefront of this debate. These industries had managed to avoid being included within the government's eco-taxes in 1998 and instead took on board a voluntary agreement. However, this view is juxtaposed against the view of the German Green party which completely supported trading as did most industry beyond the German border. German industries

continued to disregard the Emissions Trading Proposal and on October 2001 The Federation of German industries stated that it would "stifle investments and economic growth in Germany" (Skjaerseth & Wettestad, 2008, p108). The loss of support at this stage, particularly from EU members such as Germany did not show broad-based support from member states as Skjaerseth and Wettestad (2008) had suggested. However, it was shaped largely due to opposition from member state governments. On the other hand, research has shown that EU industries do tend to favour emissions trading over carbon taxes. The Union had previously proposed a Carbon Tax mechanism to deal with climate change but it failed due to significant lobbying from member state industry. One of the reasons for this lobby was that a carbon tax extrapolates revenue from an industry whereas emissions trading created a tradable asset (Grubb et al., 1999, p90). Baumert (1998) states that an emission trading system encourages industry to save money by reducing emissions as it will not have to buy permits, whereas a tax simply incurs a charge payable when the target is exceeded.

The French government held similar views on the proposed emissions trading scheme. Having read the Green Paper, the French government asked for more clarity to be achieved in the methods which would be used to create the carbon market (Vis, Climate Change Unit, 2001, p7). Although initially arguing for a harmonised system, the French government later argued that it would be in favour of a scheme which incorporated the possibility for member states to opt out. However, this was only if the member state demonstrated "an equivalent effort through alternative measures" (Ibid). From this proposal it can be noted that the French government did not favour the compliance associated with the proposed scheme and therefore wished to achieve the target set through its own methods. Undoubtedly such opposition from two of the largest emitters within the EU caused the Commission some aggravation.

Theorists of Liberal Intergovernmentalism would argue that "bargaining outcomes are mainly shaped by the relative interests and preferences of national governments, leaving scant room for autonomous supranational institutions" (Skjaerseth and Wettestad, 2010). Thus, although the Commission proposed the scheme, it was amended by resistance from member states such as France and Germany. Liberal Intergovernmentalism (LI) was developed by Andrew Moravcsik and has become one of the most influential theories associated with EU integration. In particular, Moravcsik focuses on the power and influence of the largest EU member states such as the UK, France and Germany. LI believes that most EU integration comes as a result of bargaining between member states and between member states and the EU institutions (Cini, p111). He argues that member state governments initially will aim to resolve problems from within the state, thus in the case of Denmark creating a domestic emissions trading scheme, only from then on will they "reach an agreement on institutional mechanisms" allowing them to take their domestic action further. It could be argued that LI is present within the motivations for EU ETS, however, it is more likely that the Commission proposed the scheme as a result of non-state actor lobbying and was forced to amend the scheme from member state aggravation. However, as shall be discussed the scheme could have been passed without their support.

On the 23rd October 2001, the Directive 2003/87/EC of the European Parliament and of the Council to allow greenhouse gas emission trading was passed. It chose to base the Directive on Article 175(1) and on the co-decision procedure contained within Article 251 of the Treaty. It is important to highlight the Commission's choice of Article for this Directive. Skjaerseth & Wettestad (2008, p107) state one of two suggestions why the Directive succeeded. Firstly that the Emissions Trading Directive was based on Article 175(1) which is based on a system of Qualified Majority Voting within the Council and allows the possible outvoting of Member States, even those as big as Germany or France. Secondly, it also allows the Parliament to veto the proposal. This would have differed greatly had Article 175(2) been chosen. This Article would need to "be adopted unanimously" and would have led to failure like that of the proposal for a Carbon Directive. Those in opposition to the Directive believed that Article 175(2) should have been chosen as it relates to a piece of legislation affecting a member states energy sources. Article 175(2) is based on the need for unanimous support and could have led to what Skjaerseth & Wettestad (2008, p107) term a "deadlock". They go as far as to suggest that if Article 175(2) had been chosen, there may have been no EU ETS at all or what they term as a "voluntary scheme". The Commission had therefore realised how important it was to push through this legislation as quickly and quietly as possible. Article 175(1) could be passed with a qualified majority vote. The reason for the choice of this Article is likely to be because of the Commission awareness of growing antagonism from France and Germany. It therefore wanted to push through the legislation quickly with minimal

disruption. However, this choice also shows that although the theory of Intergovernmentalism would argue that member states shape the future ETS through their opposition, the EU could have passed the legislation anyway, even without go-ahead

The support received from big industries such as BP and Shell for the Emissions Trading Directive tend to outweigh that of the opposition from the others. Skjaerseth & Wettestad (2008, p75) state that the support received from such large industries is undeniable. They supported EU ETS because "emissions trading itself does not reduce emissions. It simply provides incentives to find the lowest cost of achieving a given amount of emissions reductions" (Green Paper COM (2000) 87 Final). This struck a cord with industrial groups as they saw it as a way of reducing emissions whilst also making a profit. These are huge multi-national companies who form a part of EUROPIA, a European Industry Group. EUROPIA is comprised of twenty oil companies who were once against EU climate policy and carbon taxes. Following the Commission's proposal of the Green Paper, these companies decided to follow suit and supported the EU ETS which committed them to an emissions reduction by 2012. These companies make vast sums of money every year from what Skjaerseth & Wettestad term the "two major causes of anthropogenic climate change" – oil and gas. It is for this reason that the backlash from industry during the initial discussion stage of the proposed EU ETS ended. Industries within EU member state began to see how they could be commended for their acceptance of the system.

The Danish presidency between June and December 2002 is of significant importance to the passage of Directive 2003/87/EC. When Denmark began presidency of the Council in June 2002 it announced that environmental policy was high on the agenda.

This varied greatly with the Spanish presidency which had followed previously and the Greek presidency which assumed in January 2003 who were both inexperienced with the EU ETS (Skjaerseth & Wettestad, 2008, p114). Denmark was at a significant advantage having already created a domestic ETS almost identical to the proposed EU version and had been in use as early as 1999 (Pedersen, 2003, p225). Skjaerseth & Wettestad (2010, p4) state that along with Denmark – Sweden, Ireland and the Netherlands "all undertook preparatory work on establishing domestic emissions trading schemes". Furthermore, Denmark had discussed sustainable measures that could be used to achieve the emissions reduction for industries. Measures such as switching fuel from coal to biomass, natural gas, or oil products were some of the suggestions given in order to achieve an emissions reduction. This highlights the Intergovernmentalist theory which would argue that the member states were the first to initiate the idea of an ETS. However, ultimately it was the Commission's Green Paper which sparked the debate and in due course presented the newly found benefits of emissions trading.

The European Parliament was a clear supporter Commission-proposed Directive of 23 October 2001 and adopted it at first reading under the co-decision procedure with a 381 to 66 majority with 38 abstentions (European Parliament, 2002). However during the first reading it proposed a certain number of amendments to some of the wording of the document. It recognised the need for an emissions trading scheme but wanted to maintain the fact that the scheme could not work in isolation and needed other forms of domestic and international action (Vis, Climate Change Unit, 2001, p7). This view was similar to that expressed by the Parliament on the Green paper the year previous (Ibid). Despite recognising the need for domestic action, within the first reading of the proposed Directive the Parliament expressed the need for temporary exclusion of some Member States up until December 2007 on the "opt-out" basis. However, the Parliament proposed that these countries must continue to reduce emissions as if they were participating and continue "monitoring, reporting and verification requirements" like other Member States (da Silva, p33). This resulted in the initial pilot Phase I of the EU ETS occurring between 2005 and 2007.

Within the first reading, the appointed rapporteur for the Emissions Trading Directive, Jorge Moreira da Silva, a Portuguese member of the European People's party and the Christian Democrats put forward his view. He was confident to discuss the direct measures of strong Sustainable Development that must be used in conjunction with market-based mechanisms such as the EU ETS. He states the essential use of "renewable energy sources, of energy efficiency, of organic farming and of public transport" coupled with a tax to be introduced on "transport-related energy use and carbon dioxide emission" (da Silva, 2002, p50). Whereas the European Commission, Parliament, Council and Member State governments can only provide vague suggestions stating that the EU should

continue to recognise the importance of measures supplementing the ETS, da Silva explained the need for direct changes in order to ensure consistency with the EU's pronouncements on the subject during the international negotiations on the Kyoto protocol (da Silva, 2002, p50).

In conclusion, although in the past the EU institutions and member states had previously supported alternative methods in favour of reducing emissions, the idea of emissions trading was available when it was needed most. Skjaerseth & Wettestad (2010) put forward three explanatory positions for the sudden change in belief to support emissions trading. In terms of EU integration theory the arguments can be collated up as follows. The Commission sparked the debate and formally proposed the EU Emissions Trading Scheme and thus highlighted the Neo-Functionalist dimension within this argument. In order to push the Directive through, the Union and particularly, Commission were influenced by identity motivations. This shows the element of Constructivism. Finally, the backlash from member states shaped the legislation into its future form. Furthermore, issues such as the EU presidency of a pro-environmental Denmark for six-month duration throughout the negotiation process for ETS and the choice of Article 175(1) for the basis of the legislation aided its passage. As a result the Directive was destined for success. Therefore, as a result, Directive 2003/87/EC of the European Parliament and of the Council was passed on the 13th October 2003, three years following the initial discursive Green Paper produced by the Commission.

3. THE FUTURE OF THE EU ETS AND HOW IT HAS BEEN SHAPED BY OTHER ACTORS WITHIN THE EU

Phase III of the ETS is planned to begin in 2013. It is the Phase which shall determine the outcome of the target set in 2008 for an emissions reduction of 20% for all EU member states on 1990s levels by 2020. The Commission has stated that this target could be increased to 30% following an International Agreement. Therefore, as industries, interest groups and green parties have discussed – its success is vital if the target is to be achieved. Some countries have even set a higher target of 30% (in the UK at Westminster) and 34% (In Scotland at Holyrood). Also, Phase III of the scheme appears to have come as a result of much engagement with interest groups and industries in recent years. The scheme had been criticised greatly in earlier years and therefore Phase III looks set to make amendments based on previous failure. It appears as though lobbyists of the EU Emissions Trading Scheme who did not have their voices heard in the initial two phases of the scheme may have their proposals come into fruition in Phase III. Since the 1980s, Hix (2005, p211) explains that many more interest groups have sought to influence the legislative outcome of the EU. In the 1980s there were around 500 lobbyist groups present in Brussels; by the mid 1990s this figure had reached almost 1500 (Ibid). However, other lobbyists, particularly German industries, did not have their views expressed. This chapter shall focus on the position of the Confederation of British Industry (CBI) and the European Green Party and their attempts to lobby the process leading up the passage of Directive 2009/29/EC or Phase III. Both have distinct views regarding the third phase of the scheme and have lobbied for their requests to be fulfilled. However, as will be noted later, the ETS has not incorporated all lobbying positions into the enacted legislation and it could be argued that the Commission has yet again chosen a route based on market mechanisms and thus supporting weak Sustainable Development as a result. Thus, again the differing theory propositions shall be taken into consideration. If the Commission does still perform a leadership role then this shall show the triumph of Neo-Functionalism. However, on the other hand, the influence of either member state industry or non-state interest groups shall show a further influence of neo-functionalist theory.

Phase III of the EU Emissions Trading Scheme has made a distinctive break-away from the initial two phases. The scheme now supports the use of auctioning allocations in 100% of instances and such practice shall be phased in and become compulsory by 2020. Directive 2009/29/EC of the European Parliament and of the Council states that auctioning is the "basic principle for allocation, as it is the simplest, and generally considered to be the most economically efficient system". It also "eliminates windfall profits" and places all new entrants at the same level as existing ones. The European Green party believe that the first and second phases of the EU ETS were "seriously

undermined by the over-allocation of emissions permits to polluting industries" (European Greens, 2008) and that Phase III has sought to rectify this. As a result, the power sector within the EU will have full-auctioning by 2020; however, due to a backlash from Germany, the non-power sector will be allowed some free allocation up until 2027. Originally, the EU Environment Committee – vice-chaired by Finnish Green MEP, Satu Hassi, had voted for an initial auctioning of 15% which would subsequently rise to 100% in 2020. However, member states, particularly Germany, opposed this, and a compromise was made.

As discussed in chapter two, a number of German industries, politicians and officials have sought to derail the EU ETS. Since the 1970s and 1980s industrial groups have heavily affected the policy outcomes of the EU. Hix (2005, p213) explains that they were keen to support the removal of trade barriers. Notably, businesses were the first to "transfer their loyalties to the European level" in the 1950s at the peak of Neo-Functionalist debate (Ibid). In the present day, German industry has been a strong EU lobbyist, particularly in terms of the EU ETS. Notably, Germany uses a great deal of coal, particularly in order to generate electricity. Also, in the German industrial sector, Germany faces a higher-cost push than in any of the other EU member states. They argue that emissions cuts are too high for their emission-heavy industries and also the costs involved in greening their economy. In fact, German industries are more in favour of a carbon tax than the EU ETS as "their cost-effective share of emissions cuts would be relatively low" (Aqhiem & Bretteville, in Gupta, J. & Grubb, M., 2000). All industry, not just in Germany, feels strongly about any reductions which it is asked to make within installations. Pedler (2002, p105) states that even the smallest changes in "reductions and controls mandated can cost or save industry millions of Euros". Furthermore, not all industries speak with the "same voice" (Ibid). Industries throughout Europe tend to organise themselves into federations. For example the Confederation of British Industry in the UK supports the EU ETS, whereas the Federation of German Industry (BDI) believes that the EU ETS will not aid the reduction of carbon emissions, but will "deprive companies of investment funds that could otherwise be used to improve their facilities". Thus, as discussed earlier, Germany has been a major stumbling block for the EU ETS and this was not withheld in the negotiations for Phase III.

Notably, German Conservative Karl-Heinz Florenz and rapporteur for the temporary EU Parliament Climate Change Committee also sought to derail the ETS. Florenz had the backing of a number of emission-intensive industries throughout the EU who were "concerned about exposure to competition from producers in third countries with less stringent CO^2 reduction policies" (EurvArtiv, 2008). Florenz and his backers produced a set of amendments prepared last minute which sought to "completely derail the ETS" (Ibid). The original proposal for a directive of the European Parliament and of the Council amending Directive 2003/87/EC stated that "No free allocation shall be made in respect of any electricity production by new entrants". However, with the backing of the Steel sector, Florenz wanted the continuation of free allocation of emissions permits. However, he was fought off by a vote in the EU Environment Committee who wished to maintain the plan for 100% auctioning of emissions by 2020. This shows that overall the Commission still has the last say and is not forced to make changes to original plans due to strong lobbyist positions from EU industries. Thus, the theory of Intergovernmentalism is not as present here as it was during the initial negotiations. However, at Green parties' peril, the offsetting schemes have been maintained – something which will clearly benefit member state industries.

Speaking for the voice of Britain is the CBI or the Confederation of British Industry. The CBI is the UK's number one business-lobbying organisation and unlike Germany, supports the EU Emissions Trading Scheme. CBI produced a brief which stated that in order to gain support from UK businesses, the EU ETS Phase III must set an ambitious path. The CBI stated that the ETS could do this by "providing certainty for business planning, showing that reducing emissions can be achieved without damaging competitiveness, achieving the right framework for auctioning, new entrants and smaller emitters, supporting growth of international carbon market…securing low-carbon future" and so on (Birt, 2008). Following this, the CBI made a number of proposals for Phase III of the ETS. Most of these lobbying positions were achieved. For example, the CBI stated that they wanted the revenue created from auctioning to be put to good use. This request was achieved and the final directive states that 50% of revenues generated from auctioning allowances will be put back into tackling climate change. Along with further reducing greenhouse gas emissions, these revenues can be used to develop renewable energies, to avoid deforestation, to aid carbon capture and storage, encourage shift to low carbon-intensive transport and so on (Directive 2009/96/EC). In this sense, therefore, the CBI was successful in lobbying the scheme leading up to passage in 2009. However, the CBI also argued that the Commission should support growth of the international carbon market. The organisation believes that

this can be achieved through sustained use of carbon-offsetting (which the European Green Party are opposed to). By allowing 50% of emissions reductions to take place out with the EU in CDM and JI initiatives, it can be argued that the EU therefore does support the growth of a carbon-market within the EU.

The CBI state that "JI and CDM credits should continue to play a role in Phase III, not least as they will help to boost international carbon markets but that this role should not be an unlimited one". The Commission supported this suggestion and went on to allow 50% of emissions targets to be achieved this way. However, in a press release one year previously the Commission stated that:

"Greater use of credits can increase the cost-effectiveness of reducing emissions but also means that the emission reductions take place outside the EU, reducing the domestic benefits for the EU in terms of technological leadership and pollution reductions."

(EUROPA Press Release, 17.12.2008)

From this quote it is possible to see that EU has taken on board criticisms which have been made of the EU's focus on mechanisms such as CDM and JI, particularly in terms of displacing the importance of emissions reductions to countries elsewhere. EU decision makers have accepted that in recent years the EU has been an arbiter for unsustainable means of production (Europa, 2009). However, Phase III of the EU ETS will allow for 50% of reductions to be made through such offset schemes (for the period 2008-2020). The CBI had hoped for 50% of the required emissions reduction to be completed through CDM/JI schemes following an international agreement (Birt, 2008). However, in the absence of an international agreement being made, the Directive still went ahead to allow half of emissions to be "reduced" in this way. Although the Commission knows that the use of CDM/JI credits will help to meet the emissions reduction target set for 2020 but will not make a clear emissions reduction at home, they have maintained its use. The CBI believes that the use of CDM/JI is important in order to reduce costs within industry (Birt, 2009). Therefore, it is possible to understand that the Council and Parliament in the Directive were keen on aiding the industrial lobby in their plight for recognition. The Greens, on the other hand, although lobbying for reduced CDM/JI means, were largely ignored.

Although the EU Parliament is often discussed as if it were one body, it is made up of a number of different parties representing the whole of the EU. One of these parties is the European Green Party. The EU Greens[1] believe that the use of "external offsets" should be limited as a focus should be placed on making emissions reductions within the EU.

"In broad political terms, the Greens have tried to insist that the EU should set domestic emissions reduction targets (in line with the recommendations of the IPCC) and this implies actually delivering the abatement domestically within the EU."

Richard More O'Ferrall, Senior Policy Advisor, European Green Party (2010)

As is known, this is not the case for the planned third phase of the ETS. At proposal stage, the Greens believed that the plans for continued usage of CDM/JI were "flawed and inconsistent" (Hassi, European Green Party, 2008). Clearly, the party's recommendations were ignored and CBI's were replicated within the scheme. Furthermore, installations are allowed to use CERs (Certified Emissions Reductions) which had been gained in the initial two phases and transpose them for use in the third. In other words, the scheme had allowed the "banking" of external offsets which were stored to be used to mirror an emissions reduction at a late date. This was somewhat opposed within the Green party but as More O'Ferrall has stated, they were "left fighting a battle trying to ensure that no more offsetting was allowed than in the Commission's proposal". Therefore, it is possible to note that although having 46 MEPs in Brussels, the European Green party did not have much say in the decision-making process and therefore could not overrule this decision.

As part of the new era for Emissions Trading, the Commission proposed a "Climate action and renewable energy package" in January 2008. As an integral part of the new fresh-look package, it promises to "increase the EU's

energy security while strengthening its competitiveness" by using renewable energy, with a 10% share of biofuels in petrol and diesel by 2020 (Europa, 2007). These biofuels will be expected to meet specific guidelines within each EU member state in order to prove they are beneficial environmentally. With the backing of the European Green party, this shows a real step on the way to creating a strong Sustainable Development processes within the European Union. Energy-intensive lobbying groups such as the Confederation of British Industry had most of their positions met in plans for Phase III of EU ETS which shows that the Commission and other EU Institutions strive to protect the needs of businesses within the Union. However through the plans for increased usage of renewable energies, the scheme has also recognised the need for greening the economy and thus making the transition to a stable one. Directive 2009/28/EC set in stone these plans for furthered use of renewable energies and stated that by using "energy efficiency technologies" and energy from renewable sources in transport, the EU could "reduce its dependence on imported oil in the transport sector" (Directive 2009/28/EC, EURLex 2009).

Interestingly, the CBI position is also positive on the issue of renewable energy and supports the plan for 20% in existence by 2020. However, the CBI also highlights an interesting point in terms of monetary commitment. For example, in 2005 in the UK only 1.3% of all energy was generated from renewable energy resources and if current practices were to remain would rise to 5% by 2020 (Birt, 2008). The UK target for renewable energy is for 15% by 2020, therefore the current projected share must increase by at least 10% (Ibid). Furthermore, the Commission has predicted that carbon costs are set to hike in the UK during Phase III thus adding to abatement costs already in place. The Commission is indicating at €39 per ton CO^2 and the Carbon Trust at anywhere between €11-50 for the UK alone (Ibid). In order to deal with this cost of transition towards a greener economy, the CBI believe that member states, in this case, the UK should "devote sums comparable to the anticipated auction revenue from Phase III" in a sort of anticipated loan. Either way, the renewable energy plans support the use of strong Sustainable Development and therefore suggest a shift away from the weak Sustainable Development model and the Pollution Control model as outlined by Baker (2006, p30) in the first chapter. In order to fund such a scheme it is important for the Commission to devise a proposal making it compulsory for member states and installations to use the revenues collected from selling emissions permits to aid the transition to renewable energy. Also, those being able to sell permits more so than others should become part of a Commission installed redistributive policy. This would either increase projects abroad or aid other installations to switch to renewable energy. This would eliminate the idea of emission-intensive industries being able to "buy their way out" of making an emissions reduction as they would be given revenue in order to make the transition into renewable energy.

In conclusion, Phase III of the EU ETS and the subsequent targets set for 2020 look set to make a number of important differences in comparison to the initial two stages. Firstly, the Directive has set a tough target of making a 20% reduction by 2020 on 1990s levels and some member states have gone even further than this. Secondly, the scheme hopes to have 20% of renewable energy in place by 2020. Thirdly, ETS also allows for the continued use of offset schemes such as JI and CDM. It is possible that by Phase III of the ETS, the EU will have exhausted its leadership status capacity through ETS. Therefore, following this, it should focus on creating sustainable practices which will benefit the long-term changes which must be made in order to make the transition into a green economy. Although emissions trading clearly lowers emissions and allows the EU to take a leadership stance, it does not tackle climate change head-on. Furthermore, although the initial targets set to make major reductions, these will not be aided by the offset schemes currently available for use when making such reductions. With a proposed reduction of 50% for 2050, the EU Greens have tried to limit the affect that these offset schemes have on the overall productivity of the ETS.

However, on a more positive note, Phase III does appear to have addressed some of the lobbying positions put forward by green groups and that of industry during the initial two phases and the lead up the third. Mainly, the abolition of free allocation is central to the likelihood of success of the scheme at this stage. In particular, the European Green Party supports the plans for 100% auctioning of emissions allowances to be in place by 2020. They have stated that the first two phases of EU ETS could not operate effectively because of over-allocation to heavy-polluters. Therefore, phase III will see a new era which shall be clearer shall overcome some of the major problems faced earlier on.

As a whole, the Confederation of British Industry has had most of its major lobbying positions met. As discussed, the

Phase III of EU ETS takes a stronger role in terms of tackling climate change. The new legislation agreed on a 20% share of renewable energy within the EU "bubble" by 2020 has been welcome by most industries. Having lobbied for an extended use of offsetting, Phase III has gone beyond CBI's expectations and provided a 50% limit on their use. Therefore, it appears as though the Council and Parliament in Directive 2009/29/EC wanted to aim to please all, but whether this is possible whilst also achieving the hefty emissions reduction target of 20% by 2020 is unknown.

CONCLUSION

In conclusion, the EU Emissions Trading Scheme has been held up as the centrepiece of EU legislation. Many believe it has allowed the EU to perform a leadership role globally by initiating the world's "largest multi-country, multi-sector" Greenhouse Gas emissions trading scheme ever seen. However, size and coverage, clearly, are not everything. Although the scheme has served as base for the EU to make possibly the biggest emissions reduction in world since the climate change issue came to be of importance in the 1980s, it has also encountered a number of fundamental ailments throughout its course. These could have been prevented earlier given that the ETS even had a trial stage where it was meant to learn from mistakes before committing to a reduction under the Kyoto Agreement. Initially, during Phase I of the scheme, the price set per ton of carbon fluctuated so greatly that it failed to encourage installations to reduce their emissions. As discussed in Chapter one, six European countries emitted far less than they were expected to. This caused the price of carbon to drop beyond 50% of its original level. When the price drops so low there is no incentive for installations to make a reduction and therefore they continue to emit as much as they want. This was a case of bad planning in terms of the initial Phase. However by Phase II it appears that the price per ton of carbon has settled down. Coupled with this were the problems with over-allocation that the ETS was facing. Many emission-intensive industries had been given far too many permits. Although the EU was held up as a leader within the climate change arena, significant problems encountered during the early stages of the EU ETS were not broadcasted. Globally, many were blinded by the fact that the EU had created the largest emissions trading initiative ever seen and therefore failed to notice the fundamental problems it was facing during the outset.

Furthermore, not only was the EU uncovering major issues, it was not attacking the one major issue which is central to the climate change debate. It was not encouraging industries to reduce emissions. By using a method of weak Sustainable Development or pollution control, the Council and the Parliament in co-decision procedure had chosen to allow industry to buy their way out of making an emissions reduction right away. Along with mistakes made in the planning of the EU ETS allowing industries to scrape through the net without making significant changes, the Directive also allowed for the use of certain carbon-offset schemes. These schemes have caused much controversy with green groups as although they create emissions reductions or aid Sustainable Development overseas, they do not create a clear emissions reduction at home, within the EU. Therefore, although ambitious targets have been set for the third phase of the ETS, around 50% of these will be met through projects based out with the EU border. Through research into industry lobbying positions in both the UK and Germany, it was shown that the ETS seems to have supported the majority of these views. The CBI maintains that they support emissions trading but that industry must be aided in order to perform the transition to green technology. Many industries therefore, particularly during Phase I and Phase II have not had to make great changes to their business in order to achieve emissions reductions targets. The ways in which these targets were or will be achieved will be noted in 2012 when Phase II will culminate.

However, a target has been set for 20% renewable energy in the EU by 2020, thus extending the EU's commitment to creating a green economy and therefore supporting the long term use of strong Sustainable Development. These measures will benefit future generations and unlike the international carbon market, the proliferation of renewable energy calls for dramatic change in industry. Therefore, although compromises have been made for all three phases in order to aid industries transition, the EU is now seen to move away and begin the creation of a new, long term Sustainable Development plan. German industries have lobbied intensively over the course of the EU ETS. However it appears as though in Phase III despite having gained free allocation up to 2027 for the non-power sector, the EU has maintained its ground and did not allow complete over-ruling of the scheme. The Commission therefore can be seen as taking a further leadership role and thus moving further away from the influence of member states and in turn the focus on Intergovernmentalist theory within this debate. Although attempts were made to "derail" the proposals for Phase III these were largely fought off by the EU Environment Committee who maintained that full auctioning was essential to the future success of the scheme. Therefore, it is possible to conclude that although the EU Emissions

Trading Scheme uncovered a number of fundamental errors during the outset, it has learned from these. Although Phase I was termed the learning phase, it appears as though Phase II has been incorporated as well. Lobbying positions from the European Green Party and others have been taken on board. However the Council (and members of the Parliament) still appear to favour industries needs when passing amendments and rightly so given that industry is a large part of the EU economy. With the plans for more compulsory renewable energy in the next ten years it can be argued that the EU has made the base for a greener economy. Although it is important that larger sacrifices are made. Industries should be expected to make clear reductions within the EU and focus less attention on offsetting abroad. While helpful in the transition from industrialisation for these countries, these offsets do not aid the EU's development for the future and therefore should be surplus to reductions.

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[1]I had direct contact with Richard More O'Ferrall (Richard.MoreOFerrall@europarl.europa.eu) from the European

Green Party who gave me insight into the Greens' position on Phase III of EU ETS. These quotes are taken directly from E-mail correspondence.

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