

Benjamin Stephan:

## The Power in Carbon

A Neo-Gramscian Explanation for the EU's Adoption of Emissions Trading



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## **Abstract**

The EU has been the first major player to implement a domestic CO<sub>2</sub> emissions trading system. This comes as a surprise given that it was one of the most outspoken opponents of emissions trading prior to the adoption of the Kyoto Protocol. This paper uses a Neo-Gramscian approach to explain why the EU adopted emissions trading and how emissions trading became the dominant mitigation policy. Such a framework gives more insight to the case than existing studies as it enables us to consider both, discursive elements and individual actors with their structural constraints. It argues that a hegemonic bloc, originating in the US, assembled in favor of emissions trading. Promoting emissions trading the bloc extended into the EU. There, the implementation of the EU ETS was a passive revolution secured through the co-optation of environmental NGOs. This development has to be seen against the background of a specific structural context – the historical framework for action – which had put emissions trading at the center of what seems reasonable within the greenhouse gas mitigation debate. A Neo-Gramscian approach as presented in this paper gives us a better understanding on how and why certain policy measures can be implemented, while others are met with fierce resistance and fail. This is a crucial feature if one is interested in how we can achieve transformations towards a low carbon society.

## Introduction

The carbon market, consisting of emissions trading systems and off-set schemes is a rapidly growing sector of the global. The market volume, currently at US-\$ 143 billion (World Bank, 2010: 1) is expected to increase drastically within the next decade (Erlich, 2010; Point Carbon, 2008). With a volume of over US-\$ 118 billion in traded allowances and derivatives (World Bank, 2010: 2), the EU's emissions trading system (EU ETS) is the backbone of the market.

The fact that today the EU is the most important actor in the international arena using a mandatory ETS, comes as a surprise for two reasons: first, the EU ETS is quite different from the policy options used by the EU before. Especially within its environmental policy, the EU has been known for its use of command and control solutions. Until the introduction of the EU ETS, market creating policy tools like an emissions trading system had not played any role. Prior to the signature of the Kyoto Protocol in December 1997 the EU had even been highly critical of emissions trading, “not [being] very enthusiastic” (Christiansen and Wettestad, 2003: 5) about it and opposing it during the international negotiations. Only when it became clear that the US, at that point the biggest greenhouse gas emitter, would not agree to any treaty with binding reduction targets, if it did not include emissions trading and other flexible mechanisms, did the EU accept emissions trading as part of the Kyoto Protocol. Despite the US (the main driving force behind the initial emissions trading concept) having pulled out of Kyoto, the EU continued to support emissions trading. It even became the forerunner on the issue.

The objective of this article is to explore why the EU turned from a skeptic and opponent of emission trading into the biggest advocate for the policy tool. How can this substantial change of position be explained?

There have been a number of papers that analyze the introduction of the EU ETS. Some try to explain the development and implementation of emissions trading in Europe as a case of policy learning (Damro and Mendez, 2003; Braun, 2009), or an example of policy innovation (Voß, 2007). Skjærseth and Wettestad (2009; 2008) which have conducted a very rich and detailed analysis, have given a multi-causal explanation, arguing that the adoption of the EU ETS can be explained as: a diffusion and learning process, stimulated through the negotiations of the Kyoto Protocol; a failure to adopt other measures on the EU level such as carbon taxes; and an urge to act as a leader within the international climate regime to rescue the Kyoto Protocol after the US withdrawal<sup>1</sup>. While the learning and innovation framing gives an plausible explanation, it has to be criticized for implicitly assuming that emissions trading is superior to any other policy available to address organizing greenhouse gas reductions. Doing so, these approaches do not problematize the power structure at play that resulted in the implementation of this particular policy. They do neither take account of the material or discursive structural context. For the most part these articles also overlook the actor constellation with the specific interests of the individual players involved.

To fill these gaps this article is using a Neo-Gramscian political economy approach to analyze the case. This approach not only problematizes power relations and power struggles but is also based on an understanding of the state that enables us to conceptualize actor

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1 The last point has also been made by Hovi et al (Hovi et al., 2003: 18-20)

constellations that consist of state and non-state actors. For a long time Neo-Gramscian approaches have been used to tackle macro-level issues such as the international dominance of Britain or the US during different historical periods. Only more recently have authors adapted it for policy analysis: Levy et al. use Neo-Gramscian approach to conceptualize organizational and corporate strategies (Levy and Newell, 2005; Levy and Egan, 2003; Levy and Newell, 2002). Their approach is helpful to think about the formation of particular policy fields. This paper mainly draws on Bieling and Steinhilber, who used a modified Neo-gramscian approach to assess particular political projects during the process of European integration (Bieling, 2005; Bieling and Steinhilber, 2002). Based on this strand of Neo-Gramscian theory an alternative reading of the case is given: A hegemonic bloc originating in the US assembled in favor of emissions trading. Promoting emissions trading as its political project the bloc extended into the EU successfully pushing for its implementation. This development has to be seen against the background of a specific structural context – the historical framework of action – which had put emissions trading at the center of what seems reasonable within the greenhouse gas mitigation debate. A Neo-Gramscian approach as presented in this paper gives us a better understanding on how and why certain policy measures can be implemented (e.g. emissions trading within the EU), while others are met with fierce resistance and fail (e.g. the carbon tax proposals made by the EU Commission during the 1990s). This is a crucial feature if one is interested in how we can achieve transformations towards a low carbon society.

The empirical material used in this paper consists of primary sources – EU documents, position papers by stakeholders and press releases. In addition, it draws on already existing research on the EU ETS (Braun, 2009; Convery, 2009; Skjærseth and Wettestad, 2009; 2008; Steuwer, 2007; Engels 2006; Braun and Santarius, 2005; Watanabe, 2005; Woerdmann, 2004; Damro and Mendez, 2003; Zapfel and Vainio, 2002).

This paper begins with a section on Neo-Gramscian theory, outlining its core concepts and defining the major analytical tools subsequently used. It is followed by a sketch of the framework for action with its material and discursive dimensions, within which emissions trading came to be *the* policy solution for organizing greenhouse gas emissions reductions. The second part of this article reconstructs the evolution of the emissions trading coalition, tracing it from its academic origins in the US to the implementation of the EU ETS. The article closes with a description of the transformative effects the hegemonic project emissions trading has globally.

### **Key Elements of Neo-Gramscian Theory**

In Neo-Gramscian approaches an actor's behavior or an actor's ideas are never seen as fully autonomous. They are embedded within the historical context the actor operates in. Made up of a particular distribution of material capabilities and a certain set of dominant ideas and discourses the historical context provides a “framework for action” (Cox, 1981: 135-137). The actions and ideas that are within the corridor constituted by this framework make up what is perceived as common sense and thus reasonable and possible. Besides being subject to structural influences and constraints – hence being exposed to structural power – actors can have power themselves and exercise it on others. For Gramscian scholars, power is a “combination of consent and coercion” (Cox, 1983: 164). An actor does not solely rule through force. This is only one dimension of its power. The other dimension is its ability to

claim “intellectual and moral leadership” (Gramsci, 1971: 182, 269). It means that she is able to fabricate consent among other actors.

Starting point of a Neo-Gramscian analysis is generally the system of production. Depending on its configuration different "social forces" emerge and participate in the struggle for hegemony (Cox, 1981: 138).<sup>2</sup> A dominant social force – usually particular fractions of the capitalist class – tends to have vast material capabilities. In addition it might be able to gain access and influence over coercive state apparatuses like the police or bureaucratic institutions. While these aspects can make a social force dominant, it can only become hegemonic once it is able to present its ideas and projects as being universal and in the interest of the entire society. Only when subordinate groups and forces start to consent with the policies and ideas proposed by the dominant social force, and perceive them as being in the general interest, can we speak of a hegemony of this force (Gramsci, 1971: 181-182).

The arena where ideas and discourses are (re)produced and consent can be manufactured is the *civil society*, consisting of science, education, art, the church and the media. This makes it “a key site of political contestation among rival social groups and ideas” (Levy and Egan, 2003). Having a powerful position within civil society results in significant influence over societal institutions and secures the discursive power necessary to present one’s ideas as being of general interest. The important role of the civil society in Gramscian theory is underlined by the fact that it is conceptualized as being part of the state: while the government, with its institutions and bureaucrats, constitutes the *integral state* civil society is defined as the extended state. It is these concepts that make Neo-Gramscian theory very fruitful for political science analysis: the concept of hegemony enables us to analyze both material and discursive aspects. And the Gramscian understanding of the state enables us to assess problems that contain both governmental and non-governmental actors.

To be able to get a better understanding of hegemony and more fruitful categories for analysis, this article follows Bieling and Steinhilber (2000) who have suggested to differentiate between three different layers of hegemony: historical bloc, hegemonic bloc and hegemonic project. The *historical bloc*<sup>3</sup> refers to the structural level. It contains all material and discursive elements, forming the structure of a specific mode of production with a corresponding set up in the political and civil society. The *Hegemonic bloc* refers to the actors. It describes the constellations and alliances among social forces, which render on of the groups as hegemonic. It captures this power structure, including its characteristic forms of generating discursive consensus and achieving material compromise (Bieling, 2005: 181). The hegemonic bloc can propagate common morals and a common culture and thus can maintain cohesion within a society or historical bloc (see Cox, 1983: 168). Even though a hegemonic bloc originates within a particular country’s society, it has the chance to expand internationally. This is the case if a dominant social forces links with dominant forces in other countries to promote their ideas globally. Based on their relationship to subordinated

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2 While Cox himself only uses the term social forces to refer to groups directly involved in the production process – different fractions of capital or elements of the working class – I argue that it is helpful to use a broader definition: if a system of production causes specific developments, e.g. environmental problems, then it also makes perfect sense to frame the groups and movements who have come into existence because they oppose these developments (e.g. the environmental movement) as a social force.

3 Other Neo-Gramscian scholars (see for example Cox, 1983: 167-169; Gill and Law, 1989: 476) and of course Gramsci (Gramsci, 1971: 137,168) himself use only the term historical bloc. Yet, their definition is fairly broad making it analytically less helpful for the analysis of concrete political projects. It encompasses both, what Bieling and Steinhilber define as historical and as hegemonic bloc.

groups these interlinked dominant forces would constitute a transnational hegemonic bloc. The third analytical category, the *hegemonic project*, refers to concrete political initiatives promoted by a social force, which tend to appear as the solution to pressing social, economical, political or ecological problems. Depending on its character a project can have either stabilizing or transformative effects on a historical or a hegemonic bloc. Once a political project is being conceived by the entire society to be of its interest it becomes a hegemonic project (Bieling, 2005: 182-183; Bieling and Steinhilber, 2000: 102-108)

For Gramsci, intellectuals have key roles in making a political project hegemonic or in universalizing a particular class' interests. Gramsci distinguished between two types of intellectuals. Gramsci called the "ivory-tower" scholars *traditional intellectuals*. More important to his approach are, however, what he calls *organic intellectuals*. These are people native to a particular class, which are able to help to develop a class' identity. They are the ones that can develop a class' strategies and advance its concepts and – if they are successful – make them universal among the entire society (Gramsci, 1971: 3-23).

Even though, from a Neo-Gramscian perspective society seems at first sight to be stable, the theory also accounts for the possibility of change. A subordinate or counter-hegemonic social force can achieve power by engaging in a so called war of movement<sup>4</sup>. Engaging in a discursive struggle within the realm of civil society, it has to win the hearts and minds, being able to present its own ideas as universal. Yet, if “the impetus for change does not arise out of vast local economic development... but is instead the reflection of international developments which transmit their ideological currents to the periphery” (Cox, 1983: 167), a *passive revolution* can occur. Government and bureaucratic elites introduce a policy that is linked to dominant international discourse. This policy is a break to domestic policy traditions. And it is not introduced with the support of the domestic society. Subordinate forces are not necessarily opposed to it. They rather have not been included in the discussion or there has been no domestic debate at all. There are different possibilities how passive revolutions can play out. If sufficient support for this new policy is organized by obtaining consent from the leaders or elites of subordinated forces – actors that might otherwise be able to create an opposition – we are looking at a process identical to what Gramsci called transformismo (Gramsci, 1971: 58).

### **The Historical Framework for Action – The Carboniferous Free Market**

The following section sketches out the framework for action within which emissions trading emerged as a viable policy option. We will start with the characteristics of the socio-economic base and its consequences for the distribution of material capabilities, and then turn towards the ideational and discursive dimension.

The present day social-economic base is fundamentally characterized by its fossil-fuel dependent and thus carbon-intensive economy. Oil is the most commonly used fuel, making up 32% of today's global primary energy use, followed by coal and peat (27 %) and gas (21%) (IEA, 2010: 6). With regards to the transport sector 99% of the energy comes from fossil fuels (IEA, 2010: 37). This global fossil fuel dependency, which developed with the dawn of the industrial revolution, translated into numerous particular materializations within

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<sup>4</sup> These rather martial expressions originate from the fact that Gramsci developed a lot of his theory from the analysis of the successful Russian and the failed European revolutions of the early 20th century.

society: relying on oil, gas and coal for such a long time has created infrastructures (e.g. transport systems and settlement patterns) and institutionalized processes that are geared towards and heavily rely on fossil fuels. It is the hunger for fossil fuels and the carbon dioxide emitted during its extraction, refining and consumption that are the primary driver for global warming, causing 56,6% of the annually emitted anthropogenic greenhouse gases (IPCC, 2007: 36).

The fossil fuel dependency of the global economy is also reflected in the structure of the global business world. For years it has been car manufacturers and oil companies<sup>5</sup> which have dominated the rankings of the largest global corporations (see table below).

**Table I: Number of car manufacturers and oil companies among the world's 20 biggest corporations<sup>6</sup>**

year	car manufacturers	oil companies	year	car manufacturers	oil companies
1989	5	4	2000	5	5
1990	7	4	2001	5	5
1991	7	4	2002	5	6
1992	7	4	2003	5	6
1993	5	2	2004	5	6
1994	4	2	2005	5	6
1995	5	2	2006	5	7
1996	5	3	2007	5	7
1997	4	3	2008	4	9
1998	6	3	2009	2	8
1999	5	4			

Their revenues put these corporations also far ahead of most nations' economies. To give one example: in 2003 when the emissions trading directive was passed in the EU, BP was the second largest company in the world, with revenues of US-\$ 285 billion. This would have made them the 20th biggest economy ranked between Sweden and Austria (World Bank, 2005). With revenues of this magnitude this "carboniferous" (Paterson and Dalby, 2009) fraction of capital has sufficient funds available to spend on exercising coercive power or to spend on trying to organize societal consensus.

Related to this formation of material structures within the global socio-economic system there has also been the belief, widely held during most of the 20th century, that economic

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5 The position on climate change issues held by car manufacturers and oil companies has been identical most of the time. This is not surprising if we consider that the cars manufactured to date almost exclusively run on fossil fuels. Hence, policy measures curbing the consumption of fossil fuels would also impact the car industry.

6 This table has been compiled based on the Global 500 published annually by Fortune Magazine. The Global 500 ranks corporations according to their annual revenues (for more details see Fortune Magazine, 2010).



growth ultimately depends on a growth in energy consumption. Any attempt to decrease energy consumption would ultimately depress economic growth. As a result of this, the interest of keeping up economic growth, held by all fractions of the capitalist class, has been congruent with the interests of the carboniferous fraction of capital (see Newell and Paterson, 1998). As it touches the core of its business model the carboniferous fraction of capital itself is highly interested in the type and character of mitigation measures and strategies taken up by governments. While command and control legislation leave little flexibility to energy companies and a carbon tax only presents additional costs, an allowance trading system is preferred by most of them. Introducing emissions rights, presents them with assets, which if well managed, will yield additional profits.

We will now turn to the ideational and discursive dimension of the framework for action. Here the popularity of Neo-Liberalism and the emergence of an Ecological Modernization discourse made it possible that emissions trading would eventually be perceived as a viable and potentially the best policy option to organize emissions reductions. Discourse is understood here as “a specific ensemble of ideas, concepts and categorizations that are produced, reproduced and transformed in a particular set of practices and through which meaning is given to physical and social realities.” (Hajer, 1995: 44).

Within the neo-liberal discourse the market – being a free market, as unregulated as possible – is perceived to be the ideal tool, not only for regulating the economy but for organizing most aspects of society. Where markets exist, the state should withhold from any unnecessary intervention (deregulation) and withdraw from any direct engagement, hence privatize state-owned companies (privatization). In cases where the market is not yet used to organize society, the state should help create such markets (marketization). Such process introduces the logic of the market into the respective areas of society (Harvey, 2005: 1-4; Larner, 2000).

Let us turn to the Ecological Modernization discourse: The first photographs of planet earth, taken from space during the Apollo missions and the Club of Rome's publication of "Limits to Growth" are only two important events that shaped the perception of planet earth as a fragile system in crisis that required man's stewardship and care. This led to the rise of a new social force during the 1960s and 1970s – the environmental movement. Even though environmental change and degradation became an ever more important issue the dominant environmental discourse features an understanding that *existing* political, economical and societal institutions can “internalize the care for the environment” (Hajer, 1995: 25). Techniques and practices related to this discourse make environmental degradation calculable and thus governable at the same time. In the end environmental protection becomes (only) a management issue and does not require radical changes – a discourse that Hajer called: "Ecological Modernization".

To sum up, we are looking at a historical framework for action, whose material and institutional structure is heavily shaped by the fossil fuel dependence of our socio-economic base. A lot of corporations and companies have their business built around the combustion of fossil fuels – car manufacturers and oil companies being the most powerful and influential corporations in the world. Environmental problems have become an issue and a new social force has emerged. But the problems seem to be manageable from within the existing societal set up. It is free markets that appear to be the most appropriate tool to organize all sorts of issues within society. It is within this setup that a coalition of actors could position emissions trading as the best policy tool to address greenhouse gas reductions.

## **The Origin of the Emissions Trading Project**

The origin of the hegemonic project emission trading lies in (neo-)liberal academic thinking. Emissions trading is based on what came to be called the Coase Theorem postulated in “The Problem of Social Cost” by economist Ronald Coase (1960). Coase was a Professor at the Chicago School of Economics and an early member of the neo-liberal Mont Pelerin Society. His theorem is a critique of Pigou's (1912) taxation approach, which forms the theoretical basis for a carbon tax. Today his theorem is deployed by free market advocates to argue against taxation or command and control measures in the case of externalities. In 1968 John H. Dales used the Coase Theorem in his paper “Land, Water and Ownership” to discuss the problem of pollution along a river. W. David Montgomery (1972) another American economist adopted the idea for power plant emissions only a few years later.

These theoretical developments, by traditional intellectuals (based on his membership at the Mont Pelerin Society one can argue that Coase was both a traditional and an organic intellectual) put a market creating solution to environmental problems out there at a time, when a new social force – the environmental movement – started to constitute itself in the US and the Ecological Modernization discourse evolved. The following paragraphs show how environmental NGOs, scientists and bureaucrats that started to work in the newly founded Environmental Protection Agency (EPA) – elements of this new social force – were interested in institutionalizing forms of environmental protection and slowly picked up on the idea of emissions trading and permit trading in general.

Permit trading systems started to appear in US environmental policy making towards the end of the 1970s when a group of young economists within the EPA's Office of Planning and Management was given the chance to experiment with these approaches. Based on the theoretical groundwork made by Coase, Dales and Montgomery they developed all major regulatory building blocks – permits, banking, bubble creation (Cook, 1988: 64-85) – that would come to use in subsequent trading schemes like the Kyoto trading system or the EU ETS. However, until the end of the 1980s, only some regional wetland trading systems and a small scale federal lead trading system had been implemented (Hahn and Hester, 1989: 381-392).

This changed in 1988, when, in a bipartisan effort, a committee called Project 88 was put together. The goal was to discuss the possibilities of implementing larger scale permit trading schemes and to make recommendations to the winner of the 1988 presidential race. In addition to several academics and regulators from the EPA, a few corporations (e.g. Chevron and Sun Oil) and a number of environmental organizations (e.g. Environmental Defense, World Resource Institute, Resources for the Future) were represented in the committee. With six out of the 44 committee members the environmental NGO and think tank Environmental Defense had by far the largest delegation (Stavins 1988, pp. II-VII). Based on the results of Project 88 the Clean Air Act Amendments of 1990 were passed under the administration of George Bush senior. These laid the legal foundations for the Acid Rain Program – a large scale SO<sub>2</sub> and NO<sub>x</sub> trading scheme, which started operating in 1995. The program resulted in a decrease of emissions, while costs ended up being below initial industry estimates, which many trading enthusiasts credited to the permit-trading scheme (see

US EPA, 2004).<sup>7</sup>

By pushing a policy tool that is deeply rooted in neo-liberal discourse - a discourse promoted by the capitalist class - the environmental movement was successful in making demands towards the government and the dominant fractions of capital. However, compared to greenhouse gas emissions trading, the issues addressed by these permit trading schemes were only marginally important. They did not touch the core of the business model of powerful fractions of capital.

While the Clean Air Act Amendments were in the making, a number of American environmental NGOs started working on promoting the idea of emissions trading as a solution to global warming. In the case of international greenhouse gas emissions trading it was Environmental Defense that turned out to be one of the most articulate proponents. Its chief economist Daniel Dudek, who was a member of the Project 88 committee published a paper as early as 1991 on how greenhouse gas emissions trading would help protect the Brazilian rain forest (Dudek and LeBlanc, 1991). In addition to Environmental Defense, the World Resource Institute, Resources for the Future and the Center for Clean Air Policy (CCAP) were three other US-based environmental NGOs that played an important role, promoting emissions trading within the US and moving it to the international level. Both the World Resource Institute and Resources for the Future had participated in Project 88 and also actively promoted emissions trading in the context of the UNFCCC negotiations. Even though CCAP did not participate in Project 88 it still has been heavily engaged in getting the Clean Air Act Amendments and the Acid Rain Program passed. CCAP worked heavily to get emissions trading on the international level and later turned out to be one of the key actors responsible for getting emissions trading onto the ground within the EU (Braun, 2009: 478-479; Zapfel and Vainio, 2002: 8; Stavins 1988, pp. III-VI).

### **The Emissions Trading Bloc becomes hegemonic and transnationalizes**

Even though there had been first proposals (e.g. Grubb, 1989; Dudek and LeBlanc, 1991) for international emissions trading at the beginning of the 1990s, and international organizations as the United Nations Commission on Trade and Development, the OECD and the International Energy Agency set up research groups to explore the possibilities for implementing emissions trading on the international level, it did not become an issue within the international climate negotiations. The US government only started to integrate emissions trading into its negotiation position during 1996, making it part of a formal submission in January of 1997 (Matthews and Paterson, 2005: 63; Agrawala, 2002, 46-48).

The position on climate change held by different fractions of capital, explains why the US government only picked up on international emissions trading in 1996. During the early and mid-1990s, significant fractions of transnational corporate capital, spearheaded by its carboniferous fraction of oil and car companies, approached the climate change debate by questioning the scientific evidence for its anthropogenic causes. In 1989 they had founded the

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7 There are analysts critical of this enthusiasm. They argue that it is unclear, exactly what degree of reduction can be attributed to the trading system itself and what has been associated to other measures of the Clean Air Act. In addition, it is unknown how other measures would have performed cost- or time-wise. Further criticism comes from climate justice advocates, who argue that despite the overall reduction, emissions have increased in a number of locations, predominantly affecting areas with poor communities and communities of color (for more details see Lohmann, 2006).

“Global Climate Coalition” (GCC), a lobbying group, financing scientists and reports that questioned the otherwise widely held idea of man-made climate change. Initially, this strategy was relatively successful, especially in the US, where climate skeptics received disproportionately large attention in the media (for more details see McCright and Dunlap, 2003).

In 1996, this strategy which had caused discomfort among some of the GCC members (Leggett, 2001) and ultimately contributed to tensions among them, became largely discredited. Subsequently the GCC changed tactics: it now argued that despite the question whether climate change was happening or not, dealing with the consequence would be economically more reasonable than starting to force major structural changes onto the economy and invest into mitigation issues (Levy, 2005: 91-92). This discursive shift combined with the positive perception of the experience of the first years of NO<sub>x</sub>- and SO<sub>2</sub>-trading within the Acid Rain Program opened the space for proponents of greenhouse gas emissions trading, making the case that emissions trading after all was not such a bad option. This development also enabled the US government to integrate emissions trading into its negotiating position. Due to these events the tensions among the GCC members intensified and the uniform position of large fractions of American and transnational corporate capital (outright rejecting concrete measures to prevent climate change) eventually crumbled.

A clear turning point was BP's decision to leave the GCC which became public in late 1996 (Leggett, 2001: 252). In May of 1997 BP's CEO Lord Browne was the first senior management representative of a major oil corporation to publicly admit that climate change was a serious issue, requiring action being taken by politics and businesses. Leaving the GCC BP joined forces with Environmental Defence to develop an emissions trading system for its own corporation, which operated from 1999 to 2002. It is assumed that developing some experience with what they thought would likely be a future climate policy measure was a major factor behind this move. Furthermore, by going ahead with emissions trading they had the chance to avoid that momentum in the mitigation discussion would shift toward carbon taxes or command and control measures which would put a stronger burden on them (Victor and House, 2006: 2101; Akhurst et al., 2003: 657).

Other big corporations e.g. Shell, Dupont and Ford left the GCC between 1997 and 1999, embracing also a position open towards emissions reduction measures, similar to that of BP (see Levy, 2005: 84-85). In 2000 Environmental Defence rallied BP, Dupont, Shell and other corporations to found the Partnership for Climate Action. Its goal was to evaluate the corporations carbon management strategies – in the case of BP and Shell internal emissions trading programs – and promote these (Partnership for Climate Action, 2002). These corporations also joined the Pew Center on Global Climate Change, founded in 1998 and rapidly turning into one of the most influential environmental think tanks in the climate change debate (see also Engels 2006, 336-340). The Pew Center, advocating emission trading concepts to achieve reductions, is funded by Pew Charitable Trusts, which combines the trust funds of the four Sun Oil Company (SUNOCO) heirs. In its "Business and Environment Leadership Council" the centre cooperates with more than 25 Fortune 500 corporations, representing more than US-\$ 2,5 trillion in annual revenues.

Having picked up the permit trading idea, enabled a number of significant players within the American environmental movement to try and bridge the environment-economy antagonism and position themselves as potential allies to large parts of the capitalist class. As we have seen in the previous section they were successful with this strategy, managing to get the Acid

Rain Program passed and implemented at beginning of the 1990s. Only a few years later they were able to repeat its success with regards to greenhouse gas emissions trading. They benefited from the fact that the relatively uniform position among large fractions of capital started to fall apart that and players like BP, Shell, Dupont, Ford and others decided to shift their strategy: instead of heading for an open conflict, they accepted emissions trading – one of the key demands made by the environmental movement – thereby making their position more acceptable to the rest of society, which increasingly got concerned about global warming. Among the transnational oil corporations those with European headquarters and predominantly European senior management like BP and Shell were the ones that first adopted a cooperative and cooptive position towards climate change. One of the explanations for this is that oil managers in Europe had been under considerably higher public pressure to stop denying the existence of climate change and act upon it (Levy and Kolk, 2002: 291-293).

The coalition or bloc that pursued emissions trading as apolitical project had been rather small until the beginning of the 1990s consisting mainly of elements from the American environmental movement, a number of neoliberal economists and a few bureaucrats. Yet it grew significantly towards the middle and the end of the decade being joined by more and more elements of the capitalist class. With the disintegration of the GCC and the decision by a significant portion of even the carboniferous fraction of capital to join the emissions trading coalition, one can argue that the coalition became a hegemonic bloc, now being able to universalize its demands. This process of becoming hegemonic within the US was linked with a transnationalization of the bloc. Yet on the international level it still took a number of years until the emissions trading project became hegemonic as well.

When the US officially proposed emissions trading as an element for a future agreement within the UNFCCC context in January of 1997, their submission was endorsed right away by the entire JUSCANZ<sup>8</sup>-Group (Agrawala and Andresen, 2002: 46-48). However, the proposal was met with enormous skepticism and refusal from developing countries and the EU. In its internal debates the EU had been discussing command and control regulation and a carbon tax approach as possible measures – introduced into the international negotiations as Policies and Measures (PAMs). Measures to establish a permit system, however, had not become an issue prior to Kyoto. During the Kyoto negotiations EU representatives rejected emissions trading, arguing that it would leave rich polluting states with an easy way out. Instead of undertaking domestic reduction efforts states could just continue with business as usual by simply buying emission certificates to offset their emissions. In addition they feared that the European public would perceive emissions trading as a right to pollute and thus see it as unpopular (Braun, 2009: 472). But as it became clear that emissions trading and other flexible mechanisms would be conditional for the US and the JUSCANZ members to agree to a protocol with binding targets, the EU had to clench its teeth and eventually gave in (Christiansen, 2004: 27-28; Oberthür and Ott, 1999: 54-58, 89-90). The Kyoto Protocol, including emissions trading as well as the Joint Implementation and Clean Development Mechanisms were agreed upon on December 11th 1997 at COP 3 in Kyoto. However, the organizational details concerning the mechanisms were still up for debate. When they were agreed upon in 2001 at COP 7 in Marrakech, US-President Bush had already announced that the US would not ratify the Kyoto Protocol.

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<sup>8</sup> The acronym JUSCANZ stands for the countries Japan, United States, Switzerland Canada, Australia, Norway and New Zealand

With the US, the main proponent of greenhouse gas emissions trading within the UNFCCC, pulling out of the Kyoto deal an obvious first assumption would be that this presents a major if not a fatal blow to the emissions trading project. One would assume that with the main proponent (US) gone and the main opponent (EU) left, the general approach to organize greenhouse gas mitigation would change. But as the following section shows, the opposite occurred.

### **The Implementation of Emissions Trading in Europe: a Passive Revolution**

Turning towards Europe, a Neo-Gramscian analysis of the EU ETS implementation process shows us, that we are looking at a case of passive revolution: the idea to create an emissions trading scheme had not evolved out of domestic social or economic developments within Europe, where command and control approaches had been the "traditional" approach to regulate environmental problems. EU administrators had rather picked up on what had become the hegemonic policy solution within the US and the international arena. During the implementation process the majority of the European public was neither in favor nor opposed to emissions trading – they simply didn't know about it.

In the beginning of 1998, only weeks after COP 3 in Kyoto, most of the staff of the Directorate General for the Environment, which had worked on EU climate policy and represented the EU Commission in the UNFCCC negotiations, opposing emissions trading, transferred to other parts within the EU Commission. Up to this point the EU Commission had favored an EU wide carbon tax to address the need for greenhouse gas reductions. After several attempts to get it passed during the 1990s this project had failed again in 1997 as it was not possible to get an unanimous decision in the EU Council – necessary to pass such a tax measure (Woerdmann, 2004: 270). Some observers called the degree of lobbying against the tax "some of the most ferocious" (Skjærseth, 1994: 28) they had seen so far in Brussels. Of the old team working on climate change within the DG only Jos Delbeke and Peter Vis, two economists, stayed, filling the vacuum. This gave emission trading supporters more weight in the Commission's internal discussions (Delbeke 2006, pp. X-XIV; Watanabe, 2005: 38).

Starting with the staff change, the EU Commission began to take a European trading system into consideration. In January 1998 representatives of the DG Environment met informally with representatives of the major European environmental NGOs, to get a sounding on the agreeability of this policy. In its communication, of the same year, to the European Parliament "Climate Change – Towards an EU Post-Kyoto Strategy" (EU Commission, 1998), the EU Commission mentioned for the first time in an official document the possibility for an European trading scheme. Around the same time the first member states' plans to implement national trading schemes surfaced: the UK introduced a voluntary trading scheme called the UK Emissions Trading Group (UK ETG) in 1999. Denmark had already adopted an emissions trading proposal for its electricity market in 1998 (see Engels 2006: 340; Zapfel and Vainio, 2002: 8; Pedersen, 2000).

In May 1999 the Commission announced drafting a Green Paper, which was to be published in March 2000 (EU Commission, 2000a). Together with a stakeholder consultation process, being set up as Working Group One of the "European Climate Change Programme", this was supposed to get the necessary parties to the negotiating table and to come to an agreeable

concept. This allowed the Commission to develop and test ideas and gave it later the opportunity to convince stakeholders of the concept and do capacity building on it (Braun, 2009: 480).

A task force set up and facilitated by the Center for European Policy Studies (CEPS), which brought together Commission members, NGOs and business representatives in regular meetings, was a second forum with significant influence on the implementation process (Steuwer, 2007: 58-59). CEPS is a think tank and lobbying institution that has strong ties to the corporate world, getting roughly a third of its annual six million Euro budget directly from its 120 member corporations (e.g. BP, E.ON., PriceWaterhouseCooper, Vattenfall) (CEPS, 2007: 38-43).

There are two actors that should be highlighted as they had significant influence on the genesis of the EU ETS. Number one is BP, who heavily lobbied in favor of emissions trading, referring to its own positive experiences (Zapfel and Vainio, 2002: 8). Its European Government Affairs Officer Mike Wriglesworth chaired the Union of Industrial and Employers' Confederation of Europe's (UNICE) Air Quality and later its Climate Change Working Group and was in this function present at the ECCP stakeholder discussions (ECCP, 2001). Charles Nicholson, a Senior Adviser to BP chaired the CEPS task force. Being a member of the UK ETG also, he submitted a comment to the Commission's Green Paper on behalf of the UK ETG (EU Commission, 2000b). The head of the UK ETG secretariat at the time, was Margaret Mogford, wife to John Mogford who oversaw BP's ETS, being the head of BP's climate steering committee (Victor and House, 2006: 2105).

The second important actor with significant influence on the process was CCAP. The center was one of the earliest players to lobby and consult the EU Commission on emissions trading. It gave several presentations to the ECCP Working Group I and wrote a number of studies and reports for the Commission. The study (FIELD, 2000) it co-authored with the Foundation of International Law and Development (FIELD) has been regarded as most influential for the further developments of the implementation process (Steuwer, 2007: 58). CCAP and FIELD are perceived to have been "indispensable in the initial phase of 'capacity building' in the Commission" (Braun, 2009: 478). Until recently CCAP itself claimed on its website that their "recommendations ultimately formed the basis for this Directive" (CCAP, 2008). Yet, CCAP was not the only US based environmental NGO the EU Commission was in contact with when developing its ideas for the EU ETS. In addition, the Commission worked with Environmental Defence as well as Resources for the Future (Braun, 2009: 479; Zapfel and Vainio, 2002: 8).

At the end of the 1990s the predominantly US-based emissions trading bloc managed to expand into the EU. Lobbying through numerous channels it first won DG Environment and the EU Commission. After the failure of the carbon tax proposals, the adoption of emissions trading as a UNFCCC policy and numerous actors like BP and US-based environmental NGOs praising their positive experiences with emissions trading, the Commission eventually adopted it as the mitigation policy of choice. From a Neo-Gramscian perspective this was a passive revolution: the ruling state elite pick up on outside developments and start implementing them domestically without the active support of the local population.

During the Kyoto negotiations and the early discussions on a European trading scheme, the majority of European based environmental had been rather critical of emissions trading. However, they were slowly drawn into the debate and eventually co-opted into the emissions

trading coalition. During events like the ECCP stakeholder meetings, they were asked to join the negotiating tables and present their opinion. On other occasions they were asked to act as consultants or project verifiers. A prominent example of the latter is the WWF's cooperation with industry representatives to develop the Gold Standard, a quality standard for offset projects under the CDM and in the Voluntary Market (The Gold Standard, 2010). Doing this prevented these NGOs from taking up radical opposition or a critical position on the issue and increased the legitimacy and credibility of emissions trading to the rest of society. Greenpeace, for example, initially opposed the discussion about emissions trading on the international level, arguing that the COPs are more and more “turning into a trade negotiation – climate ... [being] pushed more and more down the agenda.” (Greenpeace, 1998). Yet, it eventually ended up supporting the trading mechanisms on an international and later also on the European level (see for example Greenpeace Deutschland, 2004). Opposition to emissions trading from environmental NGOs had pretty much ceased by 2001. Only few, very small groups, e.g. Carbon Trade Watch continued to criticize the implementation of emissions trading.<sup>9</sup>

What we are looking at here, is the co-optation of elites of the European environmental movement – a subordinated social force – by the hegemonic block in order to prevent them from organizing a successful opposition or counter-hegemonic movement to emissions trading or carbon markets. Neo-Gramscian scholars call this Transformismo. It is one possible strategy by a ruling class to secure its position and projects in the case of a passive revolution.

What followed was a (considering EU standards) rather swift adoption process that lasted only two years from the first official Commission proposal until the EU ETS directive was passed by the EU Parliament and the EU Council on October 12th 2003 (EU Commission, 2008). This directive set rules of the game for the first two trading phases (2005-2007, 2008-2012) leaving member states only little room for amendment within their National Allocation Plans. This adoption process had gone by without major debates – for example within the EU Parliament plenaries – about the purpose and eventual consequences of the implementation of a European trading system.

### **The EU ETS – a Hegemonic Project with Global Transformative Effects**

The first trading period of the EU ETS took off on January 1st 2005. Being the first trading system of this kind and magnitude nobody knew exactly what to expect. And at first things seemed to go fine. But within 18 months it was clear that there were two major flaws: windfall profits and over-allocation. Due to the free allocation of permits and their ability to factor the permits as opportunity costs into their electricity sales price, European utilities made billions in windfall profits. And as it became clear by the end of April 2006 that much more allowances had been allocated than were needed, prices collapsed from over €30 per ton of CO<sub>2</sub> to a few Cents. This essentially made the allowances worthless and undermined any substantial environmental steering effect the ETS might have had with its first trading phase.

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<sup>9</sup> The situation has changed slightly since 2009 when Friends of the Earth due to internal pressure from chapters in the Global South re-adopted a critical stance, opposing emissions trading (see for example Chan, 2010; Clifton, 2009)



Despite these problems with the implementation of the EU ETS, the hegemonic emissions trading bloc managed to make emissions trading a truly hegemonic project with transformative character on a global scale. Having such a significant player like the EU – who even was an initial opponent of the approach – introducing emissions trading as its primary tool to organize greenhouse gas mitigation had a strong signaling effect for the rest of the global community.

With its start, the EU ETS made up by far the biggest chunk of the global carbon market, currently representing 83% of the trade volume (World Bank, 2010: 1-2). Covering more than 10.000 installations across Europe, the EU ETS tremendously increased the demand for technical, legal and financial consulting services as well as project auditors and verifiers familiar with the carbon market. What grew rapidly was a "social infrastructure of specialized skills, professional careers, organizations and [...] the peculiar phenomenon of the carbon industry as a whole new service economy" (Voß, 2007: 339). From a Neo-Gramscian perspective the development of this service industry is the constitution of a new capital fraction. A new social force, that has emerged due to a changing production system. The International Emissions Trading Association, founded in 1999, is the central mouthpiece of this industry, with considerable influence on the international climate negotiations. The "carbon market professionals" (Voß, 2007: 340), the industry's new breed of experts familiar with monitoring standards, baselines and project methodologies represent a new type of organic intellectuals. They are not only experts in their field. They are also increasingly successful with universalizing the interest of this new capital fraction. EU policy makers followed their call for a globally integrated carbon market to provide the necessary liquidity, by linking the EU ETS to the Kyoto mechanisms and providing the means to link it to other emissions trading systems in the future.<sup>10</sup> The current demands to streamline the CDM monitoring and approval processes by using standardized baselines fall into the same category (see for example IETA, 2010).

Despite uncertainties about the future of the Kyoto Protocol and its flexible mechanisms the EU made it clear that the EU ETS was here to stay. It amended the EU ETS directive in April 2009, laying down the third trading phase (2013-2020) way beyond the end of the Kyoto commitment period (2008-2012) and extending the scope of the trading scheme to include aviation (see EU Council and EU Parliament, 2009). Even though international climate negotiations have not moved far since and it is not fully clear yet when a successor to the Kyoto Protocol will be agreed upon or what it will look like, the carbon market will be a central element in future climate policy making around the globe. After the implementation of the EU ETS, emissions trading systems have been introduced in a number of countries or governments are planning on doing so. Carbon markets will also play an important role in a future international agreement: there are discussions of upscaling the CDM to the sectoral level, or linking nationally appropriated mitigation actions (NAMAS) to the generation of carbon credits. This would enlarge the carbon market and further integrate developing countries. Looking at the results of COP 16 in Cancun shows, that there is still the possibility that Reducing Emissions from Deforestation and Degradation (REDD), will be integrated into the carbon market (Lang, 2010). Considering these developments it is fair to say that

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<sup>10</sup> The initial directive did not yet include the possibility to link the EU ETS to other trading systems. This changed with the "Linking-Directive" adopted on October 27th 2004 (EU Council and EU Parliament, 2004), making project-based certificates from JI and CDM projects usable within the EU ETS and providing the possibility to link it to other regional trading systems (for details see Lefevre, 2006).

emissions trading has become a hegemonic political project with a global reach. It has become *the* policy tool with regard to greenhouse gas mitigation measures.

## **Conclusion**

This article has shown that a Neo-Gramscian approach is helpful in analyzing why the EU implemented emissions trading. Not presuming that emissions trading is necessarily the best policy tool to organize greenhouse gas reduction, an assumption made by many existing studies, enables us to highlight a number of aspects that have been neglected in previous assessments of the issue.

This article has sketched out the main characteristics of the material and discursive setting – the framework for action – within which emissions trading became *the* policy to counter global warming: we are living in a world that is highly dependent on fossil fuels, where the carboniferous fraction of capital is tremendously powerful and where the neo-liberal market approach has become a widely, almost universally accepted concept to solve societal problems. Within this context a coalition evolved in the US pushing emissions trading as its political project: first predominately made up by parts of the American environmental movement, neo-liberal economics and bureaucrats, but subsequently drawing in more and more fractions of capital, this coalition became a hegemonic bloc. A bloc that first expanded into the international arena and by winning the EU Commission also extended into Europe.

By co-opting initially critical European based NGOs the bloc organized the necessary support to implement emissions trading within Europe. As this implementation process was pushed forward by the Commission, reacting towards foreign and international developments without gaining the active support of a broader European public this process has the character of a passive revolution. Securing support by co-opting the elites of the European environmental movement, makes it a case of transformismo.

Furthermore the paper has shown that emissions trading has become a hegemonic project with a global transformative character. Around the globe, carbon markets have become the dominant tool to address greenhouse gas mitigation. It seems unlikely that a future climate regime will not have trading mechanisms at its core.

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