This is the post print version of the article that was eventually published as

Lars H. Gulbrandsen and Anne Raaum Christensen

EU Legislation to Reduce Carbon Emissions from Cars: Intergovernmental or Supranational

Policy-Making?

Review of Policy Research, Vol 31, No 6, 2014, pp. 503-528.

DOI: 10.1111/ropr.12100

# **EU Legislation to Reduce Carbon Emissions from Cars: Intergovernmental or Supranational Policy-Making?**

## Lars H. Gulbrandsen and Anne Raaum Christensen

Abstract: This article examines the making and implementation of the 2009 EU regulation on cars and CO<sub>2</sub> emissions (Regulation (EC) 443/2009). As the first legally binding measure to target the CO<sub>2</sub> emissions of passenger cars, this regulation represents a milestone in EU efforts to reduce the climate impacts of road transport. The analysis draws on two central theoretical perspectives on EU policy-making: Liberal Intergovernmentalism and supranationalism. Both offer important insights, but their explanatory power varies with the policy-making phase in focus. The analysis shows that the Commission and the car industry were instrumental in shaping what eventually became an industry-friendly regulation applicable in all EU countries. However, far from being a case of closed negotiations between the industry and the Commission, Germany and other EU countries defending the interest of manufacturers of high-emissions vehicles made use of their powers during the decision-making phase and succeeded in watering down the Commission's proposal.

Keywords: car emissions; climate policy; EU policy-making; passenger cars; transport

#### 1. Introduction

Transport is the second biggest source of EU greenhouse gas (GHG) emissions after energy, representing around one-quarter of the EU's total carbon dioxide (CO<sub>2</sub>) emissions (EEA 2013: 4). Passenger cars alone account for 12% of total CO<sub>2</sub> emissions in the EU.<sup>1</sup> Transport is the only major sector in the EU where GHG emissions are still rising. While CO<sub>2</sub> emissions in other sectors decreased between 1990 and 2014, those from transport increased by 36% during the same period.<sup>2</sup> More than two thirds of transport-related GHG emissions are from road transport, but there are also significant emissions from the aviation and maritime sectors. Significant reductions in GHG emissions from transport are necessary if the EU is to achieve its long-term climate goals. The EU has established a range of policies aimed at lowering emissions from the transport sector. Aviation has been included in the EU's emissions trading system (EU ETS); a target and a policy have been adopted to reduce the GHG intensity of fuels (the revised EU Directive on Fuel Quality); and a comprehensive legal framework is in place to reduce emissions from passenger cars and vans (light-duty vehicles).

The EU regulation on passenger cars and CO<sub>2</sub> emissions (Regulation (EC) 443/2009) is the subject of analysis and discussion in this article.<sup>3</sup> This legislation targets the car industry – one of the most important and powerful industries in Europe. EU member-states are the world's largest manufacturer of motor vehicles, with the car industry directly employing more than 2.3 million people and supporting more than 12 million jobs across Europe (EurActiv, 6/10/08). This means that European carmakers represent a very strong pressure group both within the member-states and in Brussels.

The EU regulation to reduce CO<sub>2</sub> emissions from cars was the first legally binding measure of its kind in the European transport sector, but the history of the regulation now in place goes back about 20 years. After years of voluntary agreements with the car industry and industry lobbying against binding car-emissions cuts, agreement on the regulation represented a milestone in EU efforts to reduce the climate impacts of road transport. This makes it pertinent to examine why the EU decided to develop this legally binding measure. Specifically, we focus on three questions: Who were the key players in the policy-making process? How did they influence the stringency and ambitiousness of the policy proposal? How can we explain the outcome of the policy-making process? Understanding these questions is crucial for assessing goal attainment and future policy options in the area of car emissions and road transport. While a relatively ambitious policy is necessary to reach the EU's climate-policy goals, a certain degree of participation from and acceptance among target groups is also needed, to avoid implementation failure. Hence, we expect that the EU will have to combine a relatively ambitious policy with acceptance among carmakers in order to achieve its overarching policy objectives.

# 2. Analytical approach

## 2.1 The policy outcome to be explained

In 2007, the European Council, comprising the heads of state and governments in the EU member-states, established three targets for 2020: a 20% reduction in EU GHG emissions from 1990 levels, raising the share of EU energy consumption produced from renewable sources to 20%, and a 20% improvement in the EU's energy efficiency. These 20-20-20 targets were confirmed with the enactment of the EU climate and energy package in 2009. The climate and energy package comprises four pieces of complementary legislation aimed at helping the EU to achieve the 20-20-20 targets: reform of the EU Emissions Trading System (EU ETS), the Effort Sharing Decision with national targets for non-ETS emissions, the Renewable Energy Directive, and a directive creating a legal framework for carbon capture and storage (CCS). The regulation to reduce CO<sub>2</sub> emissions from cars was negotiated in parallel with but independently of the climate and energy package. However, because of the high share of CO<sub>2</sub> emissions from passenger cars in total EU emissions, this regulation is a key instrument for helping the EU to reach the goal of a 20% reduction in GHG emissions by 2020.

The policy outcome in focus in this article is Regulation (EC) 443/2009 on cars and CO<sub>2</sub> emissions (hereafter: the car regulation) adopted in 2009. This outcome is seen in the context of agreed goals: is it *ambitious* enough to help the EU reach its goal of a 20% reduction in GHG emissions by 2020, and the longer-term goal of 80–95% cut by 2050? The Effort Sharing Decision (ESD) establishes binding GHG emission targets for member-states for the period 2013–2020, for most sectors not included in the EU ETS. An important sector under the ESD is transport (except aviation and international maritime shipping). While each

member-state is responsible for achieving its ESD target, the EU has introduced several measures to help member-states reduce their non-ETS emissions, such as the car regulation. In this article we assess how ambitious this legislation has been, as the new EU-wide measures are intended to contribute significantly to reaching the ESD target. In particular, we examine how the ambitiousness of the policy has varied throughout the policy-making process as compared with, on the one hand, the 'baseline' stage (the situation before the establishment of the EU car regulation) and, on the other hand, the general EU goal of a 20% reduction in CO<sub>2</sub> emissions by 2020.

# 2.2 Explanatory perspectives and propositions

Recent studies of EU climate policies have focused on such issues as the making and implementation of the EU ETS (e.g. Skjærseth and Wettestad 2008; Ellerman et al. 2010), the various elements of the climate and energy package (e.g. Oberthür and Pallemaerts 2010; Kulovesi et al. 2011), and EU climate diplomacy and international leadership (e.g. Oberthür and Pallemaerts 2010; Oberthür and Dupont 2011; Skovgaard 2013). These and many other studies have examined the internal and external climate policies of the EU.

Other studies have examined environmental regulations in the European and global car industry (e.g. Mikler 2005, 2009; Paterson 2007; Levy and Rothenberg 2002; ten Brink 2010). Paterson (2007) focuses primarily on the US and global car industries, not on EU policies. Levy and Rothenberg (2002) examine technological and political responses to climate change in the global car industry and compare such responses in Europe and the USA, but their examination of EU policies is now rather dated. Employing a comparative institutionalist approach informed by the Varieties of Capitalism literature, Mikler (2009) has examined and compared environmental regulation of the car industry in the EU, the USA and Japan. Ten Brink (2010) has provided a useful empirical account of the preparation and agreement of the EU car regulation. Our study extends these analyses and contributes to this literature in at least three important ways. First, unlike earlier studies, we analyse the car regulation by taking explanatory perspectives informed by the literature on EU integration and policy-making. This approach enables us to provide theoretically informed insights about the EU policy-making process in the case of the car regulation and more generally. Second, we provide an empirically rich analysis of how the car regulation changed throughout the policy-making process, from the initiation of policies to decision-making and implementation. This analysis enables us to offer a more nuanced account of the influence of key actors and institutions in the various phases of EU policy-making. Third, given the adoption of a legally binding 2020 target and means of implementation for the car regulation by the Parliament in February and the Council in March 2014 (Regulation 2014/333), we have been able to follow the entire policy-making process to its conclusion.

We draw on two explanatory perspectives that build on central theories of EU integration and policy-making. These two perspectives are used as heuristic lenses for understanding the fundamental forces and dynamics of policy-making in the EU. The first perspective builds on literature generally referred to as 'Liberal Intergovernmentalism', which essentially regards EU policy outcomes as a result of interstate bargaining among states pursuing their own national interests (see Moravcsik 1998; Moravcsik and Schimmelfennig 2009). According to Liberal Intergovernmentalism, we must focus on the interests, objectives and negotiation behaviour of the EU member-states to understand policy processes and outcomes. Liberal Intergovernmentalism is a complex theory with many facets; here we focus on its core claim that EU policy outcomes are determined primarily by national preferences in the member-

states and by interstate bargaining among them (Moravcsik 1998). National preferences are complex but reflect the politics, institutions and economics of each member-state. Scholars in this tradition either downplay the independent role of supranational institutions such as the European Commission and the Parliament, or regard such institutions primarily as agents for national governments.

From the intergovernmentalist perspective, we would expect powerful member-states to be the key actors in the policy-making process. Specific attention will be paid to Germany, France and Italy, which partly have differing interests related to car emissions: While Germany is a producer of several powerful and/or big, heavy cars models with high CO<sub>2</sub> emission levels, France and Italy generally produce smaller car models with lower emissions. Germany is also a producer of smaller car models with lower emissions, such as VW's Polo and Golf models – the brand's volume sellers in the EU, but average emissions from newly registered German cars is the highest in the EU (ICCT 2013). The corresponding figure for newly registered French cars is the lowest in the EU (ICCT 2013).<sup>4</sup> The problem, from a climate perspective, is the manufacturers of vehicles with high emissions that consumers demand and on which they are able to make their biggest profits, not the manufacturing of them per se. In other worlds, the problem is the weight and/or power emissions of vehicles sold.<sup>5</sup> The point here is that, while EU member states have differing interests, the intergovernmentalist perspective would lead us to expect that the Commission was acting on a request from member-states in the policy initiation phase, and that powerful member-states determined the content of the regulation. We posit that changes in the car regulation during the decision-making phase can be explained by the positions and influence of key memberstates.

The second explanatory perspective used here draws on literatures on 'supranationalism' (e.g. Stone Sweet and Sandholz 1997) and the increasing 'multilevel governance' character of policy-making in the EU (e.g. Peterson and Bomberg 1999; Bache and Flinders 2004; Hooghe and Marks 2003; Peterson 2004). These studies generally highlight the increasing powers of supranational institutions such as the European Commission and Parliament and non-state actors such as firms and industry associations. Scholars in this tradition argue that the increasing powers of the Commission and the Parliament mean that they cannot be dismissed as merely agents for national governments. According to this explanatory perspective (hereafter referred to as the supranational perspective), the Commission can be expected to play a key role in the policy-making process because it has exclusive authority to initiate and draft new EU legislation and to oversee the implementation of legislation. Although the Parliament lacks the Commission's authority to initiate new EU legislation, it has substantial authority in the decision-making phase, especially since the introduction of the co-decision procedure in the 1993 Maastricht Treaty. This procedure gives the Parliament status as colegislator, on an equal footing with the European Council, with power to adopt instruments jointly with the Council.

From the supranational perspective, we would expect that the broad contours of the car regulation were determined already in the initiation phase, when the Commission drafted policies in close consultation with various stakeholders. Given the issue-area of car emissions, it will be especially pertinent to focus on the relative influence of the car manufacturers in the making of the EU regulation (Mikler 2005, 2009; ten Brink 2010). We would expect that the car industry had wide access to and heavily influenced all phases of the policy-making process. The car industry would clearly be an important player according to Liberal Intergovernmentalism as well, but only in shaping the positions and interests of member-

states. In other words, adopting intergovernmentalist lenses, we would not expect the car industry to have an independent role in the EU policy-making process in Brussels. By contrast, adopting supranational lenses, we posit that the content of the car regulation was determined primarily by the Commission and the car industry in the initiation phase, and affirmed or modified by the Parliament in the decision-making phase.

To conclude, we apply two explanatory perspectives informed by the literature on EU integration and policy-making to develop competing expectations about key players and institutions in the three phases of the policy-making process analysed here: policy initiation, decision-making and implementation. The intergovernmentalist perspective would lead us to expect that: (1) the Commission acted on a request from member-states in the policy initiation phase; (2) the car regulation was changed by powerful member-states during the decision-making phase on points where the Commission's proposal did not reflect their key national interests; (3) powerful member-states intervened during the implementation process on points where the elaboration of policies and means of implementation did not match their national interest.

By contrast, the supranational perspective would lead us to expect that: (1) the content of the car regulation was determined primarily by the Commission in close collaboration with the car industry during the policy initiation phase; (2) the Commission proposal was accepted or only slightly modified by member states in the decision-making phase; (3) the Commission determined the elaboration of policies and means of implementation in close collaboration with the car industry.

It is evident that the intergovernmentalist and the supranational perspectives offer competing expectations about policy-making in the EU. However, each perspective may shed light on different aspects and phases of the policy-making process, and may as such be regarded as complementary. Hence, we use the analytical lenses of Liberal Intergovernmentalism and supranationalism as heuristic tools for understanding and disentangling the fundamental driving forces in EU policy-making.

## 2.3 Methodology

Our methodology combines in-depth interviews with policy-makers and key stakeholders and documentary analysis. This article is based on data obtained from primary and secondary sources, including two rounds of interviews with EU policy officers and stakeholders in Brussels in December 2011 and April 2012. In total, 12 semi-structured interviews were conducted with representatives from the Commission, the Parliament, Greenpeace, Transport and Environment, Friends of the Earth and the European Automobile Manufacturers Association (see Appendix). EU policy officers were identified by examining policy documents and staff directories and by snowball sampling. Representatives from the car industry and environmental NGOs were identified by examining their websites and press releases about EU car emissions policy.

Respondents were presented with a set of questions (emailed to them before the interviews) and were encouraged to elaborate on topics of particular interest. We prepared separate interview guides for each of the respondents, but all respondents were asked a similar set of questions and were invited to reflect on the role played by various actors and institutions in the policy-making process. For example, all respondents were asked about the role of the Commission, the Council and the car industry in the initiation of policies and the influence of

the European Parliament, the Council and specific member states in the decision-making phase. Respondents were also asked to comment on specific documents and events, such as the Commission's revised  $CO_2$  and cars strategy, the legislative proposal from the Commission, the negotiations in the Parliament and the Council and the final outcome. Time was allowed for respondents to express any views that were not covered by the questions asked.<sup>6</sup>

Because several EU policy officers requested anonymity due to the sensitive nature of the issues being discussed, we decided to grant all respondents full anonymity. However, we have identified respondents by their institutional affiliation (such as DG Climate Action, DG Enterprise, the European Parliament, environmental NGOs and the car industry) because such affiliation is important for understanding their positions on the car regulation.

The documents examined include all official EU policy documents on the car regulation; press releases and statements from the Commission, the Parliament, NGOs and car industry associations; and Community strategies, reports and official statistics. In addition, a systematic search for news about car emissions was conducted from the news services ENDS (Environmental Data Services) Europe and EurActive. Secondary literature about policy-making in the EU and the car emission regulation has also informed the analysis.

Guided by our explanatory perspectives, the analysis of interview data and documents allowed detailed within-case process tracing. This procedure made it possible to identify causal chains of events and path dependencies that resulted in the EU car emission regulation (cf. George and Bennett 2004). In particular, this procedure enabled us to test if the chains of events and path dependencies we uncovered were consistent with the expectations based on either Liberal Intergovernmentalism or the supranational perspective.

# 3. Initiation of legislation on cars and CO<sub>2</sub> emissions

## 3.1 Voluntary agreements with the car industry

Since the mid-1990s, reducing CO<sub>2</sub> emissions from cars has been targeted by the EU authorities as a main solution to the problem of climate change. In 1995, CO<sub>2</sub> from passenger cars accounted for about half of CO<sub>2</sub> emissions from transport, and about 12% of total CO<sub>2</sub> emissions in the EU (Commission 1995: 2). Average CO<sub>2</sub> emissions per kilometre from cars were 186g in 1995 (ten Brink 2010: 181–182). These high figures led the Commission to conclude: 'Against this background [the climate change challenge], developments in CO<sub>2</sub> from transport are a special cause for concern' (Commission 1995: 2). After signing of the Kyoto Protocol in 1997, it became clear that the emissions path of the transport sector threatened the EU's ability to meet its commitments under the Protocol.

The Council called for a target of 120g CO<sub>2</sub>/km as early as 1992,<sup>7</sup> but in the early 1990s, the EU authorities could not agree on various proposals for regulating CO<sub>2</sub> emissions from passenger cars. In December 1994, the Environment Council more specifically requested the Commission to look into the possibility of substantially lowering the fuel consumption of newly registered cars by 2005 (Commission 1995: 4). In 1995, the European Parliament formally supported the objective that new passenger cars registered in the EU should emit a mean of 120g CO<sub>2</sub>/km<sup>8</sup> by 2005 (ten Brink 2010: 181).

Following these early signals from the member-states and the Parliament, the Commission adopted the *Community Strategy to reduce CO<sub>2</sub> emissions from cars* in 1995. This CO<sub>2</sub> emission reduction plan was based on a 'three-pillar strategy': a voluntary agreement, a fiscal framework and a consumer information scheme (COM (95) 689 final). The goal of 120g/km by 2005 was noted in this strategy, representing a 35% reduction from 1995 levels. The Environment Council endorsed this target in 1996 – but extended the time frame by specifying that the objective of the strategy should be to achieve an average CO<sub>2</sub> emission figure of 120g/km by 2005, or *by 2010 at the latest.* 9

A voluntary agreement with the car industry was highlighted as the central feature of the Commission's strategy. The use of voluntary agreements (VAs) in the environment field was quite widespread in the EU in the 1990s. Since the development of the EU's Fifth Environmental Action Programme, VAs were increasingly used as a means for effective environmental action, calculated to exceed more than 300 by 1997 (Volpi and Singer 2002: 144). Such agreements set targets, but they are not legally binding; it is left up to the industry how to achieve them.

The Commission entered into technical deliberations with ACEA (the European Automobile Manufacturers' Association) in early 1996. In July 1998, after more than two years of negotiation, a voluntary agreement was signed between ACEA and the European Commission (Commission 1998). This agreement committed automobile manufacturers to achieving a target of 140 g/km by 2008 (compared with the 1995 new car average of 186 g/km). This would equal a 25% reduction for all new registered passenger cars from 1995 to 2008. ACEA also committed to bringing to the market individual car models with CO<sub>2</sub> emissions of 120 g/km or less by the year 2000. In October 1998, the EU Council of Ministers formally approved the commitment. Speaking on behalf of the Austrian EU presidency, Environment Minister Martin Bartenstein called the deal the 'most wide-ranging and most important environmental voluntary agreement with industry the EU had ever concluded' (ENDS 6/10/98).

The voluntary target of 140g/km fell short of the EU's target of 120g/km by 2005. To help bridge the gap, the Commission proposed legislation under the two other pillars of the Community Strategy as well: CO<sub>2</sub> labelling and (member-state) fiscal measures. Both these instruments were aimed at the demand side and were intended to provide additional reductions below the 140g CO<sub>2</sub>/km target of the voluntary agreements (ten Brink 2010: 183). In fact, the 'three-pillar-strategy' was in many ways a concession to the car industry; when the voluntary agreements were accompanied by the two other pillars the strategy became more acceptable to the industry.

The Monitoring Mechanism, adopted in 2000, was an important part of the implementation of the voluntary agreements. This mechanism established a system of annual data collection (on specific CO<sub>2</sub> emissions, the number of vehicles registered, and so on). The mechanism was initially based on information provided by the automobile association, but gradually member-states provided more impartial information to the data (ten Brink 2010: 184). According to Article 9 of Decision 1753/2000/EC5, the Commission is to report annually on the effectiveness of the strategy.

The adoption of the voluntary commitments and the Monitoring Mechanism was followed by a phase of reporting and considerable focus on results. The voluntary agreements proved to have various fundamental shortcomings, in level of ambition as well as enforcement. Weak targets and inadequate enforcement made it hard to reach the EU's goal of 120g/km by 2010, and the agreements were surrounded by a lack of public participation and transparency (Volpi and Singer 2002).

Although some progress was made during the first years of the voluntary agreements, the average emissions from new cars sold in the EU-15 fell only from 186g CO<sub>2</sub>/km (1995) to 163g CO<sub>2</sub>/km (2004), and the Commission realized that the voluntary approach had brought limited progress at best (Commission 2007b). Progress also varied considerably across manufacturers (ten Brink 2010: 187). It became apparent that voluntary agreements were not enough to achieve the reduction target, so binding legislation was now deemed necessary.

## 3.2 Time for legislation

The early 2000s saw growing support for legislation instead of voluntary agreements with the car industry. The possibility of replacing the voluntary agreement with binding regulations was discussed repeatedly, at the national and EU levels. Governments had increasingly come to believe that the EU would have to legislate in order to limit CO<sub>2</sub> from cars. In December 2003, the German Minister of the Environment, Jürgen Trittin, called for EU legislation to force car manufacturers to reduce to 120g CO<sub>2</sub>/km by 2012 (ENDS, 22/12/03). In 2003, Trittin was alone among European ministers in calling for legislative action – but this changed in 2004 when, after a meeting of environment ministers, several governments said that the Commission should be prepared to legislate (ENDS, 15/10/04).

In January 2005, the European Parliament backed these proposals through a resolution calling on the European Commission 'urgently to put forward proposals for binding CO<sub>2</sub> limits for new vehicles' 10. The June 2005 European Council unanimously reconfirmed that 'in line with the EU strategy on CO<sub>2</sub> emissions from light-duty vehicles, the average new car fleet should achieve CO<sub>2</sub> emissions of 140g CO<sub>2</sub>/km (2008/9) and 120g CO<sub>2</sub>/km (2012)' (Commission 2007a: 2).

Parallel to these discussions, in January 2005, the Commission announced that a new 'high-level' group, called CARS21,<sup>11</sup> had been set up to 'boost the competitiveness' of the European car industry. The Group was established under DG Enterprise, to review the role of environmental policy and CO<sub>2</sub> emissions as part of developing an overarching integrated policy framework for the automotive sector (Commission 2007c: 5). The environmental NGO Transport and Environment (T&E) immediately criticized the CARS21 Group for its 'unbalanced' membership: 'The group has seven industry representatives but no representatives from either the Parliament's environment committee (...) or NGOs with environmental expertise' (T&E 2005).

The views of the CARS21 Group became central in the Commission's work on drafting legislation on cars and CO<sub>2</sub>. The central role of the CARS21 Group has been criticized as inappropriate: it led to a closed and industry-led process, and finding constructive solutions for emissions reductions was difficult, with the industry presence so prominent (interviews with Com1, 2011 and Com4, 2012). Conversely, the car industry itself has argued that this was a good discussion platform, with the most important stakeholders and policy-makers represented – making it easier to find consensus and feasible solutions (interview with ACEA1, 2011).

In early 2006, the Commission – this time DG Environment – launched a public consultation on how best to achieve the EU's more ambitious CO<sub>2</sub> reduction target of 120g/km by 2012. A first round of public consultations was carried out by the Commission in 2005–2006 via an internet consultation (Commission 2007c: 5), complemented by a working group established under the European Climate Change Programme (ECCP).<sup>12</sup> It became important for DG Environment to gain control over the process after the establishment of the CARS21 Group, and DG Environment decided to use the ECCP to conduct a proper Impact Assessment on the issue. It was decided that CARS21 could provide *input* to this Impact Assessment, as DG Environment wanted to limit the influence of the powerful group on the actual policy process (interview with Com1, 2011). DG Environment viewed the ECCP as a more balanced stakeholder forum, and 'more in line with the discussion DG Environment wanted' (interview with Com1, 2011).

The ECCP review concluded that although the voluntary approach had delivered solid reductions in CO<sub>2</sub> emissions, it had not been as successful as hoped. Given this slower-than-expected progress to date, the 120g/km target could not be met by 2012 without additional measures (Commission 2007b: 2).

In November 2006, ACEA responded to the ECCP process and the alleged 'failure' of the car industry: 'the European car manufacturers are fully committed to reducing CO<sub>2</sub> emissions of passenger cars [...]' (ACEA 2006). The car industry asserted that the EU should introduce harmonized carbon dioxide-based taxation and other demand-side measures to cut CO<sub>2</sub> from cars, instead of demanding more technology changes from car manufacturers. In other words, the industry fought hard to keep the voluntary agreements, and explained the slow progress by, *inter alia*, pointing to consumers and their unwillingness to purchase CO<sub>2</sub>-efficient models. ACEA urged the EU to take an 'integrated approach' to further CO<sub>2</sub> reductions – as the CARS21 Group also recommended. We return to a discussion of the concept 'integrated approach' below.

## 3.3 A new strategy on cars and CO<sub>2</sub> emissions

The early stakeholder consultations and preparations culminated in February 2007, when the Commission presented a *revised CO*<sub>2</sub> and cars strategy, with a proposal for binding legislation as its cornerstone (Commission 2007a). This strategy consisted of a set of measures aimed at influencing both the supply and the demand side of the EU market for cars and vans. The strategy presented in February had been postponed twice, as a result of heavy lobbying and internal divisions in the Commission. Let us take a closer look at the internal discussions and conflict in the Commission, prior to publication of the revised strategy.

When it was decided that some sort of binding legislation was necessary to reduce CO<sub>2</sub> emissions from cars, a central question to be settled was this: How should the emissions-reduction burden be shared? Environment and Industry Commissioners were discussing whether the main responsibility for reducing CO<sub>2</sub> emissions should lie with automobile manufacturers (as under the voluntary agreements), or be shared among several stakeholders. While Environment Commissioner Stavros Dimas wanted a 120g CO<sub>2</sub>/km binding limit on average emissions from new cars from 2012, Enterprise and Industry Commissioner Günter Verhaugen from Germany declared that would unfairly punish manufacturers of large and high-performance vehicles. It would be disadvantageous to the German car industry in particular, and Verhaugen worried that new, binding legislation targeting only the manufacturers would lead the car giants to move out of Europe, costing the continent

thousands of jobs. Verhaugen therefore favoured what became known as the 'integrated approach', which would involve tyre manufacturers, fuel suppliers, repairers, drivers and public authorities as well as vehicle manufacturers (interview with Com2, 2011). The integrated approach had gained traction through the CARS 21 Group which, as mentioned above, was set up in 2005 by Verhaugen. It is obvious that the Commission took the work of the CARS21 Group into account when creating the CO<sub>2</sub> and cars strategy, and the Commission presented a Communication on CARS21 along with the revised CO<sub>2</sub> and cars strategy (Commission 2007c); the two were in fact published on the same day.

The internal dispute in the Commission over the actual content of the strategy led to several delays, but the international community put extra pressure to bear on the Commission, as this (January 2007) was the time when the dramatic 2007 report from the Intergovernmental Panel on Climate Change (IPCC) report was published. Commission President Barroso finally intervened to settle the internal dispute between the Commissioners. According to one of our interviewees, Barosso said that Dimas and Verheugen should work together on this piece of legislation; he did not wish to take sides, and so he did not give the file to any one of the Commissioners (interview with Com1, 2011). On 7 February 2007, the Commission was ready to present the strategy.

## 3.4 The integrated approach: main content and reactions

The strategy envisaged binding EU legislation (not voluntary agreements) to ensure that average emissions from new cars sold in the EU27 would reach the 120g CO<sub>2</sub>/km target by 2012. It was stated that the Commission would propose a legislative framework by the end of 2007 or by the latest by mid-2008. Improvements in motor technology would have to reduce average emissions to no more than 130g CO<sub>2</sub>/km, while the remaining 10g would be left to softer 'complementary measures' (in order to reach the 120g CO<sub>2</sub>/km target) (Commission 2007a). This meant that car producers would have to realize new vehicle-technology improvements, but that these measures would be complemented by further use of biofuels, <sup>13</sup> fuel-efficient tyres and air-conditioning, traffic and road-safety management, and changes in driver behaviour. The strategy did not contain any longer-term target.

In other words, the final strategy of the Commission marked a partial defeat for Environment Commissioner Stavros Dimas – as the integrated approach weakened the earlier target of 120g CO<sub>2</sub>/km. It is important to understand that the EU at this point was caught in a zero-sum game: the 120g CO<sub>2</sub>/km target was taken as a given (nothing else could be introduced at this point) – so if someone else is going to do more, the car industry will do less. The decision to go for an integrated approach can be interpreted as a necessary compromise with the car industry (and Germany) in order to achieve a legislative outcome, but it can also be seen as a major lobbying victory for the car industry (ten Brink 2010: 194).

In the discussions during 2007 related to burden-sharing *among automobile manufacturers*, the industry called for a system with differentiated caps according to vehicle weight, enabling heavier cars — which, according to ACEA, respond to consumer demands — to exceed the 130g/km target. However, there was a split in the car lobby at this time. While German producers like BMW, Mercedes-Benz and Porsche make heavier or more powerful vehicles and had rising emissions, France's Peugeot and Renault, and Fiat of Italy, make lighter cars whose emissions were falling. 'Porsche, the German luxury car maker, (...) called it a 'war' in the European car industry waged by French and Italian makers of smaller cars against Germany' (*The Guardian*, 8/2/2007).

From the opposite side of the table, environmental NGOs condemned the Commission's strategy, saying that it weakened an eleven-year-old climate target. Although the NGOs acknowledged that the strategy did, for the first time, 'say that carmakers will now face binding legislation to improve fuel efficiency', the integrated approach and the 130g CO<sub>2</sub>/km led to great disappointment (T&E 2007). The ENGOs did not want the legislation linked to weight, as 'linking emission standards to weight would greatly reduce the main incentive to manufacture and sell lighter cars, because these would be subject to proportionately tougher standards' (ENDS, 29/8/07).

The Council gave overwhelmingly support to the Commission's strategy, underlining the need for an integrated approach (ENDS, 1/7/07). The strategy and its targets did, however, arouse fierce opposition in some of the member-states, and especially in Germany – with warnings that the new legislation could wipe out premium automobile manufacturers such as Mercedes, Audi, Porsche and BMW.

In the European Parliament, UK Liberal MEP Chris Davies rejected the Commission's strategy as too costly, maintaining that it did not give manufacturers *enough time* to make the necessary design changes. He proposed that the industry should have three extra years to meet the EU target, but that the full and sole responsibility for meeting the 120g/km mark should rest with the industry (as opposed to the integrated approach). Hence, the industry should be asked to do more, but later. In a resolution adopted in September 2007 the EP's Environment Committee said that automobile manufacturers would have to reach the EU target of an average of 120 grams per kilometre by 2012 through improvements in vehicle technology alone, thus rejecting the 'integrated approach' – as well as Davies' phase-in period (ENDS, 13/09/2007). Rapporteur Chris Davies welcomed the decision of the Committee, even though it had rejected by a significant majority his plan to allow manufacturers until 2015 to meet the tougher target (ENDS, 13/09/07).

The Environment Committee failed nonetheless to persuade the full assembly, and when the resolution was up for vote in the Parliament on 10 October 2007, the Commission's proposal was weakened. The EP recommended that the target should be 125g/km, but that manufacturers should have until 2015 to meet it. This recommendation was significantly weaker than the 120g/km by 2012 target proposed by the EP's Environment Committee a month previously. The Parliament also recommended that reduction targets be defined through a footprint-based (track width multiplied by wheelbase) limit value – and not by weight (as discussed above). T&E was deeply disappointed with the decision, saying that this target was 20% weaker than the Commission proposal, and 40% weaker than that of the Environment Committee (ENDS, 24/10/07). Also Green MEPs were highly displeased with the assembly's decision.

The task of preparing a proposal was handed over to the Commission's General Secretariat (headed by former Environment Directorate head Catherine Day) in order to prevent bickering between the Commission's industry and environment departments (ENDS, 18/12/07). Several issues were hard to decide on – like the level of penalties, what an emissions trading scheme for car emissions could look like, and how to differentiate among classes of cars (ENDS, 18/12/07).

## 3.5 Summing up

A supranational perspective that focuses on the role of the Commission and the car industry seems particularly relevant for understanding the policy-making dynamics of the initiation phase. We have observed that the Commission collaborated closely with the European car industry association ACEA in the initiation and drafting of new EU legislation on car emissions. However, whereas the Commission is often treated as a unitary actor in studies of policy-making in the EU, our study clearly shows internal divisions and conflict between DG Enterprise and DG Environment in the policy-making process. DG Environment questioned the role of the CARS21 Group, and the influence this industry group had in the process of drafting the car emissions proposal. CARS21 was an industry-dominated group where the industry, according to some interviewees, was 'invited to write legislation'. The industry gained an entry to and insights into a process that, according to the interviewees, ought to have been much more balanced in terms of stakeholder participation.

The heavy representation of the car industry in the preparations for a legislative proposal explains why DG Environment decided to use the European Climate Change Programme (ECCP) to conduct assessments of various policy tools. Unlike the CARS21 Group, all stakeholders had the possibility of being heard in the ECCP process, but DG Environment never managed to get the upper hand in the process. Specifically, it did not succeed in reducing the strong influence of the CARS21 Group, or the watering-down of the 120g CO<sub>2</sub>/km target by the carmakers and member-states where the manufacturers concerned are based. DG Environment opposed the linking of weight to emission standards in the proposal, but CARS21 and DG Enterprise insisted on making this linkage. Although heavier cars would still have to improve more than lighter cars, the emission limits for heavier cars were quite lax in the end. The CARS 21 group and DG Enterprise also got their way with the integrated approach, which reduced the pressure on car manufacturers to make lighter cars and/or improve engine technology to reduce emissions. However, we also observed a split in the car industry during discussions of burden-sharing, owing to the differing interests of manufacturers of heavier cars with rising emissions and manufacturers of lighter cars with falling emissions.

We can conclude that DG Enterprise and the car industry shaped the final legislative proposal as well as the policy process leading up to it. Environmental NGOs and other stakeholders were being heard, but member-states concerned about the competitiveness of their industries proved more influential. Still, the final proposals for new EU legislation on car emissions cannot be seen as a result of the influence of powerful member-states and interstate bargaining, as proposed by the intergovernmentalist perspective. This phase of the policy-making process was more compatible with the supranational perspective. The idea of a policy network comprising DG Enterprise, the car industry represented by ACEA, and national car industry associations, accurately captures how the legislation on car emissions was drafted.

# 4. Decision-making

## 4.1 Proposal for legislation on cars and CO<sub>2</sub> emissions

The Commission finally proposed the draft regulation on 19 December 2007 (Commission 2007c). Like the strategy launched in February, it was based on an 'integrated approach' where the target of 120 g/km was to be reached through improvements in motor technology accounting for average emissions reductions up to 130g CO<sub>2</sub>/km (by 2012); and

complementary measures contributing to the final cut of up to  $10g\ CO_2/km$  (thus, the Commission was not asking the automobile manufacturers to bear full responsibility for the reduction). The setting of a binding target of 130g/km marked the end of the voluntary approach, although it weakened the previous 120g/km target.

The average 130g/km target was finally proposed to be implemented according to a utility function based on vehicle *weight* (mass). A limit curve of permitted emissions of CO<sub>2</sub> for new vehicles was defined according to the mass of the vehicle ('sloped line target'). The curve was set in such a way that heavier cars would have to improve more than lighter cars, but in practice the limits for heavier vehicles were quite lax – for instance, cars weighing more than two tonnes, like the Porsche Cayenne or the Land Rover, would still be allowed to emit more (above the limit value curve) – as long as they were balanced by cars which were below the curve. This was criticized by ENGOs, but according to the Commission, that calculation method ensured that manufacturers of larger cars would still have to make proportionally greater cuts than producers of smaller cars.

Furthermore, the Commission proposed that penalties should be payable for each g/km of CO<sub>2</sub> emitted by the manufacturer's average vehicle above its fleet target, multiplied by the number of vehicles sold. Various flexibility mechanisms were introduced: for instance, manufacturers would have the opportunity to form a 'pool' with other automobile manufacturers to allow them to jointly meet their combined target. The proposal covered all manufacturers selling new cars in Europe.

Both automobile manufacturers and environmentalists immediately reacted by criticizing the plans, and a period of intense lobbying from all sides ensued. An ACEA representative branded the system proposed as 'punitive, repressive and unrealistic' (ENDS, 19/12/07). T&E, on the other hand, raised concerns over the level of the penalties, as well as weight as a parameter for setting CO<sub>2</sub> standards. The ENGO said the proposal favoured heavy vehicles, and reduced the incentive to make smaller cars – the best CO<sub>2</sub> reduction measure of all (ENDS, 19/12/07).

## 4.2 The proposal goes to co-decision

After the Commission had finally proposed the draft regulation on 19 December 2007, the legislation was debated by the European Parliament and the member-states, as the proposal was subject to the co-decision procedure by the Council and the EP. This opened up for a full-scale political battle between opponents and supporters of the new measure.

The proposal was widely discussed during both the Slovenian and French EU presidencies in the spring and autumn of 2008, respectively. Within the Council, Germany and France dominated the discussions. Germany led the political opposition to the proposals; at an early point the German Chancellor Angela Merkel stated: 'We believe this path is not economically favourable [...] therefore we think that industry policy is being made here which burdens Germany and German carmakers' (*The Guardian*, 20/12/2007). The UK and the Netherlands, by contrast, argued against watering down the proposal (ten Brink 2010: 198).

Several member-states argued for a substantial 'phasing-in' of compliance, and attacked the 2012 target date. Prior to a meeting of environment ministers in June 2008, a Slovenian presidency Progress Report revealed that some governments wanted to move the proposed deadline for carmakers to reduce CO<sub>2</sub> emissions to 130g/km, from 2012 to 2015. Germany

signalled that its car manufacturers would not be able to fully meet their share of the proposed target by 2012, and proposed that the binding limit should be phased in gradually (ENDS, 6/6/08).

In a meeting in April 2011 (during the Slovenian Presidency), several things became clear: 'The German official said France now wanted to take the matter out of the hands of the environment ministers and resolve it between heads of government. France takes over the EU presidency for six months in July and wants a deal on its watch' (Reuters, 11/4/2008). A major sticking point between Germany and France was whether a car's weight or the size of its carbon footprint should determine how the curbs were to apply. Since their interests were so divergent, it was widely assumed that any deal that could be agreed by these two countries would form the basis for an EU-wide agreement.

In a joint statement in June 2008, Merkel and Sarkozy gave their backing to the 120g/km by 2012 target, saying that the targets should be based on vehicle weight (in line with the Commission's proposal). This meant that heavier, more-polluting German cars could emit more – as long as the manufacturers balanced this production with smaller, less-polluting models. Both France and Germany called for a 'substantial' phasing-in of the target, the inclusion of eco-innovations, as well as greater flexibility on penalties. No specific proposals for a timetable for a phase-in were included in this June declaration (ENDS, 10/6/08).

Achieving an agreement on cars and CO<sub>2</sub> was a priority for the French Presidency, as it wanted to bolster the EU's leadership role in addressing climate change (ten Brink 2010: 197; interview with Com1). This can to some extent explain why France was ready to yield to German demands (like the weight parameter) – the Presidency wanted to 'close the deal' before the end of 2008. After this, a new and less climate-progressive member-state would take over the Presidency (the Czech Republic), and it was important to agree on ambitious climate change policies before the 2009 elections to the European Parliament (interviews with EP1 and ENGO1, 2011).

Reactions to the German–Franco car deal were varied. The German car industry seemed pleased, but ENGOs raged: 'Germany's BDI industry group said Chancellor Angela Merkel had strongly defended German industrial interests in her talks with French President Nicolas Sarkozy [...] But Germany's opposition Greens party and pressure group Greenpeace sharply criticized the proposal, accusing Merkel of putting carmakers' interests before environmental concerns' (Reuters, 10/6/08a). Carmakers welcomed the transition period until 2015, as well as the inclusion of ecological innovations. Looking back on the decision-making phase, one NGO representative said that the German–Franco deal was the real turning point; this agreement 'ruined the chances of an ambitious agreement' (interview with ENGO1, 2011).

The European Parliament also watered down the Commission's proposal, although there was a major divergence of opinion within the Parliament at this time (interview with EP2, 2012). In early September 2008, the Industry and Energy Committee adopted a resolution saying that carmakers should have three years' breathing space to implement  $CO_2$  reduction: they would only be required to ensure that 60% of their fleet met the target by 2012, 70% in 2013, 80% by 2014 and 100% by 2015 (EurActiv 02/09/08). It also proposed a penalty of  $\epsilon$ 40 per excess gram of  $\epsilon$ 40 per e

Later that same month (September 2008), the EP's Environment Committee said that the Commission's proposal was too soft on car manufacturers, who should be forced to limit average CO<sub>2</sub> emissions from new cars in the EU to 130g/km by 2012, as part of an overall 120g/km target. One major change to the Commission's proposal was the inclusion of a longer-term emission limit of 95g/km by 2020.

In the final Environment Committee vote on cars and CO<sub>2</sub> emissions, all party groups were torn apart along the lines of national interests, with MEPs from both the Socialist and Centre–Right groups breaking ranks to side with Liberal and Greens to defeat the compromise deal. According to one interviewee, the turning point came when the Green group called for a roll-call vote, which is basically a vote where it is recorded who voted what. Normally, only the overall result is recorded in EP Committees, but the Greens insisted that each individual's vote should be publicly visible. Suddenly it would be clear which members supported 'ambitious' climate-friendly policies, and which did not (interview with EP1, 2011). And so, the final result became that the Environment Committee voted against the EP's Industry and Energy Committee, and (basically) in favour of the Commission's original proposal, adding a 2020 target of 95g/km.

In October, the French Presidency of the EU tabled amendments in the Council that closely mirrored the June deal between France and Germany. The proposal would delay full introduction of the legislation until 2015, reduce the fines to car manufacturers that only narrowly miss their targets, and postpone until 2012 the adoption of a binding emission limit for 2020 (ENDS, 1/10/08). However, France seemed to be open to the long-term goal of 95g/km by 2020 that the EP Environment Committee and many member-state governments had been pushing for (EurActiv, 01/10/08). ENGOs responded by saying that France was clearly putting forward what was essentially a German industry position on this legislation (EurActiv, 01/10/08).

## 4.3 Coming to an agreement on cars and CO<sub>2</sub> emissions

On 4 November 2008, negotiations began between the Parliament and the Council, with the Commission acting as mediator. France, Germany, Italy and the UK – Europe's largest carmanufacturing countries – had worked to water down the targets and give the industry more time and flexibility. The French Presidency was given a mandate to negotiate on behalf of the member-states. The member-states approached the negotiations on basis of the French proposal to limit CO<sub>2</sub> emissions to 130g/km for 65% of new cars in 2012, gradually rising to 100% by 2015, to a large extent championing the viewpoint of European carmakers. In late November, negotiations between the Council and the EP ended without an agreement, apparently due to internal disagreements within the EP, and to EP/Council disagreement on wording of the long-term 95g/km target (ENDS, 25/11/08).

A few days later, however, EU lawmakers reached an agreement whereby they backed the French proposal of gradually limiting CO<sub>2</sub> emissions to 130g/km for 65% of new cars in 2012, 75% in 2013, 80% in 2014 and 100% by 2015 – as opposed to the Commission's original proposal of introducing the caps on all new cars sold in the region in 2012. Each carmaker was to get an individual annual target based on the average mass of all its new cars registered in the EU in a given year. Manufacturers whose fleet average exceeded the limit from 2012 would have to pay a penalty for each car registered. The 'integrated approach' was decided on: 130g/km was to be achieved by improvements in vehicle motor technology, with the remaining 10g/km reduction to be obtained by other measures. A so-called 'supercredit'

scheme allows electric and plug-in hybrid cars to count more toward meeting the fleet average than normal cars. Cars emitting less than 50 g CO2/km are counted as 3.5 cars in 2012 and 2013, as 2.5 cars in 2014, and as 1.5 cars in 2015. The deal also reduced the proposed fines, but the long-term target of average emissions at 95g CO<sub>2</sub>/km by 2020 was agreed – this final point obviously strengthening the Commission's original proposal. The European Parliament approved the final text on 17 December 2008 – adopted with 559 votes in favour, 98 against and 60 abstentions (ten Brink 2010: 198). The legislation was finally published as Regulation (EC) No 443/2009 of the European Parliament and of the Council of 23 April 2009.

## 4.4 Summing up

We have seen that, in the decision-making phase, powerful member-states strongly influenced the policy-making outcome. The dynamics and outcomes of this phase thus lend greater support to an intergovernmentalist understanding of policy-making in the EU. The carmanufacturing countries of Germany, France and Italy, as well as Sweden and the UK, all played a role in influencing the car regulation, by defending the specific interests of their national industries. In particular, the 2008 German–French deal, where Merkel and Sarkozy backed the 120g/km target based on vehicle weight, was important for the final agreement on the regulation. This weight-based target meant that heavier German cars could emit more CO<sub>2</sub> as long as carmakers balanced this production with smaller, less-polluting models.

We have also seen that the European Parliament used its powers stemming from the introduction of the co-decision procedure in the 1993 Maastricht Treaty to influence the car regulation. Both the Council and the European Parliament watered down the Commission's original proposal: a phase-in period was introduced, fines were reduced, and several 'flexibility mechanisms' – or loopholes – were introduced.

The role played by the Commission and the car industry associations during the decision-making processes, along with intervention from the Parliament, shows that both supranational and non-state actors influenced the process. Although this could be said to lend some support to a supranational understanding of policy-making in the EU, the dynamics and outcome of the decision-making process are clearly more compatible with the intergovernmentalist perspective. We have seen that Germany, in particular, defended the interests of its car manufacturers in the Council of Environment Ministers and the European Council, and succeeded in a further watering down of the Commission's industry-friendly proposal. Importantly, we have seen how the interests of German car manufacturers could differ from those of other European car manufacturers. The watering down the proposal from the Commission clearly benefited German car manufacturers, which make the biggest profits from heavy premium cars, but not necessarily French and Italian manufacturers of smaller and lighter cars.

# 5. Implementation

## 5.1 Implementing the cars and CO<sub>2</sub> regulation

Regulation (EC) 443/2009 setting emission performance standards for new passenger cars requires a fleet average emission of 130g/km for new passenger cars to be fully achieved by 2015 – through a phase-in period. All implementation measures were taken to comitology (committees of representatives of member-states, 'national experts') for further discussion/detailed planning. The Commission adopted new rules and guidance for

monitoring  $CO_2$  emissions from cars in 2010 – as part of implementing the 2009 regulation. The regulation requires the relevant national authorities in each member-state to record information for each new passenger car registered in its territory, and submit this information to the Commission every year (manufacturers will be invited to check the accuracy of this information). Data to be collected include manufacturer name, type, variant, version, specific emissions of  $CO_2$ , mass, wheel and track width, as well as fuel type, fuel mode and engine capacity. The Commission uses this information both for calculating the average specific emissions of  $CO_2$  from new passenger cars (a list showing the performance of each manufacturer); and for setting the specific emissions target to be met by each car manufacturer for a given year. The information is also used to calculate fines, so it is essential that the information be collected and interpreted correctly. By the end of October each year (from 2011) the Commission will give each car manufacturer a specific emissions target for its fleet in the coming calendar year. From 2012, any car manufactures that fail to meet their target will be fined.

Regarding eco-innovations, the regulation provides carmakers with the possibility of applying for the approval of certain innovative technologies that contribute to reducing CO<sub>2</sub> emissions from passenger cars. These eco-innovation credits will help the industry meet the 130g CO<sub>2</sub>/km target, and eco-innovations can count for up to 7g CO<sub>2</sub>/km towards the target. But then, once the regulation had been adopted, the discussion started: Which technologies, assessed under which criteria, should be eligible as eco-innovations? In July 2011, the EU finally agreed on accounting rules for eco-innovations. It was decided that a regulation can qualify as an 'eco-innovation' if it is new to the market, it contributes to significant CO2 savings, and is not otherwise taken into account in determining the level of CO<sub>2</sub> emissions from vehicles (Commission 2011). This provision aims at giving the automotive sector greater incentives to invest in new CO<sub>2</sub>-reducing technologies, but ENGOs have argued that the entire mechanism is an unnecessary concession to industry lobbying (interviews with Com1 and ENGO1, 2011). However, ACEA was not satisfied, maintaining that the final provision makes it very hard to prove that something is an eco-innovation, in turn making it more challenging to comply with the Regulation (interview with ACEA1, 2011). DG Climate Action was content with how the final provision on eco-innovations turned out (interview with Com1, 2011).

## 5.2 Long-term targets on cars and CO<sub>2</sub> emissions

In July 2012, the Commission proposed legislation setting out the modalities for how the target of 95g CO<sub>2</sub>/km by 2020 is to be reached (Commission 2012b). Under this proposal, manufacturers would be able to claim up to 20,000 so-called 'supercredits' each during the 2020-23 period. These credits would enable cars that emit less than 35g CO<sub>2</sub>/km to count as 1.3 vehicles, bringing the carmakers' overall average emissions down (on paper), and making it easier for them to meet their target. In practice the emission limit of 35g CO<sub>2</sub>/km means carmakers would get supercredits for each electric or plug-in hybrid car they produce. As previously noted, there is already a supercredit scheme for cars emitting less than 50 g CO<sub>2</sub>/km, but it was meant to end after 2015.

The proposal attracted criticism from several stakeholders including aluminium trade body EAA and the NGO T&E (ENDS 11/07/12). These organizations have mutual interests in promoting stricter targets, which would encourage the production of lighter vehicles. Greenpeace labelled the credits an 'accounting trick', and criticized the Commission for giving in to pressure from the car industry (Greenpeace 11/07/12). The carmakers' association

ACEA, on the other hand, said the rules were 'extremely challenging given the economic situation and would increase production costs' (ENDS 11/07/12). The car industry maintained that the eligibility threshold of 35g CO<sub>2</sub>/km was too strict, that a significantly higher multiplier than 1.3 was needed, and that the use of supercredits should not be capped.

In proposals very similar to those put forward by German carmaker's association VDA, a German MEP, Thomas Ulmer, made the case for greatly extending the supercredits scheme. The Commission warned MEPs against the proposal to allow carmakers greater use of supercredits to meet their CO<sub>2</sub> limits for 2020, as this would weaken the 95g CO<sub>2</sub>/km target (ENDS 19/02/13).

Despite this warning, the scheme was significantly extended in a deal struck between the member-states and the European Parliament on 24 June 2013. Under this agreement, carmakers will be able to *double-count* cars with emissions lower than 50g CO<sub>2</sub>/km towards their 2020-targets. Each low-emitting car (electric or plug-in hybrid) will thus be counted as two vehicles in 2020 and then as 1.67 vehicles in 2021 and 1.33 in 2022. From 2023 onwards, there will be no supercredits for low-emitting cars (each low-emitting car will be counted as one vehicle). To prevent the scheme for undermining the 95g CO<sub>2</sub>/km target, carmakers' use of supercredits for low-emission vehicles will be capped at 2,5g CO<sub>2</sub>/km average increase in emissions across all their new cars in any year. This deal represented a significant watering down of the Commission's proposal for the stricter eligibility threshold of 35g CO<sub>2</sub>/km and the lower multiplier of 1.3 during the 2020–23 period, with each manufacturer allowed to count only 20,000 low-emission cars for supercredits (ENDS 25/06/13).

The Council and the Parliament did not agree on a post-2020 target, but asked the Commission to review progress by the end of 2015 with a view to proposing a new target. The Parliament had proposed a 2025 target with an indicative range of 68 to 78g CO<sub>2</sub>/km (European Parliament 2013), but this proposal was not backed by the member-states.

Reactions to the deal were mixed. Greenpeace said the supercredits scheme meant there could be a two- or three-year delay in reaching the 2020-target, and accused EU legislators of 'giving in to German bullying' to please German carmakers like BMW and Mercedes (Greenpeace 24/06/13). According to the NGO T&E, the scheme would in effect raise the 2020-targets to 97.5g CO<sub>2</sub>/km (because the use of super credits will be capped at 2.5g CO<sub>2</sub>/km average increase in emissions across all new cars).

On the other hand, the deal was made in spite of intense pressure from Germany and its car industry for more lenient rules. Germany had pushed hard for no caps on supercredits, and had called for significantly higher multipliers, starting with 3.5 in 2020. They also maintained that car companies should be able to 'bank' the supercredits earned in earlier periods for use in meeting the 2020 target, but failed to expand the supercredit scheme in this regard too. The agreement between the Council and the Parliament confirmed the 95g CO<sub>2</sub>/km 2020 target. Under this deal, the Commission is also required to propose a 2025 target by end-2015, which will have to be in line with the EU's long-term climate goals.

On 27 June, however, when the deal was scheduled for a vote by the member-states, in a meeting among the EU-ambassadors (*Coreper*), member-states decided to postpone adoption of the agreement. According to diplomatic sources, German Chancellor Angela Merkel had personally intervened in an effort to undo the agreement (EuropeanVoice 27/06/13). Following personal calls from Merkel to Irish Prime Minister Enda Kennedy and other EU

leaders to prevent adoption, the Irish presidency said the agreement should up for a new vote by the member-states. According to diplomatic sources cited by EuropeanVoice (27/06/13), France and Italy were furious at Germany's tactics to undo a concluded deal.

A meeting of environment ministers in the Council on 14 October saw partial support for a new proposal from Germany to delay full implementation of the 95g CO<sub>2</sub>/km target from 2020 to 2024 (ENDS 14/10/13). Germany was backed by the UK, Hungary, Slovakia, Poland, Estonia and Portugal, but other countries – in particular Denmark and Italy – were opposed to any renegotiation. On 26 November the European Parliament and member-state negotiators agreed informally on a compromise deal: full implementation of the 95g CO<sub>2</sub>/km target would be pushed back one year to 2021, and the cap on the use of supercredits would be raised to 7.5g CO<sub>2</sub>/km, up from 2.5g CO<sub>2</sub>/km under the original deal from June. According to Greenpeace, the agreed changes effectively delay implementation of the 95g CO<sub>2</sub>/km target by three years to 2023. The Act was adopted by the Parliament on 25 January 2014 and the Council on 10 March, and was published in the Official Journal of the EU as Regulation 2014/333 on 5 April.

## 5.3 Summing up

Car-manufacturing member-states continued to play a key role in the elaboration of policies and the establishment of long-term targets. Germany in particular demonstrated its powers during the discussions of the agreed long-term target of 95g CO<sub>2</sub>/km by 2020. The last-minute intervention by German Chancellor Angela Merkel to undo the deal struck between the member-states and the European Parliament provoked France and Italy. Having specialized in the production of lighter, smaller cars, those countries' carmakers might be put at a competitive disadvantage against German carmakers by any watering down of the long-term target. It is highly unusual to see such a last-minute intervention, coming after a deal has been made based on a mandate given by ministers. This, in addition to Germany's interventions before the proposal came out, demonstrated how much was at stake for Germany and its carmakers.

The Commission has formal authority to oversee implementation of the car regulation. We have seen that each member-state must record information for every new passenger car registered in its territory and submit this information to the Commission annually. The Commission uses this information to calculate the average emissions of CO<sub>2</sub> from new passenger cars for each manufacturer), for setting the specific emissions target to be met by each car manufacturer for a given year, and to calculate fines for car manufacturers that fail to meet their target. The car manufacturers have a significant stake in implementation, since they calculate and submit emissions data for each of their car models to national authorities.

To conclude, it is evident that both the intergovernmental and the supranational perspective are important for understanding developments in the implementation phase. The role played by Germany in defending the interests of its car manufacturers in the discussion of confirming and implementing the 2020 target is compatible with an intergovernmentalist understanding of policy-making in the EU. The power of the Commission to oversee the implementation process and the role of car manufacturers in implementing the regulation shows the relevance of the supranational perspective. Although Germany intervened in the case of 2020 target, most technical implementation issues – which may be equally important – are determined in comitology and by the Commission and car manufacturers.

## 6. Conclusions

The relationship between industry and regulators in the EU has been described as one of consultation, dialogue, corridor lobbying and private meetings, as opposed to the more direct industry lobbying practised in the USA and elsewhere (Mikler 2009; Newell and Levy 2006). As Mikler (2009: 81) has highlighted, 'environmental regulations are often proposed voluntarily by industry peak bodies, negotiated with the EC [European Commission] and, subsequent to their acceptance, generalized to the whole of the EU'. Our study confirms these observations inasmuch as it shows that the EU has indeed 'gone down the path of voluntary industry agreements' (Mikler 2009: 81) towards legally binding regulation in the case of car emissions. We have seen that the car industry was instrumental in shaping the content of what eventually became an industry-friendly, legally binding regulation applicable in all EU countries. In particular, the CARS 21 Group, established to enhance the competitiveness of the car industry, gave automobile manufacturers direct influence in Commission-internal processes. Beyond these observations, this study has offered a more nuanced view of the EU policy process, identifying variation in the role and influence of various actors and institutions throughout the policy-making process.

The making of the EU car regulation is not only a story of co-regulation, where industry and regulators cooperated in developing regulations (Mikler 2009), but also one of conflicts, public controversies and debates involving the car industry, environmental NGOs and EU countries, and state interventions – particularly by Germany –in the decision-making and implementation phases. Far from being a case of closed negotiations between the car industry and the Commission, Germany and other EU countries changed the car regulation on points where the Commission's proposal did not reflect their national interests, giving rise to significant media attention and controversies about the car regulation. Actions by Germany showed clearly that the European climate-policy frontrunner was not willing to accept stronger CO<sub>2</sub> emission standards for cars than those deemed acceptable by its powerful car manufacturers. Indeed, our study shows that also during the implementation phase Germany played a significant role in modifying policies and re-negotiating already-concluded agreements.

Both explanatory perspectives employed here offer important insights, but their explanatory power varies with the policy-making phase in focus. Whereas the key role played by the Commission and the car industry in the initiation phase confirms the proposition based on the supranational perspective, the intergovernmental perspective has greater explanatory power regarding the decision-making phase. Both perspectives are relevant for understanding the elaboration of polices in the implementation phase, although in different ways. Germany's intervention to water down the 2020 target is compatible with an intergovernmentalist understanding of EU policy-making, whereas the role of the Commission in overseeing the more technical but equally important implementation details is compatible with a supranational perspective. This indicates that identifying the policy-making phases analysed here – the initiation of policies, decision-making and implementation – and applying various analytical lenses to study them may be a fruitful approach to follow in studies of policy-making in the EU (see Skjærseth and Wettestad 2008).

Rather than lending support to one grand theory of EU integration and policy-making, our study has shown that the analytical lenses of both Liberal Intergovernmentalism and supranationalism are useful as heuristic tools for focusing on the key actors and institutions in various policy-making phases. Our study has shown how supranational institutions such as

the Commission and the European Parliament use their increasing powers to initiate and shape EU policy. Thus, they cannot be dismissed as mere agents for national governments with no independent influence on policy-making, as scholars in the Liberal Intergovernmentalist tradition have tended to do. On the other hand, this study has also demonstrated that a Liberal Intergovernmentalist perspective is still important for understanding the making of the car regulation, despite the increasing multilevel governance character of the EU.

The car regulation represents a milestone in EU efforts to reduce the climate impact from road transport. Indeed, this regulation is the world's strictest and most far-reaching piece of legislation to curb CO<sub>2</sub> emissions from passenger cars. The average CO<sub>2</sub> emissions of any new car fleet are to be 130g CO<sub>2</sub>/km by 2015, with the remaining 10g CO<sub>2</sub>/km to be achieved by other means. The long-term 2020 target of 95g CO<sub>2</sub>/km can be seen as significantly increasing the level of ambition in this policy area, even though full implementation of the target was pushed back a year to 2021 because of lobbying by Germany.

After years of lobbying against binding car-emission cuts, European carmakers are on track to reach the 2015 target well ahead of schedule. In 2012, average emissions from European carmakers were 132g CO<sub>2</sub>/km, according to the European Environment Agency (EEA 2013). Tackling transport emissions remains a priority for the Commission. The 2011 White Paper set an agenda for the EU transport sector up to 2020, but longer-term objectives are also needed. If current transport trends continue, the EU goal of 80–95% GHG emissions reductions by 2050 is not within reach. The car regulation represents only a first step in addressing the massive challenge of curbing CO<sub>2</sub> emissions from passenger cars and road transport.

**Acknowledgements:** This study was funded by the Research Council of Norway project ECPack (grant number 199883/E20) at the Fridtjof Nansen Institute. The authors would like to thank Jon Birger Skjærseth, Per Ove Eikeland, an anonymous reviewer, and the editor Christopher Gore for very helpful comments.

#### **Interviews**

ACEA1: Policy officer, ACEA (European Automobile Manufacturers Association), Brussels, 7 December 2011.

ACEA2: Policy officer, ACEA (European Automobile Manufacturers Association), Brussels, 6 December 2011 and 25 April 2012.

Com1: Policy officer, DG Climate Action, Transport and Ozone, Brussels, 8 December 2011.

Com2: Policy officer, DG Enterprise, Automotive Industry, Brussels, 7 December 2011.

Com3: Policy officer, DG Climate Action, Member of Commissioner Connie Hedegaard's Cabinet, Brussels, 24 April 2012.

Com4: Policy officer, DG Climate Action, Transport and Ozone, Brussels, 24 April 2012.

Com5: Policy officer, DG Climate Action, Transport and Ozone, Brussels, 26 April 2012.

EP1: Policy advisor, the Greens in the European Parliament, Brussels, 5 December 2011.

EP2: Policy advisor, the Greens in the European Parliament, Brussels, 24 April 2012.

ENGO1: Policy campaigner, Greenpeace, Brussels, 8 December 2011.

ENGO2: Policy campaigner, Transport and Environment, Brussels, 5 December 2011.

ENGO3: Policy campaigner with Friends of the Earth, Brussels, 6 December 2011.

#### References

- ACEA. (2006). European car industry opposes recent statements of Environment Commissioner Stavros Dimas regarding CO<sub>2</sub> commitment, Press release, Brussels 5 November 2006.
- Bache, I. & Flinders, M. (2004). Themes and issues in multi-level governance. In I. Bache & M. Flinders (Eds.), *Multi-level governance* (pp. 1–11). Oxford: Oxford University Press.
- Bache, I., George, S. & Bulmer, S. (2011). *Politics in the European Union*, third edition. Oxford: Oxford University Press.
- Breitmeier, H., Young, O. & Zürn, M. (2006). *Analyzing international environmental regimes: From case study to database*. Cambridge, MA: MIT Press.
- Commission. (1995). A Community Strategy to reduce CO<sub>2</sub> emissions from passenger cars and improve fuel economy. Communication from the Commission to the Council and the European Parliament. COM (1995) 689 final. Brussels: European Commission.
- Commission. (1998). Implementing the Community Strategy to reduce CO<sub>2</sub> emissions from cars: An environmental agreement with the European Automobile Industry, Communication from the Commission to the Council and the European Parliament. COM (1998) 495 final. Brussels: European Commission
- Commission. (2007a). Results of the review of the Community Strategy to reduce CO<sub>2</sub> emissions from passenger cars and light-commercial vehicles, Communication from the Commission to the Council and the European Parliament. COM (2007) 19 final. Brussels: European Commission.
- Commission. (2007b). Questions and answers on the EU strategy to reduce CO<sub>2</sub> emissions from cars, MEMO 07/46, Brussels 7 February 2007. Available online at http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/07/46
- Commission. (2007c). Communication from the Commission to the Council and the European Parliament of 7 February 2007 on a Competitive Automotive Regulatory Framework for the 21st Century: Commission's position on the CARS 21 High Level Group Final Report. COM(2007) 22 final. Brussels: European Commission.
- Commission. (2007d). Proposal for a Regulation of the European Parliament and of the Council setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO<sub>2</sub> emissions from light-duty vehicles, COM(2007) 856 final. Brussels: European Commission.
- Commission. (2011). Reducing CO<sub>2</sub> emissions from cars through eco-innovation, Press Release. Memo/11/539, 25.7.2011. Available online at http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/11/539
- Commission. (2012a). EU Transport in Figures 2012.
- Commission. (2012b). Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EC) No 443/2009 to define the modalities for reaching the 2020 target to reduce CO<sub>2</sub> emissions from new passenger cars, COM(2012) 393 final. Brussels: European Commission.
- EEA (European Environment Agency). (2013). Monitoring CO2 emissions from new passenger cars in the EU: Summary of data for 2012. Brussels: EEA.
- Ellerman, A.D., Convery, F. & de Perthuis, C. (2010). *Pricing Carbon: The European Union Emissions Trading Scheme*. Cambridge: Cambridge University Press.
- ENDS. (19/3/98). 'EU ministers to back car CO<sub>2</sub> emissions talks'
- ENDS. (6/10/98). 'EU ministers approve CO<sub>2</sub> from cars deal'
- ENDS. (22/12/03). 'Germany urges curbs on car CO<sub>2</sub> emissions'
- ENDS. (15/10/04). 'EU ministers 'impatient for vehicle CO<sub>2</sub> cuts''
- ENDS. (21/01/05). 'New pressure for EU curbs on carbon from cars'
- ENDS. (1/7/07). 'Reducing car CO<sub>2</sub> emissions'
- ENDS. (1/8/07). 'Row looms over plan to cut road fuel carbon'
- ENDS. (29/8/07). 'T&E fears weight-based approach to car CO<sub>2</sub> cuts'
- ENDS. (13/9/07). 'MEPs demand more CO<sub>2</sub> cuts from carmakers'
- ENDS. (24/10/07). 'Euro-MPs urge dilution of car CO<sub>2</sub> target'
- ENDS. (18/12/07). 'Uncertainty surrounds EU car CO<sub>2</sub> proposal launch'
- ENDS. (19/12/07). 'Commission's EU car emission plans in detail'

- ENDS. (6/6/08). 'Germany lays down tough line on car CO<sub>2</sub> law delay'
- ENDS. (10/6/08). 'France and Germany unite to delay car CO<sub>2</sub> curbs'
- ENDS. (1/10/08). 'Paris proposes to weaken plan to cut car emissions'
- ENDS. (2/12/08). 'EU strikes deal to delay car CO<sub>2</sub> curbs'
- ENDS. (28/10/09). 'EU tables weakened plan to cut emissions from vans'
- ENDS. (22/12/09). 'Climate accord 'must be adopted to unblock funds''
- ENDS. (10/11/10). 'New targets on the horizon as carmakers' CO<sub>2</sub> progress dissected'.
- ENDS. (11/07/12). 'EC accused of weakening car CO<sub>2</sub> proposals'.
- ENDS. (19/02/13). 'MEPs urged not to weaken rules on CO2 from cars'.
- ENDS. (25/06/13). 'EU deal on how to meet 2020 CO<sub>2</sub> limit for cars'
- ENDS. (14/10/13) 'Germany wins renegotiation of car CO<sub>2</sub> rules'.
- EurActiv. (8/2/07). 'Commission wants binding cuts on car emissions'
- EurActiv. (2/9/08). 'MEPs side with carmakers on CO<sub>2</sub> cuts'
- EurActiv. (1/10/08). 'Carmakers gear up for tough carbon emission targets'
- EurActiv. (6/10/08). 'Carmakers plead for EU subsidies'
- EurActiv. (2/12/08). 'EU clinches deal on CO<sub>2</sub> emissions from cars'
- EurActiv. (30/1/08). 'MEPs seek tougher standards and higher taxes for fuels'
- European Parliament. (2008). EP: Position, 1st or single reading.
- European Parliament. (2010). Letter to Commissioner Hedegaard, 20 April 2010.
- European Parliament. (2011). Report on the Roadmap to a Single European Transport Area Towards a competitive and resource efficient transport system (2011/2086(INI)). Committee on Transport and Tourism.
- European Parliament. (2013). 'Car CO2: Mapping the route to 95g and beyond', Press release from European Parliament, 24 June.
- European Voice. (27/06/13). 'Germany blocks car CO<sub>2</sub> limit deal'
- George, A., & Bennett, A. (2004). *Case studies and theory development in the social sciences*. Cambridge, MA: MIT Press.
- Greenpeace. (11/07/12). 'Europe in the slow lane on car efficiency standards', Press release from Greenpeace, 11 July.
- Hooghe, L., & Marks, G. (2001). *Multi-level governance and European integration*. Lanham, MD: Rowman & Littlefield.
- Hooghe, L., & Marks, G. (2003). Unravelling the central state, but how? Types of multi-level governance. *American Political Science Review*, 97(2), 233–243.
- ICCT (International Council of Clean Transportation). (2013). *European vehicle market statistics*. Berlin: ICCT.
- Kulovesi, K., Morgera E., & Muñoz M. (2011). Environmental integration and multi-faceted international dimensions of EU law: Unpacking the EU's 2009 climate and energy package, *Common Market Law Review 48*, 829–891.
- Levy, D. & Rothenberg, S. (2002). Heterogeneity and change in environmental strategy:

  Technological and political responses to climate change in the global automobile industry. In A.

  J. Hoffman & M. J. Ventresca (Eds.), *Organizations*, *policy and the natural environment: Institutional and strategic responses* (pp. 173–193). Stanford, CA: Stanford University Press
- Mikler, J. (2005). Institutional reasons for the effect of environmental regulations: passenger car CO<sub>2</sub> emissions in the European Union, United States and Japan, *Global Society* 19 (4): 409–444.
- Mikler, J. (2009). *Greening the car industry: Varieties of Capitalism and climate change*. Cheltenham: Edward Elgar.
- Moravcsik, A. (1998). *The choice for Europe: Social purpose and state power from Messina to Maastricht*. Ithaca, NY: Cornell University Press.
- Moravcsik, A. & Schimmelfennig, F. (2009). Liberal Intergovernmentalism. In T. Diez & A. Wiener (Eds.), *European integration theory* (pp. 67–87). Oxford: Oxford University Press.
- Newell, P. & Levy, D. (2006). The political economy of the firm in global environmental governance. In C. May (Ed.) *Global corporate power*, vol. 15, *International political economy yearbook*. Boulder, CO: Lynne Rienner Publishers.

- Oberthür, S & Dupont, C. (2011). The Council, the European Council and international climate policy. In R. K. W. Wurzel & J. Connelly (Eds.), The European Union as a leader in international climate change politics (pp. 74-91). London: Routledge.
- Oberthür, S. & Pallemaerts, M., Eds. (2010). The new climate policies of the European Union: Internal legislation and climate diplomacy. Brussels: VUB Press.
- Paterson, M. (2007). Automobile politics: Ecology and cultural political economy. Cambridge: Cambridge University Press.
- Peterson, J. (2004). Policy networks. In A. Wiener and T. Diez (Eds.), European integration theory (pp. 117–135). Oxford: Oxford University Press.
- Peterson, J. & Bomberg, E. (1999). Decision-making in the European Union. London: Palgrave Macmillan.
- Skjærseth, J. B. & Wettestad, J. (2008). EU emissions trading: Initiation, decision-making and implementation. Aldershot: Ashgate.
- Skovgaard, J. (2013). The limits of entrapment: The negotiations on EU reduction targets, 2007–11, Journal of Common Market Studies 51(6): 1141–1157.
- Stone Sweet, A. & Sandholz, W. (1997). European integration and supranational governance, Journal of European Public Policy 4: 297–317.
- ten Brink, P. (2010). Mitigating CO<sub>2</sub> emissions from cars in the EU (Regulation (EC) No 443/2009). In S. Oberthür & M. Pallemaerts (Eds.), The new climate policies of the European Union: *Internal legislation and climate diplomacy* (pp. 179–209). Brussels: VUB Press.
- T&E (Transport and Environment). (2005). 'Car industry failing on Climate Change Commitments', News release, 20/01/2005, Brussels.
- T&E (Transport and Environment). (2007). 'Europe set to weaken key climate target for new cars', February 07, 2007.
- T&E (Transport and Environment). (2011). 'Transport & Environment Comments on the European Commission Transport 2050 Strategy', 28 March 2011, Available online: http://www.transportenvironment.org/News/2011/3/Transport--Environment-Comments-on-the-European-Commission-Transport-2050-Strategy/
- Volpi, G. & Singer, S. (2002). EU-level agreements: a successful tool? Lessons from the agreement with the automotive industry. In P. ten Brink (Ed.), Voluntary environmental agreements: Process, practice and future use (pp. 142–154). Sheffield: Greenleaf Publishing

<sup>&</sup>lt;sup>1</sup> European Commission (2014) Reducing CO2 emissions from passenger cars [Last accessed 30 July, 2014]. Available from: <a href="http://ec.europa.eu/clima/policies/transport/vehicles/cars/index">http://ec.europa.eu/clima/policies/transport/vehicles/cars/index</a> en.htm

<sup>&</sup>lt;sup>2</sup> European Commission (2014) Reducing emissions from transport [Last accessed 30 July, 2014]. Available from: http://ec.europa.eu/clima/policies/transport/index en.htm

<sup>&</sup>lt;sup>3</sup> While EU directives set out the general rules to be transferred into national law by each EU member-state as they deem appropriate, an EU regulation is similar to national law with the difference that it is applicable to all member-states. See http://ec.europa.eu/legislation/index en.htm

<sup>&</sup>lt;sup>4</sup> In 2012, average CO<sub>2</sub> emissions from newly registered German cars was 143g/km, whereas the corresponding figure for French cars were the lowest in the EU 125 g/km (the lowest in the EU) and the average in the EU was 132.2 g/km (ICCT 2013).

<sup>&</sup>lt;sup>5</sup> We are grateful to an anonymous reviewer for making this point.

<sup>&</sup>lt;sup>6</sup> The interview guides and the full transcribed text of the interviews are on file with one of the authors (Gulbrandsen).

<sup>10</sup> European Parliament Resolution 13/01/2004.

 $^{14}$  €20 per g/km in 2012, €35 in 2013, €60 in 2014, and €95 in 2015.

 $<sup>^{7}</sup>$  Council Directive 91/441 EEC calls for proposals to reduce  $CO_2$  from passenger cars.

<sup>&</sup>lt;sup>8</sup> This target equals an average consumption of 5 litres per 100 km for cars with petrol engines and 4.5 litres per 100 km for diesel engines.

<sup>&</sup>lt;sup>9</sup> See Council Conclusions of 25 and 26 June 1996. Available from: http://www.consilium.europa.eu/ueDocs/cms\_Data/docs/pressData/en/envir/011a0006.htm

<sup>&</sup>lt;sup>11</sup> Competitive Automotive Regulatory System for the 21st Century High Level Group.

<sup>&</sup>lt;sup>12</sup> European Climate Change Programme. All documents from this ECCP process are available from: http://circa.europa.eu/Public/irc/env/eccp\_2/library?l=/light-duty\_vehicles&vm=detailed&sb=Title

<sup>&</sup>lt;sup>13</sup> The contribution of biofuels to the integrated approach is ensured through the fuel quality directive.

<sup>&</sup>lt;sup>15</sup> Press Release from European Parliament 26 November 2013 [Last accessed 28 November, 2013]. Available from: <a href="http://www.europarl.europa.eu/news/en/news-room/content/20131126IPR26748/html/Car-CO2-emissions-MEPs-reach-a-deal-with-Lithuanian-Presidency-of-the-Council">http://www.europarl.europa.eu/news/en/news-room/content/20131126IPR26748/html/Car-CO2-emissions-MEPs-reach-a-deal-with-Lithuanian-Presidency-of-the-Council</a>

<sup>&</sup>lt;sup>16</sup> Press Release from Greenpeace 26 November 2013 [Last accessed 28 November, 2013]. Available from: http://www.greenpeace.org/eu-unit/en/News/2013/EU-seals-bad-deal-to-limit-climate-impact-of-cars/