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Governing at arm's length

The European Commission's orchestration of sustainable biofuels

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Abstract

The sustainability of biofuels has been a topic gaining recognition in the European Union's policy making during recent years. Simultaneously, scholars have observed the use of new and indirect modes of governance in the EU, used to complement its habitual regulatory approach. On this basis, this thesis examines the European Commission's governance of biofuels between 2003 and 2009. It aims to examine under what conditions the Commission has engaged in indirect governance of biofuels. Using the concept of orchestration, it explains that the Commission started orchestrating the sustainability of biofuels because of two reasons. The first was because of a lack of capacities to implement legislation in EU member states, and the second was because the member states did not share the Commission's vision of biofuels as a viable means of achieving the renewable energy targets set out in the 2003 Biofuels Directive. The analysis furthermore shows that orchestration is used as a governance mode in the implementation process of EU biofuels policies and legislation. Finally, orchestration is a fruitful concept to explain why the EU has turned to softer governance modes.

Key words: European Union, orchestration, biofuels, governance, European Commission
Words: 9959

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1 Introduction

Sustainable biofuels have been put on the European Union's (EU) agenda during the past decade, following increased concerns about how biofuel production and consumption increases greenhouse gas (GHG) emissions and exacerbates environmental degradation. Regulating biofuels is therefore one of the EU's key environmental and sustainability issues today (Lin 2012: 44). The need to include sustainable criteria in EU legislation on biofuels, which has previously only contained indicative non-binding targets, has been stressed by the public opinion throughout the last decade. It was not until 2009 that it became reality with the Renewable Energy Directive (RED) which introduced criteria meaning to assess the sustainability of biofuels production (2009/28/EC). These criteria were expected to be implemented through a range of certification schemes (Laurent 2015: 138). This characteristic of the directive meant allocating implementation of legislation to private actors, which is the phenomenon of interest in this thesis.

The introduction of sustainability schemes is regarded by some as an "experimental initiative" whereby the European institutions put new modalities of regulatory action to the test, expected to implement policy objectives (Laurent 2015: 152). These soft instruments, such as self-regulations and voluntary standards, have increasingly complemented hierarchical governance approaches, i.e. top-down regulation (Gulbrandsen 2005: 44). One approach to describe the governance of these instruments is orchestration, a theoretical concept recently introduced by Abbott et al. (2009). The general idea of orchestration is that a state or an intergovernmental organization (IGO)[1] enlists a number of intermediary actors to govern a third set of actors, the targets. It is a new approach to governance that underlines soft and indirect mechanisms. It can thus help solving the puzzle of why the European Commission (henceforth the Commission), a notionally powerful and autonomous institution with the authority to initiate legislation, engages in soft governance. This thesis examines the conditions under which the Commission has turned towards a softer governance of sustainability of biofuels to complement its harder regulatory approach on its biofuels target, as expressed in the RED.

The case of biofuels is a practical example of an alternative regulatory approach to integrating actions to mitigate climate change as well as to producing secure and sustainable energy. Besides being central in the attainment of the EU's mitigation objectives as stated in the RED, the EU's biofuels policy is key for establishing a stable renewable energy policy sector in the Union (Romppanen 2013: 340-341). Certification schemes are moreover considered to be soft governance instruments

[1] An IGO is here defined as "an entity created by treaty, involving two or more nations, to work in good faith, on issues of common interest" (Harvard Law School). This definition includes the EU (ibid.).

that are especially fruitful to analyze through the lens of orchestration, which emphasizes the soft and indirect relationships between a governing actor and its intermediaries. Having previously been examined through a lens of sustainable development, where scholars ask questions concerning the actual sustainability of voluntary certification schemes, biofuels in this thesis are instead examined from a governance perspective. This allows for a further elaboration of the hitherto rather scarce explanations as to under what conditions governance actors engage in soft, indirect governance. Eberlein and Kerwer argue that existing theories on governance fail to identify credible mechanisms to explain how "new" governance actually works, and rather locating a "black box" of governance instead of describing the mechanisms inside of it. Therefore, attention should be turned to unveiling said mechanisms (Eberlein and Kerwer 2004: 131). The orchestration framework provided by Abbott et al. helps to identify what conditions are necessary for orchestration to be prevalent, an essential part in identifying the mechanisms at work.

1.1 Aim and research question

This thesis aims to contribute to the literature on European governance and that on orchestration in three ways. First, previous research has been preoccupied with explaining European indirect governance of biofuels as a double delegation from the Commission to certification schemes operators to third party auditing firms (e.g. Lin 2011, 2012). Along with Abbott et al., I argue that this perspective disregards the political explanations to why a governor governs through third parties. The analytical tool of orchestration considers both functional and political arguments for delegating tasks to third parties, thus helping to develop the understanding of indirect governance within the EU. Second, this study examines the conditions under which a governor uses indirect governance, rather than hierarchical types of governance. It does so by mapping out the mechanisms that led the Commission to go from a softer approach to governance towards regulation, to be complemented by orchestration through certification schemes. Finally, it aims to contribute to the literature on orchestration by taking on what has previously been suggested as a future topic to examine, that is, the conditions under which EU institutions enlist and cooperate with third parties to govern (Blauberger and Rittberger 2015: 373). Against this backdrop, the research question that will guide the analysis is the following:

Under what conditions did the European Commission engage in indirect governance of biofuels?

1.2 Delimitations

The study will, for practical reasons, be limited to analyzing the sustainability criteria of the RED which involves economic operators showing compliance with the sustainability criteria. Although the RED does allow demonstration of compliance through national regulatory systems and through bilateral agreements between the EU and third countries, the main compliance instrument to this day has been the private certification schemes (Ponte et al. 2015: 103). Moreover, while being aware of the extensive literature on EU institutions, this thesis mainly focuses on the relationship between the Commission and the member states and does not take into account for example the COREPER. This, too, is due to practical limitations as well as this thesis' deepened focus on developing the theory of orchestration rather than on the case itself. Finally, since the object of interest is the changing conditions that led the Commission to govern by orchestration instead of turning to hard regulation, the period of relevance is that between 2003 and 2009[2], where the shift towards orchestration presumably took place.

[2] The first EU legislation on biofuels (the Biofuels Directive) was adopted in 2003 and the Renewable Energy Directive in 2009.

2 Theoretical framework

2.1 Governance

This section introduces and explores the concept of governance. It does not review the literature on governance systematically, but instead identifies the main themes in the literature. The aim of this is twofold. First, it is crucial to be familiar with existing literature on the concept of interest, as this alerts the researcher to the main concepts that have previously been employed, as well as their usefulness and limitations (Bryman 2016: 9). Examining previous contributions on governance, and more specifically indirect governance, offers a greater understanding of the utility of orchestration. The second aim of this discussion is to disentangle orchestration from other governance types that have previously been identified in the scholarship on governance. This is done by showing how the governance literature has broadened the understanding of societal governance. It has done so by introducing new governance actors, consequently leading scholars to seek to identify new modes of governance, such as indirect governance. Examining the debate on governance is additionally relevant since the EU sustainability schemes mirrors the challenges faced by modern EU environmental governance (Romppanen 2013: 341).

Firstly, governance as such is defined, which is followed by a discussion on the two main conceptualizations on governance that can be distinguished in the literature. Next, three ideal types of governance modes from which the concept of orchestration is derived are identified. Finally, the understanding of governance in this thesis concludes section 2.1.

2.1.1 Definition

The concept of governance is possibly one of the most debated, complex and controversial concepts in the entire social sciences (Jordan 2008: 18, Meadowcroft 2007: 300). Scholars point to the ambiguity of the often loose usage of the term within the scholarship on governance, which might inhibit rather than facilitate cumulative research (Jordan 2008: 18). Consequently, it is essential to discuss what is meant by that term to avoid indistinctness. The term *governance* describes "the patterns that emerge from the governing activities of social, political and administrative actors" (Jordan 2008: 21). It a is concept that has emerged as a response to the shift in the ways societies are being governed in the context of globalization and liberalization (Lemos and Agrawal 2009: 73). Governance is a

phenomenon that includes non-state actors such as businesses and non-governmental organizations in its analysis. Consequently, the term governance is preferred by those aiming to analyze the "whole range of institutions and relationships involved in the process of governing" (Jordan 2008: 21).

2.1.2 Conceptualizations of governance

The literature on governance has developed numerous conceptualizations of how societies are being governed, which broadly can be divided into two understandings: state-centric and society-centric governance. While a state-centric view on governance emphasizes the critical but altering role of the state in governing social change, society-centric governance puts emphasis on the increasingly complex and horizontal socio-political relationships as well as the rise of new modes of governance (see e.g. Treib et al. 2007). The state has been hollowed out and its policy competencies moved up to international bodies or to non-state actors (Adger and Jordan 2009: 12). Society-centric governance brings focus to non-state actors, but has been widely criticized for being understood as completely detached from the state and as depicting the representation of society as "functionally differentiated" (Căjvăneanu 2011: 69).

State-centric views on governance instead underline the critical, but nevertheless changing, role of the state in shaping and being shaped by governance activities. While acknowledging the rise in new actors and the subsequent increased complexity characterizing institutions, actors and relationships, scholars with a state-centric view on governance point to the prevailing patterns of authority in governing society (Pierre and Peters 2000: 37-38, 198). Authority can be interpreted in different ways, but some useful conceptions of authority are those that Birch terms legal and political authority, of which the latter is the most realistic and thereby most useful definition[3]. While legal authority refers to a group with some kind of hierarchy that possesses the right to issue commands and sanctions, political authority is exercised through the dispensation of rewards and punishments (Birch 1993: 28-31).

According to the state-centric view on governance, traditional forms of authority are still characterizing governance. In the context of the EU, this is well pictured by the concept of EU as a *regulatory state*. Underlying this argument are two claims, the first being that an overall shift towards using regulation rather than other tools of stabilization, and the second being the Commission's expansion through influence over policy content in the absence of other tools (Lodge 2008: 280). Jordan et al. understand regulation as a tool used by a governor to establish a target. The implementation is left to other public and private actors. This is the policy instrument most widely used by the EU in the field of environmental policy as of today (Jordan et al. 2011: 538-540). In the field of biofuels, regulation in the

[3] For an extensive discussion on authority, see e.g. Birch 1993.

RED is expressed in terms of co-regulation, a regulatory mechanism combining "legislative and regulatory action with actions taken by the actors most concerned, drawing on their practical expertise" (European Commission 2001: 20). The legislative authority defines the objectives and the private actors who have relevant expertise are expected to attain them (Romppanen 2013: 351). It is useful to know that some scholars have emphasized that the EU has become less of a regulatory state because of its shift towards "new" policy instruments. Others argue that this is simply a disguise of the continuation of old-style regulation (Richardson and Jordan 2001: 6). While this is a discussion beyond the scope of this thesis, the logic of co-regulation seemingly adheres to the latter view on EU policy-making.

2.1.3 Ideal types of governance

In the domain of environmental politics, new modes of governance including these emerging actors have been emphasized. These include, among others, markets and networks. A third governance type is often mentioned alongside these two, namely governing hierarchically (Jordan 2008: 19). Together, these three approaches form ideal types of mechanisms for the regulation of society (Hufty 2009: 6). Based on these three ideal types, Abbott et al. conceptualize four general modes of governance, namely hierarchy, delegation, collaboration, and orchestration which will be discussed below. It must be underlined that these are only ideal types, and in practice they often overlap and are blended into hybrid forms. They are mixed or follow one another. For instance, a hard legal environment is often a prerequisite for soft regulation (Streurer 2013: 399-400). One can therefore expect the EU's governance toolbox of biofuels to include a wide range of instruments.

Firstly, hierarchy is represented by the combination of hard and direct governance, since the state promulgates hard enforceable rules that apply directly to the targeted actors. Secondly, states and other governors can engage in other modes of governance, such as principal–agent forms of delegation which are hard but indirect forms of governance. It is indirect because the governor does not address the target directly but through a third party, an agent; it is hard because the governor has formal legal control over the agent. Thirdly, collaboration is a form of governance where governments collaborate with target actors to promote self-regulation, often in policy areas requiring technical expertise. It is direct because the government communicates directly with its targets, and soft because it creates inducements instead of top-down state regulation. Finally, orchestration is an indirect and soft mode of governance. It is indirect in the sense that the governor addresses its targets through intermediaries, and soft because the governor lacks control over the intermediaries and must facilitate their voluntary cooperation in a shared governance effort (Abbott et al. 2015: 4, 8-9).

Table 1. Four modes of governance (Abbott et al. 2015: 9).

	Direct	**Indirect**
Hard	Hierarchy	Delegation
Soft	Collaboration	Orchestration

2.1.4 Conclusion of governance

The literature on governance has opened up a black box by questioning the role of the state as the sole governing actor. As shown in the discussion above, the governance literature has introduced an array of non- and sub-state governance actors and emphasized other modes of governance, such as indirect governance. While some scholars emphasize the continuously important, nevertheless changing, role of the state, others argue that governance now plays out completely horizontally. The latter view has been critiqued, and many scholars have instead opted for a state-centric view on governance. While the increasingly complex institutions and relationships among actors on the governing scene matter, the state is nevertheless prevalent in the analysis of indirect governance.

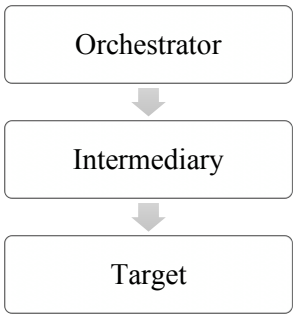
2.2 The concept of orchestration

The scholarship on governance has not succeeded in developing a fully explanatory theory on governance, but rather a number of descriptive theoretical claims about how governance is conducted, such as governance mechanisms and functions. It is a scholarship going towards a theory. Notably in EU governance, efforts to systematically theorize and explain under what conditions certain governance forms are chosen have been rather unsuccessful (Blauberger and Rittberger 2015: 64). Orchestration is not an established theory, but rather a theoretical claim or concept at the initial stage of being developed into a theory (see e.g. Adger and Jordan 2009: 20). In this section, the concept of orchestration is explained and discussed in order to lay a ground for the analytical framework which will be used in this thesis, with the ambition of theorizing orchestration.

2.2.1 Orchestration

The concept of orchestration sprung from the observation that IGOs, while still trying to govern through more traditional forms of governance such as by authority, often turned to alternative modes of governing in response to their governance dilemmas. Orchestration is a mode of governance wherein an actor "enlists and supports intermediary actors to address target actors in pursuit of [the IGO's] governance goals (Abbott et al. 2015: 4)". Generally, an actor such as a state or an IGO (orchestrator), enlists one or a number of actors (intermediaries) to govern a third set of actors (targets) (ibid.). Orchestration thus describes a distribution of political authority. It is utilized by diverse actors in varied situations to achieve politically salient goals (ibid.: 31).

Figure 1. Orchestration.



Orchestration is an indirect mode of governance in the sense that the orchestrator does not address its targets directly, but through the intermediary (see figure 1). It is a soft mode of governance because the orchestrator does not have hard control over its intermediaries but must gain their support by offering ideational and/or material inducements to create a chain of orchestration. By providing these forms of support and consequently strengthening the intermediaries' governance capacities, orchestrators gain a channel of influence over their governance goals and activities through their intermediaries. The multi-actor system created is geared towards achieving goals which neither actor could achieve on its own, namely the regulation of the behavior of targets and the provision of public goods. IGOs, but also states, can engage in orchestration. The intermediaries are often non-governmental organizations (NGOs), but can also include business organizations, trans-governmental networks, public-private partnerships, or other IGOs. What explains the fact that the orchestrator turns to intermediaries is that the latter possess governance capabilities that the orchestrator lacks, such as technical expertise, enforcement capacity, material resources, direct access to targets, the latter which can be both public and private. Orchestration is used to either *manage* or *bypass states*, which means either create and enforce common rules for the conduct of states or substitute for or complement state action (Abbott et al. 2015: 4-6, 14).

2.2.2 Hierarchy in orchestration

It is essential to define precisely what type of governance orchestration is. While Abbott et al. initially argued that orchestration is a fundamentally horizontal form of governance (see e.g. Abbott et al. 2010), they include the state as a key player in their later analyses of orchestrated arrangements (see e.g. Abbott et al. 2015). Hale and Roger find elements of hierarchy in orchestration. From their perspective, orchestration is a solution to a collective action problem hard to solve by transnational actors alone. The solution to this struggle plays out both hierarchically and horizontally: hierarchically through the agency of public institutions to direct sub- and non-state governance actors towards a common goal, and horizontally through the negotiations between these parties where the outcome must be to the convenience of all involved. In other words, orchestration contains elements of hierarchical and horizontal governance, falling between existing ideal types of governance (Hale and Roger 2013: 64).

2.3 Analytical framework

From the assumptions elaborated in section 2.2.1 on orchestration, Abbott et al. develop a framework of analysis on why governors engage in orchestration rather than in other modes of governance. It includes seven hypotheses which can be seen in table 2.

Table 2. Hypotheses on orchestration (Abbott et al. 2015: 20).

General hypotheses:	
Governance actors more likely to orchestrate when:	
Orchestrator capability	they lack certain capabilities to achieve their goals through other governance modes.
Intermediary availability	intermediaries with correlated goals and complementary capabilities are available.
Orchestrator focality	they are focal within the relevant issue area.
Orchestrator entrepreneurship	their organizational structure and culture encourage policy entrepreneurship.

IGO specific hypotheses:	
IGOs are more likely to orchestrate when:	
Goal divergence	there is a divergence of goals among their member states or between the member states and the IGO.
State oversight	member states have weak institutional control mechanisms.

2.3.1 Hypotheses in this thesis

This thesis focuses on two general hypotheses, namely the *orchestrator capability* hypothesis and the *goal divergence* hypothesis, for two reasons. First, the practical limitations of this study and the choice to study the governance of biofuels in-depth requires a choice to be made between the different hypotheses. Second, the thesis takes inspiration from Blauberger and Rittberger who use the two hypotheses to bridge functional and political explanations as to why governors choose to orchestrate. The capability hypothesis represents a functional logic, whilst the goal divergence hypothesis accounts for a political logic (Blauberger and Rittberger 2015). Basing the research on previous work moreover allows one to work cumulatively, an important aspect of working in a methodologically correct manner (Esaiasson et al. 2012: 20-21).

2.3.2 Orchestrator capability

The capability hypothesis is the single most important determining factor of IGO orchestration. According to this hypothesis, IGOs will orchestrate when they have little or no rule-making authority in a specific domain, have insufficient resources to implement policies, and/or lack legitimacy vis-à-vis the targets of regulation. IGOs will use orchestration as a means of gaining capabilities they do not yet possess. Working with intermediaries allows IGOs to expand their expertise, legitimacy and prominence into fields that they were not formerly capable of addressing, essentially expanding their authority beyond the limits of their initial capabilities. The capability deficit usually is part of the deliberate design of an IGO by member states. States do not want to see their authority reduced, or to delegate certain capabilities to a higher authority in the fear of the IGO becoming powerful and independent. This way, IGOs must rely on third parties if they wish to expand their authority or enhance their independency from member states (Abbott et al. 2015: 21, 366).

In their analysis of EU orchestration of European Regulatory Networks (ERNs), Blauberger and Rittberger make a general distinction between regulatory and operational capacities of an orchestrator (2015: 44). While possessing operational capacities means having sufficient resources to implement rules and policies, regulatory capacities implies possessing extensive rule-making authority in a domain (Abbott et al. 2015: 21). The Commission wields considerable regulatory authority in a range of policy areas, but has to rely on national actors to implement and enforce EU legislation. To solve this potential implementation deficit, the Commission turns to other agents to complete its lack of capacities. The logic of functional accounts thus allows an anticipation of a "regulatory gap", that is, the discrepancy between supranational rule-making authority and a lack of implementation and enforcement capacities (Blauberger and Rittberger 2015: 44-45).

2.3.3 Goal divergence

Goal divergence increases the likelihood of orchestration in two ways. First, when the goals of the member states are diverging, they are less likely to letting the IGO pursue harder modes of governance, such as governing by law. The same applies to when member states' goals diverge from those of IGOs. IGOs will then turn to alternative modes of governance which do not require explicit state consent, such as orchestration. Second, high goal divergence among member states increases the ability of the IGO to orchestrate since it makes it difficult for states to together block IGO orchestration, provided that the orchestrated activities are within the mandate of the organization (Abbott et al 2015: 9, 27). On the other hand, Abbott et al. find that orchestration may actually provide benefits for not only IGOs – through allowing it to bypass states' interest in the pursuit of accomplishing its own goals efficiently – but also for states. Member states may actually prefer orchestration since it entails low sovereignty costs which allows them to keep IGOs from becoming too autonomous (ibid.: 358-359). In the context of the EU, member states are keen on guarding their sovereignty and keeping the Commission from becoming too autonomous. Meanwhile, the Commission would like to expand its own competences and administrative capacities in order to secure influence over policy outcomes and enhance its institutional capacities (Blauberger and Rittberger 2015: 45).

3 Methodology and data

This section presents the methodological concerns of this study. As qualitative single case studies face much critique in terms of for example generalizability, they require a high degree of intersubjectivity, which implies a transparent research process (Boréus and Bergström 2012: 42-43). By describing how the study was carried out, the reader can follow the underlying logic which enables him or her to evaluate and question the results (Winther-Jørgensen and Phillips 2000: 139-140). Consequently, this section will elaborate on methodological assumptions that are of special concern in this study.

3.1 Representative case

The analysis is carried out as a single case study, which to its nature is intensive and in-depth, thus most useful in answering questions asking "how" or "why" of a phenomenon (Yin 2007: 23). The rationale of choosing a single case study over a comparative study moreover lies in the ambition to demonstrate that the theoretical concept of orchestration is useful to explain EU governance of politically salient and sensitive issues such as the environment, rather than showing how it can be applied to all policy areas that the EU has legal competence to act in. The latter could be achieved through carrying out a comparative study of two differing policy areas where the EU has exclusive respectively shared competence to act.

Some reflections on the research strategy may also be necessary. This thesis adheres to a primarily explanatory logic, that is, to clarify why and how there is a relationship between two aspects of a phenomenon. However, in practice, most studies are a combination of categories; this study also contains elements of an exploratory ambition. Exploratory research is undertaken when the objective is to examine an area where little is known (Kumar 2014: 13).

Additionally, the case of EU's biofuels policy is a representative case of orchestration because it enables a structuration of our understanding of the current EU approach chosen for biofuels (Romppanen 2013: 352). A representative case is chosen because it is seen as especially representative of the phenomenon under study, thereby providing insight to it. It is a method particularly suitable for closely investigating the causal mechanisms between theoretical hypotheses and an outcome that is known beforehand (Gerring 2007: 91-93). As the concept of orchestration is relatively novel, and has not yet been introduced to European studies, a representative case study is suitable for the purpose of this thesis. Such a study allows one to investigate more closely the mechanisms at work in the EU's

indirect governance approach and to generate findings that might be generalizable to other salient EU policy areas.

Single case studies are often criticized for their lack of generalizability. Some scholars argue that qualitative inquiry of few or single case studies cannot be generalized from the "sample" of cases to a "population", to speak in statistical terms. On the other hand, the aim of a case study is not to generalize statistically, but to work cumulatively by generalizing theoretical hypotheses in order to develop and generalize theories (Yin 2007: 28). This conforms with the ambition of this thesis to contribute to the theorization of the orchestration concept by examining how it can be applied to EU governance.

3.2 Material

In the search of data to provide a base of prior understanding to sustainability of biofuels in the EU, much work on the sustainability of the EU's certification schemes and of European governance in general was consulted in order to get an overview of the debate on sustainability and to gain comprehension in what governance mechanisms the EU uses at large. As for the material used in the analysis, previous work on orchestration in areas such as competition policy as well as work on EU governance of biofuels guided the search for appropriate data. The latter has been examined more thoroughly in the fields of environmental law and of energy and environmental systems (see e.g. Romppanen 2013, Di Lucia and Nilsson 2007). The findings of this research constitute one part of the empirical material used for this study. To confirm and complement these findings, primary sources of material such as member states' progress reports, EU directives and the Commission's communications were consulted. Communications express the Commission's views, as well as policy and legislative proposals on matters, and since the Commission is one of the main actors of interest, these are also used as empirical data. Triangulating material this way enhances the credibility of the findings (Yin 2007: 126).

3.3 Methods of analysis

The methodological approach of this thesis borrows ideas from two different methods appropriate for in-depth analyses, namely document analysis and qualitative text analysis. Document analysis, widely employed in qualitative research, is a systematic procedure for reviewing or evaluating various types of documents with the aim of providing the researcher with empirical knowledge. It is a research method particularly pertinent for intensive case studies, where a phenomenon in detail is examined. The procedure consists of finding, selecting,

making sense of and synthesizing data. It is a method often used in combination with other research methods with the purpose of triangulating data (Bowen 2009: 27-28). Thus, to complement this method I borrow certain notions from what Esaiasson et al. term qualitative text analysis. This approach consists of identifying the most relevant content by carefully reading a text. Analyzing the material is done by actively reading it, which is essentially done by posing questions to the text. These questions should be interpreted as empirical indicators of the general phenomenon under study (Esaiasson et al. 2012: 216).

3.4 Operationalization

While the hypotheses developed by Abbott et al. (2015) constitute the analytical framework for the study, they offer no guidance in terms of how to empirically measure the phenomenon of orchestration, that is, how to operationalize the hypotheses. Thus, as suggested by the text analysis method, the operationalization of the analytical framework in this study is achieved by formulating questions to be asked during the course of the reading of the material for analysis. In answering these, the aim is to see whether the conditions for orchestration are met.

Table 3. Questions of analysis.

Hypothesis	**Questions**
Capability: Regulatory capacities	What were the Commission's regulatory competences in the area of biofuels? How did it attempt to expand them?
Capability: Operational capacities	What were the Commission's operational capacities in the area of biofuels? How did it use and strengthen such capacities?
Goal divergence	Has there been a divergence in policy goals between member states or between member states and the Commission? If so, how has the Commission attempted to advance the governance of biofuels in such situations?

4 Analysis

This section presents the analysis of what conditions led the Commission to orchestrate the sustainability of biofuels. First, section 4.1 identifies the present situation of orchestration. The results accounted for in that section are then analyzed through the two hypotheses, which are divided into three sections. The capability hypothesis is first divided into two sections. While the first sub-hypothesis deals with a historical explanation of the Commission's regulatory capacities in section 4.2, the second addresses technical explanations in terms of administrative capacities in section 4.3. The goal divergence hypothesis finally accounts for political explanations and constitutes section 4.4.

4.1 The present situation of orchestration in EU biofuels governance

This section aims to explain how the governance of biofuels through voluntary certification schemes can illustrate orchestration. It first provides an overview of the EU's biofuels policies and regulations between 2003 and 2009 by introducing the main pieces of legislation and policy proposals. Second, it identifies in what sense the Commission's governance of biofuels can be perceived as orchestration.

4.1.1 The Renewable Energy Directive

The first piece of legislation in the area of biofuels was the 2003 Biofuels Directive, which aim was to reduce dependency on fossil fuels through supplementing it with biofuels. Member states should ensure that a minimum proportion of biofuels, more specifically 2% (calculated on the basis of energy content of petrol and diesel for transport purposes), was to be placed on their markets by 2005 and 5,75% by 2010. The target was indicative and non-mandatory. Member states responded reluctantly to the directive and 15 of 25 member states did not reach the 2% target in time. Consequently, the Commission proposed to include a strong system of targets, possibly mandatory, to reach the 2010 objective when it assessed that the 5,75% target would not be reached with solely voluntary national targets (Commission 2007: 5).

In 2007, it published the Renewable Energy Roadmap (Commission 2007) which contained the 20-20-20 targets: a 20 percent reduction of GHG emissions by 2020 compared to the baseline year of 1990; a 20 percent share of renewables; and

a 20 percent increase in energy efficiency. It furthermore proposed a binding target for the use of biofuels in the transport sector of 10 percent to be reached by 2020, and after amendments a sustainability criterion in the production of biofuels. The latter consisted of a mandatory sustainability scheme stipulating that biofuels must reach, at minimum, 35% savings in GHG emissions compared to fossil fuels (2009/28/EC, art. 17, para 2). Biofuels meeting these conditions would count for the national reductions targets and thereby be eligible for public support such as tax relief (MEMO/10/247: 2). The proposal was adopted by the Council and the Parliament in 2009 under the name of the Renewable Energy Directive (Stattman and Gupta 2015: 47, 2009/28/EC). In the following, several private certification schemes emerged that were initiated and supported by stakeholders such as the biofuels industry, NGOs, and industry associations (van den Bor 2012: 18).

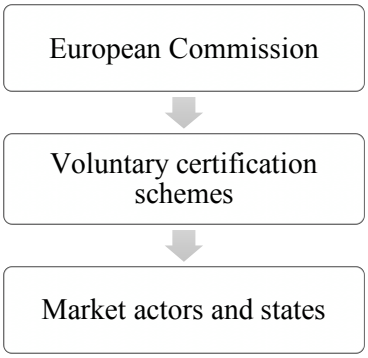
4.1.2 Orchestration through voluntary certification schemes

The Commission's orchestration of biofuels is carried out through assessing the sustainability of biofuels by using voluntary certification schemes. The certification schemes assume the role of an intermediary between the orchestrating Commission and the market actors and states (see figure 2). To show compliance with the RED's sustainability criteria, market actors can apply to certification schemes that assure their products fulfill the criteria (Ugarte and Swinkels 2015: 48). The Commission is responsible for assessing whether the voluntary certification schemes actually fulfill the criteria, thereby using them as an intermediary to reach target actors.

Voluntary certification schemes are a soft and indirect governance instrument because they are not legally binding and are operated by third parties. On the other hand, while not being mandatory, they are an inducement for market actors to supply sustainable biofuels as well as an inducement for states to reaching the 10% renewable energy target. This is because certified biofuels count towards attainment of EU or national renewable energy obligations and therefore are eligible for tax reliefs. Biofuels that do not meet the sustainability criteria can be imported to the EU, but compliance to the criteria is mandatory in order for the biofuel to count towards attainment of targets (Lin 2012: 52, 2009/28/EC art. 17[1]).

By cooperating with intermediaries with corresponding goals, the Commission therefore managed to achieve a goal it could not have attained on its own, that is, regulating the behavior of targeted states and market actors (Abbott 2015: 4-6). The Commission could thereby manage state compliance with its target of using sustainable biofuels as a means of reducing fossil fuels dependency.

Figure 2. The Commission's orchestration of biofuels.



4.2 Analysis of capability hypothesis: Regulatory capacities

The Commission is a complex institution. Not only is it central to the European integration process because of its monopoly of initiative to propose new legislation, but it is also responsible for controlling and ensuring compliance with legislation once it has been passed. These functions, emphasized especially by functional explanations, require extensive technical expertise in the policy area as well as an awareness of the politics of those issues if it wants to see its proposals pass (Christiansen 2001: 96). The following two sections examine the regulatory and operational capacities of the Commission during the early 2000's in order to determine how these conditions laid ground for orchestration in the field of energy policy. Doing this allows an understanding of how the Commission, in orchestrating sustainable biofuels, managed to operate beyond its relatively restricted regulatory mandate. It concludes that the Commission did and does not wield any extraordinary regulatory competences in the area of biofuels, but that it did use its authority to push for a more integrated European energy policy which was institutionalized in the RED and then allowed for orchestration to take place.

4.2.1 Regulatory capacities in energy policy

It is a common conception that the Commission is an autonomous, supranational entity with considerable powers to steer European integration (Pollack 2006: 165). Undeniably, the EU's legal system is very strong and reachable vis-à-vis other supranational institutions (Jordan and Rayner 2010: 40). While the Commission may wield relatively extensive rule-making authority in several policy domains, energy matters – under which biofuels policies are formulated – have been politically sensitive and is since 2009 a competence shared with the member states, as will be seen below. Consequently, the EU's influence to shape policy has been

limited. From a functionalist viewpoint, the Commission's foremost preference is to expand its own regulatory capacity and authority through increased financing and grants of regulatory capacities, and the member states have historically delegated regulatory tasks to the Commission (Kelemen 2012: 396). Indeed, the Commission possesses extensive authority in the sense that it has been granted the monopoly on drafting new EU laws and policies (Coen and Richardson 2009: 7, EUR-lex [2016b]). On the other hand, the EU has a relatively narrow range of formal policy authority. Member states have delegated the EU competence only gradually to act in a number of specific policy areas (Jordan 2010: 39). Many of these areas are shared with national governments, including energy. The EU's regulatory competence in the area of energy was consequently relatively weak, and decisions taken in these areas were subjected to the rule of unanimous voting[4] and progress has been slower than in areas where the EU's competence to act is strong and policies tend to be adopted quickly (Jordan 2010: 39).

4.2.2 Developing a European strategy on energy

The principal difficulty in developing an efficient strategy on energy has been the political sensitivity of the area. As the EU did not obtain an established competence in the area until in 2009 with the Lisbon Treaty, the member states had retained control over decisions made in the area (Grant et al. 2000: 135). Subsequently, while environmental protection became a prominent issue in Europe in the early 2000's, it did not translate into EU legislation. Biofuels regulation and policy initiation were made on either economic or environmental basis, where the EU had the competence to enact policy and legislation (Jordan 2010: 39). The Treaty of Amsterdam (1999) did not bring any major advances for a common EU energy policy (Langsdorf 2011: 5). The 2003 Directive was principally based on environmental regulation, more precisely Article 175(1) of the Treaty establishing the European Community (2003/30/EC).

The first advancement in establishing a coherent and integrated EU energy policy was made when the Commission published a package of proposals in its Renewable Energy Roadmap, which contained the 20-20-20 goals discussed in section 4.1.1. These proposals were also prevalent in its 2008 Communication entitled *20 20 by 2020 – Europe's Climate Change Opportunity* (Langsdorf 2011: 6, European Commission 2008). The Commission gained considerable competences with this package of "unprecedented scale and complexity" which would constitute the basis for the entire system of the RED (Jordan and Rayner 2010: 74). Concerning biofuels, it proposed a scheme introducing minimum criteria for greenhouse gas performance of biofuels which must be met in order for those biofuels to meet the 10% target. The criteria would be applied to domestically produced as well as to imported biofuels, opening up the market for sustainable biofuels. It moreover set criteria for biodiversity and for ban on certain land use

[4] Unanimous voting in the EU refers to the European Council having to vote unanimously on matters which are considered to be sensitive for the member states (Council of the European Union 2014).

changes. The schemes would constitute "the most comprehensive system of its kind introduced anywhere in the world" and the Commission would be in charge of it (European Commission 2008: 8).

The package expanded the Commission's regulatory capacities by proposing to address "level and scale dilemmas[5]" differently from how they had been addressed in 2003 (Jordan and Rayner 2010: 74). The Commission had indeed noted in 2007 that national policies had proven to be inadequate for achieving the indicative targets in the transport sector (European Commission 2007: 5). Instead of allowing the member states to continue producing individual national allocation plans, targets would be adopted centrally by the EU (Jordan and Rayner 2010: 74).

Ultimately, the Commission was the one to set up the targets to be achieved in the RED. It is the institution in charge of assessing whether the voluntary schemes applying for formal recognition contain accurate data on the relevant criteria and if they are reliable and fraud-resistant. Moreover, member states' use of biofuels is controlled by the Commission in that only sustainable biofuels meeting the conditions set out by the RED and approved as sustainable by the Commission will count for the national reductions targets and thus be eligible for public support such as tax relief (European Commission 2010: 1-2). Its competence to decide whether economic operators comply with the criteria as well as the ability to assess whether member states do accomplish the mandatory minimum biofuels targets, is an expression of its enhanced formal competence of controlling biofuels.

4.2.3 Conclusion of regulatory capacities

Although the Commission may be relatively autonomous from member states, it does not possess extensive regulatory authority in the field of biofuels from a functional perspective. Instead, it seems as if it used its existing relative autonomy to design a framework on which the RED then was based, thereby using its regulatory mandate extensively and assisting the EU to gain formal competences in energy policy. Scholars have observed that energy policy, traditionally having evolved via the intergovernmental method[6], increasingly has been affected by the regulatory method due to the Commission's attempt to liberalize national energy markets (Jordan et al. 2010: 37). The conditions of strong regulatory capacity, as observed by Blauberger and Rittberger, are not prevalent in the case of biofuels. On the other hand, telecommunications and competition policy which are examined by the authors, is an EU exclusive competence, while energy is a competence shared with the member states (European Citizens' Initiative 2016), and has as discussed

[5] Level and scale dilemmas refer to what extent the EU should have a role in a given policy area, that is, the choice of level of which to act – nationally, locally, or internationally. Local diversity can offer opportunities for bottom up-learning, but fewer opportunities for implementing what is learned across space. It is a central dilemma in the multi-level character of the EU's governance structure (Jordan et al. 2010: 16, 37).

[6] The intergovernmental method assigns to the Commission only a limited role in initiating legislation. It has to share the right of initiative with member states (EUR-lex [2016a]).

above previously been dominated by member states' preferences. The analysis shows that the original capability hypothesis holds – that is, that weak regulatory capacities and/or weak administrative capacities lead to orchestration – but that orchestration also can occur in areas where regulatory capacity is relatively weak.

4.3 Analysis of capability hypothesis: Operational capacities

This chapter studies the operational capacities of the Commission, that is, having sufficient resources to implement rules and policies (Abbott et al. 2015: 21). As chosen governance modes are conceivably related to dilemmas in implementation and enforcement of legislation and policy (Jordan et al. 2010: 35), it is essential to explore the implementation and enforcement deficits that have characterized the Commission's biofuels policy in order to gain an understanding to why the Commission has chosen to orchestrate sustainability. The chapter is divided in three sections. The first addresses the Commission's administrative capacities by explaining why the 2003 Directive was not correctly implemented and how the RED solved this problem. The second part examines its financial resources, and the final part explains how the Commission overcame its scarce operational capacities through co-regulation.

4.3.1 Administrative capacities

The Commission is dependent on the member states for information and administrative resources since the member states have chosen to remain the implementers of policy (Jordan et al. 2010: 40-41). This had led to distortions in transcendence of EU policies and legislation to the national levels, which have been present in the implementation of the 2003 Biofuels Directive. Since the EU lacks a coherent 'core executive', a strategy of member states to ensure that the EU remained leaderless, the Commission cannot rely on hierarchy in the implementation process (Jordan et al. 2010: 41). It must rely on other actors to implement and enforce EU legislation and policies (Christiansen 2001: 99). This indirect form of policy implementation is considered problematic because it renders EU policies vulnerable to distortion given cross-national differences in administrative capacity (Blauberger and Rittberger 2015: 44). An illustration of this problem is that as many as 15 out of 25 member states did not comply with the Biofuel Directive's indicative target of 2%. Member states that had not reached the indicative targets blamed inter alia decision making and investment lead times (Di Lucia and Nilsson 2007: 538-539). The UK argued in its 2006 progress report that setting up a system of biofuel production would require considerable time, investments and administrative capacity that it was not capable of achieving in time

(United Kingdom Department for Transport 2006: 4). These claims illustrate the practical problems of implementing biofuels policies, a project which for some countries was time-consuming due to a lack of experience with biofuels (Di Lucia and Nilsson 2007: 539).

As both the Commission and the member states lacked administrative resources to monitor implementation respectively implement the policy, the Commission sought to fill this governance gap in the RED. Meeting the targets set out in the RED was underlined by the Commission as key for achieving the sustainability of biofuels. The proposals set out in the Communication could only be assured through effective mechanisms for monitoring and compliance (European Commission 2008: 4). Indeed, the sustainability regulation in the RED, relying on a voluntary and private system of compliance through certification schemes, helped extending the Commission's authority and capacity to implement the environmental sustainability criteria not only within, but also beyond its borders since the certification schemes verify international producers' compliance with the criteria (Ponte and Daugbjerg 2015: 104). Thus, implementation of the RED was made possible in states even with low administrative capacities since compliance to the directive can be monitored on site (Schleifer 2013: 541).

4.3.2 Financial resources

One of the main motivations for the Commission to engage in the governance of biofuels through voluntary certification schemes was the prospect of financial resources. The certification schemes approved by the Commission are almost entirely privately financed and the primary implementation mechanism for EU sustainability regulation in the area of biofuels (Schleifer 2013: 540). In fact, the proposals put forward by the Commission in the *20 20 by 2020* communication, laying ground for the RED, were designed so that they would be reached in the most cost-effective way possible. Moreover, one of the five key principles as presented in the communication is that of minimizing costs to "limit the price tag of adaption for the EU economy", ensuring the Union's global competitiveness (European Commission 2008: 4-5).

Compared to federal states, the EU has limited financial resources and most of them are allocated to agricultural, regional and research policy objectives. Raising money to address challenges like climate change and the environment is thus rather constrained. To get around this problem, the Commission started issuing regulations whose costs are borne by other actors than the EU. The aims of these regulations are diverse, such as harmonizing product standards as in the case of biofuels, but are essentially to liberalize trade (Jordan et al. 2010: 40). In establishing a global market of sustainable biofuels, the financial cost of assuring the sustainability of biofuels would be borne by private actors. It would moreover comply to the overarching liberalization goals of the nature of the EU as a liberalizing organization (ibid. 38).

4.3.3 Overcoming the operational capacity deficit

Co-regulation, briefly discussed in section 2.1.1 on conceptualizations of governance, is a governance mechanism used in the EU that allows the Commission to overcome this regulatory gap which is due to a lack of administrative and financial resources. It is a regulatory method which puts the costs on the implementing private actors with sufficient resources and administrative capacities. The EU mapped out co-regulation as a desirable governance mechanism already in its 2001 White Paper on Governance, but it was not until the RED that it was truly established in the area of biofuels. It is a method especially suitable when there is a need to regulate economic activities taking place outside the borders of a state, such as markets with global supply chains (Gaebler 2014: 4-5). In the RED, implementation by private actors – all over the supply chain – is accomplished by showing compliance with the sustainability criteria through one of the certification schemes recognized by the Commission (Ugarte and Swinkels 2015: 48). This fits well with the endeavor of establishing a global market of biofuels, since the EU can monitor world wide compliance with its criteria through private actors. Private actors, in turn, bear the burden and the cost of making sure that producers comply. Co-regulation thus helps solving the problem of implementation; the EU essentially retains control over the legislative measures, while the implementation is left to actors with relevant capabilities and sufficient resources (Romppanen 2013: 341). The implementation part of co-regulation is thus what constitutes the orchestration of biofuels.

4.4 Analysis of goal divergence hypothesis

This section explores the goal divergence of member states and the Commission in terms of biofuels as a suitable means for reaching policy objectives as distinguished in the RED. The overarching goal of the 2003 Directive was to reduce dependency on fossil fuels, depicted as essential but unsustainable sources of energy (2003/30/EC para. 2). This section illuminates the divergence in goals among member states and the Commission in how to achieve this general goal. In a first instance, goal divergence between member states and the Commission is explored, followed by an examination of the goal divergence between member states. The chapter argues that because of divergence in Member State goals, the Commission pushed for further promotion of biofuels through not only a mandatory target, but also private certification schemes to create a global market in sustainable biofuels. Moreover, orchestration through private certification schemes served as a means of *managing* states to comply with the mandatory target.

4.4.1 Implementation of the 2003 Directive

Lorenzo Di Lucia and Lars J. Nilsson conducted a study in 2007 on the failed implementation of the 2003 Biofuels Directive, examining the arguments put forward by the member states to the Commission as to why they had failed to implement the indicative biofuels targets (Di Lucia and Nilsson 2007). The arguments put forward by the states embody fundamental disagreement not only among the member states, but also the member states and the Commission.

The disagreement among member states and the Commission was mirrored in the arguments embodying a fundamental disagreement among member states on the central idea of the EU directive promoting first-generation biofuels as a viable means for climate and environment protection (Di Lucia and Nilsson 2007: 539-540). The Commission had, since the early 2000s, actively promoted biofuels as a green alternative to fossil fuels. Biofuels were framed as a sustainable means of achieving the EU's climate mitigation goals, more specifically its greenhouse gas reductions targets. The Commission also promoted biofuels as a means of reducing dependency on external suppliers of European energy as well as a way to stimulate development in rural areas (Stattman and Gupta 2015: 47; EurActive 2008).

Justifying why they had failed to meet the indicative targets in the 2003 Biofuels Directive, the member states argued that biofuels were a costly way to reduce GHG emissions and to secure energy supply, thereby an unsuitable and ineffective choice in reaching the policy objectives of the Directive (Di Lucia and Nilsson 2007: 538-539). For instance, Finland announced in its 2006 progress report that it would focus its development on second-generation biofuels, since these may be more competitive in market conditions as well as contribute to greater environmental benefits (Finnish Ministry of Trade and Industry 2006: 2). Moreover, the UK underlined the possible negative environmental impacts of biofuels production several times in its national report and that the primarily reason for not complying with the indicative targets was that it was not "confident that higher levels of biofuels can be delivered in a sustainable way" (United Kingdom Department for Transport 2006: 4, 8). Indeed, several studies have shown that first-generation biofuels production in the EU is not a cost-efficient way of reducing green house gases (Di Lucia and Nilsson 2007: 539-540, 542). For instance, in the context of EU production of biofuels, several studies show that the biomass potential in the EU is limited (e.g. Ericsson and Nilsson 2004).

4.4.2 Disagreement on agricultural potentials

Concerning the disagreement on biofuels as a viable means of reaching the target set up in the Directive, member states differed in their views on the possibility to produce domestic biofuels. The group of member states with weak implementation of the Directive consisted of 15 states, whereof ten argued that the limited potential for the production of agricultural feedstock justified their low targets (Di Lucia and Nilsson 2007: 538). Ireland argued that agricultural limitations on the amount of feedstock for biofuels was one of the main reasons for not complying. Even though

some land could be set aside to produce biofuels, there were restrictions on the use of productive land for biofuels production (Deurwaarder 2005: 18). At the other end of the spectrum was Sweden, one of the states that exceeded the indicative targets with its goal of 3%. In its implementation report, it argued for the need to further produce first-generation biofuels (Swedish Ministry of Sustainable Development 2006: 4-5). The argument of lacking agricultural potentials is crucial to member states, for it encompasses the much debated issue of biofuels for energy security, domestic production versus imports, and socio-economic benefits of biofuels to rural development (Di Lucia and Nilsson 2007: 549).

As energy insecurity increasingly tainted the debate on biofuels, reduction of energy dependency became a priority for the Commission. It argued that to reduce its oil dependency, the EU had to confine its use of oil through a global biofuels market that included the "world's other economic regions" in biofuels production. Consequently, the domestic production of biofuels lost some of its importance as a mode of implementing policy and legislation, and cooperating with third parties would strengthen the energy security of the EU. As a consequence of the opening up of the biofuels market, the Commission started to recognize the risks associated with imported biofuels whose production might lack environmental standards (Humalisto 2014: 486-488).

4.4.3 Goal divergence and the RED

Taken together, these main arguments can complement the functional explanations why the Commission's decided to opt for sustainable biofuels production through certification schemes. The problem of national production of biofuels meant that member states were not equipped to produce crops for biofuels domestically and not willing to import biofuels for energy security reasons. In combination with concerns on the sustainability of first generation biofuels and of imported biofuels, the Commission switched positions and instead aimed to establish a global market for sustainable biofuels (Humalisto 2014: 486, Stattman and Gupta 2015: 48), through orchestration. To achieve this goal, the Commission turned to relevant intermediaries – certification schemes composed by NGOs, farmers, companies and governments. Their goal, in line with that of the Commission's, was to ensure the sustainability of biofuels' production and processing. Not only did the Commission turn to existing intermediaries, but also encouraged the creation of new intermediaries that would comply with the sustainability criteria set out in the RED (Romppanen 2013: 343). Scholars argue that the RED effectively created a rather confined market for sustainable biofuels (Ponte et al. 2015: 105). This is a facilitative condition, which is a soft characteristic typical for orchestration, in that the orchestrator endorses initiatives they consider to be exemplary. They provide them with legitimacy as well as participate in the formation and influence of new initiatives (Schleifer 2013: 535).

4.4.4 Conclusion of goal divergence

A goal divergence can be observed between member states and the Commission in the implementation of the 2003 Biofuels Directive. While the overarching target of reducing fossil fuels dependency was shared by all parties, the Commission saw biofuels as a suitable means of achieving this goal while member states disagreed on its appropriateness. Due to competing policy objectives and disagreement on the suitability of biofuels as a policy means led to failed or no implementation of the Directive. The Commission instead turned to intermediaries in order to open up for a global market of sustainable biofuels, thereby achieving its policy goals efficiently without having to pass through states. This can be seen as a tradeoff where the Commission had to recognize the call for sustainable biofuels, made by the member states and the public opinion, in order for it to achieve its goal of gradually replacing fossil fuels with biofuels.

The findings confirm the hypothesis on goal divergence, which anticipated an IGO to engage in orchestration if there was a divergence in goals among member states or between the member states and the Commission. It moreover demonstrates that orchestration takes place in areas with politically salient goals, in this context biofuels as a means of achieving the renewable energy goal in the 2003 Directive.

5 Concluding discussion

This thesis has explored the conditions under which the Commission engaged in orchestration of biofuels. It showed that it is an institution with relatively limited regulatory and operational capacities in the domain of energy, and that orchestration was seen as a way to overcome those barriers. The Commission turned to other actors to reach its two goals of promoting biofuels use and introducing a global market for biofuels to ensure sustainability and energy security. Moreover, it was shown that opinions on the suitability of biofuels to reach the renewable energy target set out in the 2003 Directive were fragmented. This goal divergence between member states and the Commission led to failed implementation of the Directive. Orchestration instead was meant to steer states to complying to the directive and actually using biofuels as a means of reaching and exceeding the sustainability goals set out in the 2003 Directive.

The orchestration of biofuels therefore serves as an extra arm to the Commission in terms of policy implementation. It helps the Commission to overcome the functional and political barriers that characterize many EU policy areas, but particularly those where competence is shared with member states and the areas that have previously been a matter principally of member states. Orchestration takes place in the field of sustainability, which is a salient policy area.

The analysis moreover underlined that political explanations matter, too. Functional explanations in delegation theory disregard the interplay between the governor and the governed. Delegation theory analyzes actors in isolation from each other and assumes a rationality guiding the governor's choices to delegate. Orchestration, which accounts for both types of explanations, illuminates the relationship between member states and the Commission by bridging political and functional explanations to why the Commission engages in indirect governance.

In accordance with the theoretical discussion on how governance takes place in practice, biofuels governance resembles a hybrid form of governance. It is partly governed through mandatory hard law targets. However, to facilitate compliance with the RED, the Commission has created a structure of intermediaries which certifies sustainable biofuels. These certification schemes are expected to create incentives for producers to produce sustainably since states will want to use those to reach the mandatory targets set out by the EU. It was moreover argued that when member state goals were diverging, they were less likely to letting the IGO pursue hard modes of governance. This is not the case for biofuel governance, since the Commission has introduced legally binding targets. Orchestration can thus not explain why the Commission decided to opt for hard, mandatory targets. On the other hand, it can account for its choice to orchestrate the implementation of biofuels legislation. In the EU context of biofuels, orchestration constitutes the

implementation mechanism rather than the base on which the entire system of biofuels governance stands.

Section 2.2.2 discussed whether orchestration contains elements of hierarchy, and this analysis has shown that this is the case for orchestration of biofuels. The hierarchy is illuminated in the Commission's responsibility for assessing which sustainability schemes comply with the criteria in the RED and thereby eligible for financial aid. Through its agency it directed intermediaries towards achieving a common goal, that of ensuring the usage and sustainability of biofuels. It moreover managed to expand its authority through the certification schemes by establishing a presence beyond the borders of the EU. Certification schemes allegedly ensure sustainable chains of biofuels production all over the world, whose product is then sold on the EU market.

Finally, further research should investigate if and how orchestration laid ground for the newly created Energy Union and whether the Commission continues to expand its authority through orchestration, now that it has gained formal competence on EU energy matters.

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