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Biofuels in the European Union

Development of a Common Policy

MIRIAM
SØGNEN HAUGSBØ



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Miriam Søgne Haugsbø



NILF

Norwegian Agricultural
Economics Research Institute

Series	NILF-report
Editor	Agnar Hegrenes
Title	Biofuels in the European Union. Development of a Common Policy
Author	Miriam Søgne Haugsbø
Project	Green Innovation Research
Publisher	Norwegian Agricultural Economics Research Institute (NILF)
Place of publication	Oslo
Year of publication	2012
Pages	89
ISBN	978-82-7077-844-7
ISSN	0805-7028
Key words	Biofuels, European Union, policy innovation, European integration, institutional theory

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- Documentation of economic results in the agricultural sector at national and farm level. This includes serving as secretariat for the Budget Committee for Agriculture and preparing the annual statistics for Account Results in Agriculture and Forestry.
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- Funded by the Ministry of Agriculture and Food, the Research Council of Norway and through projects for public and private institutions.
- Main office in Oslo; regional offices in Bergen, Trondheim and Bodø.

Preface

This report deals with the development of the Common Biofuels Policy of the EU from the early 1980s and to the present. Biofuels for the transportation sector are promoted primarily for their contributions to reducing greenhouse gases, but in addition energy security and providing rural areas with additional sources of income are also important concerns. The production of biofuels is at the same time strongly criticized, and the policy field is characterized by a high degree of complexity. The EU has in the last decade adopted ambitious policies on biofuels, aiming to increase the production and consumption of such fuels throughout the Community.

This report applies institutional theory to describe the development of such policies. Both internal and external influencing factors are investigated, such as the EU institutional setting and the global context. Two development processes are revealed: policy innovation and European integration.

The report is written by Miriam Søgne Haugsbø as part of the Green Innovation Research project at the Norwegian Agricultural Economics Research Institute. The report was initially submitted as a Master's Thesis at the Political Science Department of the University of Oslo in May 2012. Many people from the Norwegian Agricultural Economics Research Institute have contributed, and deserve mentioning. John Bryden and Frode Veggeland have given valuable comments throughout the study. A special thanks to Frode Veggeland for tirelessly reading the many drafts. Thanks also to Agnar Hegrenes for proofreading, and Siri Fauske who has been responsible for the final layout of the report.

Norwegian Agricultural Research Economics Institute
Oslo, December 2012

Ivar Pettersen
Director

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Summary

Biofuels are promoted all over the world as alternatives to fossil fuels in the transport sector. Their increasing popularity is due to three beneficial outcomes. First of all biofuels represent a carbon neutral energy source, as these fuels are based on biological material, and hence the emissions from these fuels belong in the natural circulation. Secondly biofuels represent an advantage considering energy security, as through diversifying the energy use, states can become less dependent on the international oil market. Lastly the biofuels for transport represent a possible additional income source for the agricultural sector, since the production of biofuels represents an alternative to traditional agricultural activities.

At the same time however, the production and consumption of biofuels is criticized both related to ecological and social concerns. The ecological considerations relate to the fact that the life cycle analyses of biofuels have revealed that some types do not give the GHG-emission reductions that were initially promised, and to the cultivation model of biofuels, which is based on large plantations, many times lead to the degradation of local ecological conditions of soil, air and water. The social considerations relate to the possible impact on food prices, as biofuels today are produced mainly from food crops, and to the fact that the production of biofuels seldom leads to the proposed rural development benefits, and in some developing countries their production means exploitation of local inhabitants.

The EU is an increasingly important actor at the world biofuels scene, and this report investigates the development of the current EU biofuels policy. The analysis is based on official EU documents regarding biofuels from the beginning of the 1980s up until today, mainly focusing on four different directives. These directives, and relevant accompanying documents, are analysed through a broad institutional approach, applying Peters (2005), Pierson (1996) and Egeberg (2004). A core assumption within an institutional approach is that one should seek knowledge about the institutional framework in order to understand and explain policy outcomes. These theories are also applicable to the EU level, as through time these institutions have become highly institutionalized, and developed from their original scope. The institutional approach also includes the context as an important source of influence to the development of policy. The research question of the study has been: how has the EU biofuels policy developed, and how can these developments be explained using an institutional approach?

The first EU legislation related to biofuels for transport was adopted in 1985, through the Directive on crude oil savings in the transport sector. The constraints from this directive upon the Member States, was not very strong, and the regulation cannot be regarded as a common European policy. The directive is merely requesting the Member States 'not to hinder' the use of biofuels in their national markets. This directive from 1985 represents a straight forward promotion of biofuels. The basis of appeal of the biofuels is their applicability in the transport sector. This is a consequence of the one sided focus of the directive regarding the outcome of the policy. The motivation is the energy security situation of the Community, and there are no interfering concerns.

In 1992 the Directive on excise duties on motor oils was adopted. This directive aims at supplying the Community with a set of rules regarding the taxation of motor oils, and it does not contain any higher or wider political outcome goals. Through this directive the Member States were allowed to exempt biofuels from taxation in their national markets, but only after going through a complicated application process. This mode of regulation meant that any Member State who wished to promote biofuels on their national markets were allowed to do so, while there at the same time were no constraints put upon the Member States who did not. The flexibility of the system, together with the complicated bureaucratic process, fostered a chaotic regulation of biofuels. This has been illustrated by the incident of the French measures, where the different EU level institutions interpreted the same directive in widely different directions, regarding France's ability to exempt their biofuels from taxation on their national markets.

In 1998 the EU and its Member States signed the Kyoto Protocol. At the same time environmental concerns were increasing their importance as an EU policy area. Together these events lead to the connection of environmental concerns to the biofuels policy in the beginning of the 2000s. The introduction of a second concern for the biofuels policy complicated the policy area, as the development was now contingent upon the development in two different areas with different contexts.

The Biofuels Directive from 2003 is the first common European policy regarding the promotion of biofuels. The directive contains ambitious targets for the proportion of biofuels in the transport sector, and requests the Member States to secure a certain amount of biofuels in their national markets; 2 per cent by 2005 and 5.75 per cent by 2010. The Biofuels Directive promotes biofuels based first and foremost on the concerns for the environment and for energy security, but the directive also includes rural development as part of the background for the policy. This complicates the policy area further, through the establishment of the threefold approach, including energy security, environmental and rural development concerns to the policy.

The targets of the Biofuels Directive were ambitious, and their implementation could have had a considerable impact on the world biofuels situation. These targets were however of an indicative character, and they were not met by any Member State, but Sweden and Germany. The non-accomplishment of the Biofuels Directive led to a consideration of stronger measures towards the Member States, in order to secure the accomplishment of the ambitions regarding these fuels. The Renewable Energy Directive of 2009 imposes mandatory targets for the Member States regarding the proportion of biofuels on their national markets. These targets are ambitious, 10 per cent renewable energy including biofuels by 2020, and their accomplishment would put the EU in a very central position on the world biofuels scene.

The Renewable Energy Directive does also contain a set of sustainability criteria for biofuels, which has been described as the most comprehensive scheme in the world related to the sustainable production of biofuels. The directive also grants privileges for next generations of biofuels. The implementation of the sustainability criteria in the policy is a result of the criticism of this policy in the political debates. Also after the adoption of the Renewable Energy directive has the influence from the critique surrounding biofuels seemed to be strong, through the proposal to include ILUC-measures to the policy. Moreover, the directive includes all three concerns, environment, energy and rural development, to its approach to the policy. The environmental concerns are however framed as the primary concern for the policy, while the other two are downplayed. This change in priority can be connected to

influence from the context, where environmental concerns are both modern and politically correct.

The application of the institutional approach on the case of EU biofuels policies, represented through these four directives, has revealed two development processes: policy innovation and European integration. The process of policy innovation refers to the development of a new policy area, where elements from different policy areas are integrated, and how this policy area is increasing its importance at the EU political scene. The process of European integration refers to the development in competence and power of the EU level, at the expense of the Member States. These processes are driven by characteristics of the EU institutional setting and by the policy context.

The two processes policy innovation and European integration, describe the development of the EU biofuels policy. The policy innovation process has developed from the passive biofuels promotion found in the Crude-Oil Savings Directive from 1985, where Member States were simply encouraged 'not to hinder' the introduction of biofuels in their national markets, through the chaotic regulation in the 1990s, and towards the ambitious and complex policies of the 2000s. The Biofuels Directive provides the first official consumption targets for the Member States, and includes the threefold approach to biofuels, while the Renewable Energy Directive takes the process of policy innovation even further through the mandatory character of its targets and the inclusion of sustainability criteria to the policy.

As regard the European integration process, the Biofuels Directive from 2003 represents the most important change. Up until this point in time, the policy was not characterized by any community wide ambitions. The process was fuelled by the chaotic situation that characterized EU biofuels policies in the 1990s, which lead to the development of a common policy in 2003. The Biofuels Directive represents a common policy because of the inclusion of targets for the Member States, imposed from the EU level. The Renewable Energy Directive's mandatory targets take the process of European integration to a new level.

Two main influencing factors were deduced from institutional theory; the EU institutional setting and the policy context. The most important influencing factors of the world context have proven to be the oil crisis of the 1970s, providing the policy with a strong energy security focus in the Crude-Oil Savings Directive; the Kyoto Protocol leading to the inclusion of the environmental concerns in the Biofuels Directive; and the increasing complexity and critique of biofuels resulting in the inclusion of the sustainability criteria of the Renewable Energy Directive.

At EU level the different institutions have influenced the policy in various directions. The institutions' approaches to biofuels seem to be dependent of the organizational criteria applied and their role in the institutional setting. In addition the power that each institution is supplied with is important. The Commission has the role as the initiator of EU biofuels policies, while the Parliament generally support the Commission's proposals and the Council is generally negative. The Commission is the only EU body with the right to propose EU law, and hence the role it plays is expected. Moreover its ambitions have been connected to its functional organizational criteria, which to a lesser extent foster the ethical sides to biofuels, compared to e.g. the political organization of the Parliament. In this way the Commission's ambitions on behalf of biofuels is not curbed by negative input.

The Parliament is further a strong promoter of the environmental concerns to the policy, much because of the large environmental party represented. Last, the Council's actions are generally towards a down scaling of the policy. The Member

States advocate their national interests in this forum, which leads to an approach characterized by the interests of powerful Member States instead of the Community. The Council is a powerful actor in the legislative process, and much of the EU biofuels policy is characterized by the Council's opinion.

Samandrag

Biodrivstoff vert i dag framsett over heile verda som gode alternativ til fossile drivstoff i transportsektoren, hovudsakleg basert på tre ulike tilnærmingar. For det første er biodrivstoff rekna for som ei karbonnøytral energikjelde. Dette fordi desse energikjeldene er produsert frå biologiske materiale, og difor ikkje fører til auka utslepp av klimagassar. Vidare er biodrivstoff eit verkemiddel for å auke energitryggleiken til enkelstatar, gjennom diversifisering av energibruken, og at ein slik gjer seg mindre avhengige av den internasjonale oljemarknaden. Til slutt vert biodrivstoff knytt til distriktsutvikling og landbrukspolitikk, gjennom ei målseting om at produksjon av biodrivstoff skal føre til at rurale område får fleire bein å stå på, gjennom produksjon av alternative landbruksvarer.

Samstundes vert bruk og produksjon av biodrivstoff sterkt kritisert, både i høve økologiske og sosiale negative eksterne konsekvensar. Økologiske spørsmål i høve biodrivstoff handlar for det første om at dersom ein tek omsyn til heile livssyklusen, frå produksjon til konsumpsjon, inneber bruk av enkelte biodrivstoff høgare utslepp av klimagassar enn det som er tilfelle ved bruk av fossile energikjelder. Vidare vert det stilt spørsmål ved produksjonsmodellen som biodrivstoff vanlegvis er underlagt. Produksjonen skjer som regel på store plantasar og fabrikkar, og dette har ofte negative følgjer for lokale naturtilhøve. Dei sosiale spørsmåla i høve biodrivstoff handlar om den plausible samanhengen mellom biodrivstoffproduksjon og den globale prisen på mat. Dette fordi produksjonen i dag stort sett er basert på planter som også vert nytta til matproduksjon, og slik kan skiple ballansen innanfor dei ulike råvaremarknadane. Til slutt er det stilt spørsmål ved i kor stor grad produksjon av biodrivstoff i rurale område og i utviklingsland er med på å gje befolkninga ein alternativ leveveg.

EU aukar stadig satsinga på biodrivstoff, og er i dag ein viktig aktør i den globale marknaden. Denne rapporten tek føre seg utviklinga av lovgjeving i høve biodrivstoff i EU frå midten av 1980-talet fram til i dag, hovudsakleg representert ved fire ulike direktiv. Direktiva vert analyserte ved hjelp av institusjonell teori, mellom anna gjennom bidraga til Peters (2005), Pierson (1996) og Egeberg (2004). Ei institusjonell tilnærming til studiet av politikk inneber at eit fokus på det institusjonelle rammeverket som omgjev politikktutforminga. Denne tilnærminga har òg eit strekt fokus på kontekst og omgivingar for politikktutforming. Problemstillinga for denne studien har vore: korleis har EU si biodrivstofflovgjeving utvikla seg over tid, og korleis kan denne utviklinga forklarast gjennom ei institusjonell tilnærming?

Det første EU direktivet som omhandlar biodrivstoff vart vedteke i 1985. Dette direktivet fokuserer på å minke bruken av rå-olje i transportsektoren gjennom å ta i bruk biodrivstoff. Direktivet frå 1985 innebar inga sterk styring frå det overnasjonale nivået, då medlemsstatane ikkje vert bedt om å gjennomføre tiltak for aktivt å fremje slike energikjelder, men heller om å ikkje diskriminere biodrivstoff på dei nasjonale marknadane. Ein ser her på biodrivstoff som einseitig knytt til omsynet til energitryggleik.

I 1992 vedtok ein i EU eit direktiv for forbrukaravgifter på motorolje. Gjennom dette direktivet vart det mogeleg for medlemsstatane å unndra biodrivstoff frå skattlegging i dei respektive nasjonale marknadane, men først etter ein komplisert

søknadsprosess. Dette innebar det at dei medlemsstatane som ønskte å fremje biodrivstoff gjennom skatteunndraging, stod fritt til å gjere dette, medan det ikkje fekk konsekvensar som dei som ikkje ønskte dette. Samstundes er det uttrykt i direktivet at alle drivstoff som skal nyttast til bruk som motorolje, skal skattleggast som konvensjonelle motoroljar. Direktivet set ikkje fram eintydige reglar for skattlegging av biodrivstoff. Fleksibiliteten, og ikkje minst uklarheita, i dette systemet, førte til ei kaotisk regulering av biodrivstoff i denne perioden. Dette har vorte illustrert her gjennom dei franske skatteletta for biodrivstoff, som vart gjenstand for stor debatt mellom dei ulike EU-institusjonane, då det gjeldande direktivet vart tolka på vidt forskjellige måtar.

I 1998 signerte EU og medlemsstatane Kyoto-avtalen, samstundes gjorde miljøomsyn seg gjeldande som ei viktig sak innetter i EU. Gjennom desse hendingane vart miljøomsyn inkludert som ein del av biodrivstoffpolitikken.

Biodrivstoffdirektivet frå 2003 representerer den første lovgjevinga som er gjeldande for heile EU samfunnet innan biodrivstoff. Direktivet inneheld ambisiøse målsetjingar for del biodrivstoff i transportsektoren, og oppmodar medlemsstatane om å forsikre seg om at innan 2005 utgjer biodrivstoff 2 prosent av konsumert energi i transportsektoren, og at innan 2010 er biodrivstoffdelen 5, 75 prosent. Biodrivstoffdirektivet fremjar biodrivstoff først og fremst på grunn av omsyn til miljøet og energitryggleik, men direktivet inkluderer òg distriktsutvikling som motivasjon for å satse på dette politikkområdet. Gjennom at miljøomsyna no er inkluderte, vert biodrivstoff som politikkområde enno meir komplekst. Målsetjingane i Biodrivstoffdirektivet var ambisiøse, og dersom dei hadde vorte implementerte ville dette hatt store konsekvensar. På den andre sida var desse målsetjingane rettleiande, og vart ikkje gjennomført av andre medlemsstatar enn Sverige og Tyskland. Denne manglande oppfølginga av målsetjingane frå direktivet førte til iverksetjing av sterkare verkemiddel i høve medlemsstatane, slik at ein kunne sikre at politiske målsetjingar vart følgde opp.

Fornybardirektivet frå 2009 inneheld obligatoriske målsetjingar for medlemsstatane i høve del biodrivstoff i dei nasjonale marknadane. Desse målsetjingane er ambisiøse: 10 prosent fornybar energi, inkludert biodrivstoff, i transportsektoren innan 2020. Desse målsetjingane ville for alvor setje EU på kartet i høve biodrivstoff. Gjennom vedtaket om Fornybardirektivet vart omsynet til miljøet fremja som den viktigaste bakgrunnen, medan omsyna til høvesvis energitryggleik og distriktsutvikling er klart nedprioriterte. Dette har vorte sett i samanheng med miljøomsyna sin sterke posisjon generelt i samfunnet og på dagsorden. Fornybardirektivet inneheld vidare eit sett med berekraftigheits-kriterium for biodrivstoff, og prioriterer neste generasjonar med biodrivstoff. Dette er ei endring direkte relatert til kritikken som biodrivstoff er omgitt av, som òg etter at Fornybardirektivet vart vedteke har vore sterk. Dette har ført til ein forslag om å innføre tiltak for å hindre ILUC-effektar frå produksjon av biodrivstoff.

Dei institusjonelle teoriane har vore brukte til å systematisere desse empiriske data. Gjennom bruk av dei institusjonelle teoriane, vart det identifisert to utviklingsprosessar; policy-innovasjon og europeisk integrasjon. Policy-innovasjonsprosessen refererer til utviklinga av eit nytt politikkområde som over tid styrkar si rolle i det politiske landskapet i EU. Den europeiske integrasjonsprosessen refererer til utviklinga der EU-nivået får større makt, på kostnad av medlemsstatane. Desse prosessane har vore drivne framover av enkelte av EU sine institusjonelle kjenne-teikn og av konteksten til biodrivstoff som politikkområde.

Dei to prosessane, policy-innovasjon og Europeisk integrasjon, svarar på første delen av problemstilling: korleis har EU si biodrivstofflovgjeving utvikla seg over tid? Policy-innovasjonsprosessen i høve biodrivstoff startar med vedtaket av direktivet om reduksjon av rå-olje frå 1985. Dette er ei passiv fremjing av biodrivstoff, og medlemsstatane vart gjennom dette direktivet oppmoda til å ikkje diskriminere biodrivstoff på sine nasjonale marknader. Dette er ikkje noko sterk eller omfattande fremjing av biodrivstoff, men direktivet er likevel veldig viktig i høve utviklinga av den felles biodrivstoffpolitikken i EU, då dette direktivet etablerte biodrivstoff som eit politikkområde. Vidare utvikla prosessen seg gjennom den kaotiske situasjonen på 90-talet, mot det ambisiøse og komplekse politikkområdet vi kjenner i dag. Biodrivstoffdirektivet frå 2003 inneheld dei første offisielle konsumpsjonsmålsetjingane, og inkluderer dei tre målsetjingane for dette politikkområdet, medan Fornybardirektivet tek denne prosessen enno eit steg vidare gjennom obligatoriske blandingsmålsetjingar og berekraftigheits-kriterium.

Når det gjeld den europeiske integrasjonsprosessen, representerer Biodrivstoffdirektivet det store vendepunktet. Fram til vedtaket av dette direktivet i 2003 var ikkje biodrivstoffpolitikken prega av noko særleg grad av felles politikk. Den felles tilnærminga i Biodrivstoffdirektivet kom som ein direkte konsekvens av den kaotiske situasjonen som råda i høve biodrivstoff på 90-talet i EU. Prosessen mot Europeisk integrasjon vert teken til enno eit nytt nivå gjennom Fornybardirektivet frå 2008, som inneheld obligatoriske blandingskrav.

Frå dei institusjonelle teoriane vart to forklaringsvariablar framsett; det institusjonelle rammeverket på EU nivå og konteksten til politikkområdet. Saman tek desse to faktorane føre seg den andre delen av problemstillinga: korleis kan utviklinga av EU sin biodrivstoffpolitikk forklarast ved hjelp av eit institusjonelt perspektiv? Frå konteksten har vi sett at dei viktigaste forklaringsvariablane har vore oljekrisa på 70-talet, som tidleg gav biodrivstoffpolitikken eit sterkt energitryggleiksfokus; frå signeringa av Kyoto-avtalen i 1998, og introduksjonen av miljøomsyna til dette politikkområdet; og til slutt frå den stadig aukande kritikken som omgjev biodrivstoff, nær sagt på alle kantar, og som mellom anna har ført til eit sterkare fokus på berekraftige biodrivstoff.

Frå det institusjonelle rammeverket på EU nivå har det stort sett komme innverknad frå organisasjonsstrukturen, rollene som dei ulike institusjonane er tildelt og makta som er fordelt mellom dei ulike institusjonane. Kommisjonen har hatt rolla som initiativtakar i høve utviklinga av EU sin biodrivstoffpolitikk, Parlamentet har vore generelt positivt innstilt til forslaga som har komme, medan Rådet har vore generelt negativt innstilt. Kommisjonen er den einaste EU institusjonen som har rett til å foreslå EU-lovgjeving, og rolla som denne institusjonen har spelt er difor ikkje uventa. Vidare har denne tilnærminga vore knytt til dei funksjonelle organisasjonskriteria som Kommisjonen er organisert ut i frå. Det vert forventet at desse organisasjonskriteria ikkje vil fremje dei etiske problematiske sidene ve biodrivstoff, og på denne måten vert ikkje Kommisjonen sine ambisjonar prega av dette.

Parlamentet på si side har eit sterkt fokus på dei etiske og problematiske sidene ved biodrivstoff, noko som har samanheng med dei ideologisk og politisk baserte organisasjonskriteria. Parlamentet er vidare ein sterk forkjempar for miljøomsyna i høve biodrivstoff, og dette har vorte knytt til den store andelen parlamentsmedlemmar frå dei grønne partia. Til slutt, Rådet har hatt ei bremsande rolle i høve utviklinga av biodrivstoff som politikkområde. I denne institusjonen kjempar medlemsstatane for sine nasjonale interesser, som fører til at utkomme her er prega av interessene til mektige medlemsstatar, i staden for heile fellesområdet. Rådet har

stor makt i lovgjevingsprosessen i EU, og mykje av biodrivstoffpolitikken er sterkt prega av handsaminga i Rådet. Rådet er ikkje underlagt det same offentlegheitsregimet som dei andre EU-institusjonane, og ein kan difor ikkje knytte det endelege utkomme frå handsaminga i rådet til enkeltstatar.

1 Introduction

Biofuels are increasingly being promoted as substitute fuels in the transport sector, and many countries are establishing public support measures, expressed through biofuels policy mandates or renewable energy targets, in order to boost the development of the industry. This leads to a development where biofuels increase their share of the fuels market, and become increasingly important agricultural products (OECD-FAO 2011). The Renewable Energy Directive of the European Union (EU) from 2009 is an example of such a governmental policy tool seeking to promote biofuels for transport. This directive contains, among other things, a goal of increasing the share of renewable energy in the transport sector to 10 per cent by 2020 (The European Parliament and the Council 2009a). This proportion shall mainly be accomplished through the use of biofuels, which is an ambitious target, and the implementation of it is likely to have severe influence on the world's biofuels scene. Both relating to the increased production within the Community, but also since the import is bound to increase.

Biofuels for transport are first of all promoted as a *renewable energy source*, as these fuels are regarded as carbon neutral. Biofuels are also promoted as an *alternative energy source*, referring to the fact that fossil fuels are running out, and the world needs to obtain its energy from other sources. Biofuels are in addition seen as an *innovative energy source* whose development contributes to the development of rural regions (Scragg 2009).

At the same time biofuels for transport are subject for a great deal of critique regarding the external consequences from their production and consumption. First of all because of the ecological degradation of air, water and soil, related to the production of biofuels is carried out in large plantations destroying the local environment (Powers et. al 2010). Further, when accounting for the whole life circle of some biofuels, the promised net gain as regards GHG-emissions is not fond (Scragg 2009). There are also social external consequences from the production of biofuels, related to the production of biofuels from food crops, which again influences food prices, which is problematic for the world's poor (Ajanovik 2011). The production of biofuels is also many times connected to the exploitation of resources from a local community, without this providing any benefits for the community population (Renner and McKeown 2010).

1.1 Research Question

The development of public policies on biofuels and the growth of this industry are strongly connected in the literature (Pahl 2005), and hence a study of public policies in this area is highly valuable for the understanding of the developments of this industry. The current EU policies directed towards boosting the use of biofuels are highly ambitious, and the Community is increasing its importance at the global biofuels scene as a consequence of this. A useful approach for studying public policy is institutional theory, where the most important explaining variables are

expected to be found within the institutional setting, but also in the policy context (Peters 2005).

The research question of this study was formulated: How has the biofuels policy of the EU developed, and how can these developments be explained using a broad institutional approach?

This report describes the development of the biofuels for transport policy of the EU from the 1980s up until today. The data is provided from official EU documents, and the findings are interpreted from a broad institutional approach. The developments that have been detected in this policy area is in this report described through two processes; policy innovation and European integration. The process of policy innovation describes how a new policy area is born and develops towards the ambitious and complex biofuels policy that we see today. The European integration process is an illustration of how the EU develops an ever closer cooperation in a policy area, eventually establishing a common EU policy. The explaining variables of interest are found in the institutional setting of the EU governmental structure, and the context of the EU biofuels for transport policy.

1.2 Biofuels Policies in the EU

In the current EU renewable energy policies, the transport sector is prioritized related to two main reasons. Firstly there is no sign of a potential replacement of the internal combustion engine as the dominant transport technology, and hence the liquid biofuels provide the best option to replace a significant share of the fossil fuels connected to the especially troublesome future of this sector. Further the transport sector seems to be facing an especially troublesome future as compared to other sectors of the society. This sector accounts for more than 30 per cent of the total Community energy consumption, and it is 98 per cent oil dependent, this strongly influences the Community's energy vulnerability and insecurity. Further the GHG emissions from the sector is projected to be 39 per cent higher than the 1990s levels in 2010, and 90 per cent of the Community's increase in GHG emissions originates from the transport sector. The sector will hence be important for the projected non-accomplishment of the EU's Kyoto Protocol obligations (The Biofuels Advisory Research Council 2006: 3).

Biofuels for transport has been an area of interest of the EU since the beginning of the 1980s. The Community was for a long time a laggard as regards this industry, much related to the fact that the USA and Brazil started their biofuels programmes a decade earlier, but today the EU is recognized as one of the most important actors at the world biofuels scene. The first successful European biodiesel production was carried out in a pilot plant in Austria in 1985, and from 1992 biodiesel has been produced on an industrial scale in Europe. In the 2000s the production reached new heights because of ambitious public policies to promote these fuel types, and the EU is today the leading biodiesel producer in the world (Pahl 2005: 83-4). The figure below shows the impressive development in biofuels consumption of the Community the last decade.

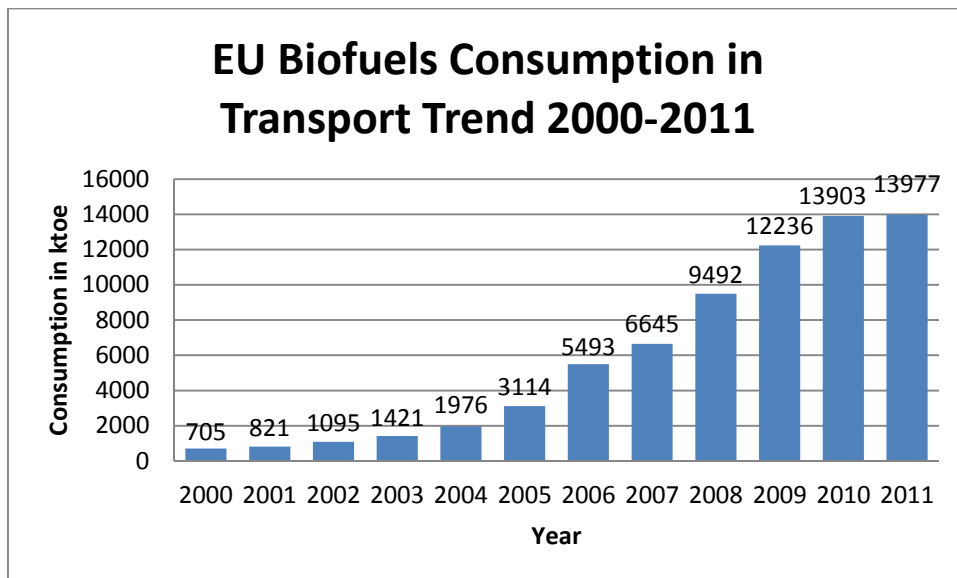


Figure 1.1 EU biofuels consumption in transport trend 2000-2010 in ktoe (adapted from Eur-Observer 2011: 74, Eur-Observer 2012:62)

The introduction of biofuels on the fuel market depends on their ability to be competitive with conventional fuel types. The price on biodiesel and ethanol is expected to increase to a lower extent than the price on crude oil in the near future, and hence biofuels will become more competitive. The reason for this increased competitiveness is increased global production and technological innovations leading to a more effective production process. This development is driven by public policies where renewable energy goals and production mandates are important (OECD-FAO 2011: 91).

A central component of the EU biofuels policies are blending mandates, where a target for the proportion of biofuels on the Member States' national markets is set. The compliance with the blending targets for biofuels in the transport sector has up until now been non-existing, and the projections for accomplishing the target for 2020 are not positive either. The table below shows the official EU targets and their corresponding rate of accomplishment.

Table: 1.2 The EU biofuels targets and the actual blending of the corresponding years (Adapted from: The Biofuels Research Advisory Council 2006:10, OECD-FAO 2012:92, USDA 2011:1-2, the European Commission 2006b:6). * Estimates by USDA (2011). ** Estimate by OECD-FAO (2012). The number includes also electricity, and takes into consideration that the second generations of biofuels will count twice towards the targets of the Member States

Road transportation fuels consumption (Ktoe)										
Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2020
Policy target	---	2,00%	2,75%	3,50%	4,25%	5,00%	5,75%	---	---	10,00%
Actual blending	0,70%	1,00%	1,68%	2,32%	3,11%	3,85%*	4,26%*	4,53%*	4,65%*	9,50%**

The Biofuels Directive from 2003 sets targets for the consumption of biofuels in the transport sector for each Member State. The target for 2005 was set at 2 per cent, but

as the table shows, the actual blending of biofuels in the Community only reached half of this by the end of the time frame. In 2010 the amount of biofuels consumed in the Community had more than quadruplicated since 2005, but this effort was not enough to accomplish the target set for this period. The Renewable Energy Directive from 2009 sets a target for 2020 of 10 per cent biofuels and renewable electricity in the transport sector. This target has been described as too ambitious, and a 9, 5 per cent proportion of renewables in the transport sector in 2020 has been proposed as likely for the EU, while aiming at the 10 per cent goal. This estimate takes into consideration that advanced biofuels shall count twice towards the target, and therefore the actual blending will be even lower than this.

1.3 The Institutional Approach

This report takes a broad institutional approach to the study of the development of the biofuels policy of the EU. A core assumption within this approach is that one should seek knowledge about the institutional framework in order to understand and explain policy outcomes (Peters 2005: 164). Pierson (1996: 158) challenges the hegemony of the traditional European integration theories in explaining the European integration process, and applies institutionalism instead. The argument is that through the integration process, the EU governmental structure has become institutionalized, and are increasing its scope for own actions and initiatives. The Member States are still regarded as important actors at the EU level, and in the development of new policy, but their actions are seriously constrained by the institutions of the Community, who have taken on a life of their own (Pierson 1996: 158). Egeberg (2004: 13) also views the EU as highly institutionalized, and outlines a set of organizational criteria in order to explain the institutions impact on policy. The institutions channel conflict and cooperation in different ways related to their organizational features. The EU level institutions are based on different sets of dividing lines that steer the focus and attention inside the institution.

The application of the institutional approach on the case of EU biofuels policies has revealed two development processes: policy innovation and European integration. The process of policy innovation refers to the development of a new policy area, increasing its importance at the EU political scene. The process of European integration refers to the development in competence and power of the EU level, at the expense of the Member States.

1.4 Report Outline

This chapter has accounted for the research question, and it has given a general introduction to the state of biofuels in the EU transport sector and to the institutional approach. The rest of the report is structured as follows: In chapter two the characteristics of biofuels as an EU policy field is described more closely, and the EU institutional setting is described. In chapter three the theoretical approach is described and chapter four discusses some methodological considerations. Chapters five, six and seven constitute the analysis chapters, where the developments in the EU biofuels policy are accounted for, and interpreted using a broad institutional approach. Chapter eighth holds an extensive overview of the main conclusions of the study.

2 Biofuels and Biofuels Policies in the EU

This chapter gives an introduction to the case of biofuels in the EU. First the technical advantages of biofuels are accounted for, and further it is given an introduction to the current and historical use of biofuels. Next the chapter outlines relevant characteristics of biofuels as a policy area in order to carry out a policy study in this field. Last the institutional setting of the EU is accounted for as this represents an important part of the institutional approach.

2.1 Biologically Based Fuels

Biofuels are energy sources derived from biological materials or biomass, and the combustion of these types of fuels is regarded as carbon neutral. Creating the raw material absorbs carbon dioxide, and using those releases an equivalent amount. The emissions from these energy sources belong in the natural circulation, because the carbon dioxide stored in biological material would eventually have been released anyhow, if not through human energy exploitation then through decomposition in nature (Scragg 2009: 167).

Biomass has always been exploited as an energy source by human beings, and can be exploited through different processes for energy generation. First, and most widespread, the biomass can be used for the heating of buildings and to generate electricity. This can e.g. be done through the direct combustion in fires and stoves in private homes for heating purposes, through more advanced pellets burning systems in the heating of larger buildings, or as the energy source in an electricity production plant. The biomass can also be exploited as a transport fuel. Through different chemical processes, the biomass can be converted into biofuels in gaseous or liquid states that can be used as transport fuels, and hence replace the current fossil fuels (Scragg 2009: 74-6).

2.1.1 Biofuels through History

The idea of using biologically based fuels for transport is as old as the motor vehicle industry itself. The early engines were originally designed to be driven by a great variety of fuels, among them alcohol and plant oil based fuels. Biofuels were in fact nicknamed “the fuels for the future” by the motor vehicle pioneer Henry Ford (Scragg 2009: 107). During the first half of the 20th century, there was a great interest in the development of biologically based fuels. This was especially true in European countries, as this part of the world lacked their own petroleum reserves, and hence these countries had a greater incentive for the development of other sources of energy in order to reduce their energy dependence. Furthermore, as many European countries had colonies in tropical areas, they had access to natural resources and land areas with low cost production potential (Pahl 2005: 26-7).

Nevertheless fossil fuels soon gained dominance as the energy source of motor vehicles. This was due to the fact that by the beginning of the 20th century these fuel sources had become considerably cheaper to access, produce and supply to the

public, compared to biologically based fuels (Olah et.al 2006: 177). During the World Wars, the normal supplies of fossil fuels were disrupted, and biologically based fuels were used as emergency substitutes. However, after the Second World War, the world society was flooded with cheap petrol, and the biological fuels industry was to a large extent abandoned. The hegemony of the fossil fuels continued without question until the 1970s and the turbulences in the oil supply of this decade. The 1970s oil crisis was a consequence of the Yom Kippur War of 1973 and the Iranian revolution in 1979. The Organization for the Oil Exporting Countries (OPEC) organized an oil embargo against the West and the USA for choosing sides in these conflicts. As a result of the embargo energy prices inflated enormously and led an economic recession. These two experiences showed beyond doubt how dependent the Western countries had made themselves on import of oil. The way of life one knew in these nations at the time was in fact threatened by the insecurity in the oil market. This led to a revival of the interest in biologically based fuels in the West (Pahl 2005: 26-8).

2.1.2 Current Production and Use of Biofuels

Today's liquid biofuels can without problems be used in small proportions with conventional fuels in normal vehicles, thanks to the belief in biologically based fuels from the pioneers in the automobile industry, and to the continuous interest in these fuels through history (Scragg 2009: 136). The biofuels available at the commercial market today are bioethanol and biodiesel, accounting for about 3 per cent of global road transportation energy consumption. Ethanol accounts for more than three quarters of this consumption, with the USA and Brazil as the major producers. Europe is the leading producer of biodiesel. It is also possible to use biogas for transport purposes, but the introduction of these fuels to the commercial private vehicle market requires a new distributional system (World Watch Institute 2007: 3-7).

Ethanol is derived from sugar crops such as sugar cane and sugar beet, or starch crops such as maize or wheat. Through different processes these crops are transformed into ethanol, which can be used as a fuel in a petrol engine. Sugar cane is the most significant biofuels crop. The plant is currently the lowest cost crop available for biofuel production, as it contains a large amount of easily accessible sugar. Brazil accounts for the majority of the ethanol produced from sugar cane, and dedicates about 50 per cent of its sugar cane to the production of bioethanol (OECD-FAO 2012). Ethanol is also produced from sugar beet, mainly in Europe. This plant gives generally good yields of energy in temperate areas, but the total energy yield is low compared to sugar cane production in tropical areas. The crop is more energy and chemical intensive, as the beet must be processed in order to access the sugar (World Watch Institute 2007: 25-8).

Maize is the most important biofuels source among the starch crops, mainly due to the plant's dominance in the USA, which uses more or less 40 per cent of its maize harvest to the production of bioethanol. Maize is a land intensive crop, and although the USA and Brazil produce comparable amounts of ethanol, the maize based American ethanol needs almost twice as large a land area as the Brazilian ethanol. In addition the starch also requires a more complicated process before it can be converted into liquid fuels. It must first be converted into sugar and then in a second process to alcohol (World Watch Institute 2007: 25-8). The Brazilian ethanol is the cheapest product among the different types of ethanol that is available on the

world market, both related to the production process and the growth conditions (The Economist 2005).

Biodiesel is derived from plants that store their energy in oil-seeds, e.g. rape seed, soy bean and palm oil. The energy yield per hectare in temperate regions is generally lower for oil seeds compared to starch and sugar crops, but these products normally require less processing, and their overall energy balance is more favourable in the long run than for ethanol products. Rapeseed is the most important feedstock for biodiesel in Europe. It gives the highest net energy yield per hectare of the oil-seed crops, when grown in the temperate parts of the world (World Watch Institute 2007: 30-33). About 65 per cent of EU vegetable oil is used to produce biodiesel (OECD-FAO 2012).

Soybeans generate a relatively low energy yield per hectare compared to other oilseed crops. Still the plant is increasingly being used as a feedstock for biofuels, much related to its availability, as it is the dominant oil-seed plant on a world basis. Palm oil is an attractive source of biofuels production, because the net energy yield per hectare is very high. The majority of the palm oil is produced for food consumption, but an increase in the demand for palm oil for the production of biodiesel is expected, especially due to forecasted increase in the import of palm oil to Europe (World Watch Institute 2007: 30-33).

2.2 Biofuels as a Policy Area

Biofuels is a contested energy source, more so than other types of renewables, both related to technical considerations but also because of the high uncertainty regarding the social and ecological external consequences of the fuels. The development of public policies in the field will be contingent of the controversy that surrounds biofuels.

2.2.1 Technical Considerations

Biofuels' main appeal is that they are a renewable energy source that can be introduced in the market without having to make major practical adaptations, as these fuels can be used without problem in the current vehicles. The fuels' applicability is heavily emphasized by the EU in relation to the promotion of biofuels. Even though these fuels are applicable in the transport sector, there are several obstacles to the fuels' success in the market. Practical problems related to the supply system or the storage of the fuels, and the compliance with the common fuel standards of the market are some examples. Moreover, biofuels have to be competitive on price in the commercial market (Scragg 2009: 134).

The costs of biofuels are related to two different global markets; the market of the crop that the production is based upon, and the oil market (Tréguer 2008: 16). Feedstock accounts for the majority of the production costs of biofuels, which makes the production of biofuels very much dependent on the world agricultural market. The costs for the production of the different biofuels are currently falling because of technological innovations (World Watch Institute 2007: 20-1). Biofuels are also dependent on the oil market, as the price of oil determines the competitiveness of the biofuels. In order for the biofuels to compete with fossil fuels, the oil price needs to be at a certain level, normally quite high. However the competitiveness of biofuels is

expected to increase, as the relative growth in the price of oil is expected to increase more rapidly than the price of biofuels (OECD-FAO 2011: 80).

The biofuels are divided into two categories according to their maturity as commercially available products. First generation biofuels is a term used to identify the biofuels that are produced from crops with sugar, starch and oil content, and that are converted into liquid fuels for transport using conventional technology. The next generation biofuels are produced from crops where the total biomass of the crop is used in the production. The processes to perform the transformation into liquid biofuels are technically advanced, and cannot be performed at a scale large enough for the commercial market today (World Watch Institute 2007: 23).

The biofuels available for transport today are all produced from crops that already are cultivated for other purposes than energy production purposes. In this way, the production of biofuels is not connected to high transformation costs. The fields can be cultivated in the same way as before, as the change is only related to the process of refining of the product. There are signs of the current biofuels crop cultivation being motivated by these “convenience reasons,” and this is in close connection to the price of the fuels. The cultivation of soybeans for biofuels purposes is an example, as the crop is a growing source for biofuels production, despite its low energy yields per hectare. Soybeans are the most cultivated oil-seed crop in the world, and hence it is available in many places (World Watch Institute 2007: 28-32).

The biofuels currently in use belong to the first generation category and these fuels have several negative external consequences. The next generations of biofuels do to a great extent resolve these problems, but they cannot be expected to be commercially available on the market for still some time. The bottom line considering the access of biofuels to the market, is that they have to be cost effective compared to conventional fuels. Only the first generation biofuels fulfil this criterion today, and they will therefore dominate the market in the short and medium term (Scragg 2009: 62).

2.2.2 The Ethics of Biofuels

While the technical debate related to the economic aspects of biofuels, the ethical debate relates to ecological and social external consequences of the promotion of these fuel types. These concerns are to a large extent connected to the use of first generation biofuels, and can be resolved through the transformation towards next generations of biofuels. Biofuels’ renewable character is one of the main arguments for the development of public policies to promote such fuels. Still, because of the use of highly inefficient crops for the production, it is argued that the production of biofuels is characterized by so low efficiency that the environmental benefits that they are supposed to provide are wiped out by their own production. There is no doubt that biomass can be a carbon neutral energy source e.g. when it is burned for heating in a stove in a private home. The case is quite different when the biomass is going through complicated and resource demanding processing in order to be transformed into gaseous and liquid fuels for transport (Scragg 2009: 179).

A life cycle analysis of a biofuel takes into consideration the whole production process. From the process where the crop is cultivated, through the processing of the crop into a liquid fuel, finally leading to the combustion of this fuel in a vehicle. The results of these analyses, when conducted on the current biofuels available on the market, are not positive as regards the emissions of GHGs (Scragg 2009: 206). Other factors that should be considered when evaluating biofuels as regards GHG-

emissions are land use changes, both direct and indirect. Direct land use change occurs when biomass cultivation displaces different former land use, e.g. when a land area formerly used for the production of food, feed or fibre is shifted towards the production of bioenergy crops, as plants have different qualities as regards the GHG-emissions from their life cycle, and their ability to store carbon. The indirect land use changes (ILUC) occur when the land that the bioenergy crops now occupy is replaced in an alternative area that might have high carbon stock (Gawel and Ludwig 2011).

Further there are concerns related to the depreciation of soil, air and water through the production of biofuels. This is related to the production of biofuels on an industrial scale in large plants, where the natural resources are exploited towards, and above, the carrying capacity of the local ecosystem. This overexploitation, together with extensive use of fertilizers and industrial machinery in the cultivation process, has negative consequences for the ecosystem (Powers et. al 2010).

The production of biofuels on an industrial scale also creates problems of social character. Local farmers employed on the production sites are many times exploited. Further, the production of biofuels is not a labour intensive industry, and there is no real hope for providing poor peasants in developing countries with a stable and long term income. There are also incidents where local peasants have been expropriated from their property, in order to make room for the biofuels plantation (Renner and McKeown 2010: 2).

The relationship between biofuels and food prices is also a complicated one. This is the well-known food versus fuel debate, where the increase in the cultivation of biofuels is feared to have influence on the food prices. This connection is very plausible, as the production of grain for food purposes and for fuel purposes is based on the same re-sources. In 2008, when the prices on some food products had doubled in just a few months, the production of biofuels was given much blame. Still, there are other concerns that may have contributed to these heights in food prices in 2008, e.g. the speculation in grain, failure of crops in important food production areas and the oil price (Ajanovik 2011; The Guardian 2011).

2.3 The EU Institutional Setting

These ethical and technical considerations related to biofuels constitute important parts of the context of biofuels as a policy area. The EU institutional setting will foster, hinder, or maybe even be captured by, these issues through their adoption of policies on biofuels.

2.3.1 The EU-Level Actors

The European Commission (The Commission) is composed of 27 commissioners, one for each Member State. Each commissioner is supplied with their own portfolio e.g. environment or energy, but the final decisions are made by the college of commissioners. The commissioners are nominated nationally, but they are to be independent from national interests once they are appointed members of the college (Nugent 2010: 110). The most important feature of the Commission is its initiative power, placing this body at the centre of the policy making process. The other branches of government lack this power and are to a great extent dependent on the Commission's initiative. (Nugent 2010: 121).

The Commission is first and foremost a developer of policies and legislation, particularly on the subject of specific measures that will advance the development of the European Union. The trend shows that the Commission's powers have been declining through the last treaties of the European Union, resulting in changes in the European Union institutional setting. Among other reasons there is no longer a need for the Commission to play the role as a "policy pioneer" anymore, as the Community is well consolidated. Further, the increase in power resting with the European Parliament and the European Council has resulted in a weaker Commission (Nugent 2010: 122-36).

The European Parliament (the Parliament) does traditionally not have as strong powers as national parliaments, recent changes have however supplied the Parliament with a central role in the EU policy making process (Nugent 2010: 179). The MPs are recruited through direct elections based on political party membership, and eight political groupings inside the Parliament, serve as the basis of organisation (Nugent 2010: 192-9).

The most important channel for influence that the European Parliament has is through giving its opinion on suggested legislation from the Commission. This consultation can be carried out through different procedures providing the Parliament with different amounts of influence. The choice in procedure depends on the nature of the matter at hand. There are also mechanisms for communication between the Commission and the Parliament at earlier stages of the policy process. The European Parliament also has three significant weaknesses as regards its relative power over legislation in the EU governmental structure. Firstly, the European Parliament shares the legislative role in the EU with the Council. The power between them is dependent on the decision procedure chosen. Secondly, the Council has the ability to make preliminary decisions before the Parliament has made their decision, and the Parliament's influence is in this way reduced. Thirdly the Commission possess powers over legislation that are technical or urgent (Nugent 2010: 179-184).

The Council of the European Union (the Council) is the principal meeting place for the national governments at EU level. The Council prefers to make decisions unanimously, believing that this is best for the development of the Community. The most important function of the Council is its role as a legislative and policy decision maker. This function is shared with the Commission and the Parliament when the Community method is applied. Through this mode of decision making the Council depends on the Commission to initiate policy, and it shares the legislative role with the Parliament through the co-decision procedure. The Council has expanded its scope for influence in recent decades, as there today is hardly any policy area that is not covered by EU law; on the other hand, the Council's relative power compared to the other EU institutions has decreased (Nugent 2010: 139-55).

In the Council the Member States advocate their national interest. In relation to biofuels policies, the different Member States' interests and actions will be contingent on the situation regarding biofuels in their national markets. Wiesenthal et al. (2009: 793-4) investigate the different Member States and their relationship to the EU biofuels policy. The study is based on variables such as GDP, arable land per capita, the share of the agricultural sector in overall employment, transport energy demand, transport CO₂ emissions and oil import dependency of a country. The argument is that Member States with a high GDP, a large amount of arable land per capita, a large share of the agricultural sector in overall employment, high transport energy demand and CO₂ emissions from transport, and which are dependent on the

import of oil, will to a greater degree be interested in the production of biofuels feedstock and using biofuels in transport. From the analysis it is indicated that Lithuania, Bulgaria, Denmark, Poland, Romania, Hungary and France have an elevated interest in the production of feedstock for biofuels production, and that Luxembourg, Germany, France, Ireland and maybe Finland have an elevated interest in biofuels consumption. France is the member state that has the highest combined value regarding these two variables. One can therefore conclude that France is the Member State of the Community with the most to gain from a European level biofuels policy. Still, the authors make these inferences with some reservations. Many of the characteristics related to biofuels are present in Ireland according to this study, but still the country is neither a biofuels producer nor a consumer. The authors include, based on this, a last explanatory factor, which they name “political will.”

The European Economic and Social Committee (the EESC) was established through the Treaty of Rome. The decision was based on the view that the special interests needed a forum to express their interests in the Community. The representatives are divided into three groups; employers, employees and various interests. The last group is dominated by representatives from among others, the agricultural sector and environmental organizations. The Committee has an advisory role in the government system, and its influence is limited, mainly due to its unclear role and the question of its representativeness (Nugent 2010: 227-231).

The Committee of the Regions (the CoR) was established as a result of the increasing importance of the regional dimension of the Community’s affairs. There are great differences between the geographical areas in the Community when it comes to wealth and income, and the Community is increasing its ambitions to compensate for this. The members of the CoR are all elected representatives of subnational levels of government, and the members are organized in political groups within. The CoR has an advisory role in the system, and the Committee’s influence is even more constrained than the EESC’s (Nugent 2010: 231-233).

The European Council does not have a legislative role in the EU system, but it holds a great deal of power in the Community governmental structure. The institution was established as a reaction to the EU’s lack of adaptability, and poor response to new challenges of the Community. The Council has a broad focus, which have led to an unclear role in the EU system, and resulted in a situation where the European Council continuously has increased its power, compared to the other institutions since its initiation (Nugent 2010: 171-8). There are also considerable lobby interests present at the EU level. The three areas that biofuels connect to; energy, environment and agriculture and rural development, are all characterized by strong lobbyist groups. These interests will try to influence the policy through formal and informal channels, and try to steer the policy in the desired direction (Andersen and Eliassen 2006: 44

2.3.2 The Legislative Procedures

The Community method is in use for the adoption of legislative acts in the EU system. This method for decision-making includes the Commission, the Parliament and the Council. The initiative structure was one where “the Commission proposes, the Parliament advises and the Council decides.” An important development has occurred over the years: the Parliament has increased its power at the expense of the Council (Nugent 2010: 294-5).

Three different legislative procedures are in use today in the EU government system; the consultation procedure, the ordinary procedure and the consent procedure. The ordinary procedure is the most used, and the other two are referred to as special legislative procedures, only applicable in certain situations. Prior to the Lisbon Treaty there was a fourth legislative procedure; the cooperation procedure (Nugent 2010: 308-310). This study investigates a process that stretches back to the beginning of the 1980s, and up until the adoption of the Renewable Energy Directive in 2009. During this time period there have been considerable changes regarding the legislative procedures in use, and this influences the relative power of the EU institutions.

Prior to the Single European Act (SEA) of 1986, the consultation procedure was the only procedure for the adoption of legislation. This is a single reading procedure where the Council is the sole legislator, and where the Parliament is merely a consultative body. When a Commission proposal is published, it is supplied to the Council, the Parliament, and if the policy area implies, to the EESC and the CoR for their opinions. The Parliament's power in this policy process is related to the fact that the procedure requires the Parliament's opinion before the final decision can be taken on the matter. Still the Council does not have to take the Parliament's opinion into consideration, the proposal can be changed after the Parliament has made its opinion on it, and the Council does at times make their decision 'subject to Parliament's opinion' even before the opinion has been submitted. The Council acts normally unanimously in this procedure, and if agreement cannot be made the proposal is sent back to the Council machinery or to the Commission for devising (Nugent 2010: 310-14).

Through the SEA the cooperation and consent procedures were adopted. The consent procedure is used when the Community is adopting e.g. international agreements or regarding Community enlargements. The procedure is a single stage procedure, and the proposal has to be approved by both the Council and the Parliament, but the Parliament does not have the right to amend the proposal. The cooperation procedure was established in order to increase the efficiency of the decision-making process, and also because it was necessary to give the Parliament more power, because of criticism of 'democratic deficits'. The cooperation procedure introduced a second reading for the Parliament, increasing its influence, but without giving it the right of veto (Nugent 2010: 315-19).

The ordinary procedure is based upon the cooperation procedure, and goes even further in the allocation of power in the Parliament's direction, supplying it with the right to veto the Council. Since the Maastricht Treaty of 1992 the scope of the procedure has evolved, and is today applied for almost all policy areas. The procedure includes as much as three readings, and encourages the EU institutions to engage in inter-institutional bargaining. The official Commission proposal is supplied to the Council, the Parliament, the EESC and the CoR, the two latter only if the policy area in question suggests it (Nugent 2010: 315).

If the Parliament and the Council do not reach an agreement, the Council, taking into consideration the Parliament's opinion, adopts a common position, which is supplied to the Parliament for a second reading. If the Parliament agrees, the common position is approved, and the Council can adopt it as a legal act. If the Parliament does not agree, it can either reject the common position, acting by an absolute majority, or amend the proposal and send it back to the Council. If the Council cannot accept these changes, a third stage is initiated. At this stage the proposal is referred to a conciliation committee, where central actors from the

different institutions meet. If the committee agrees on a joint text, this is supplied to the Parliament and the Council for final decision, if an agreement cannot be reached the proposal falls, but this hardly ever happens (Nugent 2010: 315-19).

2.3.3 EU Policy Areas Related to Biofuels

The Renewable Energy Directive advocates for a biofuels policy, based on three different arguments; the improvement of energy security, the reduction in emissions of green-house gases and innovation in the agricultural sector and rural development (The European Parliament and Council 2009a: 16). Hence, the development of the common biofuels policy should be expected to be dependent on the policy areas of energy, environment and agriculture and rural development. These policy areas are connected to the EU level to different extents, both regarding the extent and the nature of the involvement (Nugent 2010: 282-3).

The energy policy is the least developed at EU level of the three biofuels related policy areas. The energy field is characterized by a shared responsibility between the national and the Community level, and the cooperation relies heavily on interstate relationships (Nugent 2010: 283-4). The lack of a strong common energy policy is related to the enormous differences between the Member States when it comes to import dependence and energy mix. The relationship between the EU institutions regarding energy policy is generally one where the Commission is the advocate for progress, and where the Council “puts the brakes on, or otherwise limits, the ambitious of a coherent, common approach to energy policies (...)” (Birchfield 2011: 246-7). The Parliament’s approach to energy policy depends on the relationship with the Council. Generally though, the Parliament’s green colour as regards political parties is also valid for energy policy (Birchfield 2011: 235-54).

The EU Environmental Policy was established through the SEA in 1986. The environmental concerns had been important in the Community political debates since the late 1970s, but through the SEA the informal status of EU environmental policy was ended. The environmental policies of the EU are characterized by a shared competence between the national and Community level, but the policy area is at the same time one where the policy relies heavily on legal regulation (Nugent 2010: 284). The EU is today known as one of the driving forces for the development of global policies related to the environment, with ambitious policies also regarding domestic targets. Also inside the Community the ambitions regarding the environment are extensive. The Commission is eager to perform its initiation role related to environmental policies. In the Council the environmental ministers are generally eager to promote Community environmental policies, as they at the European level are not constrained by conflicting national policies. Last, the European Parliament is the greenest of the European level institutions, and its proportion of green members is much higher than what it is at national levels (Lenshow 2005: 312-23).

The Common Agricultural Policy (CAP) is one of the core competences of the EU level. The policy area is characterized by extensive EU policy involvement, and heavy reliance on legal regulation (Nugent 2010: 279-84). The policy was established during the 1960s by the original six EU-member states, trying to cope with the after-war food shortages, and worried about the sustainability of their own food production (Roeder-Rynning 2010: 182). In general, the CAP has changed its focus from agriculture towards rural development, where rural areas are seen as more than agricultural commodity production areas, among other things related to environ-

mental concerns. Even though the CAP is a supranational policy area, the developments are generally controlled by national interests, through the Council being the responsible body (Rieger 2005: 174-7). The development of the biofuels policy is contingent on all these three policy areas.

2.4 Chapter Summary

Biofuels are an eligible alternative energy source because of their reductions of GHG-emission, their positive influence on energy security and their possible diversification of incomes in rural areas of the Community. Biofuels are given much emphasis in renewable energy policies much because these fuels represent the only currently available and applicable alternative energy source in the rapidly growing transport sector.

The policy area of biofuels for transport is complex and controversial. Firstly, many biofuels are at an early stage in their technical development and hence provided with uncertainties as regards their efficiency. Secondly, the benefits from such fuels communicated in the policy; concerns for the environment, energy security and rural development, are met by fierce critique regarding; increased GHG-emissions, degradation of local ecological conditions, threats to global food security and the exploitation of rural areas and peasants. These questions constitute the context of biofuels as a policy area.

The EU governmental structure is composed of supranational institutions; the Commission and the Parliament, and of the intergovernmental Council. These bodies have different roles and power within the system. The Member States' interests, which are promoted through the Council, vary to a great extent. Biofuels as a policy area relate to three other policy areas, environment, energy and rural development, which are characterized by different relationships to the EU level.

3 Theoretical approach

This report is a case study of the EU biofuels for transport policy. It is based on official documents related to this policy area, within the time span from the beginning of the 1980s and up until today. The developments have been analysed from a broad institutional approach, including contributions from Pierson (1996), Egeberg (2004) and Peters (2005). The contributions are used to identify relevant institutional and external factors that explain the development of the biofuels policy in the EU.

The broad institutional approach constitute an applicable tool for the investigation of the research goal of this study, which is to find out how the biofuels policy of the EU was initiated, and how it has taken its current shape. The development is described thorough two processes: European integration and policy innovation. The institutional approach is used to explain the development that is connected to these two processes.

The general assumption of institutionalism is that a policy outcome is dependent on the institutional setting of the process through which the policy has developed; initiative, debates, decision making and implementation. In addition the institutional theory has a strong emphasis on the influence from context on policy (Peters 2005: 164). An institutional approach to the investigation and explanation of the development of the common EU biofuels policy will therefore steer the focus towards the institutional setting at the European level, and its institutionalized context, as the explanatory factors for the development.

3.1 New Institutionalism

The New institutionalism considers the values, rules, incentives and patterns of interaction of an institution as important explanatory factors for the outcome of governmental policies. Therefore one should seek knowledge of the institutional framework in order to understand and explain policy outcomes (Peters 2005: 164).

The basic argument is that institutions do matter, and that they matter more than anything else that could be used to explain political decisions. (...) Individuals remain as important actors in most of these theories, but the implicit or explicit argument is that there is substantially greater leverage to be gained through understanding the institutional frameworks within which they operate (Peters 2005: 164).

EU policies are traditionally regarded as the result of collaboration between Member States, where they advocate national interests. The European level institutions are seen as tools for the implementation of the policy that the Member States dictate. This view is challenged by the institutional approach which regard EU politics as more complex than this. Institutionalism emphasizes the EU institutions' own influence on the policy, as they have evolved and developed new competences over

time. In this perspective the EU institutions are carrying out completely different roles than they were initially provided with (Pierson 1996: 158).

A common way to approach the study of the EU is for example through liberal intergovernmentalism. This approach treats the EU as an international regime, and sees the process of European integration as a process driven by rational choices made by the Member States (Pierson 1996: 124-5), e.g. as Moravcsik expresses it:

European Integration can best be understood as a series of rational choices made by national leaders. These choices responded to constraints and opportunities stemming from the economic interests of powerful domestic constituents, the relative power of each state in the international system, and the role of institutions in bolstering the credibility of interstate commitment (Moravcsik 1998: 18).

This results in an approach where the sole area of interest is the Member States' actions, due to the fact that the power to initiate change and development in the Community is concentrated with them. Further, the Member States' preferences are regarded as given when they collaborate with other Member States, and the superior goal for every Member State is to preserve their sovereignty. In addition, the Member States are not expected to engage in collaboration or cooperation with other Member States, if these activities do not reduce uncertainty, or resolve collective action problems. "The core calculation for member states is whether the benefits of collective action outweigh any possible risk to autonomy" (Pierson 1996: 129).

The study of the EU institutions can therefore be carried out by accounting for the functions and roles since this is the sole reason for their existence. As a consequence of this the traditional EU approaches are mostly concerned with the amending, revision or development of new treaties, or the process leading up to these. The day to day development of the policy in between these events is more or less ignored in this approach to the study of the EU (Pierson 1996: 128-30).

According to Pierson (1996:131) this approach's understanding of the EU was correct at some point in time. It was in fact the Member States that initiated the foundation of the institutions at the European level, when the first steps towards the European Community were taken. However, as time has gone by, the scope of these institutions changed, as the institutions at the EU level gathered more competence and power. The institutional approach does therefore more adequately account for the EU policy process, and the relationships between the stakeholders, since it accounts for differences between the Member States' initial interests, and the actual EU policy outcome. It also takes into consideration that it is not easy for the Member States to go back on the processes of integration.

The characteristics of the EU institutions are emphasized in order to explain how this relationship came to be. When they were created by the Member States, the institutions at EU level were supplied with a certain amount of autonomy, in order to be able to perform the tasks for which they were established. However, the EU institutions are expected to use the power that they were provided with, for their own interests, including increasing their own autonomy, and the institutions can therefore not be expected to be merely the subjects of Member States' interests. This creates a picture where the supranational institutions of the EU; the Commission, the Parliament and the Court, are under continuous suspicion from the intergovernmental institutions; the Council of the European Union and the European Council, when proposals are treated in the EU governmental system (Pierson 1996: 132-33).

Some general characteristics of the Member States do also contribute to the process where the EU institutions increase their autonomous role in the political sphere of the Community. First, politicians of the Member States, like all politicians can be suspected to be, are concerned with a time horizon that stretches until the next election date, and only to this point in time. The EU policies on the other hand, are connected to long time frames. In this way, the Member States politicians' actions regarding the European integration process are mostly motivated by short-term gains, while their actions will have long-term consequences, resulting in an unbalanced relationship in the EU levels favour (Pierson 1996: 135). Further, even if the Member State are able to take into account the long-term impact of their actions directed towards the EU level, they are not protected from unintended consequences:

Complex social processes involving a large number of actors always generate elaborate feedback loops and significant interaction effects that decision makers cannot hope to fully comprehend (Pierson 1996: 136).

This is related to the manifold issues that the EU is responsible for. Many policy areas that earlier were dealt with at the Member State level, are now the EU's responsibility. The consequence is that the Member States are having trouble getting an overview of the situation, and hence they are unable to identify the unintended consequences of the policy they have adopted. Last, the Member States' preferences are liable to change at least every fourth year, as they are the direct consequences of national elections. The Member States' interests regarding the European integration are therefore volatile, resulting in a dispersed approach to the EU. The EU level on the other hand, does not change its interests and opinions every fourth year. This effect gets even stronger as the EU increases its competence on policy areas that traditionally have been important domestic concerns, and hence subject to considerable political dispute. The older European level issues, e.g. economic policy which is generally directed towards growth at almost any cost, have been generally less disputed (Pierson 1996: 136-9).

The power to change this process, and to transfer the power back to national level, is within the power of the Member States, and the reasons for not doing so are connected to the institutional barriers to change in the EU, e.g. the adoption of a treaty is dependent on unanimity between the Member States. Last, the withdrawal from the Community by a Member State is connected to high exit costs. The further the integration process goes, the more power is placed with the supranational institutions, and at the same time, the higher the costs would be for the Member States to break out of the Community (Pierson 1996: 142-44).

The picture painted by Pierson (1996) is one where the EU institutions no longer can be regarded as an instrument for the Member States. The European level has taken over many of the policy areas that earlier were the Member States' responsibility, and through this process the European level is supplied with an increasing scope for own actions and initiatives. The Member States are still regarded as important actors in the policy process of the EU, but their actions are seriously constrained by the institutions of the Community, who have taken on a life of their own (Pierson 1996: 158).

3.2 The institutionalized EU

The process that Pierson (1996) accounts for leads to an understanding of the EU level as highly institutionalized. Therefore in order to explain the outcome of a policy process in the EU, one needs to take into account the institutions where the policy has been adopted. The next step is to account for the organizational characteristics of these institutions based on Egeberg (2004), in order to account for their likely actions and influence towards the development of the biofuels policy of the EU.

The main dividing criterion in the European political order has traditionally been nation state borders. With the development of the European Community, and through the introduction of the institutions at this governmental level, other dividing lines have been put in place; functional and ideological. In this way new conflict and cooperation patterns have developed at the European level, and the uni-dimensional territory based structure of European interaction is no longer present. Because of these changes, and because of the institutionalization of the European level, a full understanding of the conflict and cooperation pattern of the EU is not possible without accounting for the institutional framework (Egeberg 2004: 3-6).

The notion is not that institutions as a rule “invent” conflicts, however, institutions may systematically activate some latent cleavages while routinely ignoring others (Egeberg 2004: 7).

Some main conclusions regarding effects from the different criteria for division are made. Institutions that are organized based on a territorial criterion encourage conflicts along territorial or nation state lines, while institutions that are organized based on non-territorial criteria encourage conflicts across territorial units or nation states. The traditional intergovernmental organization is based on territorial criteria, e.g. the United Nations is an example of such an organisation. In this forum the Member States represent their own interests and advocate these in collaboration with other Member States, fostering conflicts along nation state lines. The organization of the EU institutions is also to a certain degree based on the territorial criterion, but this criterion is supplemented with the other two; the functional and the ideological. In this way the conflict and cooperation patterns are changed, and the current picture for collaboration and conflicts is more complicated (Egeberg 2004: 7-8).

The Council is primarily organized based on a territorial criterion, and the Member States are representing their national interests in this forum. This is a continuation of the traditional European basis for collaboration; the nation states. Further the Council supplements this territorial criterion with a functional criterion, by organizing the members into working parties. In addition, the ministers may at times speak on behalf of their political belief, adding the political dividing line to the Council's structure (Egeberg 2004: 9-10). The Council's organization supports the nation state structure of Europe, and the changed conflict lines of Europe are not related to this institution in particular.

In contrast, the Parliament is organized based on an ideological criterion. The members of the parliament are interacting, not on behalf of their nation state, but on behalf of their European level political party. This is an important feature of the Parliament, and it is regarded as vital for the EU level political system. In the Parliament meetings, the members are seated by party family, rather than by nationality, in order to reduce the focus on national interests. The Parliament's standing

committees include a functional dimension to the organization, and the territorial organizational principle is present as the basis for organizing the elections and deciding the number of members from each Member State (Egeberg 2004: 10). This way of organizing fosters conflicts based on ideological differences, and steals emphasis from the territorially founded conflict lines. The emphasis on European level politics should be expected to increase importance of political dividing lines, such as the traditional left-right dimension, but also regarding emphasis on e.g. environmental concerns regarding policy development, which is a controversial matter where political parties express a wide range of opinions.

The Commission is organized based on functional criteria. Still the procedure for the recruiting of commissioners is based on national boundaries, as each Member State has one commissioner each. On the other hand the members of the Commission are expected to act on behalf of the entire community once they have entered office. The Commission's functional criteria do in most cases coincide with the dividing lines inside the Member States, and in this way the Commission may extend its influence towards these areas also inside the Member States. Thus the national dividing lines are, at least to some extent wiped out, inside the scope of the policy area in question. Such structures are also evident in some intergovernmental organizations, but in these organizations the functional dimension is counteracted by a territorial dimension that the Commission lacks. The Commission's functionally based organizational principle fosters conflicts based on these lines (Egeberg 2004: 11-13).

Egeberg (2004) does not treat the EESC or the CoR, this is only natural as their importance in the EU system is limited. Still this report does to a great extent take the opinions of these institutions into consideration. It has therefore been made some inferences regarding the relation between their organization principles and their likely influence on the policy development. The EESC is a forum for the special interests of the Community. The members are representing the socio-economic interests, either as employers or employees. As a result, the EESC's dividing lines are based upon a combination of ideological dividing lines and functional dividing lines. The CoR is a forum where the regional differences inside the Community are the areas of focus. The territorial basis for division is therefore active, but not in the sense of nation states, as the term regions refers to areas inside a Member State. Further, the CoR is organized in political groups corresponding with the political parties of the European Parliament. Both committees are in this way contributing to decreasing the importance of the traditional territorial dividing line. However, both Committees' influence is limited, as they carry out advisory roles and lack formal power in the system (Nugent 2010: 227-33).

3.3 Explaining Change

The institutional theories emphasize that the decisions made when an organization is formed, or a policy area is born, will have great impact on later developments. One important concept in this approach is path dependency, which implies that when an institution or a policy area has started to follow a certain path, it takes a lot of effort to change the direction. The approach assumes that the policies of one time are affected by the policies of an earlier time, and in this way the initial choices will have great impact on the later ones in a policy area (Peters 2005: 71-73).

Further, an institutional approach anticipates that there is little or only modest change in institutions. The fact that the actions that are taken in the organization are path dependent can be connected to a positive feedback effect, where initial policy choices are being reinforced through their success in the organization. In this way there is a great incentive to do things in the same way as always (Peters 2005: 76-7).

There will be change and evolution, but the range of possibilities for the development will have been constrained by the formative period of the institution (Peters 2005: 74).

The concept of punctuated equilibrium is used to describe change, and implies that institutions exist in a state of equilibrium in relation to the decisions made earlier in their history. This equilibrium is not permanent, and influences from the outside, relative to punctuations, can lead to more or less dramatic change in the institution. In this way the institutions are able to generate actions that are different from what the previous path would indicate. The institutions are also able to adapt through learning, where one pictures the change as a process of evolution. Policies are viewed as necessarily imperfect, and therefore always generate change and adaptation, as a fact of life (Peters 2005: 74-9).

There are also institutional approaches that put much emphasis on the context surrounding the institution. This is based on the assumption that these surroundings are indeed institutionalized themselves. From the surrounding context the institution is confronted with socially created norms, and must try to incorporate and reflect these norms, at least outward. This understanding of institutions uses the metaphor of populations of biological organisms to the understanding of institutions, and it is called organizational ecology. The institutions are very much embedded in their surrounding context, and hence they rely to a great extent on the support and legitimization from it (Peters 2005: 110-12).

3.4 Theoretical assumptions

According to Pierson (1996), the EU governmental system has over time become institutionalized, and the outcome of policy at the EU level can therefore not be seen merely as a consequence of Member States' actions. The EU level institutions have taken the power supplied to them by the Member States when they were created, and used this power to acquire more power. The supranational institutions of the EU will therefore be expected to try to forward the integration process through placing competence at the EU level. Together the two factors, the institutional setting and the context, drive the development of the EU biofuels policy forward.

3.4.1 The EU Institutional setting

Based on this view of the EU level system the following relationship is expected to be found regarding the development of the EU biofuels policy. The Parliament and especially the Commission, because of its role as the engine for integration, will be the main drivers for the placement of competences at EU level. This is because of their characteristics as supranational institutions. The Council on the other hand will be the brake to the development of a common biofuels policy, and will seek to place

this competence at the Member State level. This is related to the Council's intergovernmental character.

An important factor regarding the development of biofuels policies in the EU is the connection to different policy areas. The connection to a policy area where the EU level has competence means that the Commission can propose biofuels policies without problem, including constraining the Member States. On the other hand, if the biofuels policy is connected to a policy area that is under Member State control, the Commission will be constrained in its possibility to propose policy.

Biofuels are through the Renewable Energy Directive, connected to three different policy areas. These policy areas have very different profiles on the EU level, and a connection to either of them will influence the development of the common biofuels policy. A connection to both rural development and agriculture policies, and environmental policies, will foster the development of a common biofuels policy, while a connection to the energy policy will foster a placement of competence within the scope of the Member States. These assumptions are based on the fact that the environmental concerns and the concerns for rural development and agriculture are already supplied with a large amount of common EU policies, whereas the energy policy is not to any degree developed as a common policy.

The legislative procedures decide the relative power between the different EU institutions. The relationship between the two legislative branches of government, the Council and the Parliament, are the most dependent on this. Their relative power varies from the Council acting as the sole legislator, to a situation where the two have an equal status regarding the adoption of laws. Their relative power will be expected to decide which sides of the biofuels policy that is promoted the most, related to the organizational criteria of Egeberg (2004). The different EU institutions will, based on their differences in the institutional structure, promote different sides of the policy in the adoption process. This happens through a process where the conflict lines direct attention in different directions, through a mechanism where they "activate some latent cleavages while routinely ignoring others" (Egeberg 2004: 7). Biofuels as a policy area is contested. This creates the scope for the fostering of a multitude of arguments and views, because the governmental system has built in a series of dividing lines.

First, the Member States are at very different stages, regarding the use and production of biofuels. These differences between the Member States will be fronted in the Council, related to the territorial dividing lines that this institution is based upon. Further, biofuels are contested both regarding technical and functional characteristics, and also regarding ethical concerns, such as social inequality and ecological consequences. The European Parliament will, because of its political and ideological basis of organization, emphasize the ethical sides of the biofuels policy. The Commission will be more focused towards the technical and functional aspects of the biofuels policy, related to the functional dividing lines. In this way the different sides of the biofuels are assumed to be promoted through the governmental system.

3.4.2 The Context

The institutional perspectives are very much concerned with the inertia of institutions, and these theoretical approaches are considered to be best equipped to explain why an institution does not change or innovate. The approach bases very much of its explanations on the concept of path dependency, where one expects the change in

institutions, if it does occur, to be contingent on the initial steps taken in the policy area. More dramatic change can occur if the institution experiences critical junctures, where the institution is forced to relate to the context and change (Peters 2005: 71-79).

From this point of view the development of the EU's biofuels policy will be expected to be slow and contingent on the early choices made. These characteristics are expected to persist until the EU institutions experience a punctuation of the institutional equilibrium and the policy area in this way is supplied with new input from the context.

There are also institutional approaches that focus on the change in institutions. The concept of the ecological organization emphasize that institutions are responsive to their external context, and that they will be eager to change, if there is such an expectation in the organizational environment. The change does not necessarily have to be very deep. Institutions interpret their environment, and the adaptations that are made are dependent on the way that the institution perceives its environment. (Peters 2005: 111-15). This approach to explaining change emphasizes the importance of the institution's context. The assumptions from a contextual perspective is that the EU's biofuels policy will be contingent on the international context, e.g. the general economic situation or the EU entering international agreements that are relevant to this policy area.

4 Methodological considerations

This study conducts a qualitative case study of the development of the biofuels policy of the EU, and the most important data source used, is documents found on the EU official website. The interpretations made from these data are complemented with secondary literature, in order to present an accurate picture of the development over time. When conducting a social science study there are several methodological concerns that have to be considered.

4.1 Research Design

To say that one is conducting a case study sometimes seems to imply that normal methodological rules do not apply; that one has entered a different methodological or epistemological (perhaps even ontological) zone (Gerring 2007: 6).

The case study approach is very much used in the social sciences, but as the quote above shows, the case study approach has some vagueness connected to it. Given this criticism it is especially important for a researcher using a case study research design, to be thorough when describing the methodological choices of the study (Gerring 2007: 6).

When conducting a case study, the researcher is generally aiming for a thorough account of the theme or subject in question. The goal of the study is to reveal the conditions under which a specific outcome occurs, and the causal mechanisms behind it, rather than providing information about how often the outcome in question is present, hence the broad applicability of findings and the statistical valid inferences are sacrificed (George and Bennet 2005: 31). At the same time however, the case study has a general aim of being able to say something about the case population. “A ‘case’ implies a family; it alleges that the particular is a case of something else. (...) Cases are always hypotheses” (Walton 1992, in Andersen 1997: 61).

This contradiction between the rejection of statistical transferable information and the goal of generalization to the case population is the basis of the critique of the case study approach. However, this critique is only relevant if the results of a case study are promoted as general findings, if the researcher is clear about the contingencies related to the applicability of the findings, the argument is inapplicable (George and Bennet 2005: 31). This study accounts for the development of the common EU biofuels policy from its origin in the 1980s up until the policy of today. The study seeks to identify the drivers of the development of the policy, and to explain how the policy has evolved and taken its current shape. Moreover the study intends to provide knowledge that is transferrable to the study of policy innovation and European integration in general. This constitutes a classical case study approach for this study.

Generally there are two types of case studies, and they are separated by how they relate to theory. The A-theoretical case study does not relate to theory at all. The field one is studying is interesting on its own irrespective of theory, and the goal of

the study is to attain as much information as possible about the issue in study. Another type of case study is where theory is used as a tool to interpret the empirical findings. By applying one or more theories to the data, the story one is telling is structured according to disciplinary rules, and they can easily be recognized, distributed and used by other scientists (Andersen 1997: 64-9).

This study approaches the development of the EU's biofuels policy from an institutional point of view. The empirical findings, regarding how this policy area came to life and its development up until today, will be interpreted through institutional concepts. In other words, the institutional perspectives are used as a tool for interpreting the empirical findings and the study's characteristics places it in the latter group that Andersen (1997) describes. However, the theoretical approach of this study is very wide, and it can therefore be criticised for being too comprehensive. As a consequence the theory is applicable to almost every aspect of the development, and hence the inferences from theory will be difficult to falsify. For the scientific integrity of the study it is important to keep this element in mind. On the other hand does a broad approach secure that the relevant explanatory factors for the development of the biofuels policy of the EU are included, and hence that the study does not exclude important elements to the development.

4.2 Sources and Data

Until recently, the type of information that is investigated in this study was sedimentary and restricted, in the sense that it was normally obtained through an archive with limited access. Through their commitments to transparency in the official governmental structure, the EU grants every citizen of the community access to the documents of the processes in the European Parliament, the Commission and the Council, through a regulation from 2001 (The European Commission 2001d). Further the Community has a well-functioning website, where all official documents are provided. The possibility to access information about the political processes inside the Council is still rather limited, as minutes from their debates are not published.

Because of this the access to data has not been a problem when conducting this study. There are however certain concerns to be aware of when using the internet to gather information and data for a study. The amount of information can easily be experienced as overwhelming because there is almost no limit to what you can find out about your topic. The main challenge is therefore to establish clear boundaries for the study, and thereby place limits to the information search, to avoid getting lost in the huge amount of information (McCulloch 2004: 34-5).

The policy area of biofuels is limited as regards relevant documents. This is because the policy area is rather new on the EU level. In addition, to provide the public with renewable energy in the transport sector is not the most important matter for the EU compared to other policy areas. This leads to a manageable amount of information, and it is believed that the vast majority of the relevant documents from the development of this policy area are included.

On the other hand, this is a technical policy area, and the documents that are studied contain a large amount of information that is difficult to grasp for a non-professional. This challenge is solved through the inclusion of a considerable account regarding the technical sides of biofuels as a policy area in the introduction chapters. Another challenge for the study is that when using political documents,

one has to keep in mind that the information can be intended to place the publisher in a certain light (McCulloch 2004: 34-5).

4.2.1 Document Analysis

Using documents as the basis of an investigation has many advantages compared to other types of data of the social sciences. The greatest advantage is that the object being studied is not affected by the fact that it is being studied, which can be the situation if one is conducting e.g. personal interviews. Another advantage is that the context of the study can be accounted for easily. There are also practical advantages with data in the form of documents; that the researcher will be able to handle significant amounts of data, and that they can be rather unstructured, without impeding the study (Krippendorff 1980: 29-31).

This study is based on different types of documents with varying statuses. *Regulations, Directives and Decisions* form the legal basis of the EU, which all take precedence over national law. Regulations are the most direct form of EU law; as soon as they are passed they are binding throughout every Member State of the Community. Regulations can be made by the Council, either alone or together with the Parliament, or by the Commission. Directives lay down certain end results that the Member States shall comply with, and the national authorities have to adapt their laws to the content of the directive within a certain date. Decisions relate to a specific case or a specific actor, either conferring rights or ordering compliance. Decisions can be taken by the Council, either alone or together with the Parliament, or by the Commission (The European Commission 2011).

These legal acts are adopted based on a Proposal from the Commission. This proposal is supplied to the Council, the Parliament, and the consultative bodies. Through the adoption process the different bodies make *Opinions* on the given proposal. The proposal is further amended based on these opinions, depending on the status of the body that made the opinion in question. The EESC and the CoR are merely consultative bodies, and their opinions are therefore not binding for the legislative powers when adopting the final legal act. The Parliament and the Council are today equal in terms of power in the legislative process, and their agreement is necessary in order to get the proposal from the Commission adopted. This has not always been the case, at the beginning of the time span that this study investigates, the Parliament was merely regarded as a consultative body, whereas the Council was supplied with all legislative power. The Parliament has increased its power over time, and is today co-legislator with the Council (Nugent 2010: 310-14).

Further, the Commission publishes a large amount of communication documents, which make up the basis from which legal acts are made. These documents do not have a legally binding status, but they provide valuable insight in the process in advance of the adoption of a legal act. There are three different communication documents in the system: Green Papers, White Papers and Communications. A *Green Paper* is a document that is aiming at stimulating discussion and to initiate the relevant bodies to participate in the debate, they are often followed by a *White Paper* which contains proposals for a specific action in a specific policy area (Summaries of EU Legislation 2012a; 2012b). *Communications* are documents intended for the exchange of information between the Commission and the other branches of government. The inferences made from the empirical account are seen in light of secondary literature related to biofuels or policy innovation in the EU.

4.2.2 Data problem: Information on the Member States

This study approaches the Member States through their collaboration in the Council, and by looking to secondary literature that treat the Member States and the common EU biofuels policy. This is not a traditional approach to the study of policy development in the EU, as Member States are normally supplied with an important role. The reason for the lack of focus towards Member States interests in this study is that the information needed to make inferences regarding these relations was not possible to attain through the Internet. Related to the scope of the study, it was not possible to travel and conduct interviews with central actors in the policy development, which would have been a way to solve this data problem.

4.3 Reliability and Validity

Studies investigating the society have two superior criteria for the quality of data; reliability and validity. The concept of reliability is concerned with whether or not one can trust the data the study is based on. In practice this means whether the results of the study are possible to replicate if conducting the same study one more time. The validity of the study depends on whether or not the data is adequate to answer the research question. The reliability of a study is a prerequisite for the validity (Grønmo 2004: 220-21).

The data that this study is based upon are primary sources from the EU's own official website, and I regard the reliability as high. The sources are also provided in the literature list, and the link to the website from where the document is obtained, is provided where this is possible.

The analysis is based on institutional theory to interpret the data. When searching for data it is important to be aware of the possibility of being influenced from the theoretical approach. In this study, the search for information was initially very wide, and the goal was to include as much information as possible, in order to exclude the problem of selection bias. The validity could have been improved by conducting interviews, as this would have exposed other sides of the policy development than those revealed by official political documents. However, a document analysis is a good way to answer the research question, as it treats legislation and official political argumentation. By being clear about the sources used and the scope of the interpretations and conclusions from the study, the validity is secured in this study.

4.4 About the Empirical Analysis

In the next three chapters the developments in the EU biofuels policy are accounted for and consecutively interpreted using institutional theory. The aim of these three chapters is to answer the research question: How has the biofuels policy of the EU developed, and how can these developments be explained using a broad institutional approach? Chapter five account for the 1980s and the 1990s. The 1980s represent the birth of biofuels as a policy area, and have a strong emphasis on energy security as a consequence of the oil crisis of the 1970s, while the 1990s one sees an ambitious but chaotic promotion of biofuels. Chapters six and seven are dedicated to the two most important directives on biofuels in the EU; the Biofuels Directive, which is

the first common EU legislation on biofuels, and the Renewable Energy Directive, representing the current EU policy on biofuels. Chapter eight gives an overview of the thesis' findings.

The goal of this report is to describe the development of the biofuels policy of the EU, and to analyse these developments through institutional theory. The development is described through two political science concepts: policy innovation and European integration. The concept of policy innovation is applied as it is in Skogstad (2001) where one assumes that the content of a policy area is driven by both the internal EU level institutional setting, and by the context. The European integration process refers to the development of EU level competence and power (Nugent 2010).

5 Early Developments

The 1980s and the 1990s are not characterized by ambitious EU biofuels policies, this is a feature connected to the 2000s for the EU's concern. The emphasis on these periods in this study is because they form nevertheless an important part of the story around the EU biofuels policies, as they represent the forming period of the policy, and hence can be expected to be very central in the later developments, according to institutional theory (Peters 2005).

The regulation in the 1980s is provided through the Crude-Oil Savings Directive from 1985, the adoption of this directive does not impose strong restrictions on the Member States, nor does it provide strong policy tools for the promotion of biofuels. Nevertheless the adoption of this directive represents the birth of biofuels as a policy area, as this is the first directive treating biofuels in the EU. Moreover the insecure situation in the energy market of that specific period, with the oil crisis of the 1970s still close in mind, the policy was strongly affected by the concern for energy security. This framing of the policy in an energy context proved later to be persevering, holding on to its status as the principal goal of the policy for a long time. This effect has been connected to the institutional theory concepts punctuated equilibrium and path dependency.

The next directive that is treated in this study is the Excise Duties Directive from 1992. This directive allows the Member States to exempt biofuels from taxation in their national markets, but then this right is denied in a later paragraph. The adoption of this directive therefore resulted in a chaotic situation, where the different actors interpreted the rules according to what suited their personal agenda the best. The chaos in the 1990s created a scope for the adoption of a common EU policy, as it was obvious that this was necessary in order to make sure Member States were playing by the same rules. Also important for the development of the common policy in the 2000s was the implementation of the Kyoto Protocol by the EU in 1998. The protocol institutionalizes the environmental concerns, and successfully displaces the energy security concerns as the principal framing of the policy.

This chapter is divided into two sub-chapters corresponding to these two time periods. Each chapter provides an overview of the most important developments in the period, and connects these developments to theory.

5.1 The Birth of Biofuels as a Policy Area

Through the adoption of the Crude-Oil Savings Directive from 1985 a new policy area was born. The EU had unlike the USA and Brazil no policies for biofuels before this point in time. Also, the time period to which this directive belongs, is clearly marked by the oil crisis of the 1970s, and the insecurity that these events posed for the EU. This energy insecurity framing of the birth of the policy area has great impact on the later developments in these policies, through the mechanisms that we know as punctuated equilibrium and path dependency (Peters 2005).

5.1.1 Directive on Crude Oil Savings

The Crude-Oil Savings Directive from 1985 is the first EU legislation related to the promotion of biofuels for transport. The main aim of the directive is to adapt for the inclusion of biofuels in the transport sector in the different national markets in the EU, and the Member States are in that respect called upon ‘not to hinder’ the use of biologically based fuel sources in their national transport markets (The European Parliament and Council 1985: 21).

Member States shall not prevent, restrict or discourage on the grounds of oxygenate content, the production, marketing and free movement of blended petrol containing organic, oxygenate compounds (...) (The European Parliament and Council 1985: 21).

As this is the first directive relating to biofuels as a policy area, it represents an important innovation in the EU’s energy policy; indeed it represents the birth of the policy area of biofuels. However, the Member States are not required to actively promote these fuels for transport, but rather to let the substitute fuels be a part of their national markets without discrimination. The policy described in the directive cannot be regarded as especially strong or ambitious, and hence the innovation connected to this policy is the fact that now a policy directed to biofuels exists, and not to the actual content of the directive. Also, the regulation provided in this directive does not constrain action at national level in any degree, and therefore this legal act cannot really be said to be important as regards the European integration process. The Member States are not obliged to promote biofuels, but rather encouraged not to actively keep these fuel types from entering the market.

The basis of appeal of biofuels in the Crude-Oil Savings Directive is related to the fact that the use of crude oil, and hence the import of such fuel types, can be “reduced through blending hydrocarbon petrol with substitute fuel components” (The European Parliament and the Council 1985: 20). In this way the energy security situation of the Community is improved through a diversification of the energy use. This promotion of biofuels is straight forward and technical, without reference to the conflicting concerns that characterizes the policy today. Biofuels for transport are promoted because of their possible energy security net gain, and only for this reason.

These characteristics of the Crude-Oil Savings Directive can be connected both to factors found inside the EU governmental structure and in the world context.

5.1.2 The Consultation Procedure

The legislative procedure in use for the adoption of the Crude-Oil Savings Directive was the consultation procedure. This procedure supplies the Parliament with a consultative role in the policy process, and the greater part of the power is located at the Council. The Parliament’s opinion is not binding, and the Council can decide to take the Parliament’s opinion into consideration if they wish. The EESC was consulted in the adoption process of this directive, but this committee’s opinion is never binding for the Council. At this point in time this was the common way to adopt EU law (Nugent 2010: 310-14).

The Parliament is supportive towards the development of such a policy in its opinion on the directive. The use of substitute fuels is regarded by the Parliament as

an important factor in order to increase the energy independence of the Community, and notably the Parliament intends to expand the argumentation to also include environmental concerns, by emphasizing that “the use of such blends has the advantage of reducing pollution of the environment” (The European Parliament 1983: 91).

This emphasis can be related to the Parliament’s basis for organization which is based upon the political parties present. These political dividing lines foster a promotion of ethical and ideological sides to biofuels (Egeberg 2004: 10). Furthermore the Parliament has among its political groups a very large group belonging to the environmental or green movement (Lenshow 2005: 312-18). It is therefore not surprising that it is the Parliament that introduces the environmental concerns to the biofuels policy. However these concerns were not included in the final directive, which in part should be connected to the consultation procedure where the Parliament is provided with relatively little power.

The EESC is positive towards the development of a EU biofuels policy, but notes that the distribution of renewable fuels in transport may be difficult as long as these fuels are not economically competitive to fossil fuels, and as long as their supply chains are in danger of being disrupted. Furthermore the Committee stresses that fossil fuels obtained from inside the Community are not fully exploited, and that this also should be the area of focus for the energy policy (The European Economic and Social Committee 1983: 2). This is an economic and functional approach, where these fuels are treated as substitute fuels and nothing more.

The EESC represents the special interests of the Community (Nugent 2010: 227), which can be regarded as a partly ideological and partly functional organizational criterion. The functional criterion would be expected to promote this economic approach to biofuels. In addition, one could have expected the EESC to connect the biofuels to the agricultural policies, in the way that we see today, as many of the representatives in the EESC belong to the agricultural sector. The environmental organizations are also present in this body, which makes the promotion of environmental concerns plausible (Nugent 2010: 228).

This is not the case however, as the EESC mentioned the concerns for energy security as the sole motivation for the development of such a policy (The European Economic and Social Committee 1983: 2). The Committee normally acts by unanimity, and it is therefore possible that the agricultural and environmental concerns were suffering from this. On the other hand the energy security of the Community was experienced as a very pressing issue in this time period, as the energy crisis’ impact was severe, and very close in time. Therefore the strong focus on these concerns, at the expense of the other two, is not very surprising.

Related to the nature of the consultative procedure, the content of these documents did not necessarily influence the policy process of the adoption of the directive. However they give a valuable insight into the background for the directive, and the general debate regarding biofuels at the time as they formed part of the institutional setting of the adoption of the directive.

5.1.3 EU Level Competence

In order to explain the Crude-Oil Savings Directive’s strong emphasis on the energy security situation of the Community, one should also take a look at the status of the three different policy areas at this point in time. The development of EU level

policies is dependent on the granting of competence by the Member States, related to the specific policy area.

Regarding environmental concerns, their exclusion is a consequence of their lack of status as an EU level competence at this point in time. The environmental concerns were not recognized as belonging to an EU level policy area, and in this way they were kept from being a part of the policy on the promotion of biofuels. The environmental concerns were not introduced to the EU level before the SEA of 1986 (Nugent 2010). However, the environmental concerns were already before accomplishing treaty recognition through the SEA, supplied with EU level policies (Nugent 2010: 280).

Community competence over a policy area is generally seen as a prerequisite for the development of common policies, as this is the only way that the Commission can propose policy, but the picture is not that straight forward. Treaty provision is not a guarantee for EU level policy development within a policy area, and there are also examples of development of policies on an informal basis without treaty recognition (Nugent 2010: 279-80). The Parliament's mentioning of these concerns is also an indication of the presence of the environmental concerns. If the Parliament had been supplied with more power in the legislative procedure in use, this could have meant a stronger emphasis on environmental concerns at an earlier stage, because of the presence of the large environmental group in the Parliament.

The concerns for rural development and agriculture were not mentioned in this directive either. As the CAP is one of the oldest and most integrated policy areas of the EU, this can be experienced as somewhat strange. The EESC's lack of focus on this matter is striking, as this body contains a large group of agricultural interests. In order to explain, one needs to take a closer look at the CAP. The CAP is composed of two different policy areas; agriculture and rural development. The production of biofuels is an activity that relates more to the rural development part, as this is not traditional use of agricultural products. The lack of focus on CAP concerns in this directive can be related to the fact that the rural development part of CAP is of a more recent character (Rieger 2005: 177; Roeder-Rynning 2010: 182). It is therefore possible that the production of biofuels was not regarded as CAP-relevant at this point in time.

As mentioned earlier, this directive was adopted through the consultation procedure, where the Council is the sole legislator. The Council's meetings are not equipped with the same degree of transparency as the other EU level institutions, and it is therefore possible that the CAP concerns or the environmental concerns in fact were present in the debates, without this being made official. One plausible reason for framing the policy as an energy security issue, instead of a CAP issue or an environmental issue, is that the energy security concerns is an issue seen as common for all the Member States, as Europe as a continent does not possess large amounts of petroleum resources, and hence energy insecurity is an issue affecting all different Member States.

The agricultural policy on the other hand is a strongly debated issue in the EU, with powerful Member States as fierce critics, and a framing of the policy in this picture would not benefit ambitious policies for the future. Further, the environmental issues were not experienced as equally important in this time period as they are today, and the promotion of biofuels in connection to these issues could not be expected to be very effective. The different statuses of these three policy areas at this point in time therefore resulted in a framing of the policy connected to the concerns for energy security.

5.1.4 The Energy Crisis and the Early EU Biofuels Policy

There were institutional characteristics promoting energy security's connection to biofuels policies, but there is reason to believe that this emphasis was provided from the context, through a punctuation in the EU energy policy's equilibrium (Peters 2005). The energy situation of the Community is seen as a threat to the "harmonious development of economic activities, a continuous and balanced expansion and an increase in stability" (The European Parliament and Council 1985: 20). These are founding values of the European Community, and a reduction of the Community's dependence upon imported oil is regarded as a means effectively contributing to the accomplishments of these three superior policy ends.

The oil crisis of 1973 and 1979 disturbed the supply of oil to the western countries in a way that had not been experienced since the Second World War. The functioning of the western societies was at this point in time totally dependent on the access to cheap oil, and the oil crisis revealed the dependence that these nations had towards the oil-exporting OPEC-countries. Through the dramatic events of the 1970s "oil was dragged into politics in a way that had never been entangled before" (Parra 2004: 175). In this communication from the early 1980s, the connection between EU energy policy and the insecure energy situation caused by the 1970s oil crisis is expressed in plain words:

The Community economy has been badly hit by the effects of the doubling of oil prices in 1979. The challenge is to shield it from the risk of further pressure, both by reducing as rapidly as possible the Community's dependence on oil and also by taking effective measures to limit possible causes of increase in the price of its supplies. (...) efforts must be stepped up, particularly by increasing coal consumption, pursuing vigorous nuclear programmes and by developing renewable energy sources (The European Commission 1981: 9).

The energy situation that the Community is facing is seen as a threat, and therefore the EU needs to restructure its energy policy in the beginning of the 1980s. The Commission proposes that this restructuring shall be done through the implementation of three types of alternative energy sources: solid, nuclear and renewable energy. Renewable energy sources are at this stage not given any precedence over nuclear energy or non-imported fossil fuels as coal (The European Commission 1981: 9).

Action has to be directed at solid fuels and nuclear as the main alternatives to oil in the medium-term; at gas, where particular questions of flexibility and security arise; and at alternative energy resources as a major contributor to Community supplies in the longer-term (The European Commission 1983a: 19).

There are some obvious contrasts to the energy debate of today in this argumentation. First, the framing of nuclear energy as an eligible fuel has no resemblance to the nuclear debate of today. The debate today is influenced by the atomic catastrophes, e.g. the melt down in Fukushima in March of 2011. The public opinion is critical of these energy sources, and the trend is towards shutting down the nuclear plants instead of promoting them (BBC News Europe 2011). Secondly, the use of fossil fuels obtained from inside the Community is not seen as a problem in this

period. This line of argumentation would not be possible to pursue today, at least in such a direct way, as there is only one politically correct energy source: renewable energy. The concerns for climate change and the environment have become one of the fundamental values of European society, and an important point of reference of the political agenda.

This very strong emphasis on energy security in the early biofuels policies in the EU are obviously connected to the situation in the world oil market in that period. This connection is fruitfully explained through the institutional approach to policy development. According to the institutional approach institutions are normally in a state of equilibrium, but are susceptible to dramatic change, including influence from their surrounding context, when this equilibrium is broken. The influence from the context needs to be of a considerable strength in order to break the equilibrium (Peters 2005:78). The oil crisis of the 1970s can be seen as a punctuation of the equilibrium of the EU's energy policy. This punctuation leads to a shift in focus towards alternative energy sources, from the earlier dependence on crude oil.

After having experienced such a punctuation, the institution is expected to return to a new equilibrium, which will be characterized by the influence that the punctuation had on the institution (Peters 2005: 71). The influence of the energy crisis on the EU biofuels policy can therefore be expected to prevail through the mechanism of path dependency, where the organization is regarded as dependent on earlier times. Furthermore the influence that is expressed at the birth of a policy area is expected to be extra strong (Peters 2005). Therefore there is reason to believe that the development of the EU biofuels policy will be strongly affected by the energy crisis as it develops.

5.1.5 Chapter Summary

The adoption of the Crude-Oil Savings Directive in 1985 meant the breakthrough for the EU biofuels policy, because this is the first directive ever treating this policy area. The content of the directive on the other hand does not provide strong policy tools, and hence cannot be seen as an important step as regards the European integration process.

There is a strong emphasis on energy security in the directive, which has been connected to the world context of that period. The impact from the context, where the energy crisis situation from the 1970s seems to have been important, has been characterized as a punctuation in the EU biofuels policy's equilibrium, which had severe impact on the later developments in this policy field. The effect of the punctuation, is a strong focus on the concerns for energy security, which leads to the promotion of renewable energy sources.

Further, the birth of biofuels as a policy area can be seen as the direct consequence of this punctuation in the EU energy policy's equilibrium. Therefore, according to institutional theory, one could expect the new equilibrium, which was strongly influenced by the insecure energy situation of the time, to set the pace for the later developments in the common biofuels policy, leading to a stronger focus towards energy security in this policy area than otherwise necessary.

5.2 Complete Biofuels Chaos

The 1990s are characterized by a chaotic situation as regards the promotion of biofuels in the EU (Pahl 2005). This is related to the fact that the promotion is based on a directive with built in contradictions, both allowing and denying tax exemptions for such fuel types. Irrespective of this, the Commission has high ambitions on behalf of biofuels promotion in this period, though without any success, much related to the Council's actions towards the proposals for policies.

In the end of the decade the Kyoto Protocol changes the scope of the biofuels policy by providing a new punctuation in the biofuels policy's equilibrium. Through this punctuation environmental concerns are introduced to the policy, through the formalisation of the EU approach to environmental policies.

5.2.1 The Directive on Mineral Oil Excise Duties

There is no specific aim of promoting biofuels or renewable energy in the Excise Duties Directive from 1992, but it does provide certain possibilities for the use of tax exemptions to promote renewable sources of energy. The directive also contains a fundamental contradiction as regards the Member States' possibility to treat biofuels in a different way than conventional fuels. The directive states initially that the biologically based fuels for transport are put under the same regime as fossil fuels:

Any product intended for use, offered for sale or used as motor fuels or as an additive or extended in motor fuels, shall be taxed as a motor fuel (The Council of the European Communities 1992: 12).

In another part of the directive however, certain exemptions from taxes for these types of fuels are laid down at Community level. Member States are through the wordings in the quote below given the possibility to apply exemptions or reduced rates within their own territory, without this infringing the competition rules of the Community (The Council of the European Communities 1992: 12).

Without prejudice to other Community provisions, Member States may apply total or partial exemptions or reductions in the rate of duty to mineral oil used under fiscal control: (...) in the field of pilot projects for the technological development of more environmentally-friendly products and in particular in relation to fuels from renewable sources (...). The Council, acting unanimously on a proposal from the Commission, may authorize any Member State to introduce further exemptions or reductions for specific policy consideration (The Council of the European Communities 1992: 14).

Basically this means that the Member States may exempt any renewable fuel type to replace mineral oils from taxation in pilot projects. Moreover the Council can provide any Member State wishing to exempt a renewable fuel from taxation with this right based on "specific policy considerations," also after the pilot project period has expired. The possibilities for exemptions are great, providing the policy with a scope to promote biofuels in large quantities, but what is the most striking is the power that the Council is provided with.

The Council has through this directive the right to overrule Community law if they find these tax exemptions necessary because of 'specific policy considerations'.

As Wiesenthal et al. (2009) shows, the Member States have to very different extents interests towards the development of a common EU biofuels policy, and one can imagine that powerful Member States, with high interests in biofuels, have had impact on this formulation.

This was not a directive with a high environmental profile, aiming a promoting biofuels as a renewable energy source in the transport sector, but rather a general framework for the excise duties on mineral oils. Regardless of the intention of the directive, its adoption in 1992 resulted nevertheless in a situation where it became the legal basis for the promotion of biofuels in the EU in the 1990s.

The dual and unclear formulations in the directive, where the Member States are both denied and granted the right to exempt biofuels in the transport sector from taxation provided the basis for the chaotic biofuels regulation in the 1990s in the EU. The directive was subject for a wide range of interpretations, with different rules for different Member States. Further there are also some issues related to the placement of power, as the Council can authorize Member States the right to put in place the rules that suit them the best, providing for an unpredictable environment in the biofuels policy within the EU.

5.2.2 The French Measures

In 1992 the French government informed the Commission that they had imposed tax reductions for biofuels of agricultural origin. This decision was based on the possibility to exempt renewable energy from taxation in pilot projects from the Excise Duties Directive, and lead to a series of diverging interpretations of the directive from the Commission, the Council and the Court of First Instances. France was not alone in seeking to exempt their biofuels from taxation, e.g. a similar process to this was carried for Italian biofuels (The European Commission 2007).

The measures in question, introduced by the French government, consist of exemptions from the domestic taxation on petroleum products for products of agricultural origin. The products should be obtained from crops grown on land set aside for non-food use, and the aim of the measures was to introduce a limited amount of these energy sources into motor vehicle fuels and to domestic heating oil (The European Commission: 1997c: 27-8).

The French government argued that their measures were in accordance with the Excise Duties Directive, based in the directive's statement that the Member States were allowed to exempt renewable energy products from taxation in a pilot phase. This argument was disputed based on the other and contradicting article of the mentioned directive, which puts vegetable oils under the same taxation regime as fossil fuels. The French authorities argue that their measures can be seen as aid to promote an important common European interest, and also that the measures are in accordance with the promotion of renewable energy in general, and biofuels in particular (The European Commission 1997c: 31-2).

Based on the exchange of these arguments the Commission decides on 18 of December 1996 that the French measures are incompatible with the common market, and requires France to discontinue these measures. Later however, on its meeting of 9 of April 1997 the Commission decides that the measures are compatible with Community law after all. However, on 27 of September 2000 the Court of First Instance partially annulled the Commission Decision, following an appeal to the Court against the Commission's Decision by the company BP Chemicals (The European Court of First Instance 2000: 20). The ruling was based

on the Courts impression that one of the French biofuels in question had exceeded the pilot phase, while the other was still covered by this definition from the Excise Duties Directive (Newsroom of the European Union 2000).

Nevertheless the Council decision of March 2002 authorizes France to apply the schemes. This decision was based on the possibility for the Council to authorise any Member State to introduce further exemptions from taxation for "specific policy considerations" from the mentioned directive (The Council of the European Union 2002a: 25). Finally, the Commission's decision of 15 of May 2002 states that the French measures do not distort competition or affect trade, and that the measures are regarded as part of a long term strategy of the Community in "reducing dependence on imported oil, developing alternative energy sources and improving the use made of agricultural resources" (The European Commission 2002a: 41).

The final decision to authorise France to apply the schemes was made by the Council. In this body the Member States' interests are promoted due to its inter-governmental character, and the debates and minutes are not provided with any degree of transparency (Egeberg 2004: 9). Wiesenthal et al. (2009) accounts for the different Member States' interests towards biofuels policies, and suggests France as the Member State with the highest interest in biofuels among the Member States. Therefore one can expect France to be advocating policies to promote biofuels in the Community, within the Council. Moreover, France is a powerful Member State whose influence in the Council can be expected to be considerable. The decision made by the Council, contradicting the earlier decisions made by the Commission and the Court of First Instances, can be interpreted towards being heavily influenced by French interests.

In addition, this process exemplifies very well the chaos that characterized the promotion of biofuels in the EU in the 1990s. The situation was complex, and resource demanding. Therefore it is possible that the processes like this, where diverging interpretations were made regarding the same measures in light of the same legislation, together constituted the final incentive in order to provide the Community with a common biofuels policy.

According to Pierson (1996: 133), the EU level institutions are always trying to increase their power, and the situation in the 1990s created an opportunity for the EU level to increase its power over the biofuels policy, because the situation that existed was not bearable. As the process of the French measures show, the Member States were already interested in promoting biofuels. Further the policy tools in use in some Member States were much stronger than the corresponding ones at EU level. The chaotic situation of the 1990s regarding biofuels, gave the Commission an opportunity to promote a policy where more power was placed at the EU level. The adoption of the Biofuels Directive in 2003, containing a common biofuels policy, needs to be seen in relation to this situation in the 1990s.

5.2.3 Directive on Motor Fuels from Agricultural Sources Not Adopted

Alongside the Excise Duties Directive in 1992, the Commission proposed a corresponding directive on excise duties specific for motor fuels from agricultural sources. The content of this proposal would have given the Member States the possibility to actively promote biologically based fuels at national level through tax exemptions. The reduction for the biofuels would be considerable, as the tax for these fuel types

should not “exceed 10 per cent of the rate imposed upon conventional fuel types” (The European Commission 1992: 7).

In this way biofuels would have been given a great advantage in a market situation compared to conventional fuels. This is remarkable in the EU context, where the free market and competition is the most fundamental factor (Wilks 2005: 114). This disrespect of the market rules indicates that this is regarded as important measures. The status of biofuels in the EU at this point, regarding their limited extensiveness in use and production at this point in time, implies that there must be other important policy areas in connection to this proposal. At this point in time, biofuels cannot be regarded as a policy area important enough to justify the disrespect of this important founding EU value that this proposal represents.

One border lining policy that can be expected to form part of the background of this proposal is the Common Agricultural Policy. The reform of this policy in 1992 introduced the set-aside measures, where Member States were obliged to set aside minimum 10 per cent of their arable land. These reforms were introduced in order to limit the rising surplus production of agricultural commodities in the Community, and the related budgetary costs, through withdrawing land from food production. These measures were important for the production of biofuels as they would warrant the use of these set-aside land areas for purposes other than food production. The cultivation of crops for biofuels production on the land set-aside represented a possibility for farmers to exploit land areas that otherwise would have been unexploited (Eikeland 2005: 15-17).

There is no spelled out connection between this proposal for a directive, and the set-aside measures however. The French measures on the other hand, have the production from land set-aside as one of the criteria for the production to count towards these measures, and there is fair reason to believe that there is a connection between the two.

The Commission shows its ambitions as regards the biofuels through this proposal, but the Council, does not follow the Commission’s initiative, and does not take a decision on the matter, and the Commission regards the proposal as no longer topical in 1999 and hence decides to withdraw it (The European Commission 1999a: 7). The lack of interest from the Council is a clear sign of a lack of ambitions towards the development of a common policy where biofuels were exempted from taxation. The Council’s intergovernmental character leads to a situation where the Member States’ interests dominate (Egeberg 2004: 9).

From the actions of the Council one can therefore conclude that the Member States were not supportive of an ambitious policy towards biofuels, carried out through tax exemptions for such fuel types. On the other hand the Council was in fact the body that in the end decided that the French measures were in fact legal according to the relevant directive, indicating a tendency towards ambitions regarding biofuels. However, there is a long way from adopting measures regarding one Member State, to the adoption of measures regarding all Member States. The Council adopts most legal acts based on a consensus approach, and therefore, to adopt common measures, can many times be hard. To adopt a measure regarding only one Member State, in addition if the Member State in question is very motivated to impose these measures itself, the decision cannot be expected to have been very hard. This leads towards the hypothesis that France used its power in the Council, which is considerable, to promote these measures, as they were regarded as a benefit. These are merely speculations however, as the Council does not publish its minutes.

5.2.4 The Introduction of Environmental Concerns

Through the 1990s the world society became increasingly preoccupied with environmental concerns and the climate changes. These concerns were institutionalized at world level through international agreements such as the Framework Convention of the United Nations (UN) and the succeeding Kyoto Protocol. Also inside the EU, environmental concerns were increasing their importance, as the Community level environmental policy was introduced through the SEA of 1986, which soon fostered a considerable amount of policies towards these concerns. Environmental issues had been an important part of the EU political agenda since the beginning of the 1970s, but through the SEA these concerns were institutionalized and the scope for legislation was expanded (Lenschow 2005: 307).

The UN Framework Convention was ratified in December 1993 (The Council of the European Union 1994a), and called for wide cooperation between the countries of the world in order to prevent climate change caused by human activities. The innovation as regards the Convention was that it obliged the Member States among other things to promote the technical development of renewable fuel sources and to promote the use of this type of energy (United Nations 1992: 6).

The Kyoto Protocol was signed in April 1998, and later ratified in May 2002 (The Council of the European Union 2002b). The Kyoto Protocol contains a series of specific and mandatory tools to combat emissions of green-house gases, and requires its members to ensure that their emissions do not exceed the specific protocol limits. The EU is given a limit of 92 per cent by the Protocol, meaning that their emissions should not exceed 92 per cent of their 1990 emissions. The overall goal of the protocol is to reduce the global emissions of green-house gases by 5 per cent from 1990 level in the period 2008-2012 (United Nations 1998: 6).

By the adoption of first the UN Framework Convention, and later the Kyoto Protocol, the EU was obliged to take the environmental concerns seriously, and to put these issues at their political agenda. There is strong reason to believe that the implementation of the Kyoto Protocol in 1998 and the strong emphasis on these concerns that emerged from the focus on these issues in the UN changed the scope of the EU biofuels policy. The Protocol included today's most important concern to the policy, and challenging the strong energy security focus that was evident at that time.

Up until this point in time there had not been a connection between the biofuels policies in the EU and environmental concerns. This despite the active EU level opinion related to the environment, and the large part of green representatives in the Parliament (Lenschow 2005: 307). The sole goal of the biofuels policy had been the improvement of the Community's energy security concerns. This dominance can be traced back to the forming period of the policy, which was very much contingent on the oil crisis of the 1970s, and led to the energy security dominance of the biofuels policy up until this point. The policy development can therefore be characterized as path dependent, since the initial policy choices are constraining the later developments, and leads to the pursuit of a certain biofuels path irrespective of the developments in the context (Peters 2005: 71).

This path dependency was however challenged by the punctuation in the equilibrium of the EU biofuels policy of the adoption of the Kyoto Protocol. Through these two international agreements of the 1990s, and especially the Kyoto Protocol with its binding targets, the EU was obliged to a greater extent to address the environmental concerns. Even though the environmental concerns had been an

important factor on the world, and EU, scene for some time already, the institutionalisation of these concerns was new. In this way these arguments were supplied with a new strength, and led the environmental concerns to become a more extensive policy concern in the EU.

Because of these mechanisms the implementation of the Kyoto Protocol can be regarded as a punctuation in the equilibrium of the biofuels policy. The policy development is exposed for such a strong force that it is not able to resist being influenced towards environmental concerns, despite the strong force of path dependency pulling the development towards the known concerns of energy security (Peters 2005: 74).

However, it does not seem like the signing of the Kyoto Protocol had an immediate effect on the biofuels policy of the EU. The biofuels policies adopted around the Kyoto Protocol are not connected to the environmental concerns, and the policy continues on its energy security path, despite the punctuation that the Kyoto Protocol provided. The path dependency towards energy security concerns seems to be stronger than the punctuation in the equilibrium pulling the focus of the policy in another direction. In the process of implementing the Kyoto Protocol the Commission emphasizes the need for action that is compatible with the high ambitions that the EU showed in the negotiations of the Protocol. The communication does however not mention biologically based fuels as a potential renewable energy source in the transport sector. The emphasis directed at other types of renewable energies than the ones provided from biomass, and in the transport sector the emphasis is directed towards the technical advances regarding vehicle engines (The European Commission 1999b: 2-5).

Moreover, in the process of developing the tools to accomplish the targets from the Kyoto Protocol, there is no focus on biofuels, and their potential as a renewable energy source in transport is not yet emphasized. Further the motivation for introducing biofuels is still predominantly concerned with energy security. It is clear that the implementation of the Kyoto Protocol affected the general feeling in the Community towards a more environmental focus, but it did not immediately affect the biofuels policy. The focus related to the accomplishment of the targets in the Kyoto Protocol focuses on other areas of the society than the transport sector.

Since the introduction of the environmental concerns is slow, one could interpret the inclusion of these concerns as a result of the continuous development of the environmental issues at the EU level, and not as a direct impact from the Kyoto Protocol present in the context. In this way the development is better understood through the concept of evolution in institutions, rather than the punctuated equilibrium concept. The evolution concept sees the change in institutions as more gradual and slow, and as a process where the institution is adapting rather than being constrained from the context (Peters 2005: 79).

Regardless of the mechanisms, be it through a punctuation in the policy equilibrium, or through an evolution process, the environmental concerns were indeed introduced to the policy. In its plan for the cuts in emissions of green-house gases in the Community the Commission includes the use of biomass as an energy source to the strategy. The production of biofuels is seen as beneficial in relation to the CAP, and in addition the Commission expresses concerns for the high emissions in the transport sector, and promotes action towards the reduction of this great number. The belief in biomass as a renewable energy source is however mainly directed towards the production of electricity and the heating of buildings (The European Commission 1997d: 3-9).

In the beginning of the 2000s, this small tendency towards connecting biofuels and the environmental policy becomes stronger in the beginning of the 2000s. The Commission includes the obligations from the Kyoto Protocol as the main argument for the use of biofuels for transport in a communication from 2001. Moreover, it promotes a wide range of instruments in order to transform the energy mix in a renewable direction. Of the proposed measures to accomplish this, is a target of 7 per cent renewable energy, including biofuels, in the total fuels consumption of cars and trucks in the Union by 2010, and 20 per cent by 2020. These targets proposed from the Commission in 2001 are very ambitious, e.g. is the goal of 20 per cent renewable energy in the transport sector by 2020 the double of the target of the Renewable Energy Directive from 2009 (The European Commission 2001a: 10). Most importantly however, when accounting for the background for the necessity of such a policy the argumentation is predominantly focused on environmental concerns, and the goal of the policy is connected directly to the accomplishment of the emission reduction targets of the Kyoto Protocol (The European Commission 2001a: 10).

It is obvious that the signing of the Kyoto Protocol changed the EU approach to the promotion of biofuels, one way or the other; through an evolution process or through a punctuation in the policy equilibrium. In the beginning of the 2000s the argumentation for such a policy has shifted from primarily being an energy security issue, to also including environmental protection as a motivation. The original scope for the policy; to be a tool to diversify the Community's energy mix, is not as important as it had been earlier, and the environmental concerns are from this point on an important part of the biofuels policy. These two concerns are framed as equally important concerns for the development of ambitious biofuels policies. In this hierarchy of biofuels arguments, the environmental concerns now prevail. And this hegemony needs to be closely linked to the process where these concerns were included to the policy.

Accompanied by these strong environmental concerns, the biofuels policy of the EU experienced its breakthrough in the 2000s. Two comprehensive directives with ambitious targets for the promotion of biofuels were adopted; the Biofuels Directive from 2003 and the Renewable Energy Directive from 2009. The problems related to the chaotic biofuels regulation of the 1990s are resolved through a common EU policy, and it is in this period that the EU becomes the important actor on the world biofuels scene that the Community is today.

5.2.5 Chapter Summary

The promotion of biofuels based on the Excise Duties Directive resulted in a chaotic situation, where the different Member States were acting very differently towards the promotion of biofuels. This chaotic and unpredictable situation leads to a fruitful environment for the establishment of a common policy, as the prevailing situation was experienced as unacceptable. At the same time the environmental concerns are increasing their influence in the Community through the Kyoto Protocol, in the end changing the Community argumentation on biofuels away from energy security concerns towards environmental concerns. Moreover the decade is characterized by a very ambitious Commission towards the development of an ambitious biofuels policy, and an equally reluctant Council.

The process of European integration is promoted by the Commission, and stalled by the council, as can only be expected related to their organizational criteria, but

the basis for the development of a common policy in 2003 is laid in this decade, and it is directly related to the chaotic situation that was dominating. The policy innovation process is driven by the inclusion of a new concern to the policy: environmental concerns. This complicates the picture and makes the policy more comprehensive.

6 The Biofuels Directive

The Biofuels Directive represents a comprehensive promotion of biofuels for transport, and sets the pace for the ambitious biofuels policies in the EU in the first decade of the 21st century. The directive lays down obligations for the Member States to introduce legislation and the necessary measures in order to ensure that by 2005 there is a certain amount of biofuels available on their markets (The European Commission 2001c: 7). This is the first community wide biofuels policy ever adopted in the EU, and therefore this directive can largely be seen as the breakthrough for the common biofuels policy of the EU. Two other directives related to biofuels in the transport sector were adopted in 2003; the Energy Taxation Directive and the Fuel Quality Directive. Together these three directives ensured an ambitious promotion of biofuels in the beginning of the 2000s.

6.1 A Common Policy

The Biofuels Directive requests the Member States to ensure that a minimum of biofuels and other renewable fuels are placed on their national markets, and further to set national indicative targets for the proportion of these fuels in the overall consumption of energy in the transport sector. The minimum target for proportion biofuels or other renewable fuels of the total fuel consumption was set at 2 per cent for 2005 and 5, 57 per cent for 2010 (The European Parliament and the Council 2003b: 44).

The directive is policy innovative in the sense that it requires the different Member States to actively promote biofuels through ensuring that there is a certain proportion of these fuel types at the national market. In comparison, through the Crude-Oil Savings Directive of 1985 the Member States were “asked not to hinder” the use of biofuels. This was hardly a promotion at all, as the regulation was solely intending to secure that biofuels are given an opportunity in the market. Later the Member States were allowed to exempt biofuels from taxation through the 1992 Excise Duties Directive, if they wished to do so and met certain requirements.

The formulation “Member States shall ensure a minimum proportion of biofuels in their national markets” (The European Parliament and the Council 2003b: 44) is strong, and relates to the process of European integration. The Community level is imposing targets on the Member States, as compared to earlier biofuels policies that provided the Member States with possibilities to promote biofuels without considering the general competition laws of the Community. Through the adoption of this directive power is relocated to Community level, which is completely new to this policy area. Therefore the passing of this directive represents the breakthrough for the common EU biofuels policy.

Moreover the targets of the Biofuels Directive are very ambitious. A 2 per cent proportion of biofuels in the transport sector within 2005 meant a considerable increase in the proportion of biofuels in the transport sector, which was 0.3 per cent at that time (Eur-Observer 2011: 74). Through the adoption of these targets the dedication towards the introduction of these fuel types is communicated. The

directive represents therefore an important step as regards the policy innovation process, in the sense that the focus on biofuels is stronger, and the role that biofuels are set out to play is a more important one. On the other hand the targets of the Biofuels Directive are indicative, meaning that the Member States do not risk sanctions if they are unable to comply.

Even though the targets are ambitious, because of their indicative character, the adoption of the Biofuels Directive does not transform the scenario sketched in the directive to reality, as the targets were not accomplished, much related to their indicative character.

6.2 Increasing Complexity

The basis of appeal of biofuels, as stated in the Biofuels Directive, is related to the potential environmental benefits, to the goal of decreasing the Community's dependence on imported oil, and to the general strategy of promoting renewable energy (The European Parliament and the Council 2003b: 42). In addition the goal of creating rural development is mentioned as a motivation for the development of biofuels policies, but this concern is however to a large extent framed as a less important motivation for the development of such a policy (The European Parliament and the Council 2003b: 43).

Greater use of biofuels for transport form a part of the package of measures needed to comply with the Kyoto Protocol, and of any policy package to meet further commitments in this respect. (...) (The European Parliament and the Council 2003b: 42).

Increased use of biofuels for transport (...) is one of the tools by which the Community can reduce its dependence on imported energy and influence the fuel market for transport and hence the security of energy supply in the medium and long term. (...) (The European Parliament and the Council 2003b: 42).

Promoting the use of biofuels in keeping with sustainable reframing and forestry practices laid down in the rules governing the common agricultural policy could create new opportunities for sustainable rural development (...) (The European Parliament and the Council 2003b: 43).

The promotion of biofuels is now framed towards all the three concerns that the policy relate to today; the environment, energy security and rural development. The concerns for the environment and for energy security are however emphasized stronger to a certain degree. This is an important policy innovation as the trend towards an environmental focus all over society has entered also to the scope of the biofuels policy, which earlier had been strongly oriented towards the concerns for energy security. The inclusion of the environmental concerns is a continuation of the trend that was identified after the adoption of the Kyoto Protocol.

The concerns related to rural development are also new to the biofuels policy through the adoption of the Biofuels Directive. The Common Agricultural Policy has at this point in time become more directed towards concerns for rural development on the expense of agricultural concerns, implying a focus towards among other things the combating of the environmental challenges, and the production of

renewable energy (Rieger 2005: 178). The reform of the Common Agricultural Policy of 2003 must be seen as part of the background for the Biofuels Directive. The 2003 reform brought with it a measure directly promoting biofuels productions in the Community. This was the carbon-credit, providing farmers with fiscal motivations for each hectare of arable land put into biofuels crop cultivation. These measures are regarded as very important for the growth in the production of biofuels in the EU (Eikeland 2005: 15-17).

Alongside the focus on rural development in the EU we find the goal to ensure a policy that provides the same benefits to the rural communities in developing countries. Both social and ecological effects of the biofuels production in developing countries are considered, and a policy providing for sustainable development is stressed. The concrete goals of the biofuels policy in relation to developing countries are to generate positive economic and environmental effects, through creating employment, reducing the country's energy bills and providing a potential export product (The European Commission 2006a: 6-7). This is disputed by Franco et al (2010) who connects the goal of creating rural development and to diversify the agricultural sector to matters inside the EU (Franco et. al 2010: 667).

Franco et al. (2010) relates the inclusion of developing countries in the scope of the bio-fuels policy, to the lack of agricultural land for biofuels production in the EU. This is because the concerns for developing countries were not introduced before the policy makers became aware that the ambitious targets that were put in place for biofuels were not possible to accomplish from production from inside the Community. The inclusion of developing countries to this policy does not mean that it has changed its scope to-wards development and cooperation policy. The inclusion of developing countries is by this argumentation made out of cynical and egoistic concerns, and not in order to create benefits for the world's poor.

That shift [towards concerns for developing countries] responded to industry projections that half the EU biofuels supply could come from imports by 2030. A parallel narrative promised that biofuels would offer opportunities for 'economic development' or 'rural development' in the global South, despite early evidence of destructive effects (Franco et al. 2010: 667-8).

A second approach to explain this change towards an emphasis on the concerns for developing countries is to see it as a consequence of the criticism that surrounds the biofuels debate. The social effects of the production of biofuels, the expropriation of land areas, and the biofuels production's impact on food prices are gradually becoming known to the public. Because of the growing criticism the EU is required to justify its ambitious biofuels targets through the inclusion of developing countries in the scope of the policy. In this way the institutional approach can be used to interpret the change in the scope of the policy. It is the context's influence that has led to the EU changing its ways, and the introduction of the social concerns to the biofuels policy can therefore be seen as a punctuation in the biofuels policy's equilibrium, which was internally focused before this change (Peters 2005: 74).

Either way, regardless of the background for this change in the policy, the picture is more complicated after than prior to the introduction. For example, the wish to increase the possibilities for rural development in Europe, and the aim for the bio-fuels policy to create benefits for development countries, are fundamentally contradicting. If the biofuels policy is to create rural development in Europe, it presupposes that the biomass for the production is obtained from inside the

Community. On the other hand, if the policy is to create benefits for developing countries, it presupposes that the biomass is indeed imported from these countries. In this way the inclusion of these two concerns for the policy development, is complicating the picture of biofuels policy development in Europe even more, and it could be expected that the Commission would find it problematic to navigate between the different concerns.

The development of the policy is taking into consideration the problematic sides of the production, but at the same time the targets for the consumption are pushed forward and increased. The threefold approach to biofuels, focusing on environmental, energy security and rural development benefits, and also considering the effects that the policy has in developing countries, does not affect the content or the focus of the policy. This indicates a shallow shift in the policy, as the implementation of the policy continues in the same way as always.

Institutional literature treats such actions. The context's influence is experienced so strong for the institution, that it cannot resist making a change, in order to survive. At the same time the institution does not have the resources to make this change. This leads to a situation where the institution makes the change that the surrounding context requires only on the outside. The inside of the institution is unchanged (Peters 2005).

The Biofuels directive is motivated from three different concerns, and the connection to three different policy areas seems to have been beneficial for the development of a common EU policy. A threefold approach to the policy allows the policy to seek support from different angles, and since the argumentation becomes diversified it has a broader audience to speak to.

Earlier the biofuels policy was framed in relation to the concern for energy security, and as long as this was the case the development towards a common EU policy was slow. EU energy policy is without much earlier common policies because of the big differences between the Member States (Youngs 2011: 58). The rural development concerns and the environmental concerns however, are both connected to a large body of common European policies (Rieger 2005: 172; Lenschow 2005: 306). In this way it is plausible that the inclusion of rural development and environmental concerns to the policy together made the development of a common EU policy possible.

Through the implementation of the Biofuels Directive, the policy is supplied with its threefold basis for motivation. The content of the Biofuels Directive meant a more complex policy, with internally contradicting and conflicting concerns. The three concerns will influence the balance and equilibrium of the policy, and one can therefore in the future expect more frequent changes in the policy, as the policy is now more dependent on its surrounding context.

Another innovation as regards the Biofuels Directive is the inclusion of the potential negative external consequences of the Biofuels Directive, as these fuel types are no longer seen as solely beneficial (The European Parliament and the Council 2003b: 45). The inclusion of the concerns for developing countries is connected to this.

The connection to the three concerns is concurring with the development of the first common EU policy through the Biofuels Directive. The connection to the energy security concerns that this policy area had been characterized by up until this point in time, had not been providing the best basis for developing a common policy. This is because the energy security concerns are not provided with any degree of EU level competence. The introduction of environmental concerns and concerns for

rural development, as the Biofuels Directive provides, creates a whole new scope for developing a common policy. This is because both policies are regarded as EU level competence, and hence a common policy on biofuels is also within the scope.

6.3 The EU Institutional Setting

The legislative procedure in use for the adoption process of the Biofuels Directive was the ordinary procedure. This procedure includes as much as three readings, and provides the Parliament and the Council with equal amounts of power (Nugent 2010: 315-19). The Commission presented an ambitious proposal, which was processed by the different institutions. In the original proposal from the Commission the biofuels targets were mandatory:

The Commission believes that the simplest way of promoting large-scale bio-fuel penetration in the long term would be through obligatory blending of a certain percentage of biofuels into gasoline and diesel marketed throughout Europe (The European Commission 2001c: 7).

These obligatory blending mandates were motivated by the need for preparation in order to see a successful development of the biofuels industry of the Community. The obligatory targets would provide the industry with a stable market, and hence providing it with the possibility to expand rapidly and as far as possible, at the same time without this leading to drastic changes in the energy market in the short run, as the use of biofuels is possible in the existing cars on the market (The European Commission 2001c: 7). This is a practical approach to the promotion of biofuels, and there is no connection to problematic sides to these fuel types. This is related to the Commission's role as an initiator in the EU institutional setting, and to its sectoral organizational criteria, fostering such an approach, through excluding ethical and debated sides to the policy (Egeberg 2004: 11).

The Council of the European Union introduced some main changes in the Biofuels Directive. First, the scope of the directive was changed to also include other renewable sources, while the original proposal from the Commission focused solely on biologically based fuels. The Council believed the Member States would thus be able to have a broad focus in their promotion of renewable fuels in the transport sector (The Council of the European Union 2003a: 6).

The Council also proposed indicative targets for the proportion of biofuels, in contrast to the mandatory targets proposed from the Commission. This was done in order to give the Member States an opportunity to impose the measures in a gradual and flexible manner. However, with these indicative targets follows also a review clause and a possibility to develop the targets into mandatory targets after some time, based on the reporting from the Member States and the Commission about the implementation of the targets. The Council also provided the Member States with the responsibility to choose the biofuels most suitable for their national markets, and supplied the directive with a list of approved biofuels (The Council of the European Union 2003a: 6).

These changes were extensive, and by making them the Council went quite far in transferring the regulation of the promotion of the use of biofuels from the Community level to the Member State level. The final directive was adopted without any strong policy tools to promote this policy from the Commission's side. The

implementation of the targets of the directive was in this way made totally dependent on the Member States' actions. Furthermore the Council's changes regarding the scope of the directive, towards all types of renewable fuels, lead to a less specific directive, where biofuels were just one of many eligible alternative fuel types for the transport sector. In this way the Council's changes resulted in a directive with considerable less potential for influencing the actions of the Member States from the Community level.

The Council's restructuring of the directive should be related to its intergovernmental character. In this forum the Member States are acting on behalf of own national interests. From this it could be interpreted that the Member States did not have the same ambitions as the institutions of the Community level regarding the introduction of biofuels in the transport sector. As Wiesenthal et al. (2009: 793) shows, the Member States have very different interests related to the production and consumption of biofuels in their national fuel markets, and hence they relate differently to the development of a common EU biofuels policy. Further, since the Council prefers to make their decisions unanimously, the diverging interests of the Member States could be expected to block an ambitious policy regarding the promotion of biofuels in the Community. In this way, the organization criteria for the Council, which is favouring the promotion of national interests, is hindering the development of a common biofuels policy.

The most interesting feature as regards the European Parliament's treating of the Directive, is the environmental focus. The environmental benefits of biofuels are framed as the most important benefits of the biofuels policy, but at the same time the Parliament questions these benefits. The main message from the Parliament regarding these proposals is that the promotion of biofuels must not mean the ruling out of other types of alternative fuels in the transport sector. The uncertainties related to the environmental benefits of the policy are stressed, and research and development is emphasized, but at the same time effort needs to be put into all possible sources of renewable energy in transport. The Parliament even goes as far as to propose environmental criteria for biofuels in the transport sector. There is no reference to other concerns for the policy in the Parliaments opinion on the Biofuels Directive (The European Parliament 2002).

The dividing lines of the Parliament are ideological, which can be expected to foster the critical sides of biofuels, as conflict patterns inside are based on political differences. The promotion of both sides of biofuels, negative and positive, from the Parliament can be interpreted as a consequence of its organizational criteria (Egeberg 2004). Further, the Parliament has a very large branch affiliated with the green environmental movement (Lenshow 2005: 312-18), and the strong emphasis on environmental concerns reflects this.

The Parliament does not treat the placement of the power regarding execution of the policy. The Parliament is a supranational body, where trans-European ideas are strong, and the promotion of community wide policies is expected to thrive (Egeberg 2004: 10). The members of Parliament are also nationally elected, but the political organization of the Parliament is widely known to be very efficient in wiping out the national dividing lines (Egeberg 2004).

6.4 Biofuels Targets Not Accomplished

The Biofuels Directive obliges the Member States to report to the Commission on the measures taken to promote biofuels or other renewable fuels, their sales shares and on exceptional conditions affecting their ability to comply with the directive. Based on this the Commission shall draw up an evaluation report for the European Parliament and for the Council on the progress of the Member States. If this report concludes that the indicative targets of 2 per cent by 2005 and 5.75 per cent by 2010 are likely to not be achieved, and that this is related to unjustified and non-scientific reasons, the national targets shall be addressed, and mandatory targets will be put upon the Member States (The European Parliament and the Council 2003b: 45-6).

The Biofuels Progress Report from 2006 evaluates the Member States' accomplishment of the Biofuels Directive and proposes changes in the policy based on this evaluation. The majority of the Member States did not accomplish their targets for 2005. The only Member States that met their reference value were Germany, with a 3.8 per cent proportion of biofuels in the transport sector, and Sweden with a 2.2 per cent proportion. The average Member State's accomplishment of their biofuels targets was 52 per cent. In total the market share of biofuels in overall EU consumption of energy in the transport sector totalled at 1 per cent in 2005, which is half of the target from the Biofuels Directive. Even more striking is the fact that if all of the Member States had reached their planned share, the Community would have had only a 1.4 per cent share of biofuels in 2005, in other words the targets from the Biofuels Directive were planned to be under-achieved right from the start. Moreover, the Commission's quiet accept of this planned under-achievement shows that the situation was experienced as without much scope for increasing the targets that the Member States put forward. On the basis of the progress reports regarding the 2005 targets, the Commission concludes that "the biofuels directive target for 2010 is not likely to be achieved [either]" (The European Commission 2006b: 5).

The fact that the Member States did not accomplish their goals implies that the targets set by the Commission, were too ambitious, and that the industry and the society were not ready for this intense promotion of biofuels for transport. These events means a retreat for the process of policy innovation, as the prescribed developments in policy from the Biofuels Directive were not accompanied in practice, and the policy resulted to be less comprehensive, and to have less strong influence as compared to what was prescribed.

The events are however very important for the process of European integration, as this non-accomplishment leads to the development of mandatory targets for the policy. This is related to the fact that even though the Biofuels Directive is mild regarding the community level's possibility to force the Member States to comply, it supplies the Commission with a possibility to review the functioning of the targets, and the possibility to make the targets compulsory. The Member States' failure to comply with the targets of the Directive proved that indicative targets was not enough, and the Commission had a good starting point for the development of mandatory targets for the biofuels proportion in the Member States' national markets.

Based on the Member States' lack of success in complying with the targets, the Commission states that the EU needs to send a clear signal about their intentions regarding biofuels as an alternative fuel in the transport sector, and the voluntary targets from the Biofuels Directive are not regarded as communicating the

Community's ambitions towards biofuels. The Commission therefore sees the need for mandatory targets directed towards the proportion biofuels in the transport sector in the Member States' national markets (The European Commission 2006b: 8). In this way did the non-accomplishment of the targets of the Biofuels Directive, described as a set-back regarding the policy innovation process, provide the scope for the development of mandatory targets imposed from the Community level towards the national level, and hence a complete common biofuels policy in the Renewable Energy Directive.

6.5 Chapter Summary

The Biofuels Directive represents the breakthrough for the common EU biofuels policy, as this directive is the first community wide policy ever adopted. The targets of the directive are very ambitious, and the Biofuels Directive is a good example of the EU's dedication towards biofuels in the beginning of the 2000s. On the other hand the targets are indicative, as a result of the Council's actions, and the targets were not accomplished. The sketch of the development of the policy area of biofuels in the EU, as provided in the Biofuels Directive, was not put into practice.

The development of a common policy has been connected to the inclusion of the threefold approach to the policy. Through the influence of the institutional status of the environmental concerns and the concerns for rural development, the biofuels policy was given the strength it needed to step up to the supranational level. The inclusion of the threefold approach also led to a more complex policy, as several concerns would have to be made. The inclusion of developing countries, a result of context or the EU's need for import, is also made in the period connected to the Biofuels Directive.

The adoption process on the Biofuels Directive is characterized by an ambitious Commission, even proposing mandatory biofuels targets for the Member States. The Council on the other hand can only be described as staggering, as the directive is scaled down, and loses much of its scope for influencing the Member States in any way, during its processing in the Council. The Parliament is also ambitious on behalf of biofuels, but takes to a greater extent than the Commission the potential negative externalities into consideration, and has an overwhelming environmental focus during the adoption.

The targets as promoted in the Biofuels Directive were not accomplished. This is much related to the indicative character of the targets. The ambitious policy proposed at Community level was not followed up by the Member States, as non but two Member States accomplished their targets. In fact, the plans submitted to the Community level from the Member States meant an under-achievement of the targets from the beginning. This non-compliance resulted in turn to the development of mandatory targets for the proportion of biofuels in the Member States' national markets.

These developments can on one hand be interpreted as a step backwards regarding the biofuels policy, in the sense that the policy proposed in the directive was not put into practise. On the other hand these developments lead to the most significant step along the process of policy innovation ever in the EU biofuels policy: mandatory biofuels targets.

7 The Renewable Energy Directive

In 2009 the EU Energy and Climate Change Package was adopted. Through this package the EU committed itself to reducing the green-house gas emissions by 20 per cent compared to the 1990 levels and to increase the share of renewable energy in the total energy consumption of the Community with 20 per cent. Related to this goal was a target of 10 per cent renewables in the transport sector. In addition the package contained a non-binding goal of 20 per cent energy efficiency in primary energy consumption. All targets were aiming at the year 2020 (The European Parliament and Council 2009a).

The package consisted of two different Directives, one on the promotion of the use of energy from renewable sources and the other on improving and extending the greenhouse gas emission allowance trading scheme of the Community (Behrens and Egenhofer 2011: 221-2). It is the primer that will be treated in this report.

The Renewable Energy Directive establishes a common framework for the promotion of energy from renewable sources in the European Community. All legislation directed towards renewable energy is gathered here, and the Biofuels Directive is hence repealed (The European Parliament and Council 2009a: 16). At this point, two main changes in the biofuels policy have occurred. First, mandatory national targets for the share of energy from renewable sources in the overall energy consumption in the transport sector are set. Second, sustainability criteria for biologically based energy sources are established (The European Parliament and Council 2009a: 27).

7.1 A Common Policy supplied with Mandatory Targets

Important aspects of the Renewable Energy Directive as regards the two development processes that this report treats are the mandatory character of the targets, and the community wide approach of the directive. The mandatory targets are directed towards the overall share of energy from renewable sources in the total energy consumption of each Member State, and towards the share of renewable energy in the transport sector (The European Parliament and the Council 2009a:7).

Each Member State shall ensure that the share of energy from renewable sources in all forms of transport in 2020 is at least 10 % of the final consumption of energy in transport in that Member State (The European Parliament and the Council 2009a: 28).

In its wording the Renewable Energy Directive promotes biofuels strongly, and constrains the Member States to a large degree in this policy field, as the Member States “shall ensure.” Also in the Biofuels Directive this specific wording was used, and in the previous chapter it was said that the Biofuels Directive represented a common EU policy, and the breakthrough of the biofuels policy.

However, the Renewable Energy Directive is supplied with mandatory targets to transform the policy targets into practise, while the targets of the Biofuels Directive

were indicative, and hence the intentions of the policy were not put into practise, as the lack of strong policy tools lead to a non-accomplishment of the targets of the policy. The Biofuels Directive promoted common EU outcome goals, but did not provide the necessary policy tools to accomplish these goals. Therefore, even though the European integration process came a long way through the adoption of the Biofuels Directive, the Renewable Energy Directive goes even further, as it contains mandatory targets.

7.2 Agreement at First Reading

Even though its adoption meant a development where much power was reallocated from national level, the process around the Renewable Energy Directive was not characterized by debates similar to the adoption of the Biofuels Directive, where the Council effectively was able to scale down the scope of the directive. When adopting the Renewable Energy Directive the proposal from the Commission was approved at first reading.

As an agreement was reached between Parliament and Council, Parliament's position at first reading corresponds to the final legislative act, Directive 2009/28/EC (The European Parliament 2008).

The legislative procedure in use was the ordinary procedure, where the Parliament and the Council are equal in terms of power. The procedure includes as much as three readings, but if the Parliament and the Council comes to an agreement, the proposal is made a legislative act at the first reading (Nugent 2010: 315-19). Considering the mandatory character and the considerable size of these measures, it is conspicuous that the directive is adopted this quietly. Especially when considering the Council's previous lack of ambitions regarding the promotion of biofuels. Earlier in this report these actions have been related to the Council's intergovernmental character, and hence the promotion of Member States' interests in this body (Egeberg 2004: 9).

When receiving the proposal from the Commission for the Renewable Energy Directive, the Council immediately initiated a process in order to come to an agreement with the Parliament at first reading. The legislative procedure in use encourages such communication to be carried out, providing for the development of a consensus oriented policy, representing all interests present. About the initial processing of the Renewable Energy Directive the Council's minutes says:

The discussion brought out the clear will to succeed in arriving at an agreement with the European Parliament by the end of 2008 so that a first-reading could be reached before the end of the current legislature. The Council intends to step up its discussions in close collaboration with the Commission so that the EU may continue to have a leading role in combating climatic change at international level (The Council of the European Union 2008b).

The gain from reaching such an agreement with the Parliament is not spelled out, but a plausible motivation for this could be a wish to create an environment characterized by consensus for the adoption process of this directive.

The Council's approach to biofuels in the transport sector is changed, as compared to its actions taken towards the Biofuels Directive in 2003. In the former process many important aspects of the policy regarding the effective implementation of the policy were removed from by the Council's hand through the adoption process. In its approach to the Renewable Energy Directive on the other hand the Council sees a community level approach as necessary for a successful policy. In its process of adopting the directive the Council is quoted as follows:

[The Council] stresses (...) the binding nature of the ambitious target for the use of biofuels in overall EU transport consumption to be introduced in a cost-efficient way is appropriate subject to production being sustainable, the fulfillment of effective sustainability criteria and second-generation biofuels becoming commercially available (...) (The Council of the European Union 2008a).

This change of mind could be explained through the influence from an environment in the EU where the need for the implementation of the biofuels targets was experienced as increasingly pressing. A situation that led the Council, and through this the Member States, to accept a Community level regulation of these concerns, in order to make sure that the biofuels proportion was indeed increasing. Early policy targets of an indicative character were not achieved, and mandatory targets were seen as necessary.

It is also possible that powerful Member States with ambitions regarding biofuels were pushing this development ahead. The picture painted by Wiesenthal et al. (2009) revealed that many of the traditional powerful EU Member States, such as France and Germany, had potentially strong interests regarding biofuels consumption and production in the Community, and hence they could be expected to promote a common EU biofuels policy.

Further, the Renewable Energy Directive has certain characteristics that can explain the change in the Council's approach. The Renewable Energy Directive gathers all types of different renewable energy, and the policy is therefore not as easily attacked as earlier. This is because the promotion of renewable energy is a policy area that cannot be criticized in any degree. There is strong consensus around the importance of these issues. Biofuels on the other hand, is a very much criticized fuel source. The connection between biofuels and other renewable sources is therefore important for the consensus around this directive. As regards the transport sector the approach has changes as well. Even though biofuels are still given much emphasis in this directive, the approach is now connecting other renewable energy sources such as electricity, and therefore the policy is easier to accept. In addition the sustainability criteria and the emphasis on later generations of biofuels take the edge of much of the critique.

The argument proposed here, that the adoption of the Renewable Energy Directive was this conflict free because the directive is considerably better at taking negative external consequences into consideration, is challenged by the opinions of the consultative committees. The EESC and the CoR, does not have decision making authority, but their opinions give a view of the arguments present in the debate of the adoption of the Renewable Energy Directive.

The EESC does not support the Commission's line of argumentation, and regards the substitution of fossil fuels with biological derived fuels in the transport sector as "one of the least effective and most expensive climate protection measures" (The

European Economic and Social Committee 2008: 43-4). The use of renewable electricity in the transport sector is regarded as much more beneficial, at least until the next generations of biofuels are ready for the commercial market. (Committee of the Regions 2008: 15; the European Economic and Social Committee 2008: 43-4). The future transport sector is not, they argue, based on the internal combustion engine and private cars, but on public environmentally friendly transportation modes. Where the use of private cars is necessary it is much more reasonable to obtain the energy from renewably produced electricity, rather than liquid biofuels. Further they promote investment in a policy of “traffic prevention” (The European Economic and Social Committee 2008: 46).

These opinions reveal a strong negative attitude towards the promotion of biofuels among the member of the consultative committees. Especially the suggestion promoted from the EESC of a policy to curb the growth in the transport sector is striking. According to Franco et al (2010: 662) one of the main goals for the promotion of biofuels has been to prevent the need to curb mobility throughout the Community. These strong objections towards biofuels are in strong contrast to the way that the Parliament and the Council related to the Directive, as an adoption at first reading shows a strong consensus upon the policy.

The adoption process of the Renewable Energy Directive is characterized by consensus, and the different EU level institutions are all in favour of this policy. However, the Commission had even higher ambitions for the Renewable Energy Directive:

(...) the European Council should choose to fix a specific minimum target for sustainable biofuels of 10 % of overall petrol and diesel consumption (The European Commission 2008b: 7).

The initial proposal from the Commission included a 10 per cent renewable proportion in the transport sector from biofuels alone. The ambitions of the directive have therefore been down scaled through the adoption process, in the same way as the Biofuels Directive, however not to the same extent.

The Renewable Energy Directive represents, spite its innovation as regards the sustainability criteria, a continuation of the policy from before. Even though the policy tools that has been applied in order to promote biofuels, targets for the overall consumption in the transport sector, have not been successful in any degree, there is no change in the approach, other than making the targets mandatory. The reason for non-compliance is solely connected to the indicative character of the targets, and not to other reasons connected to biofuels’ technical characteristics.

7.3 Biofuels for the Sake of the Environment

In the Renewable Energy Directive the threefold approach to the promotion of biofuels is continued from the Biofuels Directive. The directive also promotes the environmental concerns as the principal goal of the policy, whereas the concern for energy security and rural development are secondary.

The control of European energy consumption and the increased use of energy from renewable sources, together with energy savings and increased energy efficiency, constitute important parts of the package of measures needed to

reduce green-house gas emissions and comply with the Kyoto Protocol to the United Nations Framework Convention on Climate Change, and with further Community and international green-house gas emission reduction commitments beyond 2012. (...) Those factors also have an important part to play in promoting the security of energy supply, promoting technological development and innovation and providing opportunities for employment and regional development, especially in rural and isolated areas (The European Parliament and Council 2009a: 16).

Through this wording a shift in the framing of the policy can be detected. The Renewable Energy Directive promotes environmental concerns as the most central outcome goal, and subordinates the other two concerns. In the Biofuels Directive in comparison, the concern for the environment and for energy security was promoted as equally important, while the concern for rural development was subordinated. This change towards the concerns for the environment should be connected to these concerns' strong emphasis generally in the society. The environmental concerns are very important to the EU, as the Community has ambitions of being a world leader on environmental issues.

Further, the environmental concerns could be regarded as the most trans-European issue of the policy, as the environmental threat does not relate to the nation state's borders. A framing of the common biofuels policy towards these concerns could therefore be expected to be beneficial. Also the concern for rural development relates to a policy of strong EU competence, the Common Agricultural Policy, and the inclusion of such concerns can be expected to foster the common policy's development. Last, concerns for energy security are not relating to a strong EU level policy, and hence their subordination can be expected to be beneficial for the policy development towards a common policy.

7.4 Sustainability Criteria

For the biofuels in the transport sector, the Renewable Energy Directive sets up a set of sustainability criteria that the fuels have to comply with in order to count towards the Member States' renewable energy obligations. This is in order to rule out their potential negative external consequences. The sustainability criteria of the directive relate both to the ecological concerns and to the social concerns of biofuels, but only the ecological criteria are obligatory (The European Parliament and Council 2009a: 36).

First, the GHG-emission savings from the use of biologically based fuels compared to fossil fuels shall be at least 35 per cent, gradually increasing to 60 per cent by 2018. Second, these fuels shall not be made from biomass obtained from land regarded as valuable considering biodiversity, e.g. primary forests, areas with endangered species, areas with high carbon stock, e.g. wetlands or continuously forested areas, or from peat land areas. Last, the production of biologically based fuels has to be in accordance with the CAP. It is clearly stated that only products fulfilling these criteria shall be taken into account as renewable energy sources towards the mandatory biofuels target (The European Parliament and Council 2009a: 36-7).

The social concerns that the Renewable Energy Directive speaks of are related to the possible impact the use of biofuels might have on the availability of food to

affordable prices for people in developing countries, to land-use rights and a series of Conventions of the International Labour Organizations with implications on the rights of the labour force of the country where the production is carried out. These criteria are not mandatory in contrast to the ecological criteria. The Commission is responsible to monitor the development, and report to the Parliament and the Council on this subject, but the compliance with these criteria does not affect whether or not the fuels in question counts towards the Member States' environmental obligations (The European Parliament and Council 2009a: 38).

The sustainability criteria represent a step towards sustainable biofuels, and at its adoption this scheme was the most comprehensive in the world. The emphasis on the sustainability of biofuels, and the adoption of these complex sustainability criteria, shows that the EU takes into consideration the potential negative external consequences of the policy, and is seeking to promote biofuels in a more sustainable way than earlier. The criteria cover to a great extent the different areas of criticism that surround biofuels, e.g. the exploitation of labour forces in development countries and biofuels' possible impact on food prices, and ecological concerns for the green-house gas emissions as well as the degradation of soil and water.

On the other hand the social concerns for the production of biofuels are not sufficiently covered. The concerns related to the biofuels impact on food prices and the exploitations of labour forces are not mandatory in order for the biofuels to count towards the measures. The backdrop of the adoption of the Renewable Energy Directive is one where food prices have doubled in few years, and there are many who blame these changes on the production of biofuels (The Guardian 2011). The fact that the social concerns for the production of biofuels are not promoted in the same mandatory way as the ecological concerns is therefore striking. The reason given in the adopted directive is that the measurement of these factors are very difficult, and that these concerns therefore are better handled in a non-mandatory way and through supervising their impact (Franco et al. 2011: 6).

The inclusion of sustainability criteria could be expected to be accompanied by a general evaluation of the policy, considering putting the stakes on other types of fuels in the transport sector. This is not the case however as biofuels are promoted just as strongly as before, or even stronger through the goal of 10 % renewables in the transport sector. The inclusion of sustainability criteria can in this way be interpreted as a "quick fix" to the policy, where one is including the criteria without really taking them into consideration. The sustainability criteria in the Renewable Energy Directive are motivated from a need to legitimate the aggressive promotion of biofuels in the Community. The institutional context of the policy is pushing the concerns forward, and the EU does not have a choice but to implement such concerns (Peters 2005). The environmental concerns are in addition supported by the green Parliamentary wing (Lenshow 2005).

The non-mandatory character of the social sustainability criteria is related to the fact that there is no channel present for their promotion, to the same extent as the environmental sustainability criteria. According to Franco et al. (2010: 6) the social sustainability criteria were also promoted as mandatory, by a Parliamentary committee. This was rejected however, by the Commission, because such criteria were said to intervene with WTO trade rules.

The main innovation that the sustainability criteria represent for the policy is admitting that biofuels are not a one sided positive thing, and that the industry is experienced as one that has to be constrained and supervised, in order not to have negative external consequences. The EU sees the sustainability criteria of the

Renewable Energy Directive as adequately securing the sustainability of biofuels. The food crisis of 2008 and the other social concerns related to the biofuels policy, did not have a strong enough influence, to change the development in the EU towards other renewable energy, making a case where the context did not influence the policy development.

This can be seen in relation to the high oil price at the same time, doubling from 2005-2006 (The World Watch Institute 2007: 8), strengthening the EU's incentive to secure its energy supply, among other means through biofuels. The energy security concerns of the biofuels policy seem to be still quite strong, and influencing the content, even though the policy is not framed in this picture anymore.

7.4.1 Next Generations of Biofuels

The next generations of biofuels, produced from waste, residues, non-food cellulosic material and lingo-cellulosic material, are given a special treatment in the Renewable Energy Directive. These biofuels shall be counted twice compared to other types of biofuels in relation to the Member States' renewable energy obligations (The European Parliament and Council 2009a: 41). Further the biofuels produced from waste and residues are treated differently towards the sustainability criteria. The fuels derived from these sources need only fulfil the sustainability criteria of green-house gas emissions (The European Parliament and the Council 2009a: 36).

This positive discrimination of next generation biofuels, and biofuels from waste, shows a political wish to promote these types of fuels to a greater extent than the first generation fuels. This measure is a tool to change the composition of types of biofuels that are used in the Community, towards a use of the next generations. This is the respond to a general critique towards the biofuels policy of the EU, saying that it has been over-emphasizing its emphasis towards first generation biofuels, and that these fuels are put in the market regardless of the negative external consequences that they involve (Eggert, Greaker and Potter 2011).

The logic behind the policy promoting the first generation fuels is that the introduction of these biofuels is believed to lead to an easier introduction of the next generation biofuels when they are commercially available for the market. This line of thought is criticized based on the argument that the first generations' hegemony in the market, leads to a more difficult entrance for the next generations of biofuels (Eggert, Greaker and Potter 2011).

In this way the favouring of the next generation biofuels in the Renewable Energy Directive can be interpreted as a punctuation of the equilibrium of the biofuels policy, resulting from critique from the context (Peters 2005).

7.5 The Current EU Biofuels Equilibrium and the Future

The adoption of the Renewable Energy Directive was surprisingly conflict free, as the Parliament and the Council made an agreement already at the first reading. This is surprising considering that through this legal act, mandatory and considerable targets for the proportion of biofuels on the national markets are provided. The

policies adopted are comprehensive and intervening to a considerable degree in the Member States' national policies.

The process of adopting the Renewable Energy Directive has no resemblance to the process of adoption of the Biofuels Directive in 2003. The processing of the Biofuels Directive was dominated by the Council, who successfully changed the considerable policy tools that was presented by the Commission, to a policy without any real tools to ensure compliance. The lack of success of the EU biofuels policies is a direct result from this. The Renewable Energy Directive on the other hand was adapted at first reading, without any debates. It seems like the EU biofuels policy has come to a state of internal equilibrium. Through the agreement on the mandatory targets, the earlier tug of war between the EU level and the Member State institutions have come to an end and the development of a common EU biofuels policy is in many ways complete. This speaks for an ambitious EU biofuels policy also in the future. On the other hand there are characteristics of the policy area that speak of a contrary development. These factors are both internal and external.

First of all the, production of renewable energy in rural areas of the Community does very often happen without providing the promised rural development benefits. This is related to the basis of production and organization of the producers, and leads to a lack of support from local inhabitants (Cavicchi 2012). In addition, the rate of completion of the EU biofuels targets is very low. The adoption in 2008 of the comprehensive and considerable targets of the Renewable Energy Directive was made at a time when none of the previous targets of the policy had been accomplished. The targets for proportion of biofuels in the transport sector are not likely to be met either, despite the mandatory character (OECD-FAO 2011:91). The lack of success of earlier policies could be expected to create a negative feed-back effect, and creating the scope to change the policy. Moreover, the possibility to impose sanctions on Member States not accomplishing the targets of the Renewable Energy Directive has not yet been carried out.

Further two CAP-measures, that have been important for the development of the biofuels policy, are abolished through the CAP "health check" of 2008. Both the set-aside measures and the direct energy crop support are abolished from 2010 (The European Commission 2012a). The effect from the abolishment of these two measures will without doubt have influence on the production of biofuels within the Community, and hence the possibility to accomplish the targets from the Renewable Energy Directive.

Also the context provides challenges to the policy equilibrium. As we have seen many times before the EU biofuels policy is very contingent of its surrounding context, something very evident by the adoption of the sustainability criteria of the Renewable Energy Directive. The criticism of biofuels in the surrounding context is ever growing, and its influence is considerable also after the adoption of this directive. The feelings towards biofuels in the EU have changed greatly after the adoption of the Renewable Energy Directive:

The European Union governments no longer view the rapid increase in biofuel consumption as a priority. (...) The European Union's attention has shifted to setting up sustainability systems to verify that the biofuel used in the various countries complies with the Renewable Energy Directive's sustainability criteria (Eur-Observer 2012: 43).

This shift in attention has led to a proposal from the Commission to include Indirect Land Use Change (ILUC) measures to the policy. These are measures that take into consideration the emissions from the change in use of land, even though it is not a direct consequence of biofuels production, but if they are a result of e.g. the cultivation of new land areas. The result in practice is that the target from the Renewable Energy Directive is connected to a new goal, of not to exceed 5 per cent from food crops. The industry states that this will mean the abandoning of biofuels in the EU, as the production today is almost exclusively based on food crops.

7.6 Chapter Summary

The Renewable Energy Directive represents the current EU regulation of biofuels promotion, and gathers all EU policy on renewable energy, including biofuels for transport. The directive provides a community wide approach to biofuels in the EU, and supplies this policy with mandatory targets for the Member States. The common policy was adopted through the Biofuels Directive, and hence the adoption of the later directive does not provide this innovation. On the other hand the Renewable Energy Directive also includes mandatory biofuels targets, leading to a policy with a greater scope of influencing the Member States' actions.

Another important innovation in the Renewable Energy Directive is the inclusion of sustainability criteria for the policy. Through the adoption of these criteria the EU acknowledges that biofuels are provided with potential negative external consequences, but at the same time it is presumed that all of these concerns are taken care of through these criteria. However, considering the fact that the social sustainability criteria are not mandatory, there are still potential for improvements as regards the EU biofuels policy.

The Renewable Energy Directive is mainly motivated from the environmental sides to biofuels. The policy has left its previous path with the strong emphasis on energy security concerns that the oil crisis of the 1970s created.

The adoption process is surprisingly conflict free, both considering the content of the policy, and the Council's history as a brake to the development of this policy area. The process of adoption of the Renewable Energy Directive bespeaks a situation where all the EU level institutions are in favour of the development of a common biofuels policy. This report has because of this promoted a hypothesis of a new state of equilibrium of the EU biofuels policy. However, this equilibrium is challenged both by the lack of success in previous policies, and by the influence from the context.

The Renewable Energy Directive represents the current regulation of biofuels in the EU. This regulation is based upon the state of equilibrium that was apparent at the time of adoption in 2008. This equilibrium is now changed through the financial crisis that hit Europe in late 2008.

8 Overview and Final Conclusions

This chapter provides the reader with an overview of the findings of the study. The story of the developments in the common biofuels policy of the EU is systematized and structured through institutional theory, and more specifically the following theoretical concepts: *policy innovation*, *European integration*, the *EU institutional setting* and *policy context*.

First of all, the story treats two development processes; policy innovation and European integration. It is a story of policy innovation, as biofuels as a public policy area is born and develops towards a comprehensive policy area during this time period. It is a story about an European integration process, because the policy area starts off as a national issue, and over the years develops towards a common EU policy.

Secondly, the story focuses on two main types of influencing factors on the policy; the institutionalized EU structure and the world context. By treating the EU governmental structure as institutionalized the study shows how the different institutions at Community level promote certain sides of biofuels as a policy area, and in this way influences the final outcome. The story also focuses on the world context, and shows that the development at times is very much contingent of the context because the EU as an institution is embedded in its surroundings. These developments are summarized in the following figure:

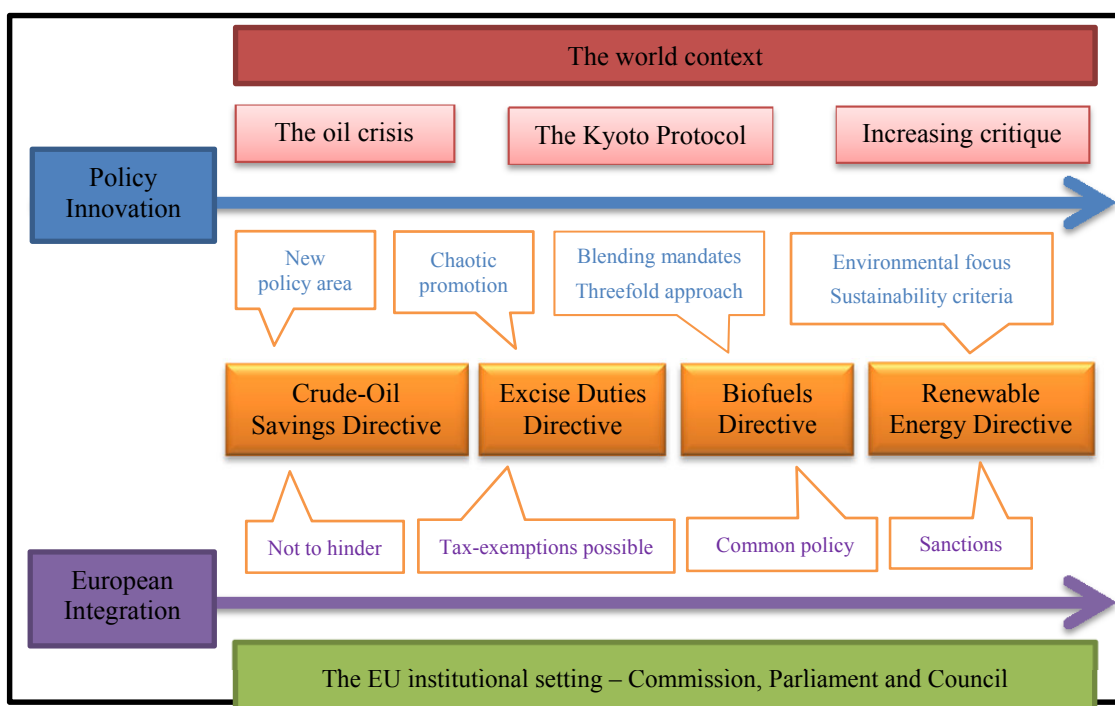


Figure 7.1 Overview of the development of the EU biofuels policy as it is described in this report

The figure above indicates the findings of this study. Two processes occur, symbolized by two arrows stretching from left to right, and together they answer the first part of the research question: how has the EU biofuels policy developed? The figure shows that the policy has developed through the process of policy innovation, from the birth of biofuels as a policy area to the strong and ambitious promotion that we see today, and through the process of European integration where the Community level increases its influence on the policy area at the expense of the national level. The squares in the middle of the figure represent the four different directives that the report treats: the Crude-Oil Savings Directive, the Excise Duties Directive, The Biofuels Directive and the Renewable Energy Directive. The directives, represented by the squares, are flanked by a few words describing the content of the policy as it developed.

The policy innovation process has developed from the passive biofuels promotion found in the Crude-Oil Savings Directive from 1985, where Member States were simply encouraged 'not to hinder' the introduction of biofuels in their national markets, through the chaotic regulation in the 1990s, and towards the ambitious and complex policies of the 2000s. The Biofuels Directive provides the first official blending mandates for the Member States, and includes the threefold approach to biofuels; of environmental, energy security and rural development concerns. The Renewable Energy Directive continues the ambitious policies, but with the environment as the principal concern for the policy. The most important innovation as regards the Renewable Energy Directive however, is its focus on sustainable biofuels.

Considering the European integration process, the Biofuels Directive from 2003 represents the most important development. Up until this point in time, the policy was not characterized by any community wide ambitions and there were no constraints put upon the Member States, neither in the Crude-Oil Savings Directive nor the Excise Duties Directive. The chaotic situation regarding biofuels promotion in the EU in the 1990s however, fuelled the process of policy innovation, and provided the scope for a common policy. The Biofuels Directive represents a common policy because of the inclusion of targets for the Member States, imposed by the EU level. The Renewable Energy Directive's mandatory targets take the process of European Integration even further, as it contains mandatory targets for the Member States, and provides the EU level with the possibility to sanction.

The sections at the top and at the bottom of the figure represent the influencing factors to the policy, and they are answering the second part of the research question: how can these developments be explained using an institutional approach? The factors that have been important for the development are found in the context and at the EU level institutional setting.

Regarding the EU institutional setting, the organizational structure of the EU institutions and the roles and relative power between them have proven to be important. The organizational structure of the different EU level institutions makes them foster different sides of the policy, e.g. the Parliament's strong environmental focus in relation to biofuels comes from its political organizational criteria and the large environmental party. Further the Commission's role as 'policy initiator' is very evident as regards biofuels, as this body is the far most ambitious on biofuels behalf. Last the Council's strength in the legislative process, which was even stronger in earlier times, has constrained the policy development, e.g. at the adoption of the Biofuels Directive, where the Council completely changed the scope of the policy.

The most important influencing factors of the world context have proven to be the oil crisis of the 1970s, providing the policy with a strong energy security focus in the Crude-Oil Savings Directive; the Kyoto Protocol leading to the inclusion of the environmental concerns in the Biofuels Directive; and the increasing complexity and critique of biofuels resulting in the inclusion of the sustainability criteria of the Renewable Energy Directive.

Through this development, where new concerns are included to the policy, the scope for action is increased. The connection to the strong and important EU level policy that the environmental concerns represents, lead to a rapid development in policy, much more efficient than the connection to energy security from earlier, as this field is not provided with a strong EU level policy.

8.1 Two concurrent development processes

The first part of the research question of this study has treated the continuous development of the common EU biofuels policy, and its characteristics at certain points in time. The study finds that the development can be fruitfully described through two processes: policy innovation and European integration. These two concepts capture different sides to the development of biofuels as a policy area in the EU, they are complementing and at times they overlap, but neither is sufficient on its own in order to describe the development of the EU biofuels policy.

8.1.1 The Policy Innovation Process

The process of policy innovation relates to the inclusion of new issues and concerns to the policy, and the increasing ambitions related to the policy area. In this study the innovations detected, from the birth of the policy area in 1985 to the current legislation, as provided for in the Renewable Energy Directive from 2009, have been impressive. The innovations include the increasing complexity of the policy area, from a singular focus on energy security in the 1980s, towards the threefold approach that we see in the Renewable Energy Directive. The process also includes the development in the practical content of the policy, where the study has revealed increasing strength of the policy tools, and increasing ambitions for the outcome of the policy. The latest developments, after the Renewable Energy Directive, include an even stronger focus on sustainable biofuels, but a movement away from the singular focus on traditional biofuels. In addition, the concept of policy innovation could be defined to include also the transmission of national power to the EU level. In this study the European integration process has been regarded as a process of equal importance, and hence worth analysing alone.

Tabell 8.1 Empirical account overview

Overview Empirical Account					
	Crude-Oil Savings Directive	Excise Duties Directive	Biofuels Directive	Renewable Energy Directive	Post RED changes
Policy innovation	Birth of a new policy area	Chaotic situation	Specific biofuels directive	Connects biofuels to the general renewables policies	EU U-turn on biofuels?
Ambitions	Biofuels one of many energy sources that the EU must consider	MS are more ambitious than EU level regarding the use of biofuels	Biofuels are regarded as an important energy source by EU level	Continues the strong ambitions on biofuels behalf	The rapid increase in biofuel consumption is no longer a priority for the EU
Argumentation	Energy Security	Energy Security, Rural Development (some)	Energy Security, Environment, Rural Development (less)	Environment (principally) Energy Security, Rural Development	
Policy tools	Let biofuels enter to the market	Tax exemptions after complicated application process	Blending mandates	Blending mandates Sustainability criteria	Indirect Land Use Changes Measures
European integration	First EU level biofuels legislation	Powerful MS show that they have interests towards biofuels	Common policy	Common policy	
Constraints on MSs	MS asked "not to hinder" biofuels in national markets	Flexible system, MS can almost do what they want, chaotic situation	Indicative targets imposed on MS from the EU	Mandatory targets imposed on MS from the EU	Sanctions have not been put into practice

The policy innovation process on the EU biofuels policy starts with the adoption of the directive on crude oil savings from 1985. The adoption of this directive represents the birth of biofuels as a policy area in the EU, as this is the first directive in EU history treating biofuels. The directive represents a modest promotion of such fuels, and cannot be compared to the measures for promotion that we see today. The Member States are simply asked 'not to hinder' the use of biofuels, and not to actively promote these fuel types. Further the ambitions on behalf of biofuels are low, as they are seen as only one of many energy sources. Moreover, the directive is merely considering the energy security concerns related to biofuels, and not the other two more complex and contradicting matters. The Crude-Oil Savings Directive from 1985 is therefore not interesting primarily because of its content, but because this is the first legal act related to biofuels in the EU (The European Parliament and Council 1985).

The excise duties directive from 1992 is the next step as regards the biofuels policy innovation process in the EU. The directive represents wide mandates for the promotion of biofuels, through the possibility of applying for exemption for biofuels in each Member State's national market. The policy is however characterized by a chaotic situation, where it is unknown what the correct guidelines are, and where Member States are interpreting the regulation for their own personal benefit, e.g. the process surrounding the French measures. This was related to the lack of clarity in the directive from 1992, where the taxation of biofuels was both allowed and denied. This ambiguous situation regarding biofuels created an environment for the development of much more ambitious policies in the coming decade (The Council of the European Communities 1992).

The 2000s is the biofuels decade of the EU. To this period belong two highly ambitious directives as regards the promotion of biofuels; the Biofuels Directive from 2003 and the Renewable Energy Directive from 2009, where the policy innovation process advances both regarding the complexity of the policy and the ambitions regarding the potential benefits from biofuels for the EU society. The Biofuels Directive from 2003 is characterized by a strong belief in biofuels directed towards all the three policy areas of; environment, energy security and rural development. The negative external consequences are to a certain degree included, but these questions are not given much emphasis, and nor do they undermine the enthusiasm towards the policy area. Further the directive provides targets for the consumption of biofuels in the Member States' markets, which is the first time blending mandates are used as a policy tool in the biofuels policy area (The European Parliament and the Council 2003).

The targets presented in the Biofuels Directive were however not accomplished, much related to their indicative character. This development is crucial for understanding the later developments in the biofuels policy of the Community. First of all because this under-accomplishment was planned beforehand, as the future targets that the Member States reported to the Commission, did not add up to the proposed target of 2 per cent biofuels in the transport sector. This reveals a lack of ambitions among the Member States. Secondly, the lack of accomplishment of the targets from the Biofuels Directive demonstrated clearly that biofuels would not be successfully introduced to the market without the use of force. The mandatory character of the biofuels targets in the Renewable Energy Directive must be seen as a direct consequence of the under-accomplishment of the Biofuels Directive targets (The European Commission 2006b).

The Renewable Energy Directive introduces the environmental concerns as the principal concern for the use of biofuels, reducing the focus on the concern for energy security and rural development. The directive also includes the comprehensive scheme for sustainable biofuels, revealing a contingency of the policy context, where the critique of biofuels is increasing (The European Parliament and the Council 2009).

The process that is described in this study is a process of strong and important policy innovations related to biofuels as a policy area. The promotion of biofuels today, represented by the Renewable Energy Directive, does not show much resemblance to the regulation of this policy area in the 1980s, represented by the Crude-Oil Savings Directive. The development has been impressive, and the policy area can today be characterized as a well-developed EU policy area, with ambitious targets for the impact on the society. However, there is still potential for further development of this policy area, as not even the Renewable Energy Directive utilizes the complete scope for regulation. This scope includes a further development of the sustainability criteria, e.g. the inclusion of mandatory social sustainability criteria. The latest development in the EU biofuels policy takes steps in this direction, through the proposal of including also ILUC-measures to the Renewable Energy Directive. This focus on sustainability criteria has also had the effect of shifting the EU's focus towards other energy sources than traditional biofuels (Eur-Observer 2012).

8.1.2 The European Integration Process

The process of European integration refers to the development where power is relocated to EU level institutions at the expense of the Member States. There is a wide scope of more or less specialized theories belonging to the concept of European integration, explaining a specific part of this process, or with its focus in a certain area (Nugent 2010).

Today's biofuels promotion in the EU can be characterized as a well-developed common EU policy. The process of European integration in the field of biofuels has come a long way since the Crude-Oil Savings Directive from 1985. The Member States were encouraged to promote biofuels in their national markets, but without applying carrots or sticks. The power was in the hands of Member States, and the adoption of this directive did not mean important changes as regards the European integration process.

The directive on excise duties from 1992 provided the Member States with stronger tools for the promotion of biofuels, as the European level is granting the Member States the right to exempt their biofuels from taxation outside regular competition rules. In this way power is located at the European Union level, since Member States cannot exempt biofuels from taxation to a greater extent than what the EU level accepts. The promotion of biofuels in the 1990s, through the ambivalent Excise Duties Directive, showed that certain Member States had higher ambitions than the EU level at that time, and therefore that a stronger promotion of biofuels was possible. This in turn provided the Commission with a larger scope for policy initiative in the area of biofuels. Adding the chaotic situation, with complicated application processes, and the various interpretations of the directive in question, it became clear that the Community needed a Common policy in order to make sure that everyone played by the same rules, creating common benefits.

The adoption of the Biofuels Directive in 2003 represented such a common policy. Through this directive the Member States are given clear rules for their actions towards the promotion of biofuels in their national markets, and in many ways the integration process is finalized at this point. The policy is common for all Member States, and provided from the EU level. The directive does however not make these targets mandatory, and hence it does not provide sanctions for non-compliance. This directive's approach to biofuels has the scope of a community wide policy, but the tools provided in the directive are not of such a character. The Renewable Energy Directive, providing mandatory targets for the amount of biofuels consumed in the Member States, therefore represents a policy that to a greater extent can be classified as a common EU policy.

Despite this common character of the Renewable Energy Directive the implementation is entrusted to the Member States, as the legal acts do not give details considering the following up on the decisions. This is a consequence of the adoption of biofuels legal acts through directives and not regulations or decisions. Directives are more general than regulations and provide fewer details, in order to let the Member States figure out the best suited implementation. Regulations on the other hand give the Member States strict rules and mandates. Therefore a regulation of biofuels through regulations or decisions instead of directives would provide an even more communized policy.

In addition, when speaking of the common character of the policy, one has to consider the fact that the sanctions that are provided in the directive are not easily imposed, and that up until now no Member State has been sanctioned because of a lack of following up on the policy (Hohnen 2010). This lack of sanctioning is strongly related to the bureaucratic procedures that are necessary in order to carry out these actions. Likewise the lack of following up on the directive from the Member States will be important for the development. The rate of accomplishment of the biofuels targets has not been very high up until now, and the target for 2020 is also regarded as impossible to accomplish with the current development (OECD-FAO 2012).

8.2 Explaining the Development

The processes of policy innovation and European integration are in this study investigated through a focus on internal and external factors. Internally the EU institutions and their roles and relative power, influence the policy development, but there is also strong influence coming from the biofuels context. Regarding the internal EU institutional setting this study has shown that the organizational criteria of the institutions shape the way that they relate to the development of the EU biofuels policy, and that this influences the final outcome of the policy. Further the institutions have different amount of power, and roles to play at the EU level. Through the context of biofuels as a policy area, external factors, such as the Oil crisis of the 1970s and the Kyoto Protocol, influence the policy development.

8.2.1 The Commission

The Commission takes an ambitious approach to biofuels, and has been the driving force behind the development of the biofuels policy of the EU. Examples of this is

the Commission's proposal of mandatory biofuels targets in the Biofuels Directive (The European Commission 2001c: 7), and the target of 10 per cent from biofuels *alone* in the initial proposal for the Renewable Energy Directive (The European Commission 2008b: 7).

The Commission's ambitions regarding the promotion of biofuels should first of all be connected to its initiating role in the EU system. The Commission is by definition the only institution at EU level with a right to promote new policy, and this provides this body with much power and influence, being in possession of the right to define the starting point for any policy. This power is great and sovereign as there is no EU legislation without the Commission's initiative. However, through collaboration between the institutions, the Parliament and the Council may communicate their views on the development of new policy, and through recent treaty revisions they too have been given some competence towards initiation. The powers of the Commission to initiate are still considerable (Nugent 2010).

This ambitious approach to biofuels can also be related to the Commission's organizational criteria. The functional organization criteria upon which the Commission is organized, fosters an economical and technical approach to the promotion of biofuels, and the ethical sides of biofuels are not promoted (Egeberg 2004). Hence the negative sides of biofuels are not exposed to the Commission, and its ambitions are not curbed by these concerns. The promotion of biofuels from the Commission can be characterized as generally 'straight forward.' In its proposals the Commission does not include the negative external consequences of biofuels to any extent. The growing public awareness regarding these issues does not show in the policy proposals, and their inclusion to the policy happens mostly through the input from the consultative bodies, above all the Parliament.

8.2.2 The Parliament

The Parliament has been the principal promoter of environmental concerns in relation to the development of the common EU biofuels policy. In addition, the Parliament has in contrast to the Commission, focused on the potential negative external consequences of biofuels, and especially towards ensuring the environmental benefits of the policy. The Parliament has also been generally positive towards the development of common policies in the biofuels area, and has not had problems related to placing competence at the Community level at the expense of Member States. The Parliament's general support towards a Community approach to biofuels policies has been related to its supranational role in the EU system, and that the Parliament's members to a large extent identify themselves as European citizens (Nugent 2010).

The Parliament's environmental focus related to biofuels is exemplified through the Parliament advocating the potential environmental benefits of the biofuels policy in the adoption process of the Crude-Oil Savings Directive in 1985 (The European Parliament 1983: 91). The EU level environmental policy was not put in place until a few years later, and hence the environmental concerns were not an obvious connection to make when treating policies related to energy security. This focus has in this report been related to the Parliaments organizational characteristics. As a political institution, with political and ideological dividing lines as the structure for collaboration, the promotion of these sides of the policy will be facilitated. In addition, the Parliament contains a large group of politicians sympathizing with the

green political movement, which leads to a focus on the environmental sides to biofuels (Egeberg 2004).

The Parliament and the Council share the role as legislator in the EU system, and traditionally the most of the power was located within the Council. Throughout the time period of this study however, the Parliament has been increasing its power at the expense of the Council (Nugent 2010). Thus the influence of environmental concerns in legislation has increased. The Renewable Energy Directive promotes biofuels in connection with GHG-emissions and environmental benefits principally (The European Parliament and Council 2009a: 16). This strong environmental focus is related to the Parliament increasing its power in the system, but it can also be connected to the increasing focus towards the environment generally in the society, and the biofuels policy context.

The increasing focus on environmental concerns must also be connected to the punctuation of the equilibrium of the biofuels policy that the implementation of the Kyoto Protocol led to. Before the signing of this legally binding international agreement the EU biofuels policy was strongly path dependent towards the concerns for energy security.

8.2.3 The Council

The Council's role in the development of the common EU biofuels policy has generally been to slow the process down. This role has been connected to this body's inter-governmental organizational character. The Council is organized based on a territorial criterion, which leads to collaborations where Member States' interests are advocated, and hence that one is reluctant to place competence at the EU level (Egeberg 2004). Further, the Council has traditionally been the most powerful body in the legislation process of the EU, and its influence on the biofuels policy has been considerate. The role as a legislator is however shared with the Parliament, which has increased its power at the expense of the Council over the years (Nugent 2010).

This reluctance towards the adoption of Community level biofuels policies is especially evident in the process of adoption of the Biofuels Directive in 2003. The original proposal from the Commission was ambitious, including mandatory blending mandates for the Member States, but through the process of adoption in the Council however, the directive's scope of influencing the Member States' policies on biofuels was considerably reduced. In the final policy the targets were indicative, something that later led to the non-accomplishment of the targets in the directive.

The general picture as regards the development of the common biofuels policy has been one where the Commission proposes ambitious and common policies, and where the Council uses its powers to scale down the ambitions of the policy, and to redirect the power to national level. This picture however is not valid for the adoption process around the Renewable Energy Directive in 2009. The Council and the Parliament came to an agreement at first reading, indicating a consensus among these two institutions completely new to the EU biofuels policy. This consensus should be connected to the fact that the Parliament over time has increased its power, as the Council could no longer ignore the Parliament's opinion, but needed to seek collaboration (Nugent 2010).

8.2.4 The Context

This study has accounted for three occasions where the developments in the EU biofuels policy can be fruitfully explained through using the concept of punctuated equilibrium. The emphasis of energy security concerns during the adoption of the first biofuels related directive from 1985, the introduction of environmental concerns as a result of the implementation of the Kyoto Protocol in 1998, and the inclusion of sustainability criteria in the Renewable Energy Directive in 2009.

The adoption of the very first directive related to biofuels in 1985 was considerably influenced by the 1970s oil crisis. The documents studied from this time period reveal a change of path as regards the EU energy policy, as a consequence of these events, which in turn leads to an increased interest in biofuels for transport. Biofuels are regarded as a valuable energy source because of the possible net value that they can provide to the energy security balance of the Community (European Parliament and Council 1985). The emphasis of this concern in the early EU biofuels days establishes an energy security focus for the policy, which turns out to be impressively strong and long lasting. In other words the equilibrium of the EU biofuels policy was in this way set around an energy security focus, and it was not challenged until the implementation of the Kyoto Protocol in the final years of the 1990s.

In this study the implementation of the Kyoto Protocol is also understood as a punctuation of the equilibrium of the EU policy. The strong path dependency that the energy crisis had created towards energy security was broken through the adoption of this legally binding international agreement, as the policy now changes its focus to also include environmental concerns into its argumentation for the promotion of biofuels. The inclusion of these concerns does not happen immediately after the implementation of the Kyoto Protocol, and the application of the concept of organizational evolution, where the change is slower and more gradual, could also be applicable to describe the situation as it developed. The slow inclusion of the environmental concerns should also be connected to the strong path dependency of the concerns for energy security that was present in the policy (Peters 2005).

Irrespective of the mechanisms at play, whether it was a punctuation from the context, or a gradual development driven by internal factor, the environmental concerns are now included as one of the main arguments for the promotion of biofuels in the EU. The Biofuels Directive promotes the environmental concerns with equal strength as the concern for energy security (The Parliament and Council 2003), and in the Renewable Energy Directive the environmental concerns are promoted as the undisputed superior goal of the policy (The Parliament and Council 2009).

Through the inclusion of the environmental concerns the biofuels policy is connected to a strong EU level policy. This is important since in general the framing of the promotion of biofuels towards a policy area that does not have status as EU level competence will not be beneficial for the development of ambitious and Community wide policies. Biofuels as a policy area relate to three other policy areas; energy, environmental and rural development. These three have different statuses as regards the EU level competence, both historically and today. Rural development policy is included in the Common Agricultural Policy, which is one of the most integrated policy areas of the EU, and has been so since the initiation of the Community in the 1950s. The environment has been an important EU issue for a long time, and through the Single European Act in 1986 the EU level was officially

given competence in this policy area. Energy policy on the other hand is not a very well developed policy area at the EU level (Wallace et al. 2005).

Today, all three policy areas are recognized as part of the background for the promotion of biofuels for transport, but this is a rather recent development. The initial steps towards an EU policy on biofuels in the 1980s were solely motivated from energy security concerns, which must be seen in relation to the energy crisis of the 1970s. The focus on energy security as regards the EU biofuels policy was also evident throughout the 1990s, until the implementation of the Kyoto Protocol in the final years of the decade. In the beginning of the 2000s, the environmental concerns are given much emphasis in the Commission's promotion of EU biofuels policies, and the Biofuels Directive from 2003 promotes environmental concerns with equal strength as energy security concerns. The Renewable Energy Directive goes even further in its promotion of biofuels based on a potential environmental benefit, as the directive has this as its principal outcome goal from the policy. Rural development is also included into the policy through the Biofuels Directive, and the Renewable Energy Directive strengthens this emphasis.

This study has shown that the development of the common European biofuels policy was slow as long as the framing of the policy was solely based on energy security concerns, and that with the inclusion of environmental policy and agriculture and rural development policy, the process of the development of the common biofuels policy escalated. These observations have been connected to the lack of a strong EU level energy policy, and to the importance that environmental concerns have in the community (Wallace et al. 2005).

The third occasion where the development has been explained using the concept of punctuated equilibrium is the introduction of sustainability criteria to the Renewable Energy Directive. The backdrop for the implementation of this directive was the growing public awareness regarding the ecological external consequences of the production of biofuels, and a global food crisis, for which biofuels were given much blame. The sustainability criteria of the Renewable Energy Directive should therefore be seen as a result of this critique from the context.

The scope for following up on the criteria for sustainable biofuels do however differ between the ecological and the social aspects. The ecological sustainability criteria are compulsory, while the social concerns are only indicative. This should be seen in relation to the large and powerful environmental movement in the EU (Lenshow 2005), and last but not least, the legally binding Kyoto Protocol, whilst there are no such mechanisms working to promote the social sustainability criteria. Moreover, the EU was entering into a severe economic crisis at this time and oil prices were higher than ever in relative figures, hence there is a possibility that the social concerns were sacrificed for the sake of the high oil price. Still, the food crisis in 2008 did raise the relevance of these issues, however without having any considerable effect on the inclusion of social sustainability concerns to the policy development.

The critique that in this study is connected to the inclusion of sustainability criteria in the Renewable Energy Directive has since the adoption of this directive been increasing its influence. The public opinion of today is much more educated regarding the possible negative external consequences of biofuels, influencing the public debate. The institutional context of biofuels as a policy area is strongly influenced by this critique, something the inclusion of ILUC-measures to the policy also shows. The overall focus on sustainability of the policy is much stronger now compared to earlier stages (Eur-observer 2012).

8.3 Summing Up and Looking Ahead

This study has used an institutional approach to describe and explain the development of the common EU biofuels policy. Two processes; policy innovation and European integration, have been detected in the historical account of the biofuels policy in the EU. The policy innovation process starts with the adoption of the Crude-Oil Savings Directive in 1985, and culminates with the adoption of the comprehensive Renewable Energy Directive in 2009. The European integration process is fuelled by the chaotic situation regarding biofuels in the EU in the 1990s, which showed that there was a need for a common policy in this field, and lead to the adoption of common policy through the Biofuels Directive in 2003.

Further the organizational characteristics of the EU and the world context have influenced the development of the policy. The EU level institutions have channelled different sides of the policy, and their relative power and roles within the system have influenced the focus of the final outcome in policy. Also the definition as EU competence or not, of the three intervening policy areas has been important for the development of the policy. The world context has on different occasions had significant influence on the development of the policy; the strong energy security concerns as a consequence of the oil crisis of the 1970s, the inclusion of the environmental concerns to the policy after the implementation of the Kyoto Protocol in 1998, and the inclusion of sustainability criteria to the policy after strong critique from the context.

The future regulations of biofuels in the EU will be contingent on the lack of accomplishment of the biofuels targets up until now. Further the policy area is still characterized as highly controversial, despite the sustainability criteria of the Renewable Energy Directive, implying that the ethical and ecological debates surrounding biofuels are likely to continue. In addition, production of renewable energy in rural areas of the Community is often hampered by a lack of local support, related to the basis of production and organization, which often does not lead to the promised rural development benefits (Cavicchi 2012). Moreover, the Community is currently going through an economic recession, which will influence the scope for the development of biofuels policies, as will the high oil prices. This has led to less emphasis on environmental concerns in general in the community.

The last development in the EU biofuels policy is the proposal for the inclusion of ILUC-measures to the Renewable Energy Directive, meant to decrease the use of food crops for biofuels production (The European Commission 2012b). The adoption of such measures has been characterized as a catastrophe for the EU biofuels industry, as most of it is produced from such crops today, and hence the ILUC-measures are predicted to lead to the abandoning of biofuels in the EU (Reuters 2012). The influence that these measures will have on industry is hard to predict, but considering the processes of policy innovation the proposal and possible adoption of such measures means an even stronger inclusion of social and ecological sustainability criteria to the policy. This implies the move away from the ambitious and energy security driven policy, towards an environmentally focused policy taking the whole life cycle of the fuels into consideration, and hence providing the proposed benefits of biofuels to a stronger degree than today. The developments after the Renewable Energy Directive have taken a giant leap towards a policy that promotes sustainable biofuels.

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