

Law on Renewable Energy in the European Union and the effects on the EEA States Norway and Iceland.

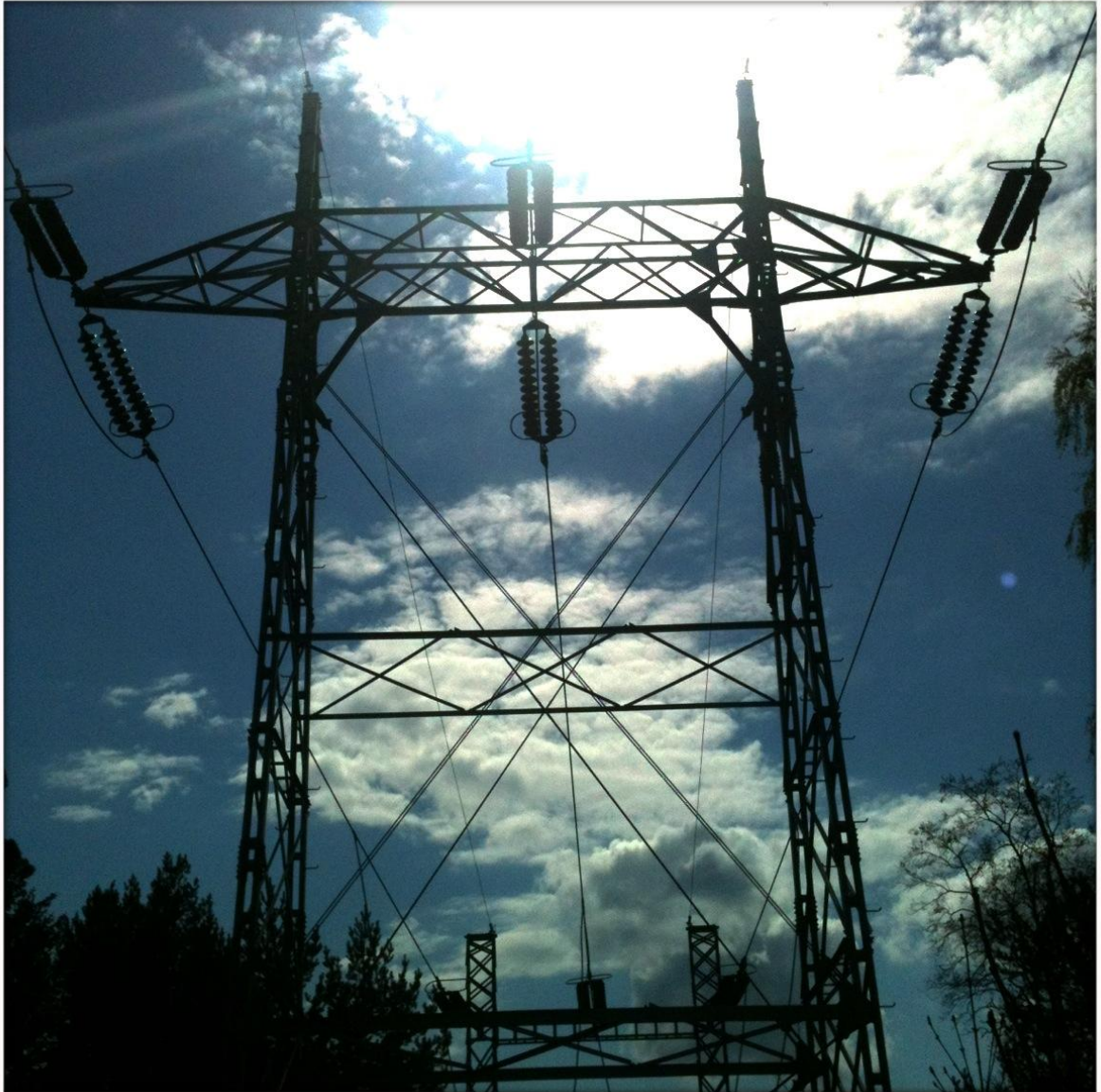
- LL.M. in Natural Resources Law and International Environmental Law -

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5 September 2012



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Power lines in Jessnes, Norway. Photo by Oda F. Arnesen.

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1. Introduction.

1.1. Brief introduction

This master thesis is the final part of my programme in LL.M. in International Law and Natural Resources at University of Iceland. It is difficult to choose topic for a research project, but I was never in doubt that it had to be something EU-related. First of all, there are very little EU included in the teaching at the Universities of Law in Norway (where I completed my first four years of law-studies), secondly my interest for EU law has grown through the courses at University of Iceland. Last but not least the topic is dynamic, always changing and have a growing impact on rules in Member States of the Union and the other States that are connected to Union on some level. Some of the factors that made me choose EU law as a topic for this thesis is also the most challenging one. Books on the Union are soon outdated, and there is always something new coming from the Institutions of the EU. Therefore the sources used also include webpages, which luckily are updated and correct as a consequence of the technological world that we live in today.

It was central to write about something that is relevant in today's political and legal environment, and that would continue to be important in the future. It did not take long time before the links between environmental law and energy law, two fast growing fields of EU-law, seemed interesting. As shown below are these fields more present in the Union than ever before, and in between environmental law and energy law is the Climate Change Package and Third Energy Package (to be introduced later), especially the Renewable Energy Directive,¹ which is the main topic of this thesis.

As a national Norwegian, and a student in Iceland, it was also interesting to write about something that affects these States, also as these countries are unique when it comes to renewable energy. Norway and Iceland are not members of the European Union, but are still largely involved in the Union. There are many differences between these countries, but the similarities might be even more striking.

During the last years, the Renewable Energy Sector has become a more attractive and growing market. Energy demand is increasing, energy supply is becoming more volatile and

¹ When only "the Renewable Energy Directive" is used this points to the Directive 2009/28/EC of the European Parliament and of the Council 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directive 2001/77/EC and 2003/30/EC.

energy prices are soaring. Because of this, renewable energy sources are developing into an important industry and a viable energy alternative.²

Today the world is strongly dependent on fossil fuels such as oil, coal and gas. These sources are referred to as non-renewables since they cannot be replaced, at least not in the foreseeable future.³ Uranium is a non-renewable source, but is still considered one of the cleanest ways of generating power, still energy from nuclear plants is very controversial as there are There are especially concerns regarding meltdown of the plants, and also long-term disposal of waste, but there is no doubt that nuclear energy will play a big role in the years to come.⁴

Green energy has been viewed as a clean, but expensive solution. Now the prices on oil and gas are higher than before and energy from renewable sources is by comparison less expensive. Coal is still a popular source of energy in parts of the world, but the days of costly green energy are changing and the investment activity in the market has been remarkable the recent year, a trend that is expected to continue. Government subsidies are among the key drives of investor interest in the market for renewable energy, a predictable regulatory environment is important because they reduce a big market barrier: high costs.⁵

Climate change is now on everyone's lips. There are several definitions of the "climate change", but in general, the problem is related to changes in concentration of greenhouse gases, which trap infrared radiation from the Earth's surface, which again causes the greenhouse effect. This is not a new or unhelpful effect, this is the reason why there is living life on this planet, but human activities are leading to an unnatural increase in concentration of greenhouse gases.⁶ The climate has been changing since the beginning of mankind, but today the climate is changing too fast compared to before.⁷ Now the greenhouse effect causes changes in air temperature, precatory patterns, sea-level rise and melting of glaciers.⁸ By now, the rapid climate change represents one of the greatest environmental, social and economic threats on earth, problems caused by global warming is getting worse every year.⁹

The regions expected to be particularly affects by climate change is the Arctic, Africa, small islands, and Asian and African mega-deltas. These countries are those that will have

² Clarisse Fräss-Ehrfeld: Renewable Energy Sources – A Chance to Combat Climate Change, Kluwer Law International BV (Fräss-Ehrfeld), 2009, page 1

³ Fräss-Ehrfeld page 113

⁴ Fräss-Ehrfeld page 113-114

⁵ Fräss-Ehrfeld page 1

⁶ Fräss-Ehrfeld page 4

⁷ Ibid.

⁸ Ibid.

⁹ Fräss- Ehrfeld page 5

particular difficulties adapting to climate change since they have fewer resources to adapt socially, technologically and financially.¹⁰ Also in Europe the distribution of impacts is likely to be uneven; it will hit the poorest countries the hardest. In Southern Europe climate change will most likely decrease crop productivity, increase heat related mortality and have negative impacts on tourism conditions during summer.¹¹ There are several climate change impacts of great concern in Europe. Ecosystems are expected to migrate pole ward in Europe under most of the global warming scenarios, for example will the tundra and taiga regions of Scandinavia and Russia shrink. In general, rainfall has increased in Northern Europe and decreased in Southern Europe, which might lead to floods in the Northern Europe and droughts in the Southern part of the continent. Climate change can also lead to a north-south dichotomy in agriculture, coastal erosion and an increase in health risks due to heat waves and frequency of wildfires.¹²

To combat climate change, there must be taken measures on national, regional and international level. The EU has taken a leading role in this work as a major contributor.¹³ EU started to be forefront in combating climate change a long time ago and EU is committed to work for an international agreement to control climate change, and it played a major part in both the UNFCCC and the Kyoto Protocol.¹⁴ The budget for environment, energy and transport research is now 8, 4 billion Euros and the money should be used to promote the development of clean energy and transport technologies for earliest possible deployment, and to strengthen the knowledge of climate change. After 2013 the budget is to be raised again. EU is also considering several other ways to reduce emission of greenhouse gas and of ensuring the environmental and economic consistency of the adopted measures.¹⁵ To address the problem of greenhouse gas emissions and break the link to economic growth, the EU has been taking big steps to address its own emissions of greenhouse gases, partly by developing and promoting the use of renewable sources.¹⁶

1.2. Sustainable Development.

The concept of sustainable development is getting a more and more relevant and popular factor with time, and it has proven to have impact in a various fields of law. Since the energy policy is such closely related to the environmental field, and the concept of sustainable

¹⁰ Fräss- Ehrfeld page 5

¹¹ Fräss-Ehrfeld page 13

¹² Fräss-Ehrfeld page 18-19

¹³ Fräss-Ehrfeld page 19

¹⁴ Fräss-Ehrfeld page 47

¹⁵ Fräss-Ehrfeld page 29

¹⁶ Fräss-Ehrfeld page 47-48

development has its main side to the environment, there will be given a brief introduction to the concept of international sustainable development.

The origin of the concept of sustainable development cannot be exactly pinpointed. Some argue for its use already by ancient civilizations wherever there was an attempt to reconcile the need for development with the protection of the environment. But in international and national law, the idea of sustainable development is pretty recent.¹⁷ It was the report of “Our Common Future”, the report of the World Commission on Environment and Development (WCED)¹⁸ that brought the principle of sustainable development into wider public attention, as an overarching objective. The report defines sustainable development as:

Development that meets the needs of the present, without compromising future generations to meet their own needs.¹⁹

The report of WCED called for a total transformation of policy in harmony with the needs of sustainable development, and the concept was seen as addressing challenges of environmental degradation, and social and economic development by recognizing the links between these policy areas.

The idea of the WCED has had the most far-reaching implications for law and legal systems both nationally all over the world, regionally and, internationally. As a direct follow-up for the report, there was held a United Nations Conference in Rio de Janeiro in 1992 and the integration of sustainable development can be seen in as an enormous inspiratory for the documents produced at the Conference.²⁰

References to sustainable development are now found in merely all international treaties that have side to the environment. Concerns regarding sustainable development are also getting more present on the field of economic and social policies, the principles of sustainable development has now been incorporated into a multitude of international agreements and national laws, and they are also given weight in international and national jurisprudence.²¹ The area of trade have traditionally not been very involved in environmental concerns, but in

¹⁷ Hans Christian Bugge and Christina Voigt (eds.): Sustainable Development in International and National Law, Europa Law Publishing, 2008, (Bugge and Voigt) Introduction page vii

¹⁸ Report of the World Commission on Environment and Development: Our Common Future, available online at <http://www.un-documents.net/our-common-future.pdf> (Our Common Future) (visited 01.09.12)

¹⁹ Our Common Future page 41

²⁰ Bugge and Voigt, Introduction page vii

²¹ Ibid.

the GATT Article XX²² there is an exceptions to the rule of no trade barriers, if founded in environmental concerns.

Twenty years after the Rio Conference, the importance of sustainable development is more pressing than ever. Debates around energy safety and clean energy, threat of climate change, widespread poverty, increasing gaps between the rich and poor, and other alarming trends are getting more visible and more debated. This has actualized the importance of sustainable development.²³ Sustainable development is all-embracing, but it has one core, to ensure that protection of the environment for a longer term is treated at least as an equal with economic development and social equality. This might mean that protection of the environment will have to be given priority over economic development.²⁴

The WCED comments on energy in its report of 1987, most of them are still relevant. The Committee states that there has not been found an acceptable pathway to safe and sustainable energy future, and these dilemmas was thought not to have been addresses with a sufficient sense of urgency by the international community.²⁵ It is later stated that every effort should be made to develop the potential for renewable energy, which should form the foundation of the global energy structure during the 21st century.²⁶ These points would fit in today in any speech on energy by any president of the EU, the United States and any premier of China.²⁷

The history of the concept sustainable development is an important backlight for the situation today. Of course, the economic cooperation has always been a founding part of the Union, but social and environmental concerns are getting more focus, also in the field of energy law.

Although most of the elements of The Third Energy Package and Climate Change Package²⁸ have entered into force, they seem to be slow to find their way into the national law of the Member State. The European Commission (the Commission) as highlighted its intention to prioritize the implementation, and has commenced many infringements proceedings in this respect.²⁹ Still, while these documents has not been properly implemented

²² The General Agreement on Tariffs and Trade (GATT) of April 1994, available at http://www.wto.org/english/docs_e/legal_e/legal_e.htm (visited 01.09.12)

²³ Bugge and Voigt, Introduction page ix

²⁴ Bugge and Voigt, Introduction page x

²⁵ Our Common Future page 142

²⁶ Our Common Future page 163

²⁷ Lawrence Watters: The Path to Sustainable Development 1972-2012, Article in *Pro Natura – Festschrift for Hans Christian Bugge*, Universitetsforlaget, 2012 (page 13 ff.), page 14

²⁸ Both are to be introduces thoroughly under Chapter 2 and the subsequent subchapters.

²⁹ Silke Goldberg: Recent Developments in the EU Energy Market, Article in *EER – The European Energy Handbook 2012*, edited by Silke Goldberg and Mark Newbery (page 3 ff) (EER – Recent EU Developments) page 3.

in all of the Member States, the European Commission has still been busy to put forward key initiatives for the European Energy Market, so further developments has been announced or even adopted.

1.3. Definitions.

There are some terms that it is important define. The most important one is “renewable energy”, which covers a number of sources and technologies at several different stages of development. There is constant evolution in the field, for example are wind power becoming a cheaper and therefore a lot more relevant than before.³⁰

Renewable energy is derived from natural processes that are replenished constantly. It derives directly or indirectly from the sun, or from heat generated deep into the earth. The EU First Renewable Energy Directive³¹ defines renewable energy sources, and they include³²:

- Wind power
- Solar power
- Geothermal power
- Hydropower
- Wave power
- Tidal power
- Sewage treatment plant gas
- Biomass
- Landfill gas
- Biogas (including landfill and sewage gas)

The commercial markets for renewable energy sources today are hydropower, bioenergy, solar heating and cooling, solar thermal power plants, photovoltaic, wind energy and geothermal energy. According to experts, it is possible to generate more than 100% of electricity worldwide from renewable energy sources by 2040.³³

There will now be given definitions of what is considered wind power, geothermal power and hydropower. The latter two are the most important ones in Norway and Iceland at the present, renewable energy in Norway is almost solely based on hydropower while Iceland

³⁰ Fräss-Ehrfeld page 111

³¹ The 2001 Renewable energy Directive: Directive 2001/77/EC of the European Parliament and of the Council of 27 September 2001 on the promotion of Electricity produced from renewable energy sources in the internal electricity market (The 2001 Renewable Electricity Directive/2001 Directive)

³² The 2001 Renewable Energy Directive Article 2 a

³³ Fräss-Ehrfeld page 115

also utilizes geothermal energy. Wind power is also becoming more relevant, especially in Norway.

Wind power is the fastest growing renewable energy source, due to the fact that wind energy is practically inexhaustible as well as it is available almost everywhere. It has no constraints, it is free and endless.³⁴ The use of wind as a source for renewable energy includes harnessing the power contained in moving air.³⁵

The turbines used to produce energy from the wind have rotors with aerodynamic blades that are connected to an electrical generator that produces energy. The wind power available is proportionate to the cube of the wind speed so that the wind power is highly dependent on the local wind connections.³⁶ At least this is good news for most parts of Norway and almost all of Iceland.

Wind turbines can be situated on- or offshore and are often collected in a wind farm. Some of the positive advantages of wind power is clean energy with no carbon dioxide emission, low cost (wind power can compete with nuclear, coal and gas at optimum locations), free fuel abundant and exhaustive and it is land friendly, since agricultural and industrial activities can continue around it.³⁷ Due to all these positive effects, wind power is quadrupled between years 2000 and 2006, and the wind power industry has grown at an impressive rate, both inside and outside of Europe.³⁸

Geothermal power is a type of renewable energy source that involves the exploitation of different grades of thermal energy stored within the earth.³⁹ In some cases hot water or steam that exists in the ground can be piped to the surface and used to drive a turbine generator, a process called hydrothermal resources. Another technique is the so-called Hot-Dry-Rock, which takes advantage from the heat of deep masses of rock that contain little or no steam or water, but water from the surface must be pumped through a hole to extract heat from the rocks. When the water is heated up, it can be pumped to the surface through a different whole, and may be used to drive a turbine generator. Hydrothermal resources are used commercially for generation of electricity, while the procedure with the Hot-Dry-Rock is only applied in demonstration projects, since the boring of the two holes has been very expensive.⁴⁰

³⁴ Fräss-Ehrfeld page 116

³⁵ Fräss-Ehrfeld page 117

³⁶ Ibid.

³⁷ Ibid.

³⁸ Ibid.

³⁹ Fräss-Ehrfeld page 119

⁴⁰ Ibid.

Geothermal power is used for district heating and heating and cooling for individual buildings, and it has a large potential. There are some geothermal district heating systems in Europe, and the biggest one is in the Paris area in France, and other States are showing some interesting geothermal district heating systems.⁴¹

Hydropower is energy derived from flowing water in rivers of man-made installations, where water flows from a high-level reservoir and down through a tunnel and away from the dam.⁴²

The most important points in the view of renewable energy can be summarized as finishing fossil fuel, security of supply, taking environmental concerns into consideration, make renewable energy sources a competitive source for generation of power, local employment and development, and competition.⁴³

1.4. The Topic for this Thesis.

The topic for this thesis is renewable energy in the European Union. After a look at the history of the Union, which is important to understand the present, there will be an examination of relevant rules on the energy field with focus on the Renewable Energy Directive of 2009.

What will be tried to be elaborated further on are the rules on renewable energy, first in the EU, and then the affects at the EEA States Norway and Iceland will be further examined. This is not a thesis which only considers law directly relevant to the EU, but there is a broader perspective. How have the rules in Norway and Iceland changed? What can be expected in the future? How big is really the influence on the EU law in these States? Is this influence for the better or the worse? These are only some questions that will be elaborated on. It is not my intention to answer all these questions, but all of them will be touched upon to some extent.

There are many relating areas to the topic of renewable energy, and some of these will be introduced but not elaborated further where relevant. For example is unbundling of great importance to the rules on renewable energy in the EU, but will only be briefly mentioned. Questions on competition are very present when making policies for the energy field, but as this also is a big and extensive area, it will not be elaborated too much. It is not possible to give a complete and exhaustive description of any field of the EU law. Maybe even more interesting than EU in this aspect, as a Norwegian/Icelandic-student of EU-law, is the EEA Agreement. This thesis focuses in Iceland and Norway.

⁴¹ Fräss-Ehrfeld page 120

⁴² Ibid.

⁴³ Fräss-Ehrfeld page 111-112

Also, there has been difficult finding material on the topic, even for a student that (partially) speaks English, Norwegian and Icelandic. This has been especially challenging regarding Iceland, but as Iceland gets much inspiration from the laws of the Nordic countries it is not unnatural to look to for example Norway. It is also a fact many of the questions, and sometimes even the answers, are the same. Both Norway and Iceland are one the field of renewable energy examples that should be followed by the other European countries, with the highest percentage of energy that comes from renewable sources in Europe.

After the introduction to the EU the focus will be energy law in the Union. There will be made some comments on environmental law in EU. After this the focus will be on renewable energy and the changes that have happened the latter years. The past is an important part of the present and the future, though the latter are most interesting. Several changes have been, and are currently being made. Chapter 3 will give a general introduction to the EEA, how it started and how it stands today. This will be very general, and specific questions will be addressed in the Chapters on Norway and Iceland. As will be shown there are a lot of similarities in these two States, but there are also some important differences.

Then the focus in Chapter 4 will be on Norway, the relationship to the EU/EEA and then the history and policies of energy law. As Norway is one of the largest suppliers of oil and gas in Europe, there will also be given a short overlook of the situation on these fields though this is an industry which might be said to work on the contrary goals as the renewable energy sector. After this the focus will be renewable energy sources, with some comments on specific kinds of renewable energy sources. In the end questions on climate change and the green certificates will be addressed.

Iceland is the topic of Chapter 5. Iceland has a very special geology, and has been very fortunate when it comes to sources for renewable energy. Therefore there are many questions regarding energy, for example with the aluminum. The focus of the Chapter on Iceland will be a little different than Chapter 4 on Norway, since Iceland now is in a special situation with accession negotiations with the EU. Because of this there are different EU questions of relevance in Iceland compared to Norway. Chapter 5 will be differently organized, though the main lines are thought to be the same.

The name of Chapter 6 is Conclusion, and here there will be some comments and views on the future, especially related to Norway and Iceland.

In the bibliography sources that are available online mostly includes a link to the webpage where this information can be found (marked with underlining). This is because of the international content of this thesis, and especially to ease the search for foreign legislation.

2. Energy Policy in the European Union.

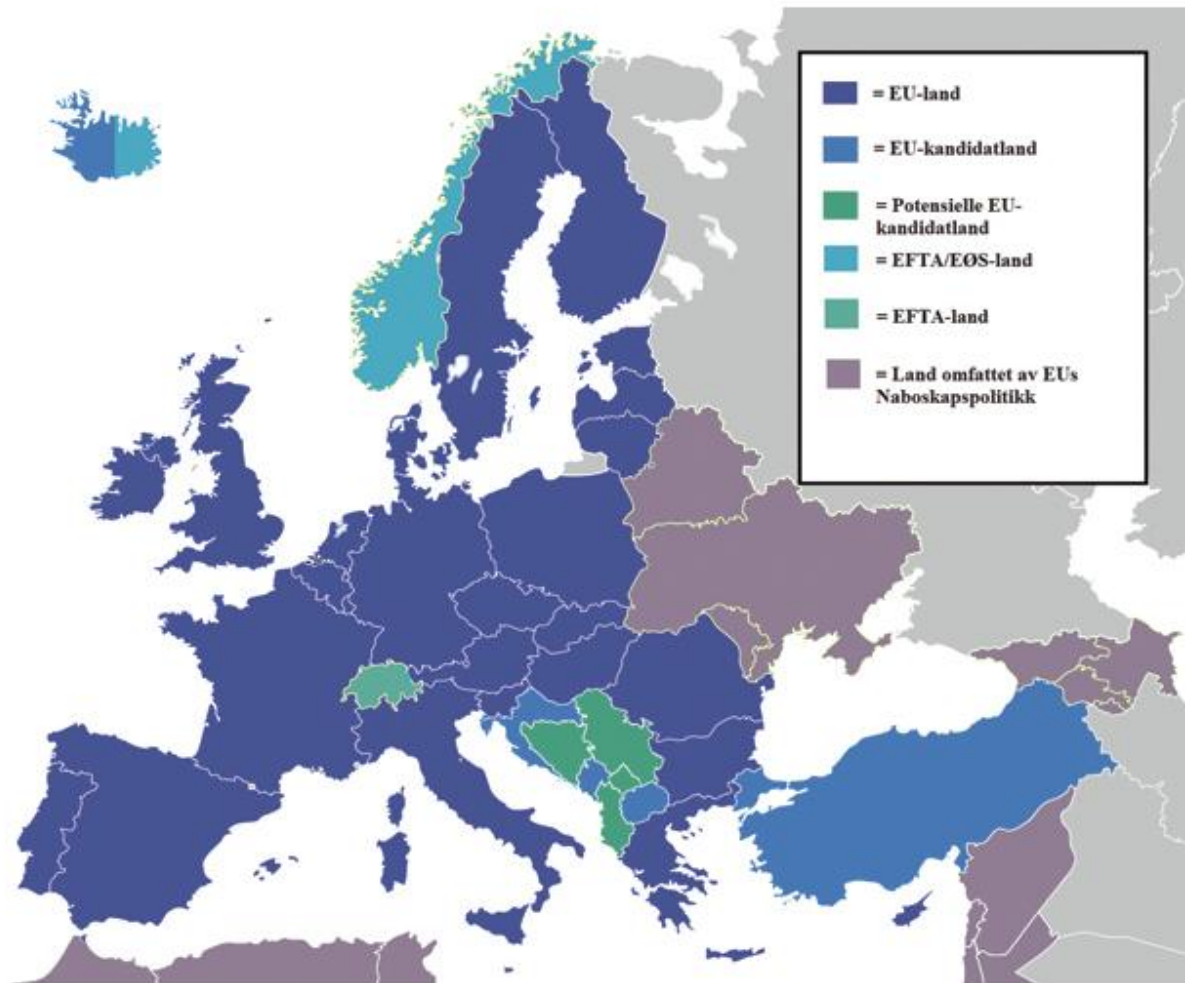


Figure of (translation from the top to bottom) the Member States of the European Union, candidate countries to the EU, potential Member States, EFTA/EEA States, EFTA-States and States under EU's Neighboring Country Policies.⁴⁴

2.1. History – the beginning of the European Union.

To understand the present, there is sometimes need to go to the past and see how we got to where we are today. This also goes for the European Union, which was up to a rough start, but it has slowly and steadily moved towards the supranational and large community that it is today.

The first steps towards a European Union can be seen in the aftermath of the Second World War, and the desire for peace and stability in Europe.⁴⁵ This was also a time for many

⁴⁴ NOU 2012:2, Utenfor og Innenfor – Norges Avtaler med EU (Utenfor og Innenfor) page 297. NOU is Official Norwegian Reports, the title can be translated to Outside and Inside – Norway's agreements with the EU.

new international organizations and agreements, for example GATT and the founding of United Nations (UN). The European countries were not all easy to convince, many of them had been bitter enemies during the war.⁴⁶ After trying to convince Britain to be part of a more concrete move towards European integration, and failing, the French foreign minister Robert Schuman proposed pooling of resources from Franco-German coal and steel under a single High Authority, and other European States were also invited to participate.⁴⁷ This proposal led to the European Coal and Steel Community (ECSC) set to expire in 2002, and can be seen as the first step towards European integration with supranational institutions.

The relationship between Germany and France has been difficult in many aspects, and this has colored the way towards a Union.⁴⁸ In 1955 the foreign ministers from the six states of ECSC (France, Germany, Italy and the three Benelux-countries (Belgium, Netherlands and Luxemburg)), gathered in a conference in Italy to make an agreement on moving in the direction towards European economic integration.⁴⁹ In 1956 a report was published which laid the funding for the European Atomic Energy Community (Euratom)⁵⁰ and the European Economic Community (EEC)⁵¹.⁵²

Two of the founding treaties for the Union, Euratom and ECSC, can therefore be said to be related to the energy field, addressing concerns regarding the magnitude of the energy sources. These Treaties were sector specific, respectively regarding nuclear energy and steel and coal.⁵³ After this the EU's policies on energy continued to form, centered on a liberalized gas and electricity market for the EU.

Energy law did then receive somewhat little attention in the cooperation between the European states, for example was the first Article in one of the fundamental EU Treaties that focused singlehandedly on energy included with the Lisbon-treaty.⁵⁴ But at least some aspects

⁴⁵ The term «Union» is used to cover the EU today and also previous forms, though the term «community» or other will be used where relevant.

⁴⁶ Paul Craig & Gráinne De Búrca: *EU Law – Text, Cases and Material*, Fifth Edition, Oxford University Press, 2011, (Craig and De Búrca) page 4

⁴⁷ Craig and De Búrca, page 5

⁴⁸ Ibid.

⁴⁹ Ibid.

⁵⁰ Treaty Establishing the European Atomic Energy Community (1957), Rome 25 March 1957, with later amendments

⁵¹ The Treaty establishing the European Coal and Steel Community (1951), Paris 18 April 1951, with later amendments.

⁵² Craig and De Búrca, page 6

⁵³ Wim Vanderberghe: Chapter VII, *EU Rules Concerning Energy and Investment After the Lisbon Treaty Article in European Energy Law Report VIII*, Editors: Martha M. Roggenkamp and Ulf Hammer, Intercientia 2011, (page 133 ff.) (Vanderberghe), page 143

⁵⁴ The Lisbon Treaty, Treaty 2007 OJ C 306 of 17.12.2007, Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community, signed at Lisbon, 13 December 2007. Into force 1 December 2009

of the energy field can be said to have been important cornerstones for the further development towards a European Union.

Through the years there were further enlargements of the Community, but the most striking changes in the organization of the Union came with the Maastricht Treaty⁵⁵ in 1992.⁵⁶ The most striking feature of the Treaty was the institutional changes establishing a three-pillar structure.⁵⁷ The First Pillar then consisted of EEC, ECSC and the Euratom, the Second Pillar covered Common Foreign and Security Policy and the Third Pillar consisted of Justice and Home Affairs.⁵⁸

An initiative to reform the Treaties of the Community in 2006⁵⁹ led to the birth of the Lisbon Treaty, and the process ended in amending the two existing Treaties to the Treaty of the European Union (TEU)⁶⁰ and the Treaty of the Functioning of the European Union (TFEU).⁶¹ The Union should have a single legal personality, and therefore the word “Community” is replaced by the word “Union” throughout the Treaties.⁶² Finally, after some adjustments and amendments, the Lisbon Treaty entered into force for all Member States of the European Union on 1 December 2009.⁶³ The Lisbon Treaty itself does only consist of seven articles, but Article 2 stretches over 90 pages, and there are 37 legal protocols with the same legal value as the text of the Treaty.

Today EU has 27 Member States, and more may be on the way. There are currently six candidate countries, Croatia, the Former Yugoslav Republic of Macedonia, Montenegro, Serbia, Turkey and Iceland.⁶⁴ 16 European countries are currently neither Member States of the European Union or candidate States, but most of them have more or less extensive connections with the EU. Two of the non-Members, Norway and Lichtenstein, and Iceland as the only candidate State, are currently parties to the EEA Agreement,⁶⁵ which can be said to be the most extensive and broad agreements between EU and non-Member States.

⁵⁵ Craig and De Búrca, page 13

⁵⁶ The Maastricht Treaty, OJ C 191 of 29.7.1992 series of amendments to existing legislation, signed in Maastricht 7 February 1992. Entered into force 1 November 1993

⁵⁷ See Craig and De Búrca, Chapter

⁵⁸ Craig and De Búrca page 13

⁵⁹ Craig and De Búrca page 25

⁶⁰ Treaty of the European Union (TEU) as amended by the Treaty of Lisbon

⁶¹ Treaty on the Functioning of the European Union (TFEU) as amended by the Treaty of Lisbon

⁶² Craig and De Búrca page 25 with further references

⁶³ Craig and De Búrca page 26

⁶⁴ http://europa.eu/about-eu/countries/index_en.htm

⁶⁵ Agreement on the European Economic Area (OJ No L 1, 03.01.1994) (The EEA Agreement)

Norway has twice rejected membership to the Union in national referendums, see subchapter 3.1. Iceland has now entered accession negotiations with EU, and there is not possible to say at the present whether Iceland will become member or not. These questions will be further elaborated under Chapter 5 on Iceland.

2.2. Environmental Law in the European Union.

The impact of climate, geography and other strictly non-legal factors on EU and EEA law address the overarching legal issue of whether a specific geographical location, different climates and other distinguishing factors may have an impact on shaping of the legal rules, in solving legal issues or on the respect of law in general. If so they contradict one of the prime objectives of the EU, and maybe even more the objective of the EEA Agreement; promotion of trade with equal conditions regarding competition, and respect of common rules with a view to creating a homogenous European Economic Area.⁶⁶ It is clear that non-legal factors have impact on both legislative policy empowerments and regarding the applicability of relevant rules at EU-level.⁶⁷

There are many international treaties, agreements and conventions regarding the environment. Many of these are binding for EU's Member States, and sometimes for the EU itself when the Union has chosen to be a signatory party. The EU is member of several international conventions that are extraterritorial, for example the 1992 Framework Convention on Climate Change and subsequent Protocols.⁶⁸

According to international law, states have the sovereign right to exploit their own resources on their territory pursuant to their environmental and developmental policies; this is for example stated in the Second principle of the Rio Declaration on Environment and Development.⁶⁹ This is the principle of prudent and rational utilization of natural resources. In Principle nine of the same Declaration is it stated that states should reduce and eliminate sustainable patterns of production and consumption to secure sustainable development.

It is not clear what a "natural resource" is and different definitions are found in different Treaties, Conventions and literature. One of the broadest, and maybe most popular definitions

⁶⁶ Peter-Christian Müller-Graff: The Impact of Climate, Geography and Other Non-Legal Factors on EC Law and EEA Law. Article in *The EFTA Court – Ten years on*, Edited by Carl Baudenbacher, Per Tresselt, Thorger Örlýgsson. Hart Publishing, Oxford and Portland, Oregon, 2005, (page 55 ff.) (Müller-Graff), Page 55

⁶⁷ Müller-Graff page 57

⁶⁸ 1992 Framework Convention on Climate Change and subsequent Protocols, OJ 1994 L 33/13

⁶⁹ Rio Declaration on Environment and Development, The United Nations Conference on Environment and Development, signed at Rio de Janeiro from 3 to 14 June 1992

seem to be the one of the Stockholm Declaration from 1972,⁷⁰ which in its Second Principle states that natural resources are resources of the earth, including the air, water, land, flora and fauna, and representative samples of natural ecosystems. Assumed to be included are also wood, minerals, water, oil, gas and chemical substances.⁷¹ It is clear that this principle is of relevance to the field of energy, since renewable energy comes from for example wind and water. But environmental principles are never a one way road, and different and often difficult considerations must be weighed and decided. To produce environmentally friendly energy can cause problems, for example for the downstream user.⁷² Also, power stations and wind turbines can have esthetical and other consequences.

The history of EU environmental law can be divided into several phases. In the first one, with the entry into force of the EEC Treaty in 1958, no specific attention was given to the environmental policies.⁷³ The true starting signal for a European environmental policy was with the European Summit meeting in 1972.⁷⁴ On 1 July 1987 the changes to the EEC Treaty brought about by the Single European Act came into force, and for the first time, objectives of environmental policy was enshrined in the Treaty.⁷⁵ With the Maastricht Treaty which entered into force 1 November 1993 the word “environment” was used for the first time in key Articles⁷⁶ that set out objectives and activities of the Union.⁷⁷ This phase is also recognized by that decisions under the Title on Environment could be taken by a qualified majority and the status given to the action programmes on the environment.⁷⁸ Then came the Treaty of Amsterdam in 1997, where the constitutional status of environmental protection was clarified and improvements were made to the relevant key articles, with the insert of “sustainable development”.⁷⁹ The introduction of sustainable development brought new concepts, principles and objectives into the environmental policy.⁸⁰

⁷⁰ Declaration of the United Nations Conference on the Human Environment, The United Nations Conference on the Human Environment, signed in Stockholm from 5 to 16 June 1972

⁷¹ Jan H. Janus and Hans H. B. Vedder: *European Environmental Law*, Third Edition, Europa Law Publishing, 2008, (Janus and Vedder) page 31.

⁷² Elli Louka: *International Environmental Law – Fairness, Effectiveness and World Order*, Cambridge University Press 2006, Chapter 5 on Water Resources, which elaborates further on these questions on an international level.

⁷³ Janus and Vedder page 3

⁷⁴ *Ibid.*

⁷⁵ Janus and Vedder page 6.

⁷⁶ TEU Article 2 and 3

⁷⁷ Janus and Vedder page 7

⁷⁸ *Ibid.*

⁷⁹ Janus and Vedder page 7-8

⁸⁰ Janus and Vedder page 8-9

It must now be possible to say that the next phase is on us, with the entry into force of the Lisbon Treaty, though the environmental provisions seem mainly unchanged from the previous ones, there have been a change in perspective from the Union's institutions, as can be seen from the many new programmes on the field of environment.⁸¹

As an underline to the connection that has grown between the fields of energy and environment in EU law, the provision on energy follows immediately after the provisions about environment. But while Article 194 on energy is new with the Lisbon Treaty, the provisions on the environment are older. The main article regarding the environment is Article 191:

Article 191 (ex. Article 174 TEC)

1. Union policy on the environment shall contribute to pursuit of the following objectives:

- preserving, protecting and improving the quality of the environment,
- protecting human health,
- prudent and rational utilisation of natural resources,
- promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change.

2. Union policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Union. It shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay.

In this context, harmonisation measures answering environmental protection requirements shall include, where appropriate, a safeguard clause allowing Member States to take provisional measures, for non-economic environmental reasons, subject to a procedure of inspection by the Union.

3. In preparing its policy on the environment, the Union shall take account of:

- available scientific and technical data,
- environmental conditions in the various regions of the Union,
- the potential benefits and costs of action or lack of action,
- the economic and social development of the Union as a whole and the balanced development of its regions.

4. Within their respective spheres of competence, the Union and the Member States shall cooperate with third countries and with the competent international organisations. The arrangements for Union cooperation may be the subject of agreements between the Union and the third parties concerned.

The previous subparagraph shall be without prejudice to Member States' competence to negotiate in international bodies and to conclude international agreements.

⁸¹ Janus and Vedder page 9 state in footnote number 31 that there are limited consequences of the Reform Treaty for European environmental policy

Article 191 (ex. Article 174 TEC) is followed by Article 192 (ex. Article 175 TEC) and Article 193 (ex. Article 176 TEC) which also regulates environmental questions. The legislative competences is laid out in Article 192, and it is for the European Parliament and the Council to decide what action is taken by the Union in order to achieve the objectives laid out in Article 191, in accordance with the ordinary legislative procedure.⁸² Derogations can be made from the decision-making procedure for measures i.e. significantly affecting a Member State's choice between different energy sources and the general structure of energy supply.⁸³ Though there were not specific provisions on energy in the Amsterdam Treaty, this derogation is the same as in the old Article 175 (2). This shows an awareness of the links between energy and environment. One of the main questions regarding the interpretation of Article 192 has been what "significantly affecting" means, since the Article also include derogations for "measures affecting" town and country planning⁸⁴ etc. and the threshold for significantly affecting is clearly higher than for measures affecting.⁸⁵

Article 193 lays out a standard phrase that Member States can maintain and introduce more stringent protective measures, but such measures must be compatible with the treaties. More protective measures can easily collide with the principles of the internal market and the rules of competition.⁸⁶ This is a derogation that applies for many fields of the EU law, but this might be particularly important on the environmental field. Different countries face different challenges, and it is important to remind the States that even though the Union may seem stringent, there is still something left to the Member States to decide. Through the history of sustainable development, there has been a point of view that the developed states must take more responsibility and help the developing states in achieving the goals set. This can be an important notice in Europe as well, the more developed States should have better equipment and better conditions to meet the goals set, and even stricter targets.

This thesis will not be concentrated on environmental law, but it is not an understatement to say that environmental principles have a big influence on the EU institution and legislative acts. Therefore will there be given a brief overview of the relevant environmental principles, general EU principles related to the environment will not be considered.

⁸² Article 192 paragraph 1

⁸³ Article 192 paragraph 2 letter c

⁸⁴ Article 192 paragraph 2 letter b

⁸⁵ Janus and Vedder page 56-57

⁸⁶ Janus and Vedder, Chapter 7 "Environment and Competition" has detailed comments on this subject regarding the Articles in the Amsterdam Treaty, which are mostly the same in the Lisbon Treaty

The environmental objectives that the EU shall try to accomplish are laid out in the first paragraph of Article 191, and they are rather general. The first two objectives are that EU should pursue to preserve, protect and improve the quality of the environment and protect human health. The Renewable Energy Directive is an example of use of these principles, as will be shown in subchapter 2.7. The two latter principles seem to be most relevant for the field of energy law, namely to secure prudent and rational utilization of natural resources and promote measures at an international level to deal with regional or international environmental problems, and the especially to combat climate change. It is clear that environmental catastrophes can have impacts all over the world, for example as for the disaster in Chernobyl in 1986. It is therefore important that the states can cooperate in this respect, and the EU as a strong cross-border organization is eminently qualified to do so.

Second paragraph of Article 191 includes a list of relevant policies for the environmental field, which also can be seen through various treaties and agreements on sustainable development. Environmental legislation from the EU institutions will have to translate these principles into more concrete obligations for the Member States, and then use the principles as a background when interpreting the relevant directives and regulations.

2.3. Legislation on Energy in the European Union.

The main provision on energy is TFEU Article 194:

Article 194

1. In the context of the establishment and functioning of the internal market and with regard for the need to preserve and improve the environment, Union policy on energy shall aim, in a spirit of solidarity between Member States, to:

- (a) ensure the functioning of the energy market;
- (b) ensure security of energy supply in the Union;
- (c) promote energy efficiency and energy saving and the development of new and renewable forms of energy; and
- (d) promote the interconnection of energy networks.

2. Without prejudice to the application of other provisions of the Treaties, the European Parliament and the Council, acting in accordance with the ordinary legislative procedure, shall establish the measures necessary to achieve the objectives in paragraph 1. Such measures shall be adopted after consultation of the Economic and Social Committee and the Committee of the Regions.

Such measures shall not affect a Member State's right to determine the conditions for exploiting its energy resources, its choice between different energy sources and the general structure of its energy supply, without prejudice to Article 192(2) (c).

3. By way of derogation from paragraph 2, the Council, acting in accordance with a special legislative procedure, shall unanimously and after consulting the European Parliament, establish the measures referred to therein when they are primarily of a fiscal nature.

The objectives of EU Energy policy are competitiveness, security of supply and sustainability.⁸⁷ There are some specified rules on designated areas, for example are the rules regarding security of supply that Member States shall hold oil stocks of specified categories of fuel equivalent to 90 days of average net imports, or if greater, 61 days of daily average inland consumption.⁸⁸ The completion of the internal energy market is based on rules on competition and state aid of the Union and the Member States must ensure open and competitive markets for electricity and gas according to the principles of transparency, non-discrimination, third-party access, cross-border transmissions, security of supply and sustainability. Transmission system operators (TSOs) and distribution system operators (DSOs) must be unbundled.⁸⁹

When it comes to nuclear energy, the Euratom Supply Agency has the exclusive rights to conclude contracts for supply of nuclear materials. The European Council (the Council) has many times emphasized the importance of promoting nuclear safety in the candidate countries.⁹⁰ With the Lisbon Treaty, small changes were made to the Euratom Treaty. Nuclear energy is still very controversial, though there seems to be growing interest for nuclear plants in several Member States.⁹¹

During the late 80's and 90's the European Commission started to challenge national and often state-owned monopolies that utilized much of the available resources in the Member States. They started with the market for telecommunications and then moved for the electricity- and gas sectors, because the monopolies and exclusive rights made an internal market for these goods difficult.⁹² At the time, it was impossible to get a qualified majority of the Member States to agree to liberalize the energy market at Community level, and the Commission therefore decided to use provisions of the Treaty regulating competition to abolish monopolies. It was argued that these monopolies were contrary to the Treaty's rules on free movement of goods and establishment.⁹³ After this it can be stated that energy is clearly considered to be covered by the word "goods".

⁸⁷ Screening report of Iceland, Chapter 15 – Energy, of 25 October 2011 by the European Union (Screening report of Iceland, Chapter 15 – Energy) page 2

⁸⁸ Screening report of Iceland, Chapter 15 – Energy page 2

⁸⁹ Ibid.

⁹⁰ Ibid.

⁹¹ Vanderberghe page 155

⁹² Screening report of Iceland, Chapter 15 – Energy, page 2

⁹³ Christopher W. Jones: EU Energy Law – The Internal Energy Market (Volume 1), Second Edition updated by Christopher W. Jones and William Webster, Claeys & Casteels, 2006, (Jones) page 2

Traditionally the rules on free movement have not been used on network-bound markets for electricity and gas.⁹⁴ There was some uneasiness in this area for some time, and the European Court of Justice (ECJ) had some important rulings on this field, though they are mostly of academic interest today.⁹⁵ The uncertainty in this field is the reason why EU started the work on deregulation of the energy sector in the Member States in order to establish an internal market for energy in 1988.⁹⁶ The process towards a European-wide electricity and gas market started very slowly, but has accelerated the last years. The process started in 1992 when the Commission formally proposed The First Electricity Directive,⁹⁷ though Member States also before this had partly or fully opened their market.⁹⁸ The First Electricity Directive was agreed upon in 1996, and the Directive was implemented into the EEA Agreement 26 November 1999.⁹⁹

The First Electricity Directive divided monopoly functions and other activities, and it required a gradual market opening to give producers and consumers the opportunity to freely sell and buy energy.¹⁰⁰ Because of the political disagreements under the preparation of the Directive it is to a large extent based on compromise, which gave the Member States freedom to choose different regimes for third party access to the networks. The EU Institutions were clear on that they did not think the Directive was enough far-reaching,¹⁰¹ and in 1999 the work towards what became the Second Electricity Directive began.¹⁰² The 2003 Directive had more stringent measures than the First Electricity Directive. Also the gradual opening of the electricity market continuous into the Second Directive, but also here are the rules clearer and leaves less legislative powers to the Member States. The Second Electricity Directive came with a Regulation on access to network for cross-border exchanges in electricity.¹⁰³

⁹⁴ Odd-Harald B. Wasenden: *Energimarkedsrett – Om informasjonsplikt og markedsatferd i det finansielle kraftmarkedet*, Cappelen Akademisk Forlag, 2007 (*Energimarkedsrett*), page 68 with reference to Jones' EU Energy Law

⁹⁵ Jones page 2-3 with further references

⁹⁶ *Energimarkedsrett* page 68 with further references

⁹⁷ The First Electricity Directive: Directive 96/92/EC of the European Parliament and of the Council of 19 December 1996 concerning common rules for the internal market in electricity

⁹⁸ Jones page 1

⁹⁹ *Energimarkedsrett* page 68 with further references

¹⁰⁰ *Energimarkedsrett* page 68

¹⁰¹ *Energimarkedsrett* page 69

¹⁰² The Second Electricity Directive: Directive 2003/54/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in electricity trading and repealing Directive 96/92/EC.

¹⁰³ Regulation (EC) No 1228/2003 of the European Parliament and of the Council of 26 June 2003 on conditions for access to the network for cross-border exchanges in electricity.

With the Second Electricity Directive the legislative process towards a competitive internal market then took a big step forward, creating the world's largest gas and electricity market fully open to competition.¹⁰⁴ EU has focused particularly on security of supply and consumer protection, and in this respect the rules on competition has been well used.¹⁰⁵ Competition is one of the main points in this development of the electricity market, but the Member States of the Union have to import energy from other countries, for example is Norway a major exporter of both gas and electricity to the Member States of EU. Third-party access on a non-discriminatory basis to the existing network is therefore necessary for competition to develop.

Still, even after the First and Second Electricity Directives, the Commission was not entirely happy with the situation, and they made some research in the electricity- and gas markets that resulted in a report on the energy sector.¹⁰⁶ The Commission seems to be content with the Nordic energy market, and thinks of it as well-functioning, though it indirectly states that the concentration in the market is worrying.¹⁰⁷

With time, EU have given legislation that requires unbundling in various degrees,¹⁰⁸ and there has been established an independent energy regulator to prevent discrimination, cross-subsidies and excessive pricing,¹⁰⁹ to create a competitive electricity market.

Though Article 194 TFEU is a new provision, it does not entail any major innovations. It might raise the profile of the energy issues, and provides a new legal basis for measures in the field. The Article also draws up some lines between the sovereignty of the Member States and the EU, but the significance of the provision will be seen in the next years.¹¹⁰

2.4. Recent Developments in the EU Energy Market.

EU energy policy are said to mainly balance three considerations; the environment, security of supply and competitive energy prices.¹¹¹ Hence, in accordance with the concept of sustainable development one can see environmental, social and economic concerns. The environment can be seen as more relevant in the actual political environment, with various international and regional treaties, agreements and conventions on the field.

¹⁰⁴ Jones page 3

¹⁰⁵ Jones page 4.

¹⁰⁶ DG Competition report on energy sector inquiry (SEC(2006)1724, 10 January 2007)

¹⁰⁷ DG Competition report on energy sector inquiry subchapter II.1.4. From page 136 onwards

¹⁰⁸ Jones page 6

¹⁰⁹ Jones page 7

¹¹⁰ Vanderburghe page 163

¹¹¹ Meld.St.28 (2010-2011) En næring for framtida – om petroleumsvirksomheten. Report to the Storting (White paper). Originally in Norwegian, but here is the English translation used., page 48.

The Lisbon Treaty gives the EU a clearer and more explicit competence in energy policy.¹¹² EU can now be said to have far reaching influences over national energy policies, and this influence may increase as the integration of the market for gas and. Still energy production and supply is crucial to the national economy, so the Member States will prefer to have something to say on this field. Shared competence is therefore inevitable on the field of energy, and the question is where the line shall be drawn.¹¹³

In 2005 the European Commission undertook an inquiry into competition in gas and electricity markets on the implementation of the EC Treaty rules on competition and it examined various key areas of the European energy market.¹¹⁴ As a legislative follow up, the Commission published a proposal for a Third Energy Package. This proposal came after intense negotiations between both the EU legislative Institutions and Member States, but also within the EU Institutions. The EU adopted principal goals for the climate policy in 2008, with the goal to have a reduction of 20% in CO₂ emissions, increase renewable energy with 20 % and implement energy efficiency measures to achieve a 20% reduction in the energy demand by the year 2020. Therefore the slogan: “20-20 by 2020”. Energy from renewable sources will help the EU countries to achieve the reduction of greenhouse gas.¹¹⁵

The Package was finally adopted on 13 July 2009, and entered into force 4 September the same year.¹¹⁶ Further liberalization and harmonization of the internal energy market is the main focus of the Third Energy Package, and it includes i.e. measures regarding unbundling, the role of national regulators and investment by third countries in European transmission systems. The last has been the most controversial.¹¹⁷

The EU institutions seem to be having some busy years lately. In 2010 there could be seen high activity and a large number of proposals in the EU and it is believable that this trend would continue. The Commission had a busy 2011, and at the present, 2012 seems to be just as busy.¹¹⁸ Many of the changes seem to be motivated by an ambition to dismantle market

¹¹² Article 4 TFEU paragraph 1 and 2 h-i

¹¹³ Vanderburgh page 145

¹¹⁴ Silke Goldberg: Overview of the Legal and Regulatory Framework in the European Union, Article in *EER – The European Energy Handbook 2012*, edited by Silke Goldberg and Mark Newbery, (page 9 ff) (EER – EU Overview) page 9 with further references.

¹¹⁵ Meld. St.28 (2010-2011) page 48

¹¹⁶ EER – EU Overview page 10

¹¹⁷ EER – EU Overview page 9

¹¹⁸ EER – Recent EU Developments page 3

barriers that impede the creation of a competitive common market, with a focus on improving energy efficiency.¹¹⁹

The changes focus on a prioritizing of safe, secure, sustainable and affordable energy within the EU, and the institutions are working on a long term strategy for EU's energy policy, initiatives until 2050 can be seen at the present. In February, the Council outlined future actions for five areas, the internal energy market, infrastructure, energy efficiency, external relations and renewables.¹²⁰

2.5. EU's External Relations – The Energy Community.

The wish for a fully-fledged market for energy in the EU reflects many developments, for example the growing import of energy to the Member States of the Union, which again led to questions regarding supply vulnerability. A tightening of the global energy supply/demand balance led to higher prices on energy, and higher political profile. As a result of this, energy has become more important in the policies of EU's external relations than before.¹²¹

The Energy Community¹²² was established on 1 July 2006, and it links EU to Albania, Bosnia-Herzegovina, Kosovo,¹²³ Moldova, Montenegro, Serbia and Ukraine. Four countries are observers in the Energy Community, Norway, Armenia, Turkey and Georgia.¹²⁴

The Community was set to expire in 2016, but in March 2011 the Commission called for its existence even longer than this to address outstanding shortcomings. On the 6 of October 2011 the Ministerial Council of the Energy Community adopted the EU rules on the internal market for electricity and gas, known as the Third Energy Package. Hence, the Package is now this extended to also cover the Energy Community, and the Contracting Parties to the Energy Community must transpose the Third Energy Package into national law by January 2015.¹²⁵ Behind including the Third Energy Package into the Energy Community, is an attempt to create a pan-European energy policy in the absence of further EU enlargements in the immediate future. Regulatory decisions concerning the Contracting Parties or implementation of the TEP decision will not be advised to ACER, but to the Energy Community Regulatory Board.¹²⁶ Iceland is not part of this Energy Community and Norway

¹¹⁹ EER – Recent EU Developments page 3

¹²⁰ Ibid.

¹²¹ Vanderberghe page 143

¹²² Treaty Establishing the Energy Community (OJ L/198/18 20.07.2006)

¹²³ Pursuant to Resolution 1244 of the UN Security Council

¹²⁴ Jones page 361

¹²⁵ EER – Recent EU Developments page 6

¹²⁶ EER – Recent EU Developments page 7

is only an observer, and they are not obliged to transpose the Package through the Energy Community, but they have gotten it through the EEA-agreement.

For a well-functioning internal market it is important to have the same standards in the States where the cooperation is the strongest. The Energy Community makes several environmental rules from the Union binding for these signatory states on the field of energy law. Also, this way the States that in fact are members of the Union, cannot get out of environmental or other obligations by shifting the production to states where no such obligations are in force. But not all environmental concerns are covered by the Energy Charter Treaty.¹²⁷

2.6. The Third Energy Package.

Member States was given until March 2011 to transpose the majority of the provisions in the New Electricity and Gas Directives into national law, with exceptions for the third country clause, which has to be transposed before March 2012. The New Gas and Electricity Regulations, and ACER Regulation entered into force as of September 2009.¹²⁸

The Third Energy Package consists of three Regulations and two Directives.

- Directive 2009/72/EC of the European Parliament and of the Council 14 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC (**the New Electricity Directive**).
- Directive 2009/73/EC of the European Parliament and of the Council 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/ECA Gas Directive, amending and completing the existing Gas Directive 2003/55 (**the New Gas Directive**)
- Regulation (EC) No. 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators (**the ACER Regulation**).
- Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for crossborder exchanges in electricity and repealing Regulation (EC) No 1228/2003 (**the New Electricity Regulation**).

¹²⁷ Jones page 362

¹²⁸ Ibid.

- Regulation (EC) No 715/2009 of the European Parliament and of the Council 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005 1775/05 (**the New Gas Regulation**).

The most important provisions of the Third Energy Package broadly cover five main areas, unbundling, regulatory oversight and cooperation, network cooperation, transparency and record keeping and access to storage and LNG facilities. Unbundling means the separation of the operation of gas pipelines or electricity networks, at transmission level from the business of producing or supplying either gas or electricity.

In February 2011 the Commission published a non-paper, “The Internal Energy Market – Time to Switch Into a Higher Gear”.¹²⁹ The non-paper emphasizes the Commission’s intention to prioritize the implementation of the applicable energy market legislation and commence infringement proceedings where necessary to speed on legislative action by tardy Member States. The Commission also expresses its disappointment regarding the late and incomplete transposition of the Second Gas and Electricity Directives, and stated that more than 60 infringement proceedings were coming.¹³⁰ It is understandable that the Member States are having difficulties following the far going rapid and challenging changes from the Union, but this is a duty they signed off to by joining the EU. Hence, they should have seen it coming. The environmental duties have developed rapidly the latter years, and the EU have gotten a much bigger initiative at the field of energy law as well, so there is no reason that the development on these fields will slow down.

On the 3 March 2011, a body created under the Third Energy Package, the Agency for Cooperation of Energy Regulators (ACER), was inaugurated. The Agency has various tasks, but one of them is to develop framework guidelines for European network codes pursuant to the Third Energy Package. The Framework Guidelines are supposed to set out clear and objective principles for the development of network codes in areas where ACER has consulted on.¹³¹

One major goal in EU’s energy legislation is to facilitate the creation of the single, competitive, efficient and sustainable internal European energy market. After external studies

¹²⁹ The Internal Energy Market – Time to Switch Into a Higher Gear, February 2011

¹³⁰ EER – Recent EU Developments page 3-4

¹³¹ EER – Recent EU Developments page 4

and public consultation, the Council of European Energy Regulators (CEER),¹³² on behalf of the Commission, recommended introduction of an EU-wide energy wholesale trading passport. Energy trading has traditionally been unlicensed and largely unregulated in many jurisdictions, but the advice from CEER focuses on identifying market participants and implementing minimum requirements for wholesale energy trading market participants, to promote market confidence and also to prevent fraud.¹³³ The goals and approach of the CEER is in line with the requirements of the Third Energy Package, to create a single European energy market.¹³⁴

On the 22 of June 2011 a new set of measures for increased energy efficiency was proposed by the Commission in a draft Directive, an Energy Efficiency Directive.¹³⁵ The Draft establishes a common framework for promoting energy efficiency to meet the target of 20% primary energy savings by 2020, but it also paves for further measures regarding energy efficiency after 2020. The draft focuses on measures that lay down requirements in the public sector relating to renovations of buildings and application of high energy efficiency standards, to the purchase of buildings, products and services, and it requires Member States to establish national energy efficiency obligations schemes and regular mandatory energy audits for large companies. The draft Directive also lies down regular mandatory energy audits for large companies, and several requirements on energy companies regarding metering and billing. Finally, the draft establishes national energy efficiency targets for 2020, and it requires the Commission to assess in 2014 if the Union can achieve its targets of 20% primary energy savings by 2020. The Commission is required to submit its assessment to the European Parliament and the Council. If appropriate, a legislative proposal will follow, laying down mandatory national targets.¹³⁶

2.7. The EU Climate Change Package.

In January 2008, the European Commission proposed a legislative package that focused on a range of measures to shape EU's climate change policies and actions, the Climate Change Package. The Package was adopted by the Council on 6 April 2009, passing the Climate Change Package into European law.

¹³² The Council of European Energy Regulators (CEER) is the voice of Europe's national regulators of electricity and gas at EU and international level, was established in 2000 for the cooperation of the independent energy regulators of Europe. It seeks to facilitate the creation of a single, competitive, efficient and sustainable EU internal energy market. Information from http://www.energy-regulators.eu/portal/page/portal/EER_HOME,

¹³³ EER – Recent EU Developments page 7

¹³⁴ Ibid.

¹³⁵ The Draft EU Energy Efficiency Directive as proposed by the Commission

¹³⁶ For more detailed information, see the Draft Directive at <http://www.eceee.org/EED/>

The Climate Change Package contains four Directives, one Regulation and one Decision:

- Directive 2009/29/EC of the European Parliament and the Council of 23 April 2009 amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community (**the New EU ETS Directive**).
- Decision No 406/2009/EC of the European Parliament and of the Council 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020 (**the GHG Reduction Decision**).
- Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on geological storage of carbon dioxide and amending Council Directive 85/337/EEC, European Parliament and Council Directives 2000/60/EC, 2001/80/EC, 2006/12/EC, 2008/e/EC and Regulation (EC) No 1013/2006 (**the CCS Directive**).
- Directive 2009/30/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 98/70/EC as regards the specification of petrol, diesel and gasoil and introducing a mechanism to monitor and reduce greenhouse gas emissions and amending Council Directive 1999/32/EC as regards the specification of fuel used by inland waterway vessels and repealing Directive 93/12/EEC (**the Biofuel Directive**).
- Regulation (EC) No 443/2009 of the European Parliament and of the Council of 23 April 2009 setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO₂ emissions from light-duty vehicles (**the Emissions Standards Regulation**).
- Directive 2009/28/EC of the European Parliament and of the Council 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directive 2001/77/EC and 2003/30/EC (**the Renewable Energy Directive**).

As can be seen from the various preambles of these legislative acts, much inspiration comes from the United Nations Framework Convention on Climate Change (UNFCCC),¹³⁷ together with the Kyoto Protocol¹³⁸ has had major impacts on the EU on this field.

¹³⁷ The United Nations Framework Convention on Climate Change UNFCCC: produced under the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro from 3 to 14 June 1992.

In the further, there will be given a brief overview of the mentioned legal documents under the Climate Change Package. Then under subchapter 2.8 there will be given a more thorough explanation of the Renewable Energy Directive.

The EU Emission Trading System (EU ETS) is a cornerstone of the European Union's policy to combat climate change, and it is an important tool to cost-effectively reduction of industrial greenhouse gas emissions. 30 countries are part of the EU ETS system, the Member States of the Union and the EEA States. It covers CO₂ emissions from installations such as power stations, combusting plants, oil refineries and iron and steel work, as well as various factories.¹³⁹ The New ETS Directive amends the previous versions of EU Emission Trading Scheme, and introduces many important changes. These changes will mainly take effect from 2013, and it will provide clearer sense of the future of the scheme.¹⁴⁰

The main changes in the New EU ETS Directive includes declining emissions cap, increased auctioning of allowances and longer trading phases.¹⁴¹ The Directive does also expand the EU ETS to cover new activities and gases, including carbon dioxide emissions from aluminum sectors. This can be especially tough demands for Iceland, which highly depends on the aluminum industry. One of the main features of the New EU ETS Directive is that the allowances are administered centrally by the EU and not by the Member States, and this will lead to increased harmonization and centralization of the EU ETS.¹⁴²

Before a new agreement that follows the Kyoto Protocol is reached, or if no such agreement is made, operators of relevant installations will be able to use credits allocated to them for the period 2008-2012 that they have not already used yet.¹⁴³ If the Kyoto Protocol gets a global successor, the limitations will be automatically increased by up to half of the additional reduction effort.¹⁴⁴

The Decision on GHG Reduction sets binding greenhouse gas emission targets for the individual Member States for sectors of the economy that are not covered by the EU ETS, and it provides an indication of the extent to which Member States will be required to address and

¹³⁸ The Kyoto Protocol: a protocol to the UNFCCC, adopted on 11 December 1997 in Kyoto, into force 16 February 2005.

¹³⁹ The homepage of climate action in the European Commission, http://ec.europa.eu/clima/policies/ets/index_en.htm

¹⁴⁰ See the Preamble of the Directive

¹⁴¹ EER – EU Overview page 16

¹⁴² EER – EU Overview page 16 with further references

¹⁴³ Article 1(13) of the New EU ETS Directive/Article 11a of the amended Directive 2003/87/EC

¹⁴⁴ Ibid.

reduce emissions from non-EU sectors for the next decades.¹⁴⁵ The targets set are together with the EU ETS sector emission reduction are designed to ensure that EU meets its overall target, a 20% reduction by year 2020. The targets are set to an average reduction of 10% for each Member State.¹⁴⁶ But those Member States that have lower capita per income and strong prospects for future economic growth, usually the newer EU Member States, may increase their greenhouse gases by up to 20% by 2020 compared to 2005. Member States with higher income per capita must reduce their emissions by up to 20% by 2020.¹⁴⁷ The targets will be reviewed if an international agreement succeeding the Kyoto Protocol is agreed upon.¹⁴⁸

There are set annual binding emission limits for each Member State, but flexibility measures are available. Such measures allow the Member States to bank and borrow up to 5% limits between years. They are also allowed to transfer overachieved emissions reductions to other Member States or use credits generated by emission reduction projects within the EU, without limit.¹⁴⁹ The GHG Reduction Decision does not include an enforcement mechanism.

The CCS Directive provides a framework for carbon capture and storage in the EU and supports carbon capture and storage (CCS) as an option to reduce emissions. The key provisions creates a permit based CCS storage to be administered by the Member States and amends existing EU legislation that prohibits or inhibits CCS,¹⁵⁰ establishes a regime of operators holding permits to pass long-term liability for leakage, as long as certain criteria are met, from storage sites to the licensing Member State¹⁵¹ and the amendment of Directive 2001/80/EC.¹⁵²

The measures introduced with the Biofuel Directive, which amends two previous Directives relating to the quality of petrol and diesel¹⁵³ is expected to boost the European biofuel market.¹⁵⁴ The changes aim at introducing a mechanism for the reporting of and reduction in the life cycle of greenhouse gas emission from fuel,¹⁵⁵ enable a more widespread use of ethanol in petrol¹⁵⁶ and tighten environmental quality standards for specified fuel parameters. The latter is an objective repeated several times in the preamble of the Directive.

¹⁴⁵ See the preamble of the GHG Decision

¹⁴⁶ Annex II to the GHG Decision.

¹⁴⁷ Ibid.

¹⁴⁸ GHG Decision Article 8 (6)

¹⁴⁹ GHG Decision Article 3 (4)

¹⁵⁰ CCS Directive Article 5-11

¹⁵¹ CCS Directive Article 12-20

¹⁵² CCS Directive Article 33

¹⁵³ Directive 98/70/EC as amended by Directive 2003/17/EC

¹⁵⁴ EER – EU Overview page 20

¹⁵⁵ Preamble of the Biofuel Directive, paragraph 8

¹⁵⁶ Preamble of the Biofuel Directive paragraph 26-29

Though there have been some improvements in fuel efficiency, CO₂ emissions from road transport all across EU increased by 26% between 1990 and 2004, and it does now account for almost one third of EU's total emissions.¹⁵⁷ The European Commission proposed new legislation to impose further requirements when it became clear that voluntary car industry reduction targets were not met,¹⁵⁸ and of this came the Emission Standards Regulation which is the first EU act that sets legally binding standards for emissions of CO₂ from passenger cars.¹⁵⁹

The Emission Standards Regulation is much less demanding than the original proposal from the European Commission, after the car industry argued that lead in times for car development would make complying with these proposals within the time frame impossible.¹⁶⁰ This can help to illustrate the difficult conditions the Commission is working under, trying to promote environmentally friendly solutions. Through the making of the Climate Change Package there have been seen great difficulties in agreeing, between the Member States and the EU institutions, but also within the legislative authorities. This is thought-provoking in a society where almost everyone realizes the potential dangers of climate change, and still there are such difficulties trying to change existing regulations.

2.8. The 2009 Renewable Energy Directive.

2.8.1. The Directive.

The use of renewable energy sources contributes to limit the effects of climate change, and they play a part in securing energy supply and creating employment in Europe by increasing domestically produced energy, diversifying the energy-mix and increasing the proportion of energy from politically stable regions. But renewable sources are more expensive than many other sources of energy in Europe. This gap is now narrowing, particularly when the cost of climate change is incorporated.¹⁶¹ The additional cost for renewable energy measures accounts for approximately 18 billion Euros per year and this is around 6% extra on EU's total expected energy import bill in 2020. But when accounting the carbon price of more than 20 billion Euros, the 20% target of renewable energy will not cost more than relying on more traditional energy sources. Hence, it will also create many jobs in Europe and new,

¹⁵⁷ EER – EU Overview page 21

¹⁵⁸ Ibid.

¹⁵⁹ Preamble of the Emission Standards Regulation paragraph 9

¹⁶⁰ EER – EU Overview page 21

¹⁶¹ Fräss-Ehrfeld page 61

technology driven companies.¹⁶² Exporting techniques for renewable energy is also a viable business idea.¹⁶³ It might not only be the environmental concerns that have played their part in the promotion of renewable energy sources. Production of renewable energy creates workplaces with local employment, have a positive impact on social cohesion, contribute to security of supply and also help reach the goals of the Kyoto Protocol.¹⁶⁴ In today's European environment with a high percentage of unemployment in a rising number of the Member States, this is also a highly relevant concern.

For EU the use of renewable energy is an important, even crucial, stepping stone to reach the goals set for year 2020. Though the EU is a world leader in the sector for renewable energy, a sector with a high economic potential worldwide, exploitation of such resources are underused in the EU. Development in the Member States seems uneven, and the energy consumption is mostly based on coal, gas and oil. Also the development of different renewable energy sources is at different stages of development, both technological and commercial.¹⁶⁵

The Renewable Energy Directive is based on two provisions of the EC Treaty ex. Article 175 (1) on environmental policy (now Article 191 TFEU) and ex. Article 95 on the inner market (now Article 114 TFEU). When founded in these provisions, it is evident that environmental concerns and the inner market are the main goals of the Directive.

The Directive promotes use of renewable sources for electricity production. It also sets a target for energy from renewables of 20% of total energy consumption by year 2020, including a further 10% target for each and every Member State's transport energy consumption. This is considered to be achievable and appropriate objectives.¹⁶⁶ In order to reach these targets, the Renewable Energy Directive sets a mandatory national target for each Member State, stating that the overall share of gross energy must come from renewable energy sources, while taking the various levels of progress achieved in the State into account.¹⁶⁷ This mandatory target provides certainty for investors and should also encourage technological development.

The Renewable Energy Directive is not characterized by program statements or environmental principles, but such principles can be found in the Directive's preamble and in

¹⁶² Fräss-Ehrfeld page 61

¹⁶³ Fräss-Ehrfeld page 110

¹⁶⁴ Fräss-Ehrfeld page 111

¹⁶⁵ Fräss-Ehrfeld page 110

¹⁶⁶ Preamble to the Renewable Energy Directive paragraph 8

¹⁶⁷ Annex I.

some of the Articles.¹⁶⁸ The Directive leaves much up to the Member States of the Union, and they can choose the preferred means to meet the requirements. This also follows from the general EU principles on subsidiarity and proportionality.¹⁶⁹

The European Commission considers this Directive as a tool and a helping hand on the way to the goals on more energy from renewable sources, since investigation has suggested that further efforts are needed to reach the ambiguous targets for 2020. The Directive uses specific measures to reach these targets, some measures were introduced with the 2001 Directive, for example measures for reduction of administrative and regulatory barriers and measures governing the use of guarantees of origin. The Directive of 2009 introduces some new measures, and these include mandatory national targets, cooperation between Member States and Third Countries and the need for National Renewable Action Plans.¹⁷⁰ These five measures will be discussed in more detail later under subchapters 2.8.2.1.-2.8.2.5.

A system requiring open trading in renewable energy certificates between participants across Member States was rejected.¹⁷¹ Instead the Directive lays down a system permitting Member States themselves to transfer excess renewable energy credits, which can only take place if the Member State has reached its interim renewable energy target.¹⁷² Member States have to ensure that energy produced from renewable sources can be guaranteed as such, within the meaning of the Directive.¹⁷³ This is the thought behind the Green Certificates that was implemented in Norway (and Sweden) from 1 January 2012. Members of the Union do also have to take appropriate steps to develop transmission and distribution grid infrastructure, intelligent networks, storage facilities, etc.¹⁷⁴

Member States of the European Union had to implement the 2009 Renewable Energy Directive before 1 January 2012, and in order to assist the Member States, the Commission set up an action plan for the implementation of the Directive.¹⁷⁵ The Renewable Energy Policy Action Paving the Way for 2020 (REPAP-2020) tries to facilitate the process of

¹⁶⁸ Ellen Margrethe Basse: Bæredyktigheten som bestemmende for reguleringsdesign – Med Eus regulering av vedvarende energi som eksempel, Article in *Pro Nature – Festskrift til Bugge* (page 85 ff.) (Basse), page 85

¹⁶⁹ Basse, page 92

¹⁷⁰ Ahner, Nicole: Framework for Supporting Renewable Energy in Europe: Implementing Directive 2009/28/EC, Article in *European Energy Law Report VIII*, edited by Intersentia Ltd, 2011, page 93 ff. (Ahner) page 98

¹⁷¹ EER – EU Overview page 18

¹⁷² The Renewable Energy Directive Article 6

¹⁷³ The Renewable Energy Directive Article 15 (1)

¹⁷⁴ The Renewable Energy Directive Article 16

¹⁷⁵ Ahner page 115 with further references

implementation in the Member States by presenting studies on different technology trajectories towards 2020.¹⁷⁶

2.8.2. Instruments to Promote Renewable Energy Sources.

The European Commission considers the Renewable Energy Directive as a tool and helping hand to ensure an increase both production and use of renewable energy, and to move forward with the goal to reach their national targets. Research shows that more effort is needed to reach the targets set for year 2020.¹⁷⁷

2.8.2.1. *Mandatory National Targets.*

This is a new target as EU previously tried to increase the share of renewable sources by introducing indicative targets. The topic of legally binding targets was much disputed, but the main concern was that the Commissions would not be able to start infringement procedures against Member States that did not comply with the indicative targets.¹⁷⁸ In the end the Directive with its binding targets were well received by the affected parties.¹⁷⁹ The system with legally binding targets is established in the Directive's Article 3, and the targets are linked to the economic strength of the actual Member State and divided among the States in Annex I (B).

There are set some non-legally binding interim steps to help the Member States reach their targets set for 2020.¹⁸⁰ The indicative trajectory are that 25 % of the overall 2020 target are to be reached between 2011 and 2012, 35% between 2013 and 2014, 45% between 2015 and 2016 and then 65% of the 2020 target between 2017 and 2018.¹⁸¹ In the Directive are there not set any penalties for non-achievement of the interim targets, but the Commission do reserve a right to issue infringement proceedings if the actual Member State does not take appropriate measures to meet the targets set.¹⁸²

A Member State that does not meet the mandatory targets risk an infringement procedure, as a failure to reach these goals are considered a breach of EU law.¹⁸³ Another concern is that such procedures might take years before there are any concrete results, but to prevent that the process takes too much time there has been proposed a new penalty regime inspired by already existing regimes should be considered. There does not seem to be agreement on how

¹⁷⁶ Ahner page 115. See also www.repap2020.eu/

¹⁷⁷ Ahner page 98

¹⁷⁸ Ibid.

¹⁷⁹ Ahner page 99 with further references.

¹⁸⁰ Renewable Energy Directive Article 3 (2) in conjunction with Annex I (B)

¹⁸¹ Renewable Energy Directive Annex I (B)

¹⁸² The Renewable Energy Directive Article 4 (4)

¹⁸³ Ahner page 99

this problem can be solved but this is not due to lack of possibilities.¹⁸⁴ The Directive is silent to this regard, and there is not possible to say if the concerns actually will be real before after the year 2020.¹⁸⁵

2.8.2.2. Cooperation Between Member States.

It is also a new measure that two or more Member States can cooperate on joint projects relating to energy production from renewable sources. Member States can even join such cooperation with non-EU States.¹⁸⁶ The Directive does also allow Member States to count virtual imports based on investment in a non-EU country towards a Member State's national target.¹⁸⁷

The Member States have different potentials for utilization renewable energy sources, and an integrated approach is therefore desired. Renewable energy should be produced where it is cheapest, and where the potential for utilization of renewable energy sources are at the highest.¹⁸⁸ The area of wind energy is illustrating a trend towards cooperation in the deployment of renewable energy sources.¹⁸⁹ The Norwegian/Swedish cooperation regarding Green Certificates (to be elaborated under subchapter 4.10), is also an example in this regard. For the first time is there, with the Renewable Energy Directive, explicitly established a regime where Member States can buy renewable energy in another Member State of the EU, and count this energy towards their own target.¹⁹⁰

The Directive regulates the admission to make statistical transfers between Member States, joint projects between the Member States of the Union, also with non-EU countries, and joint support schemes as four conclusive ways of reaching the goals by cooperation.¹⁹¹

To what extent these cooperation mechanisms will be used, remains to be seen. At the present most Member States expect that the domestic production will be sufficient to reach, and maybe even exceed, their targets. Italy is the sole country anticipating a large deficit to reach the goal for 2020, but concrete plans are assessed to build interconnectors to connect Italy with the Mediterranean market to exchange renewable energy.¹⁹²

¹⁸⁴ Ahner page 99-100

¹⁸⁵ Ahner page 100

¹⁸⁶ The Renewable Energy Directive Articles 7-9

¹⁸⁷ The Renewable Energy Directive Article 9 read in conjunction with Article 10.

¹⁸⁸ Ahner page 100

¹⁸⁹ Ahner page 101

¹⁹⁰ Ibid.

¹⁹¹ Renewable Energy Directive Article 6-11.

¹⁹² Ahner page 106

Cooperation as described between the Member States also serves the goal to create and tighten a common market and a European approach for renewable energy.¹⁹³

2.8.2.3. National Renewable Energy Action Plans.

The New Renewable Energy Directive goes much further than the 2001 Directive on requiring National Renewable Energy Action Plans (NREAPs), and the deadline to submit such reports was June 2010.¹⁹⁴ These plans have to follow a binding format provided for by the Commission and they must include sectorial targets and/or trajectories for renewable energy, renewable heating and cooling, the transport sector, an estimate of the contribution of technologies designed to achieve the trajectory, the use of cooperation mechanisms, biomass policy and bio-fuel sustainability.¹⁹⁵ The NREAP shall contain all the key issues of the New Renewable Energy Directive.

The NREAP is an indicative trajectory towards an achievement of their 2020 target. The Member States can choose their preferred sources of renewable energy. The plans should be split into three separate sectors; electricity, heating and cooling, and transport.¹⁹⁶ Member States are to submit reports to the Commission on progress in the promotion and use of energy from renewable sources, the first one at 31 December 2011 and then every two years. The last report required, the sixth one, is to be submitted by 31 December 2021.¹⁹⁷

Member States are also required in their National Action Plans to assess whether there is a need to build new district infrastructure for heating and cooling using energy produced from renewable sources, to be able to reach the mandatory goal before 2020.¹⁹⁸

The NREAPs provides transparency of the renewable energy sectors in the Member States. This makes it easier for the European Commission to monitor, evaluate and enforce the Renewable Energy Directive. The documents are published on the EU transparency platform¹⁹⁹ where other relevant documents from the Member States and the Commission relating to renewable energy are available. This is important for potential investors which seek stability and predictability.²⁰⁰

¹⁹³ Ahner page 100-101

¹⁹⁴ Ahner page 106

¹⁹⁵ Renewable Energy Directive Article 4 in conjunction with Annex VI.

¹⁹⁶ Renewable Energy Directive Article 22 (1) a

¹⁹⁷ Renewable Energy Directive Article 22 (1)

¹⁹⁸ Renewable Energy Directive Article 16 (11)

¹⁹⁹ In accordance with The Renewable Energy Directive Article 24

²⁰⁰ Ahner page 107

2.8.2.4. *Reduction of Administrative and Regulatory Barriers.*

The 2009 Renewable Energy Directive does, as the 2001 Renewable Energy Directive,²⁰¹ provide detailed provisions aiming at decreasing the administrative and regulatory barriers hampering the development of renewable energy.²⁰² Experience from the 2001 Renewable Energy Directive has shown that the slow growth in production of renewable electricity is partly because of planning delays and administrative barriers.²⁰³

A complicating factor for the free, internal market is the difference between administrative and regulatory procedures in the 27 Member States. There are as many systems as there are Member States, and this can be considered as an additional barrier to growth of renewable energy production. The 2009 Directive is establishing more uniform rules than the 2001 Directive regarding authorization, certification and licensing of techniques for renewable energies, as well as needed information and training in the field.²⁰⁴ This is an advantage for the possibilities for competition.²⁰⁵

The 2009 Directive provides two instruments to improve the authorization mechanisms. Firstly there is a demand for proportionate and necessary permitting procedures,²⁰⁶ and secondly the Directive stipulates that better coordination is needed between all relevant authorities so that the administrative procedures get streamlined and expedited at the appropriate administrative level. The best measure to do so is by establishing a single authoritative body, and reports on the intentions for establishing such a body had to be handed in to the EU institutions.²⁰⁷ The Directive also requires that the procedures for authorization, certification and licensing are transparent; publicly available, objective and non-discriminatory.²⁰⁸

The Directive also address the lack of information and training of professionals working in the sector of renewable energy, and it aims at offering free training courses, websites, publications or information to relevant actors.²⁰⁹ Relevant actors also include a single consumer that wants to install means of renewable electricity production in his/her house.²¹⁰

²⁰¹ The 2001 Renewable Energy Directive

²⁰² The Renewable Energy Directive Article 13 and 14

²⁰³ Ahner page 108 with further references.

²⁰⁴ These developments are discussed in more detail in Nicole Ahner page 108-111

²⁰⁵ Ahner page 108

²⁰⁶ The Renewable Energy Directive Article 13 (1)

²⁰⁷ The Renewable Energy Directive Article 22 (3) (a)

²⁰⁸ The Renewable Energy Directive Article 13 (1) (d)

²⁰⁹ The Renewable Energy Directive Article 14 (1), (2), (5) and (6)

²¹⁰ Ahner page 110

2.8.2.5. *Grid Access Barriers.*

Previously, several smaller producers of renewable electricity have argued that lack of transparency and restricted access to electricity grids prevent them from competing in the market, but now the Directive requires the Member States to ensure that transmission and distribution system operators provide priority access or guaranteed access to the grid for electricity produced from renewable energy sources.²¹¹ As previously stated, the rules of energy have some important sides to the rules on competition, and competition will (almost) always benefit the consumer, with lower prices and better quality.²¹²

The need to arrange an access to a grid was central in the 2001 Directive, and is one of the key elements in the Renewable Energy Directive of 2009. Compared to conventional power plants, electricity generators using renewable energy has encountered some problems with access to the grid, and these problems may derive from some of the plants' characteristics. Renewable energy plants do for example have the need for a constant output of electricity, and are often smaller than the traditional ones.²¹³ Already the 2001 Renewable Energy Directive provided for a possibility to provide a regime for priority access for producers of electricity from renewable sources, as an exception to the regime of regulated third party access.²¹⁴

The 2009 Directive is based on the same principle, but goes further than the 2001 Directive, as it puts an obligation on the Member States to ensure priority or guaranteed access to the grid for electricity that stems from renewable sources.²¹⁵

Another element that was not part of the 2001 Renewable Energy Directive, is that the Directive on Renewable Energy of 2009 has the extended focus to gas, and access for biogas. Member States must organize so that the system operators publish technical rules governing access to the system, and especially the requirements for gas quality, rules on odoration and requirements on pressure.²¹⁶

2.8.3. The Role of Guarantees of Origin.

Both the Old and the New Directives on Renewable Energy included the need to prove that the energy produced really did stem from a renewable source. The 2001 Directive introduced

²¹¹ The Renewable Energy Directive Article 16

²¹² See Crag and De Búrca Chapters on Competition, 26 and 27

²¹³ Ahner page 111 with further references

²¹⁴ Ahner page 111

²¹⁵ The Renewable Energy Directive Articles 15 (3) and 25 (4)

²¹⁶ The Renewable Energy Directive Article 16 (9)

the guarantees of origin on energy to EU law, but the Member States did not practice it.²¹⁷ It was therefore a very important to decide on what role and character the guarantees of origin should have in the New Renewable Energy.²¹⁸

After lengthy discussions, the 2009 Directive decides that the guarantees of origin shall only be used for proving the origin of the energy to the final consumer, and have no function in terms of a Member State's compliance.²¹⁹ The consequence is that the only purpose of the guarantees of origin shall be in the consumer-disclosure area.²²⁰

2.8.4. Biofuels and Bioliquids.

A new focus in the 2009 Renewable Energy Directive is bio-fuels (for the transport sector) and bio-liquids (in other sectors).²²¹ Bio-fuels are very central to reach the ambitions for an increased use of renewable energy.²²² The Directive sets some targets to ensure that the production is sustainable.²²³ By contrast to other renewable sources, which only can be used on the spot, bio-fuels can be transported.²²⁴

These criteria can be a challenge for Iceland, which has particularly low percentage of use of biofuel.²²⁵

2.8.5. Conclusion on Implementation of the Renewable Energy Directive.

The 2009 Directive can be seen as an important step towards an increase in the use of renewable energy sources, and towards creation of the Internal Energy Market. The 2009 Directive is, by contrast to the 2001 Directive, a single legal instrument that regulates all parts of the energy sector including energy consumption.²²⁶ The Directive of 2009 does also provide binding national targets that replaces the previous non-binding targets. Also interesting is the introduction of the provisions that allows Member States to cooperate with each other in order to reach the targets set in the Directive. These instruments resemble the flexibility mechanisms under the Kyoto Protocol (Joint Implementation, Clean Development Mechanism and Emission Trading).²²⁷

²¹⁷ Ahner page 112

²¹⁸ Ibid.

²¹⁹ The Renewable Energy Directive Article 15 (2)

²²⁰ Ahner page 113

²²¹ Ibid.

²²² The Renewable Energy Directive Article 16 (9)

²²³ The Renewable Energy Directive Articles 17 and 18

²²⁴ Ahner page 98-100

²²⁵ See the Chapter on Iceland

²²⁶ Ahner page 116

²²⁷ Ahner page 116 with further references

It can be stated that the 2009 Renewable Energy Directive reforms the European renewable regime and it has the potential to lead to desired expansion of renewable energy sources at national and European level. This expansion can even be done in third countries, since also these States can join the EU in the stride towards more renewable energy. The Directive does not only push Europeanization of regulation on renewable energy, but it also gives room for the Member States, to take necessary national maneuvers, for example by designing national policies for pushing the deployment of renewable energy sources.²²⁸

2.9. The Future for the European Union's Climate Change Regime.

2.9.1. What has really been done?

Taken as a whole, the EU's Climate Change Package seems to be the first attempt from EU to create one single comprehensive European legal regime, covering a range of different sectors, including the carbon and renewable energy sectors. At policy level, the Package aims at achieving a reduction of minimum 20% of greenhouse gas emissions. This will probably rise to 30 % if an international agreement that commits developing countries to a comparable emission reduction is reached. Such an agreement will probably oblige more advanced developing countries to contribute according to their responsibilities and capabilities.²²⁹ There is a goal in the Climate Change Package that 20% of all energy consumption in EU is generated from renewable sources by year 2020.²³⁰

Some of the legislative acts in the Climate Change Package have yet to be transposed into national law. As this takes time, it will still be some years before the real impact of the Climate Change Package can be assessed. Also, both the European Parliament and the Council have made it clear that this Package will not be EU's final word in the climate initiative. This can already be seen; the EU Institutions are not only focusing on 2020, but have moved focus even further into the future, and are now looking to 2050. By then the Member States will have to make greater cuts, lay down more work and more stringent measures in the relevant fields. There will be even stricter future emissions limits that affect more sectors. To reach these goals technological development will have to be stimulated to ensure that manufacturers, producers and others involved in the relevant industries implement the new technologies.²³¹

²²⁸ Ahner EC page 116

²²⁹ EER – EU Overview page 22

²³⁰ See the Renewable Energy Directive

²³¹ EER – EU Overview page 22

The Renewable Energy Directive has been incorporated into the EEA Agreement by Decision of the EEA Joint Committee at the 19 December 2011.²³² The legislative acts of the Third Energy Package and the Climate Change Package are all of EEA relevance, since they are related to both the environment and energy, sectors that are covered by the EEA Agreement.

2.9.2. Energy Roadmap for 2050.

There is an uncertainty for what will follow after 2020, and this is something that the Institutions of the Union have considered to make a more stable situation for investors, governments and citizens. On 15 December 2011, the Commission adopted an energy Roadmap for 2050 (the Roadmap), which seeks to develop a long-term European technology-neutral framework in which the national energy policies will be more effective.²³³ The roadmap continues the current development, and the goals set for 2020, and aims at continuing to deliver reductions beyond 2020 to reduce emissions by about 40% in 2050, however less than half of the decarbonisation goal will be achieved in 2050. The roadmap focuses mostly on the priority that has been given to energy efficiency in the period 2020 to 2050, and especially the increasing role that renewable energy sources must play and the key role of gas during this period.²³⁴ Energy from renewable energy sources will in gross final energy consumption be about 75%²³⁵ in 2050, and a share of renewable energy sources in electricity consumption will reach 97%.

The Roadmap does not include any concrete legislative proposals for the period after 2020, but it does provide clear guidance that can be helpful for consumers, industry and the governments. It concludes with 10 conditions that must be met to achieve the transformations of the energy markets that create a new landscape for European Industry and can increase competitiveness. One of these conditions is focus on renewable energy.²³⁶

The goals of the EU for 2050 are highly reachable, for example that half the contribution to electricity comes from renewable energy sources in each of the large communities by this

²³² Decision of the EEA Joint Committee No 162/2011 of 19 December 2011 amending Annex IV (Energy) to the EEA Agreement

²³³ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Energy Roadmap 2050 (Com(2011) 885/2) (The Roadmap), page 2

²³⁴ Ibid.

²³⁵ The Roadmap page 4

²³⁶ The Roadmap pages 5 to 8

year.²³⁷ Some States of the Union have an even higher potential, where two thirds of the electricity can come from renewable sources and in a few States on the Continent renewable energy sources could contribute to over 90% of the power generation!²³⁸ Countries that are very high in line with these future standards are Iceland and Norway, as will be explained later. These are of course not members of the EU, but of the EEA, but it is no doubt that the EU could look to these Nordic States for inspiration and help to reach the ambitious goals.

Energy policies seem to still remain high on the institutions of EU's agenda, and there can also be seen an increase in European-level regulations with focus on stronger harmonization and centralization.²³⁹ The 2012 Work Programme for the European Parliament²⁴⁰ provides details regarding a number of legislative initiatives and likely developments. According to this programme, energy efficiency and security of supply will still remain central issues for the EP's Energy Committee in 2012.²⁴¹ After this, it can clearly be stated that also 2012 most probably will be a busy year for the European energy sector.

3. The European Economic Area.

3.1. History of the European Economic Area – EEA.

The European Free Trade Association (EFTA) have for more than four decades been an important link to the European Union for countries that have chosen to stand on the outside of the Union. Some argue that EFTA have a very limited value today, since the only States that are left in the cooperation are Norway, Iceland, Switzerland and Liechtenstein, all of small size. But the countries that are still part of the Agreement must have another point of view, as they still remain members.²⁴²

EFTA's origin was as an alternative to States that did not want to join the European Community, and the Association was founded in 1960.²⁴³ Until 1972 the EFTA States stood together as a united party opposite of the EC, but it soon became clear that many of the states in the EFTA would rather want to join EC, and from 1973 EFTA functioned as an arena for economic negotiations for States that wanted to become member of the EC. All the original

²³⁷ Fräss-Ehrfeld page 111

²³⁸ Ibid.

²³⁹ EER – Recent EU Developments page 8, and illustrated through the mentioned legislative acts

²⁴⁰ European Parliament resolution on the preparation of the Commission Work Programme for 2012

²⁴¹ See the Commission Work Programme's paragraphs 27 to 38 on Climate Change and Environmental Policy.

²⁴² Fredrik Sejersted et.al.: EØS-rett, Second Edition, Universitetsforlaget, Reprinted in 2007 (Sejersted et.al.) page 31.

²⁴³ Sejersted et.al. page 32

EFTA States have either joined the Union, or are now parties to the EEA Agreement, except from Switzerland who is still in the EFTA arrangement.

In 1989 negotiations were started between the European Community and the EFTA States for a more structured partnership.²⁴⁴ The formal negotiations started in June 1990 and eventually led to the Agreement on European Economic Area (the EEA Agreement).²⁴⁵ According to this Agreement, the EFTA-States was to adopt all EU legislation regarding the inner market with the four freedoms (capital, service, goods and persons) and also the rules on competition. This would secure better conditions for cooperation between the European States.

In its Opinion 1/91²⁴⁶ the European Court of Justice (ECJ) held that the EEA Agreement was not compatible with the EC Treaty, but after several amendments the ECJ held in Opinion 1/92²⁴⁷ that the EEA Agreement was compatible. One of the main changes was the function and work of the EFTA Court, which no longer had the mutual binding connection with the ECJ.²⁴⁸

The EEA Agreement was signed the 2 May 1992, and was meant to come into force from 1 January 1993, but it did not come into force before one year later, 1 January 1994. When the Agreement finally came into force, most of the original members of the EFTA were already considering, and some had even applied for, full membership of the European Union.²⁴⁹ The States that signed the EEA Agreement with the Union are Norway, Iceland and Liechtenstein. Liechtenstein is with its extremely small size and many special conditions not part of this topic, but will be mentioned where relevant.

Norway has in two national referendums declined membership of the Union. The referendums in Norway were held in 1972 and 1994, and though the politicians were positive towards membership, the people voted against joining the Union both times.²⁵⁰ Before the last referendum Norway had signed the Acts of Accession to the European Union, as Austria, Sweden and Finland, but only the last three countries actually acceded.²⁵¹ Iceland's relationship with the EU and EEA has become a more complicated one since 2008, as Iceland has applied for membership to the Union, and this relationship will be treated thoroughly under the Chapter on Iceland, Chapter 5.

²⁴⁴ Sejersted et.al. page 32-34

²⁴⁵ Agreement on the European Economic Area (OJ No L 1, 03.01.1994) (The EEA Agreement)

²⁴⁶ Opinion 1/91 [1991] ECR 6079

²⁴⁷ Opinion 1/92 [1992] ECT I-2821

²⁴⁸ Craig and De Búrca page 17

²⁴⁹ Sejersted et.al. page 35

²⁵⁰ Sejersted et.al. page 32 and 35

²⁵¹ Craig and De Búrca page 16

There has been mixed views on how well the EEA Agreement has worked. One of the main arguments that seem to be repeated as an argument against the EEA Agreement is that while the Treaties under the European Union is under constant evolution, the Agreement from 1992 is still the same as it was then as there have not been made bigger changes here. Still, there must be a good sign that the parties to the Agreement have been very stable for the almost two decades that have passed. The parties also seem interested in keeping the good tone to continue the cooperation, and all parties seem to think that a flexible and pragmatic approach is helpful.²⁵² Still, there are many challenges to this cooperation.

Another argument that frequently enters the debate is the lack of democratic participation from the EEA States in the legislative process in EU.²⁵³ The EEA States are not part of the processes that lead towards relevant legislation, processes that in fact do have direct consequences for the States. Still, this is situation that the political majority has grown accustomed to, and this is deemed as the best alternative. The countries of EEA have stayed outside of the Union for many reasons, but one of the main reasons seems to be that they want to keep their sovereignty. And this might be the price they have to pay.

The EEA Agreement does not seem prioritized on the agenda of the EU Institutions since 1994, but this also means that the EU never has suggested terminating or renegotiating the Agreement. This indicates that the Member States and Institutions of the Union are satisfied with the present situation. And when compared to some of the agreements between EU and other states outside of EFTA, the EEA Agreement can be characterized as well-functioning.²⁵⁴

Development has shown that EEA law in many ways is equally effective as EU law, at least on some fields.²⁵⁵ EEA can be seen as a mixed system, a hybrid between regular international law and European Union law, the latter include supranationality, state liability and direct effect, to name some distinct differences. The EEA Agreement is therefore a *sui generis* legal order, distinct from national, international and European Union law.²⁵⁶ Still, the Agreement is focused on interaction with the EU, and they do share the same goal: to build a common European legal system for all the 500 million citizens inhabiting Europe.²⁵⁷ Currently 30 countries are bound by the EEA Agreement, the 27 Member States of the European Union and the three EFTA States that chose to sign the Agreement in 1992.

²⁵² Sejersted et.al. page 37

²⁵³ Outside and Inside, NOU 2012:2, English version page 7-8

²⁵⁴ Utenfor og Innenfor page 297-298

²⁵⁵ M. Elvira Méndez-Pinedo: EC and EEA Law – A Comparative Study of the Effectiveness of European Law, Europa Law Publishing, 2009 (Pinedo). The topic for the book is a comparison between the EEA Agreement and EU. See page 299

²⁵⁶ Pinedo page 27-28

²⁵⁷ Pinedo page 300-301

The aims of the EEA Agreement are stated in the Agreement's Article 1, and they include promotion of a "continuous and balanced strengthening of trade and economic relations between the Contracting Parties with equal conditions of competition, and the respect of the same rules, with view to creating a homogenous European Economic Area".²⁵⁸ The association shall entail the four freedoms,²⁵⁹ rules on a system ensuring that competition is not distorted²⁶⁰ and finally that the Agreement shall entail closer cooperation in other fields such as research and development, the environment, education and social policy.²⁶¹

EU legislative acts regarding energy is clearly covered by "goods" and acts regarding the environment are also EEA relevant. Annex IV contains specific provisions and arrangements concerning energy, and Chapter 3 under Part V contains provisions on the environment, which are further elaborated in Annex XX. All legislative acts from the EU will have to go through the EEA Joint Committee that takes a decision concerning an amendment of an Annex to the EEA Agreement.²⁶²

In the EEA Agreement, there is included what might be characterized as a safe-guard for the States of the EEA Agreement.²⁶³ After the Joint EEA Committee has agreed upon implementing an EU legislative act, it is forwarded to the local parliament (in Norway Stortinget and in Iceland Allþingið) which then has to implement the act from the Union into domestic law. The parliaments can according to this be said to hold a veto-power over EU implementation of laws from the Union, a non-option in the Member States. But it has become evident that the EFTA/EEA states cannot refuse the legislative acts already implemented by the EFTA Joint Committee without threatening the whole cooperation. This veto right has never been used by either of the parties to the EFTA Agreement, at it is believed that this is mainly because of the suicidal effect that is built into the Agreement, though Liechtenstein once voiced reservations to a new act. An agreement was reached before further measures had to be taken.²⁶⁴

The EEA Agreement now consists of 129 Articles, 49 Protocols and 22 Appendixes. In addition, the contraction parties have, individually or collectively, issued 71 statements regarding for example safety clauses and special understandings.²⁶⁵

²⁵⁸ EEA Agreement Article 1 Paragraph 1

²⁵⁹ EEA Agreement Article 1 Second paragraph letters a-d

²⁶⁰ EEA Agreement Article 1 Second paragraph letter e

²⁶¹ EEA Agreement Article 1 Second paragraph letter f

²⁶² EEA Agreement Article 102

²⁶³ Bergmann page 14 and the EEA Agreement Article 102

²⁶⁴ Bergmann page 15

²⁶⁵ Eirikur Bergman: Iceland and the EEA, 1994 -2011, available through the homepage of Europautredningen (www.europautredningen.no (Bergmann) page 12

3.2. The Future of the European Economic Area.

There have been some major changes in the EU since the EEA Agreement came into force. The EEA Agreement is dynamic in the sense that the States parties implement new EU laws within the framework laid down in the Agreement, but it does still not mirror the treaty changes within the EU. This again has led to a widening gap between the EU and the parties to the EEA. Iceland wanted to bridge this gap by a revision of the EEA Agreement during the 1990's, but did not get any support from Norway on this.²⁶⁶ This could be an example of Icelandic government's eager to fine tune the EEA instrument as a viable option in the future. Norway has been criticized by Iceland to be too EU-friendly, and have maybe always looked for an opportunity to get in the Union, and might therefore not have bothered with revising a chapter that they anyway wanted to end soon.

Though the EEA Agreement functioned way better than many thought in the beginning, there are some new problems on the rise. The Agreement might be said to be operated on a lower level within the Commission, which results in a lower flexibility than before, when EU showed a much bigger interest for the Agreement. Iceland has also criticized the EU for not involving specialists from the EEA/EFTA States when new legislation is being prepared.²⁶⁷

EU has had many enlargements the latter years, which helps illustrate an interesting picture of the cooperation between EU and the EFTA States. Especially has the EU been enlarged to the Eastern parts of Europe the latter years. This did almost resulted in a collapse of the EEA Agreement as negotiations on the enlargement of the EU, and simultaneously of the EFTA,²⁶⁸ did not come to a close until the 1 April 2004, a month before the enlargement actually took place.²⁶⁹ EEA was a distant priority in the accession of the new Member States to the Union, though the European Commission demanded Iceland and Norway to increase funding's to the EU developmental fund...²⁷⁰ And on this field, Iceland's position, and a reluctance to pay, was undermined by Norway's willingness to increase their payments, and some special arrangements has to be made.²⁷¹

There are many examples of that especially Iceland is vulnerable when it comes to enlargement of the EU and the EEA. But though Iceland might be considered small and vulnerable, the processes shows that when there is a mutual political will to find solutions,

²⁶⁶ Bergmann page 26

²⁶⁷ Bergmann page 15

²⁶⁸ See the EFTA Agreement Article 128 which states that new Member States of the European Union also apply for membership to the EEA Agreement, and that accession should be simultaneously

²⁶⁹ Bergmann page 15

²⁷⁰ Ibid.

²⁷¹ Ibid.

there is fully possible to find suitable solutions within the framework of the EEA Agreement.²⁷²

Officials in Iceland are convinced that the EEA Agreement is becoming increasingly less important to the EU, and they believe that the view within the Commission is that the EEA Agreement is outdated and ought to be terminated.²⁷³

²⁷² Bergmann page 16

²⁷³ Bergmann page 16 with further references

4.Norway.



4.1. Norway and the EU - Outside and Inside.

Norway is a small country compared to many other European States, with about 5 million inhabitants.²⁷⁴ Still, there are strong ties between Norway and rest of the European Continent, for example by the export of oil, gas and electricity to the Member States of the European Union.²⁷⁵ These ties are seriously strengthened through the EEA Agreement, but also through several other agreements that sets out the conditions for an effective and sustainable cooperation between the European States.

Norway has been part of the EEA Agreement since the beginning, and there have always been mixed opinions on the cooperation with EU, and what form this should have. While some of the political parties want to join the EU, others are against EU but prefer the EEA Agreement, and again others would like an arrangement more similar to the arrangements between Switzerland and the European Union.²⁷⁶ Another interesting notification can be made on the fact that Norwegian politicians seem more eager to access the Union rather than the people, demonstrated by the two negative referendums. Now, as Iceland is negotiating accession some voltage can be detected in daily discussions and newspaper articles. What will happen to Norway if Iceland joins the EU? The EEA States consists of one small country and two even smaller, and it is not possible to predict what will happen if one of the smaller ones changes side.

Periodically, there are made reports on the agreements between Norway and the European Union, their function and effectiveness. The last one is a 911 pages long official report on from January 2012 which is called Utenfor og Innenfor (in English Outside and Inside).²⁷⁷ This is one of the most important and relevant reports from later years, and it has gotten a lot of attention both in Norway, Iceland and also some interest from the rest of continental Europe.²⁷⁸

It took two years to write the report, the EEA Review Committee was appointed on 7 January 2010, and it was submitted to the ministry of Foreign Affairs on 17 January 2012.²⁷⁹ The report in its full length is only published in Norwegian.

²⁷⁴ <http://www.ssb.no/minifakta/> (The Norwegian Statistical Authority) Visited 17.07.12.

²⁷⁵ See subchapter 3.5

²⁷⁶ Segjrsted et.al. page 39

²⁷⁷ Utenfor og Innenfor

²⁷⁸ Including in EFTA Judge Carl Baudenbachers presentation at the EFTA Court Seminar "Access to Justice and Courts" at University of Iceland 09 March 2012

²⁷⁹ Utenfor og Innenfor page 3

Though Norway is not a member of the European Union, the recent changes in Europe, regarding financial unrest and political and social unrest, affects Norway both directly and indirectly.²⁸⁰ Norway has about 600 statutes, and about 170 of them, approximately one third are strongly affected or influenced by the EU!²⁸¹ Though the EEA Agreement is more of a regular international agreement than membership of the Union (which also of course is based on an agreement with the Member States), the EEA Agreement is a cross between Union law and other international agreements and involves association without membership.²⁸² The EEA Agreement is probably one of a kind in the world today.²⁸³ This is also the background for the title of the official report; Norway is in a way both inside and outside the EU at the same time.

EU is a big factor when it comes to the areas for energy, climate change and environment in Norway. Norway is an integral part of the internal electricity market and implements the relevant Directives and Regulations in their entirety as a result of the EEA Agreement. It can also be expected that Norway will become even closer connected by becoming a signatory to the Energy Community Treaty.²⁸⁴

4.2. Energy Law in Norway – The History.

Norway is poor in some natural resources, while extremely rich in others, especially when compared to the relatively small population of the Nation.²⁸⁵ Norway is particularly rich when it comes to energy resources, at the present especially hydropower and the petroleum industry. Energy is therefore an essential sector for Norway, and there are heavy national interests in oil, gas and hydropower.

Energy policies were for a long time considered solely as a national concern, and when signing the EEA Agreement it was held that in the Norwegian energy sector would not need any change. When agreeing to the EEA Agreement, Norway had just gotten a new Energy Act²⁸⁶ which was thought to be very advanced.²⁸⁷ When the First Electricity Directive was implemented into the EEA Agreement, the authorities in Norway went through the Energy Act and other relevant legislation, but found no reasons to change the existing Acts when the First Electricity was implemented to the EEA Agreement in 1999. Neither when

²⁸⁰ The English summary of the Norwegian report (will be referred to as Outside and Inside, when the Norwegian version is used the reference will be made to “Utenfor og Innenfor”) page 5

²⁸¹ Outside and Inside page 6

²⁸² Pinedo page 28 with further references, Outside and Inside page 6-7

²⁸³ Innenfor og Utenfor page 296

²⁸⁴ Jones page 361

²⁸⁵ Inge Lorange Backer: Innføring i Naturressurs og miljørett, 5th edition, Gyldendal Norsk Forlag AS, 2012, (Backer), page 18

²⁸⁶ The Energy Act, LOV 1990-06-29 nr 50: Lov om produksjon, omforming, overføring, omsetning, fordeling og bruk av energi m.m. (Energiloven)

²⁸⁷ Backer page 18

implementing the Second Electricity Directive changes in existing Norwegian legislation was though necessary, at least not at a deeper level, though some small adjustment had to be made.²⁸⁸ The later years has shown that this was an understatement, at least the thought of energy policies as a national concern.²⁸⁹

The Norwegian market on energy was liberalized with the 1990 Energy Act, and with this Act electricity was not as much a public service as commodity any more.²⁹⁰ Norway was one of the first States that developed a market based system for the energy sector, and with time there came a common Scandinavian market, the Nord Pool which includes the Nordic States Norway, Denmark, Sweden and Finland (not Iceland). This also illustrates the great ties between especially Norway and Sweden on the field of energy, they started financial trading in energy in 1996, and then Denmark and Finland came along parallel with the liberalization of the respective markets.²⁹¹ Though market based system in this sector has gotten more and more common, Norway and the Nordic countries are still considered as pioneers in this field when it comes to development and regulation of a well-functioning physical and financially energy market.²⁹² This might have made the adaption to the EU rules easier on these States, as they were already though to be so advanced in the field, so no big changes were necessarily needed.

One thing that has been highlighted as a problem in the Norwegian energy sector is that the relevant legislative acts often are general, and not very concrete.²⁹³ Legally based considerations²⁹⁴ have always had a central place in the interpretation of Norwegian legislative acts (though in various degrees), and they can be said to be very present on the field of energy, because of the vague rules. In the field of energy there have traditionally not been a lot of relevant sources to help clarify and answer the legal questions. But as the EU law is getting more and more present it gets easier to look to the Union for help in interpreting and use the national rules on the field.²⁹⁵

²⁸⁸ Energimarkedsrett page 70 with further references to the relevant Norwegian legislative Acts and preparatory documents.

²⁸⁹ Backer page 18

²⁹⁰ Wasenden page 23

²⁹¹ Energimarkedsrett page 96

²⁹² Energimarkedsrett page 24

²⁹³ See for example Energimarkedsrett page 34

²⁹⁴ “Reelle hensyn” in Norwegian, it is not a good English translation, which seems to be a Scandinavian phenomenon

²⁹⁵ Energimarkedsrett page 34

In the Norwegian report “Utenfor og Innenfor” (Outside and Inside) the fields of energy, climate and environment are described in Chapter 19.²⁹⁶ Norway is a big producer of renewable energy, and has been very involved in environmental concerns and international climate change operations.²⁹⁷ Also, these are areas where EU has changed policies to a large extent after concluding the EEA Agreement. The three fields has been a part of the Union law for a long time and was also a part of the EEA Agreement from the beginning, but have now grown extensively the later years.²⁹⁸ For example have the energy policies have changed a lot, where the focus to a large extent now is on security of supply.

One of the major things that make the fields of energy, climate and environment in a European perspective so interesting in Norway is that these fields are characterized by both conflicting and common interests for both parties. Norway is to a large extent producer of energy that the Member States of EU consumes, which naturally leads to conflicting interests, but also a need for extensive cooperation. The question on the range of the EEA Agreement has been raised, for Norway has held that some EU rules and policies are not EEA relevant, but on other fields Norway has expressed a wish to interpret the Agreement widely, and take rules from the Union in under the Agreement.²⁹⁹

Something that can be said to distinguish Norway as an energy-nation from many other European States is that Norway to a large extent is an exporter of raw material, for example electricity directly in the Nordic power network, instead of products where energy is used in the production.³⁰⁰ But Norway also has a big production of metals which uses hydropower. Norway is Europe’s biggest producer of aluminum, which needs a lot of energy, and is therefore sometimes, is called “frozen energy”.³⁰¹

The Norwegian energy politics has sought to separate energy policy from international policy, though some internationalization of petroleum policies always has been accepted.³⁰² Energy policies and utilization of natural resources has been important subjects in the debate on membership of the European Union, though the public seems less interested than the authorities, but it might have played an important indirect role also here. The petroleum industry has led to low unemployment and a strong economy.³⁰³

²⁹⁶ Utenfor og Innenfore page 546 ff.

²⁹⁷ Utenfor og Innenfor page 546

²⁹⁸ Ibid.

²⁹⁹ Ibid.

³⁰⁰ Utenfor og Innenfor page 550

³⁰¹ Ibid.

³⁰² Ibid.

³⁰³ Ibid.

4.3. Energy Policy in Norway Today.

There is a close connection between the Nordic Countries, and there is extensive cooperation also in the field of energy. This is especially true when it comes to Norway and Sweden, as will be shown under the subchapter on the green certificates (4.10).

Thus the many similarities, electricity generations differ in Norway, Sweden, Iceland Denmark and Finland. In Norway and Iceland nearly all generation of electricity is based on hydropower, while in Sweden and Finland the electricity production mainly comes from hydropower, nuclear power and thermal power.³⁰⁴ In Denmark, electricity generation is mainly based on conventional thermal power, with an increasing amount of wind power. The hydropower output in the Nordic region varies considerably due to the fact that the hydrological balance shifts significantly from season to season, and therefore the annual share of overall production generated from renewable sources, and consequently, also fossil energy varies from year to year. In the Nordic countries, the yearly output from renewable sources varied between approximately 192 TWh (in 2003) and 253 TWh (2005).³⁰⁵

A large share of the resources, especially hydropower, is located in the northern part of the Nordic countries, while the major population usually is situated more to the south.³⁰⁶ The problem of volatile amounts of precipitation to the hydro plants in Norway, Sweden and Finland is to some extent addressed through the utilization of large hydropower dams, but there are still important seasonal and regional differences in the generation potential for hydropower.³⁰⁷ In addition, the value of electric power varies over time and across various regions due to fluctuations in supply and demand, for example. Such regional differences in the value of electricity create a demand for transportation of electricity.

There seems to be a common political view in the Nordic countries that increased harmonization in the Nordic electricity market can lead to further improvements in economic efficiency and better functioning in the market for all parties involved, and the political will in the governments of the four countries seem to be united on continuing this trend,³⁰⁸ which especially the Green Certificates Agreement between Sweden and Norway shows. The Nordic Ministers have declared support for continued support for the harmonization of the Nordic electricity market, but at the same time they underline that the emphasis not should be in

³⁰⁴ Antti Kivipu: The Nordic Electricity Market and the Regulation of the TSOs – Is there Need for a More Harmonised Regulatory Set up? Article in *Energy Law and Policy Issue – The Energy Law Research Forum* edited by Bram Delvaux, Michael Hunt and Kim Talus (1st Edition, Euroconfidentiel, 2008), page 109 ff. (Kivipu), page 109

³⁰⁵ Kivipuro page 109 with further references

³⁰⁶ Kivipuro page 109

³⁰⁷ Kivipuro page 109-110

³⁰⁸ Kivipuro page 120

harmonization per se, but rather on coordination around the policies.³⁰⁹ This means that there will still be differences between the Nordic states regarding the regulatory framework, but only as far as these differences not are detrimental to the Nordic market.

As in the EU, there can be seen a slight change in focus of the government and legislative authority in the field of energy in Norway. The focus has shifted towards an environmentally friendly policy, and the legislative authorities will have to take environmental concerns in regard when making new legislation. Though Norway was early on by constitutionalizing a right to decent environment, it will be interesting to see what happens in this field with the new and revised Constitution. In 1992 there was added a new Article 110b to the Norwegian Constitution of 1814,³¹⁰ including a right to a healthy environment.

Article 110 b

Every person has a right to an environment that is conducive to health and to a natural environment whose productivity and diversity are maintained. Natural resources should be managed on the basis of comprehensive long-term considerations whereby this right will be safeguarded for future generations as well.

In order to safeguard their right in accordance with the foregoing paragraph, citizens are entitled to information on the state of the natural environment and on the effects of any encroachment on nature that is planned or carried out.

The authorities of the State shall issue specific provisions for the implementation of these principles

The thoughts and principles in this Article might not have gotten a big breakthrough in the minds of Norwegian lawyers, but it is a growing field. The constitutional duty to give the environment attention when making new Acts must be presumed to be in line with EU policies.

Through the EU rules on the four freedoms, state aid and rules on competition, rules and policies from the Union have had much greater impacts on Norwegian energy law than anticipated in 1992. Still the Union has left much up to the individual States, for example the States' sovereignty over own national resources. Norwegian authorities can also be said to have used the scope of the EU provisions to make necessary arrangements in a way so that Norwegian energy interests are maintained.

The further analysis of Norwegian energy legislation and policies will largely be based on the Norwegian Official Report Inside and Outside. This is a very extensive document on the subject. All legislative acts from the EU on the energy field has been made as a part of the

³⁰⁹ Kivipuro page 120

³¹⁰ The Norwegian Constitution, LOV 1814-05-17 nr 00: Kongeriget Norges Grundlov

internal market, and are therefore considered EEA relevant, so the rules from EU have full validity in Norway (and Iceland) with just smaller exceptions.³¹¹

While Norway is a big producer of oil and gas, most European States are importers of oil and gas. Also Norway, and Iceland, is in a special situation compared to most of EU's Member States regarding the production of electricity since most of the production in these countries already comes from natural resources, whilst EU States mostly get their electricity from non-renewable sources like gas, coal and nuclear power. Normally, Norway produces more power than the country consumes so there are good conditions for export of energy.³¹²

The focus in EU has turned to security of energy supply, which means that the production of energy has to be sustainable both in production and use, and there are therefore objective conflicts of interest between Norway's status as an energy provider and the Member States of the Union as buyer of energy. Norway wins on high prices, while the Union is trying to press them down.³¹³ EU has therefore put pressure on Norway, especially regarding the organization of the sector and the Union has pushed the rules on competition and the obligation to non-discrimination within the EEA Area. Norway has not always given after for the pressure, but it is still clear that Norwegian energy market has been reorganized after Norway joined the EEA Agreement, as will be illustrated later with the EFTA Case against Norway in 2007 (Hjemfallsrett).³¹⁴

Norway has a system where the energy market is not to be politicized, and Norway does not favor EU Member States over other states, and this has made some Member States of the Union to express that Norway should deliver more gas to the these States, especially in 2006-2007. The thought behind this is to make the Union less dependent on Russian gas, but Norway rejected this.³¹⁵ The political Norway seems united in the view that the market should decide on the export of energy. But it is noteworthy that when Norway does not have to deal with the disadvantages of Union policies in the Norwegian market which will follow a membership, they neither get the advantages that follow.³¹⁶ These arguments do not apply for Iceland in the same extent as for Norway, since export of energy not is a relevant field in today's situation.

The EU through the EEA has set framework which both indirectly and directly has influenced Norwegian policies regarding petroleum and energy. The impact from EU varies

³¹¹ Utenfor og Innenfor page 546

³¹² Utenfor og Innenfor page 547

³¹³ Utenfor og Innenfor page 546-547

³¹⁴ Utenfor og Innenfor page 547

³¹⁵ Ibid.

³¹⁶ Ibid.

after what area inside the energy field the question is about, the impact from EU is not as strong regarding how Norway should utilize its resources as for ownership. Also the impact of EU varies with the kind of sources in question.³¹⁷ It can also be remembered that all changes in the Norwegian energy sectors is not brought up by the EU, for example has better infrastructure and an international liberalization played its part in the development.³¹⁸ But it can be stated that influence from EU has been a part of reforms that have liberalized the Norwegian power market, but also strengthened governmental control and ownership, as for the Hjemfall-Case.

The Norwegian energy dimension is based on the “resource rent”,³¹⁹ and the hydropower and petroleum sectors are considered profitable compared to other inputs used. Norway is a country with huge natural resources and there is a common thought that the resource rent accrues to the society. The general principles of Norwegian energy policy are broadly accepted by a broad political majority for a long time.³²⁰

4.4. Renewable Energy Sources.

In the following, there will be given some comments to the most important fields of Norwegian energy policy, from the past, at the present and into the future. The focus will be on renewable energy sources.

Practically all production of electricity in Norway is based on renewable energy sources, for example does 99 percent of all electricity stem from hydropower.³²¹ Norwegian watercourse magazines produce half of the total production of electricity from such sources in Europe.³²² Still the extended scope of the Renewable Energy directive to include other categories of energy production, for example in the transport sector, might bring challenges for Norway in meeting the mandatory target.³²³

On 19 July 2011 the EFTA States sent the draft of an EEA decision on the Renewable Energy Directive to the European Commission. It is stated in the draft that Norway will be aiming to increase its total share of gross domestic energy consumption originating from renewables to 67, 5% by 2020 (from app. 60% today). The draft was made final in the EEA

³¹⁷ Utenfor og Innenfor page 547

³¹⁸ Utenfor og Innenfor page 548

³¹⁹ The resource rent represents the excess return which separates the utilization of natural resources from other types of industry

³²⁰ Utenfor og Innenfor page 548-549

³²¹ Utenfor og Innenfor page 557

³²² Utenfor og Innenfor page 558

³²³ Karl Erik Navestad, Torkjel K. Grøndalen and Henrik Bjørnebye: Overview of the Legal and Regulatory Framework in Norway. Article in *EER – The European Energy Handbook 2012*, edited by Silke Goldberg and Mark Newbery, (page 305 ff.), (EER - Norwegian Overview), page 309-310

Joint Committee the 19 December 2011,³²⁴ and the Directive came into force in the States the 20 December 2011. There are made some smaller amendments to the Renewable Energy Directive in the EEA Decision. Liechtenstein is not bound by the Directive.

Also Norway and Iceland will have to notify their national renewable energy action plan (NREAP), but they will notify ESA and not the institutions of the Union.³²⁵ The countries have to submit a report on progress in the promotion of use of renewable energy by 31 December 2013, and then every second year,³²⁶ as described previously.

There is adopted a particular scheme for the target that Norway and Iceland will have to achieve. The countries did in 2005 respectively have a share of energy from renewable sources in gross final energy consumption of 55, 0% and 58, 2%. The new goals for 2020 are for Norway 67, 5% and for Iceland 64%.³²⁷ These numbers, along with the fact that both of these countries are outside of the Union, is what makes a comparison between them particularly interesting. The Renewable Energy Directive shows the present percentage of renewable energy used, and targets for 2020 for the Member States of the European Union. According to this scheme it becomes very clear that Norway and Iceland are the States in EFTA that has the highest percentage of renewable energy. Sweden is number three, with a level of 39, 8% energy from renewable sources in 2005.³²⁸

The national target may partially be achieved through energy efficiency measures, for example can electric or hybrid cars in the transportation sector have great impact. In Norway there is a large potential when it comes to develop electricity production from renewables, especially wind power, upgrading existing hydropower facilities and investment in new small-scale hydropower.³²⁹

On 1 July 2010 a new Act regarding renewable energy production offshore came into force in Norway, the Sea Energy Act.³³⁰ This Act provides a regulatory framework for the development and operation of renewable energy production offshore by establishing a concession regime.³³¹ The Act defines renewable energy as production of electric energy by the use of renewable energy resources, for example wind, waves and tidal water.³³²

³²⁴ Decision of the EEA Joint Committee No 162/2011 of 19 December 2011 amending Annex IV (Energy) to the EEA Agreement

³²⁵ Adjustment of Article 4(2), see the ESA Decision Article 1 (c)

³²⁶ Adjustment of Article 22(1), see the ESA Decision Article 1 (d)

³²⁷ Adjustment of Annex I point A, see the ESA Decision Article 1 (e)

³²⁸ The Renewable Energy Directive Annex I

³²⁹ EER - Norwegian Overview page 310

³³⁰ The Sea Energy Act, LOV 2010-06-04 nr 21: Lov om fornybar energiproduksjon til havs (havenergilova)

³³¹ The Sea Energy Act Chapters 1-3

³³² The Sea Energy Act Article 1-4 (1)

In Norway, the preparatory legal documents are usually used extensively in interpreting the relevant Acts. These documents give valuable information on the thoughts, goals and ambitions behind the individual Act. In one of the preparatory documents³³³ to the Act on renewable resources at sea, the Ministry of Oil and Energy describes the background for the Act, as founded in the need to reduce emissions from energy production, without limiting the energy efficiency and security.³³⁴ The theoretical potential for production of renewable energy at sea seems great in Northern Europe, and many of the neighboring countries have ambiguous goals on production of these kinds of energy the next years,³³⁵ especially in Denmark.³³⁶ In 2008 the EU Commission gave a report on offshore wind energy, which is considered one of the available measures to reach the goal of 20 percent renewable energy by 2020.³³⁷

Regarding energy efficiency, Norway is way up north and the climate is cold compared to many other European states. Heating of houses and buildings requires substantial amount of energy, and the government seem to take this seriously, since energy efficiency is a part of the measures to reduce the greenhouse gas emissions. Energy efficiency is mainly done by introducing new requirements for new houses and other buildings. There are also established different support schemes for energy efficiency administered by the state enterprise Enova SF.³³⁸

Norway does not have any nuclear energy production.

4.5. Oil and Gas.

The EU countries consume about 500 billion scm gas per year, which is about five times the production in Norway, and gas is used in households, business, industry, the public sector, etc. Many factors affect the demand for gas, but the most important factors are economic growth, the price of gas compared to other energy sources, technical development and energy policies.³³⁹ Over 95 percent of Norwegian gas is sold in the European market, so developments in the European energy market are particularly important on this field. The petroleum industry is the biggest industry in Norway measured in economic growth,

³³³ Ot.prp.nr. 107 (2008-2009). Om lov om fornybar energiproduksjon til havs (havenergilova) (Ot.prp. nr 107)

³³⁴ Ot.prp. nr. 107 (2008-2009) page 14

³³⁵ Ibid.

³³⁶ Denmark had a share of energy from renewable sources in gross final consumption of “only” 17% in 2005, but the goal for Denmark is raised more than for many of the other Member States of the Union, up to 30%, almost twice as much. See the Renewable Energy Directive, Annex I.

³³⁷ Ot.prp. nr 107 page 15

³³⁸ Information in English at <http://www.enova.no/about-enova/259/0>

³³⁹ Meld.St.28 (2010-2011),. page 48

governmental revenues and export earnings, and it employs about 43 000 persons. The production of oil is now somewhat reduced compared to year 2000, while the production of gas is steadily increasing.³⁴⁰

In June 2011 the Ministry of Energy and Petroleum issued a white paper on petroleum activities in Norway named “An industry for the future – Norway’s petroleum activities”.³⁴¹ The white paper lays out an ambitious policy for the maintenance of the high levels of activity in the Norwegian petroleum industry, and for further increases in these levels of activity. Still, the report also considers further challenges and problems in the future, for example how the focus on renewable energy will affect the industry.

Though the oil and gas cannot be said to be environmentally friendly, there is no doubt that these sources of energy will be highly relevant also in the future. EU’s goal on reduction of greenhouse gases implies a reduced use of oil and gas but these energy sources will have to be important backups. Due to climate change and variations in wind and sunshine, and since power produced from renewable sources not can be stored, the renewable energy sources must be supported by considerable amounts of back-up power generation capacity, in case the wind does not blow or the sun does not shine.³⁴² These back-ups are planned from gas and coal, at least in the beginning. Demand for gas in the EU is expected to grow, while the production is declining in the Member States. This means an increasing need for import of gas, good news for Norway.³⁴³ 60 percent of the European consumption of gas is imported, mainly from Russia, Algeria and Norway.³⁴⁴

In 2011 there were several significant oil discoveries on the Norwegian Continental Shelf (NCS), for example did Statoil make the Skrugard discovery Barents Sea, estimated to contain 150 to 250 barrel of oil equivalent, and these findings strengthens the beliefs that the Barents Sea could still become a significant oil province. There are also found oil and gas other places on the Norwegian Continental Shelf.³⁴⁵

Historically the ownership of the Norwegian gas pipeline network Gassled has been owned by the main gas producers of oil and gas on the NCS, but recently many of the owners

³⁴⁰ Utenfor og Innenfor page 549 with further references

³⁴¹ Meld.St.28 (2012-2011)

³⁴² Utenfor og Innenfor page 549 with further references

³⁴³ Ibid.

³⁴⁴ Meld.St.28 (2010-2011) page 48-49

³⁴⁵ Karl Erik Navestad, Torkjel K. Grøndalen and Henrik Bjørnebye: Energy Law in Norway: Recent Developments in the Norwegian Energy Market. Article in *EER – The European Energy Handbook 2012*, edited by Silke Goldberg and Mark Newbery,(page 303 ff.) (EER – Recent Norwegian Developments) page 303

have announced the sale of their participating interests. Afterwards also Norske Shell, Total and Statoil announced their sale of ownership interests to different financial investors.³⁴⁶

The ultimate regulatory authority with respect to petroleum activities on the NCS is exercised by the Norwegian Parliament (“Stortinget”), while the overall responsibility of petroleum activities rests with the Ministry of Energy and Petroleum. Then there are two entities at the regulatory level below Ministry, The Norwegian Petroleum Directorate and the Petroleum Safety Authority. Other regulatory authorities are also involved, on a more implicit level, for example the Ministry of Finance who handles policy and legislation concerning taxation of petroleum. There is a high level of state participation in Norwegian oil and gas industry, and the Norwegian State is largest player on the NCS.³⁴⁷ Legal basis for government regulation is the Petroleum Act.³⁴⁸

A production license can be said to be the core document in licensing system, and the licensee has an exclusive right to explore for, develop and produce petroleum in the covered blocks. These licenses are normally awarded through annual licensing rounds. Companies can apply individual or in groups. The license is awarded for an initial period up to 10 years, and in this period a specific work obligation must be fulfilled.³⁴⁹

A company that wants to apply for a production license on the Norwegian Continental Shelf must be pre-qualified as a licensee, hence: fulfill certain criteria regarding financial strength etc. Practice shows that it usually requires that the licensee is incorporated and registered in Norway.³⁵⁰

The Norwegian offshore gas transportation infrastructure system (Gassled) is organized as a joint venture. Gassled is operated by Gassco, which is 100% owned by the state, which is not a shareholder in Gassled. Gassco is therefore an independent system operator.³⁵¹ Norwegian domestic downstream gas market is not really mature and is considered an emergent market pursuant to the Second Gas Directive. Unbundling of this market has therefore not been considered as a pressing issue in Norway, and the New Gas Directive of 2009 will probably not alter this.³⁵²

³⁴⁶ EER - Recent Norwegian Developments page 304

³⁴⁷ EER - Norwegian Overview page 307

³⁴⁸ The Petroleum Act, LOV 1996-11-29 nr 72 Lov om petroleumsvirksomhet (petroleumsloven)

³⁴⁹ EER – Norwegian Overview page 307

³⁵⁰ EER – Norwegian Overview page 308

³⁵¹ EER – Norwegian Overview page 307

³⁵² Ibid.

Access to Norwegian upstream pipeline system is regulated by Petroleum Act and Petroleum Regulation.³⁵³ These legislative acts follow the principles of third party access laid down in the relevant provisions of the Second Gas Directive. The Ministry of Energy and Petroleum holds that there will not be any changes to the current upstream regime regarding the New Gas Directive.³⁵⁴

The domestic gas consumption in Norway is very limited, and there is only a few small scale facilities for receiving liquefied natural gas (LNG – mainly used to transport gas over bigger distances), and the ones that exist in Norway are all the West or North of Norway. There is neither any onshore gas storage in Norway.³⁵⁵ The Norwegian natural gas transportation system is very complex, and it is outside the scope of this thesis to dig deeper into this material. What can be said to be relevant are all the interconnectors and pipelines. There are now seven major pipelines, transporting natural gas from the NCS to UK and the continent.³⁵⁶

4.6. Electricity.

Norway's domestic electricity production is based almost entirely on hydropower, accounting for approximately 96 % of the energy mix.³⁵⁷

According to the Norwegian Industry Concession Act³⁵⁸ only public undertakings may acquire concessions for the ownership of hydropower resources.³⁵⁹ Public undertakings are defined as undertakings where Norwegian public entities directly or indirectly control at least two thirds of the shares and the capital, and that are organized in such a manner that genuine public ownership exists.³⁶⁰ Therefore, Norwegian large and medium scale hydropower is mainly under Norwegian public ownership, which has been the case from the development of the sector already from a century ago (the Act is after all almost 100 years old). For other energy sources, for example wind power, the same restrictions when it comes to ownership does not apply.

In Norway, the largest producer of electricity is Statkraft AS, owned by the 100% State-owned Statkraft SF. Statkraft AS owns approximately 36% of the Norwegian electricity

³⁵³ The Petroleum Regulation. FOR 1997-06-27 nr 653: Forskrift til lov om petroleumsvirksomhet

³⁵⁴ EER – Norwegian Overview page 308

³⁵⁵ Ibid.

³⁵⁶ Ibid.

³⁵⁷ EER – Norwegian Overview page 305

³⁵⁸ The Industry Concession Act, LOV 1917-12-14 nr 16: Lov om erverv av vannfall mv., Industrikoncessjonsloven.

³⁵⁹ The Industry Concession Act Articles 1 and 2

³⁶⁰ The Industry Concession Act Article 2

generating capacity. According to their homepage, they are the biggest producer of renewable energy in Europe.³⁶¹ Local municipalities and county authorities own about 52% of the generating capacity, which is mostly exercised through ownership in public undertakings. Roughly 12% is owned by private companies, based on concessions from before the 1917 Industry Concession Act.³⁶²

Something that differentiates Norway from most other European countries is that there are three grid levels rather than the usual two levels. The three levels are the central, the regional and the local distribution grid. The central grid is for most practice purposes operated by Statnett SF. Statnett is designated as a Transmission System Operator with a particular system responsibility pursuant to the Norwegian Energy Act. Statnett owns around 87% of the central grid, and operates the remaining parts of the central grid on the basis of rental agreements.³⁶³

Ownership interests in Statnett are held by the Ministry of Petroleum and Energy, while the ownership of Statkraft is held by the Ministry of trade and Energy.³⁶⁴ Therefore, the clarification of the New Electricity Directive that two separate public bodies are not deemed to be the same person³⁶⁵ makes it clear that the organization of public ownership interests in Statnett and Statkraft does comply with the unbundling requirements in the Directive.

Regional grids and distribution grids are owned by a large number of companies, and most of the companies are owned by county and municipal authorities. Companies with private ownership do exist within all parts of the resource chain, but they are more common within electricity trading than other areas of the industry.³⁶⁶ Regulatory responsibility is to a large extent delegated from MPE to the national regulatory authority, the Norwegian Water Resources and Energy Directorate (NVE).³⁶⁷

The main act in Norwegian electricity market regulation is the Energy Act, a framework Act, which regulates all parts of the resource chain, from electricity production to consumption.³⁶⁸ With the Energy Act full competition, at least in principle, was introduced to the Norwegian electricity sector. This has later become a Nordic competitive electricity market, which today can be characterized as a well-functioning and advanced regulatory market model.³⁶⁹

³⁶¹ www.statkraft.com

³⁶² EER – Norwegian Overview page 305

³⁶³ Ibid.

³⁶⁴ Ibid.

³⁶⁵ The Renewable Energy Directive Article 9 (6)

³⁶⁶ EER – Norwegian Overview page 305

³⁶⁷ Ibid.

³⁶⁸ The Energy Act Article 1-1

³⁶⁹ EER – Norwegian Overview page 305

The Norwegian electricity market regime is said to comply with most of the provisions of the New Electricity Directive, according to the national authorities, and this seem to be a general opinions among legal authors as well.³⁷⁰ Still, as mostly when implementing EU legislative acts, some amendments will have to be done. This does especially apply for the New Electricity Directive's comprehensive new set of provisions governing national regulatory authorities.³⁷¹

Electricity can be traded bilaterally at the Nordic power exchange, Nord Pool Spot, owned by the Nordic TSO's.³⁷² Nord Pool offers two markets, day-ahead ("Elspot") and intra-day ("Elbas").

Regional grid and distribution grid companies in Norway operate the grid pursuant to trading licenses with the objective to facilitate an efficient electricity market and efficient operation, utilization and development of the grid. The license requirements include conditions concerning organization, non-discriminatory market access, calculation of tariffs, etc. Licensees must ensure market access for all customers that want grid services on non-discriminatory and objective point tariffs and terms.³⁷³ Distribution grid companies with local area license are at the outset required to ensure that consumers within their grid area are supplied with electricity from their grid.³⁷⁴

Recently there was adopted a new regulation in Norway regarding smart metering. The main rule is that grid companies shall install advanced metering systems at all measuring points within their area of license within the 1 January 2016.³⁷⁵ These rules are going are intended to correct the billing, give necessary information to control energy consumption for the consumer and other energy consumers and give an increased opportunity for the network company to a more efficient operation of the network.³⁷⁶

4.7. Water as a Source for Renewable Energy and the Hjemfall-Case.

Previously, law on energy in Norway was greatly linked to the law on watercourses. The latter years there has been a shift towards a separate field for energy law, but there is of course a big

³⁷⁰ EER – Norwegian Overview page 305

³⁷¹ Ibid

³⁷² EER – Norwegian Overview page 306

³⁷³ Chapter 4 of the Energy Regulation and Article 4-1 of the Energy Act

³⁷⁴ The Energy Act Article 3-3

³⁷⁵ Regulation on smart metering etc., 24 June 2011 No 726, Forskrift om endring i forskrift om måling, avregning og samordnet opptreden ved kraftomsetning og fakturering av netjtjenester which introduces a new Chapter 4 concerning advanced measuring and control systems in the Electricity Supply and Grid Services Regulation (FOR 1999-03-11 nr 301: Forskrift om måling, avregning og samordnet opptreden ved kraftomsetning og fakturering av netjtjenester).

³⁷⁶ Regulation on smart metering, FOR 1999-03-11 nr. 301: Forskrift om måling, avregning og samordnet opptreden ved kraftomsetning og fakturering av netjtjenester, Article 1-1

field that is covered by both the energy law and the law of watercourses, so it is impossible to separate the two.³⁷⁷

The watercourses are of a fundamental value both in long and short time perspectives, it is necessary for life on earth, for consummation, agriculture and industry. Water also plays an important role as a source of energy, and it has done for a long time in Norway. But water is also an important source to recreation and outdoor activities, and there is therefore special, and often crossing, considerations that must be considered when regulating the watercourses. Still, production of electricity is the most important element in the Norwegian law regarding watercourses.³⁷⁸ Not strange, when Norway has the highest level of electricity from watercourses in Europe.³⁷⁹

Utilization of watercourses for electricity purposes represents huge values for many people, and there is therefore need for extensive regulation of the field. This is also grounded in the fact that these energy sources can be particularly vulnerable. As a consequence, it is not enough to regulate the relationships between those utilizing these sources, but one must also regulate the relations to the public as well. New rules became especially necessary when production of electricity from water started in big scale. But also changes in the public interests and attitudes might make new legislation necessary, like the work for conservation and nature protection.³⁸⁰

Almost 97% of Norway's access to fresh water stems from rain,³⁸¹ and climate change can strike hard if it leads to changes in rainfall (though the public opinion seem to be that there is currently much more rain, especially during summertime, than before). 1/5 of the fresh water evaporates, while 4/5 runs to the sea. The watercourses are a characteristic of Norwegian nature, and many of them have waterfalls and rapids, compared to for example Sweden and Finland where the lakes dominate. Of the world's 20 highest waterfalls, 9 are in Norway, and 7 of them are used to power generation. The watercourses have tremendous value for Norwegian biological diversity, for example does the North-Atlantic salmon spawns in these areas.³⁸²

³⁷⁷ Thor Falkanger and Kjell Haagenzen (editors): Vassdrags- og Energirett, Universitetsforlaget, 2002 (Falkanger and Haagenzen) page 33

³⁷⁸ Falkanger and Haagenzen page 32-33

³⁷⁹ Backer page 285

³⁸⁰ Falkanger and Haagenzen page 34

³⁸¹ Backer page 285

³⁸² Ibid.

A look at the past is considered important to understand the present rules, and what considerations that have played a role in making the rules.³⁸³ From the mid 1800's, watercourses did not play an as vital role in mills as before, and instead played a leading role in the growing industry in Norway, first as power for operating machinery, and then for production of electricity. This resulted in a new value for Norwegian watercourses. It took some time to build the necessary plants for utilization, but those visionary enough made large-scale acquisitions and especially the foreigners were big buyers. Right after 1900, the foreign nationals owned most of the exploitable rights.³⁸⁴ In light of this, the legislative authorities made it a priority to secure that ownership over and right to exploitable watercourses, did not end up in anyone's hands. The solution was found through rules on concession, and licensing was after this subject to an official authorization.³⁸⁵ So while the watercourses have been owned by private persons or entities, the oil- and gas resources has always been owned by the Norwegian state.³⁸⁶

After the 1887 Act on Watercourses, there came a new Act in 1940, which was replaced by the currently applicable Watercourse Act of 2000.³⁸⁷ The Act shall ensure a responsible use and management of waterways and groundwater for the society as a whole.³⁸⁸ This might be considered as a shifted point of view when compared to previous Acts as it is more general and more towards the society than before.

After the Second World War there was an increase in power development, and there were built several plants to secure electricity to private households, but also to the growing industry. Some of the energy was also exported to the neighboring countries.³⁸⁹ In the beginning, this expansion of production of electricity from watercourses did not need any new legislation, but with time, there came some new concerns and the focus was to some extent shifted to the negative factors of electricity production.³⁹⁰ This skepticism can probably be said to be one of the major motivations by the Nature Conservation Act of 1970.³⁹¹ This has led to a stricter regime when it comes to granting licenses for exploitation of watercourses in production of electricity³⁹². Through this example it can be seen that also acts not directly

³⁸³ Falkanger and Haagensen page 34

³⁸⁴ Falkanger and Haagensen page 40

³⁸⁵ Ibid.

³⁸⁶ Utenfor og Innenfor page 559

³⁸⁷ The Watercourse Act, LOV 2000-11-24 nr 82: Lov om vassdrag og grunnvann (vannressursloven)

³⁸⁸ The Watercourse Act Article 1

³⁸⁹ Falkanger and Haagensen page 54

³⁹⁰ Ibid.

³⁹¹ The Nature Conservation Act, LOV 1970-06-19 nr. 63: Lov om naturvern (naturvernloven)

³⁹² Falkanger and Haagensen page 54

related to exploitation of water courses can be highly relevant in determination of questions related to this field. Acts regarding nature conservation and nature protection is especially relevant in this regard.

In Norway a search for “renewable energy” in the official database for court cases³⁹³ shows that very few cases has been up for the Norwegian Courts in this topic. Norway has courts in three levels, District Courts, Appeal Courts and Supreme Courts. A search on the two upper Courts shows only 16 cases related to renewable energy only reveals 16 cases, and most of them seem related to ownership of natural resources, expropriation and interpretation of contracts.

There have not been many cases on energy related questions for the EFTA Court, surprisingly few, one might say. There seems to have been four cases the latter years on energy, environment and state aid related to energy.³⁹⁴ The most important, at least to the topic of this thesis, must be said to be the case against Norway in 2007,³⁹⁵ called the Hjemmfallsrett case. This case concerned conditions for concession for acquisition of hydropower resources, among other things, for example indirect discrimination, security of energy supply and environmental protection. In the further there will be given an introduction to the hjemmfallsrett-system in Norway, before the case will be more extensively presented.

Development of hydropower plants in Norway will almost always require a license after the existing legislation, which entails detailed legislation on criteria to be met before a license is given to the applicant. One of the most important criteria, and subject to the case for the EFTA Court, was the requirement that licenses to private entities were given for a restricted period of time, 60 years. After this period, the waterfall, the power plant and other installations were accrued to the state, without compensation, for an unlimited period of time.³⁹⁶ This is called “hjemmfallsrett” in Norwegian (and therefore the name of the case) or reversion in English.

As previously mentioned, the tightening of the concession regime in Norway was partially made because the government wanted to limit the foreigners in the electricity market in Norway, and the reversion expressed an attitude to the national watercourses at exactly that; national. It was therefore only acceptable that foreigners could exploit the resources for a limited period of time, and it was only later that the rules on reversion also applied to

³⁹³ Lovdata.no. To access most of the cases one must have a paid subscription.

³⁹⁴ Cases E-6/08, E-2/06, joint cases E-5/04, E6/04 and E-7/04 and E6/06. The first three were all against Norway, but the latter one concerned Liechtenstein.

³⁹⁵ Case E-2/06

³⁹⁶ Falkager and Haagensen page 411-412

Norwegian nationals. Though the watercourses was in fact private property, it was the leading view that these private properties has such a special character, since running water is of fundamental value and the government should therefore control these resources.³⁹⁷

The requirement of reversion is a tradition in Norway, and the first concession with reversion was given on 7 January 1907.³⁹⁸ But there have been some discussions around the system of reversion, especially the latter years. The industry claims that it is unfair that the government get the right to their installations and plants that they have paid for. The local municipalities that have power plant with unlimited concessions, and want to sell parts of the plant claim that the rules of reversion limits the number of buyers, and this again makes the prices lower. The politicians on the other hand, did not seem too concerned on the public opinion, and in 1999 a vote to dismiss the system of reversion was rejected in the Norwegian Parliament, Stortinget, with 83 against 14 votes.³⁹⁹

There are many advantages with the institute; it could easily be regarded as unreasonable that one private party holds the sole property right to such a fundamental value as water. Also, the reversion brings huge values to the State and that the use of natural resources should not be locked for an unlimited period of time are other arguments.⁴⁰⁰ The strongest argument against this rule is the interests of the licensees, especially the privately owned power industry.

Norway's agreement to join the EEA, has given a new dimension to this institute. When the Norwegian legislation was checked against the relevant EU rules after signing the EEA Agreement, the authorities concluded that the rules on reversion were not in conflict with the EEA Agreement, though many legal experts and people in the power industry not necessarily agreed.⁴⁰¹ In 2001 the ESA (EFTA Surveillance Authority) started an investigation against Norway about the ability to keep a system with different time on the licenses for different licensees, and reversion where the license is given for a limited time.⁴⁰² The ESA pointed out that the Norwegian law seemed to differentiate directly on the ground of nationality, when only Norwegian public undertakings could get unlimited concessions. Further, it was pointed out that there is no necessary correlation between the need for control, and the fact that Norwegian public companies have easier access to non-limited concessions regarding time.⁴⁰³

³⁹⁷ Falkanger and Haagensen page 417

³⁹⁸ Falkanger and Haagensen page 413 with further references

³⁹⁹ Ibid.

⁴⁰⁰ Falkanger and Haagensen page 417-418

⁴⁰¹ Utenfor og Innenfor page 560

⁴⁰² Falkanger and Haagensen page 413

⁴⁰³ Falkanger and Haagensen page 414 with further references

The Norwegian Ministry for Oil and Energy made a statement saying that the Norwegian perception of the rules was that they did not collide with the EEA Agreement,⁴⁰⁴ though the reasons behind the institute, to secure national's interests, maybe should have gotten the alarm bells ringing. And ESA stated in a Reasoned Opinion of 20 February 2002 that the Norwegian rules did in fact collide with the EEA Agreement's rules on right to establishment and free movement of capital.⁴⁰⁵ Then came a long process with a lot of back and forth, especially after an election in Norway where a new government was elected. It ended with Norway saying that they would not change the system, though it was clear that this would lead to a case before the EFTA Court and the judicial experts in Norway stated that the chances of winning the case was minimal.⁴⁰⁶ And after this, ESA took Norway for the EFTA Court based on breach of the EEA Agreement Articles 31 and 40 (discrimination based on nationality hence regarding freedom of establishments and movement of capital), and the difference in treatment was not thought to be objectively justified or falling within the ambit of Article 125. The Court delivered its judgment on the 25 June 2007.

The EFTA Court states that about 88 % of all hydropower in Norway was in public ownership, about 45 % by the State through Statkraft AS while the municipalities and county municipalities owned about 42 %. The remaining 12 % was owned by private undertakings, national and foreign. Some of these were harnessed before the rule on reversion was introduced, but would fall under the rule of sold to another non-public company. After this introduction, the Court gives an in-depth presentation of the relevant Norwegian legislation.⁴⁰⁷ It then turns to the parties arguments, ESA's arguments are based on the mentioned provisions from the EEA Agreement and that Norway is in breach of these Articles. Norway stated that the rules of issue fell outside of the scope of the EEA Agreement, that the rules on reversion not represented a breach of the relevant rules, that the aim of the public ownership was a legitimate justification under the Agreement and finally that the aim of maintaining and acquiring public ownership functioned as a means for reaching other legitimate aims, for example public security, secure supply of energy and environmental protection.⁴⁰⁸ Iceland supported Norway, and states that both Norway and Iceland had as a precondition for joining the EEA that property of ownership fell outside of the Agreement.⁴⁰⁹ Also Netherlands,

⁴⁰⁴ Falkanger and Haagensen page 414

⁴⁰⁵ Ibid.

⁴⁰⁶ Utenfor og Innenfor page 560

⁴⁰⁷ Case E-2/06 paragraph 13-29

⁴⁰⁸ Case E-2/06 paragraph 40

⁴⁰⁹ Case E-2/06 paragraph 48

Poland and even (more surprisingly) the European Commission supported Norway on many of the stated arguments.⁴¹⁰

The Court finds that the contested rule does not fall outside the scope of the EEA Agreement, based in the principle of homogeneity with the EU rules and the interpretation of the EU law's equivalent to the EEA Agreement's Article 125.⁴¹¹ It then goes to consider the EEA Agreement Articles 31 and 40, and finds that the contested rules fall under the scope of both these Articles, since the differentiation has a negative effect on the value of investment of private and foreign investors in hydropower production and it restricts the freedom of establishment.⁴¹²

The Court states, in line with Norway's arguments, that Article 125 of the EEA Agreement is to be interpreted to the effect that an EEA State's right to decide whether a resource for hydropower and related installations is in private or public ownership is not affected by the EEA Agreement, as such.⁴¹³ In line with this, Norway can legitimately establish a system of public ownership over these properties (as they also did, as will be shown below), as long as the objective is pursued in a non-discriminatory and proportionate manner.⁴¹⁴ After going through the contested provisions, the Court still states that the existing rules cannot be said to aim at establishing a system of property ownership within the meaning of Article 125 EEA, but instead is aiming at a certain level of public control of the relevant sector of the economy.⁴¹⁵

Still, this is not enough to breach the EEA rules, since public control may be a means of attaining other goals which may qualify legitimate aims, and Norway here argued that environmental protection, security of energy supply and effective collection of economic rent were such relevant concerns.⁴¹⁶ The Court found that the first mentioned, environmental concerns, is a legitimate public interest under the Agreement, and the same as regards to securing energy supply, as it might constitute a public security concern.⁴¹⁷ The last, effective collection of economic rent has an economic nature, and cannot serve as a justificatory ground.⁴¹⁸

⁴¹⁰ Utenfor og Innenfor page 561

⁴¹¹ Case E-2/06 paragraph 57-63

⁴¹² Case E-2/06 paragraph 65-69

⁴¹³ Case E-2/06 paragraph 72

⁴¹⁴ Ibid.

⁴¹⁵ Case E-2/06 paragraph 73-77

⁴¹⁶ Case E-2/06 paragraph 78

⁴¹⁷ Case E-2/06 paragraph 79

⁴¹⁸ Case E-2/06 paragraph 80

Then the Court has to decide whether the contested rules are suitable for achieving the intended objectives, and that they do not go beyond what is necessary in order to attain legitimate objectives that they pursue.⁴¹⁹ The Court finds that the rules are not suitable for neither securing energy supply or ensuring environmental concerns, though this is an effective way of giving the State control over the acts that the undertaking takes, but it cannot find it proven that this will be of any advantage to the relevant aims.⁴²⁰ The Court found that Norway therefore was in breach of Articles 31 and 40 of the EEA Agreement by maintaining measures as laid down in the Industrial Licensing Act.⁴²¹ The Court:

1. Declares that the Kingdom of Norway has infringed Articles 31 and 40 of the EEA Agreement by maintaining in force measures as laid down in Act No 16 of 14 December 1917 Relating to Acquisition of Waterfalls, Mines and Other Real Property etc., which grant to private undertakings and all undertakings from other Contracting Parties to the EEA Agreement, a time-limited concession for the acquisition of waterfalls for energy production, with an obligation to surrender all installations to the Norwegian State without compensation at the expiry of the concession period, whereas Norwegian public undertakings benefit from concessions for an unlimited period of time.
2. Orders the Kingdom of Norway to pay the costs of the proceedings.⁴²²

Thus, the Court stated that public ownership was not in breach with the rules of the EEA Agreement, but the problem was how the rules discriminated between private and public entities, since the public undertakings were strongly favored by the rules. Still changes had to be made, and the government had to choose between liberalization or to termination of the system with differentiated private and public concessions. They chose the latter. In 2008 the system with public ownership to watercourses was strengthened.⁴²³ The main changes were made by consolidating and strengthening the traditional Norwegian rules on public ownership to watercourses, to avoid collision with the EU/EEA-rules.⁴²⁴ This came as a great surprise for both ESA and the Norwegian power industry, since none had seen that the EFTA Court opened for such an alternative, and thought that it would be liberalization.⁴²⁵

⁴¹⁹ Case E-2/06 paragraph 82

⁴²⁰ Case E-2/06 paragraph 83-84

⁴²¹ Case E-2/06 paragraph 90

⁴²² The judgment of the Court, found at the last page of the judgment

⁴²³ Utenfor og Innenfor page 371

⁴²⁴ Utenfor og Innenfor page 128

⁴²⁵ Utenfor og Innenfor page 561

The Case is probably the most important EFTA case for Norway this far, both politically and economically.⁴²⁶ This case illustrates one of the sectors where the EU has pushed Norway to reach more uniform conditions in the EEA area, and the competition rules and rules on non-discrimination has been used to reach this goal. Sometimes Norway “win” because of special concerns or other relevant reasons, but this case is a perfect example on a case where Norwegian energy sector had to be reorganized as a consequence of the cooperation with the EU.⁴²⁷ It can also be said to be an example for Norwegian authorities how important it is to actually try cases for the EFTA Court; they might get better out of it than they thought! While the impact of EU might be said to have led mostly to liberalization of the market, even though the energy market was liberal before the EEA Agreement, this is a field of there the liberalization has been limited, and the governmental control is even stronger than before this case.⁴²⁸

Long-term contracts to secure Norwegian industry cheaper electricity have also been important in Norwegian industry policy, and many of these contracts were to run out in 2008-2011. ESA did not want to interfere with existing contracts, but did not allow renewal on the terms set by the governments. Because of EU rules on competition and environment, ESA stated that future contracts must be based on market value. The terminating of the long-term contracts had meant severe difficulties for the various companies, but in August 2011 the Norwegian government presented a new guarantee scheme. After some time, the ESA accepted the new scheme in August 2011.⁴²⁹

4.8. Wind as a Source for Renewable Energy.

A reoccurring question is what limits the EEA Agreement has laid down for the Norwegian Governments authority to decide on independent policies and decision making on the field of environment. There must be done a separation regarding what field of environmental policies that is concerned, important parts of national environmental policies is left to the national authorities, especially classical natural conservation. Many of the most disputed and argued environmental areas in Norway the latter years have not been regulated in the EU, for example electricity power lines, exploiting for oil in the Lofoten area in Northern Norway and the localization of wind mills.⁴³⁰

⁴²⁶ Utenfor og Innenfor page 561

⁴²⁷ Utenfor og Innenfor page 547

⁴²⁸ Utenfor og Innenfor page 528

⁴²⁹ Utenfor og Innenfor page 561

⁴³⁰ Utenfor og Innenfor page 584

Wind power has traditionally not had a strong impact on Norwegian energy sector, and today only one percent of electricity in Norway stems from wind power, but there are some great changes on this field. The potential is enormous; Norway has excellent conditions for wind mills, and big areas for such production. Wind power will therefore very probably be important for Norway in reaching the goals set for increasing the energy from renewable sources, as Norway is obliged to meet according to both the Renewable Energy Directive and the Agreement with Sweden on the green certificates.⁴³¹ One potential problem in exploiting the wind as a source for energy in Norway might be that there are not sufficient power lines to transport the energy made. Therefore, to reach the goals set for 2020, there will be mostly be relied on wind power potential that already has, or will in near future get, admission to power lines. Therefore the western parts of Norway are essential in this regard, since there already are power lines, at least to some extent.⁴³²

In July 2012 there was given five concessions to wind power plants in Rogaland.⁴³³ The five plants will have a total effect on 426 MW, a yearly production on approximately 1, 3 TWh, which is about the amount that 65 000 households need. These concessions resulted in the biggest wind power project in Norway this far.⁴³⁴

Power from wind mills might have some negative impacts on nature, for example has there been some special consideration for the birdlife.⁴³⁵ Hence, two crossing environmental concerns will have to be evaluated and harmonized.

4.9. Climate change and sustainability.

Early 2008, the major political parties in Norway agreed to a Climate Change Agreement.⁴³⁶ This is a political compromise between the leading political parties in Norway regarding Norway's environmental and climate policies. The overall goal of the agreement was for Norway to be carbon neutral by the year 2030.⁴³⁷ As part of the commitments after the Kyoto Protocol, Norway wishes to finance emission reduction also in other states, especially in developing countries.⁴³⁸ The parties of the agreement found it realistic to reduce the Norwegian greenhouse gas emission by 15-17 million tons CO₂ by 2020, forest included.

⁴³¹ Decision on Wind Mills from the Norwegian Ministry for Oil and Energy of 05.07.2012

⁴³² Decision on Wind Mills page 7

⁴³³ Official Press release from the Norwegian Ministry of Oil and Energy 05.07.12

⁴³⁴ Decision on Wind Mills page 4

⁴³⁵ This is given much consideration in the Decision on Wind Mills of 05.07.12.

⁴³⁶ Avtale om klimameldingen 2008, merknader til St. meld. Nr. 34 (2006-2007) Norsk Klimapolitikk

⁴³⁷ Avtale om klimameldingen page 2

⁴³⁸ Ibid.

This means that two thirds of Norway's reductions will be achieved nationally,⁴³⁹ which also seems to be essential throughout the report, that not only shall measures be taken outside of Norwegian territory. The main measures in Norway to reach these ambitious goals are increased use of renewable energy and carbon capture and storage.

Carbon Capture and Storage has been subject to discussions in Norway after there were made amendments to the progress schedule of the government-backed CCS project on the Mongstad refinery. The ESA stated that they would not object to the state aid to the first phase, the development of the refinery.⁴⁴⁰ The technology center for testing of CO₂ capture technology will start in 2012, but the government's decision to invest in a full scale CCS facility has been delayed, from 2012 to 2016 at the latest.⁴⁴¹ But as the Climate Change Agreement states, the CCS is an important step in reaching the goals of the political parties.⁴⁴²

Possible locations for storage carbon dioxide in Norway are mostly offshore. Already there are some projects regarding carbon dioxide storage in Norway at the Sleipner and the Snøhvit Fields.⁴⁴³ On these fields the carbon dioxide is treated as an integrated part of the petroleum activities and regulated by the petroleum legislation. A CCS project from a land-based industrial plant falls outside the existing petroleum legislation in Norway, and separate legislation is therefore necessary.⁴⁴⁴

The EU CCS Directive of 2009 does not distinguish between storage of carbon dioxide as means to decrease carbon dioxide emissions, or where carbon dioxide storage is an integrated part of petroleum activities. The provisions of the Directive will therefore apply where the storage is an integrated part of the petroleum activities, and it is therefore clear that a harmonization between the CCS Directive and Norwegian petroleum legislation is necessary.⁴⁴⁵ The current Norwegian view is that the Act Concerning Subsea Natural Resources⁴⁴⁶ will cover carbon dioxide storage, and further regulations subordinate this act are currently being developed.⁴⁴⁷

⁴³⁹ Avtale om klimameldingen page 2

⁴⁴⁰ ESA Press Release of 15. March 2012

⁴⁴¹ EER – Recent Norwegian Developments page 304

⁴⁴² Avtale om klimameldingen page 4

⁴⁴³ EER – Norwegian Overview page 309

⁴⁴⁴ Ibid.

⁴⁴⁵ The Directive is included in the EEA Agreement Annex XX on the Environment

⁴⁴⁶ Act on to scientific research and exploration for and exploitation of subsea natural resources other than petroleum resources LOV 1963-06-21 nr 12: Lov om vitenskapelig utforskning og undersøkelse etter og utnyttelse av andre undersjøiske naturforekomster enn petroleumforekomster

⁴⁴⁷ EER – Norwegian Overview, page 309

4.10. The Green Certificates.

On 29 June 2011 Norway and Sweden entered into an agreement concerning a common market for green certificates, which in Norway has become the Green Certificate Act.⁴⁴⁸ The agreement's aim is to contribute to new investments delivering 26.4TWh of electricity production from renewable energy sources in Norway and Sweden jointly by year 2020,⁴⁴⁹ which amounts to approximately 20% of Norway's total production of electricity, or half the amount that Norwegian households use.⁴⁵⁰ Norway and Sweden covers half the cost each no matter what country the energy comes from. The agreement is based on the principle of technology neutrality, and applies to investments in electricity production from renewable energy sources, as the term "renewable energy sources" is defined in the Renewable Energy Directive. Wind, biomass and hydropower are likely to be the most important renewable energy sources in contributing to this energy target.⁴⁵¹ The agreement came into force in Norway from 1 January 2012. This has a natural connection with the EU Renewable Energy Directive, which obliges Norway to increase the share of energy coming from renewable sources by 9,5% from 2005, and the Green Certificates Act was decided to come into force when the implementation of the Directive into the EEA Agreement was succeeded.

The certificates are proof from the government for the fact that it is produced one megawatt hour with renewable energy that meets the requirements according to the law.⁴⁵² The certificates are given to the producers that fulfill the criteria laid out in the law. The green certificate is a market based support system, and producers of renewable electricity achieve one certificate per MWh electricity they produce in 15 years. All producers of electricity have an obligation to buy certificates, and it will then be a demand for certificates, and then they will be able to sell them. Therefore, the producers of renewable electricity will get income from sale of certificates, as well as income from selling electricity from renewable sources. The incomes from certificates are meant to make it profitable to make power stations for renewable electricity production. Consumers also contribute through paying the electricity bill. This has cost some concerns for more expensive electricity.⁴⁵³ The market for electricity certificates is a constructed market, because the demand for such certificates is dependent on a legislative duty to buy these certificates. The Norwegian Green Certificate Act decides who

⁴⁴⁸ The Act on Green Certificates, LOV 2011-06-24 nr 39: Lov om elsertifikater

⁴⁴⁹ Preparatory document for the Green Certificates Act Prop.101 L (2010-2011). Lov om elsertifikater page 6

⁴⁵⁰ EER – Recent Norwegian Developments page 303

⁴⁵¹ Prop.101 L (2010-2011) page 31

⁴⁵² The Green Certificates Act Article 3

⁴⁵³ Prop.101 L (2010-2011) Chapter 1 and 2

will get the certificates, and there will be a price on the certificates so the investors will get provision both from selling certificates and from selling electricity.⁴⁵⁴

Promotion of renewable energy has historically been a task for the individual state, and the EU did, as shown above, not make rules on this field until recently. Still, the cooperation between the Nordic countries (except Iceland) has been important for energy security for these states. More cooperation and coordination on this field can give better utilization of the renewable resources, and this again strengthens the security of supply. Good experiences with Nordic cooperation in the market for electricity, is a good basis for further cooperation strategies.⁴⁵⁵

The holder of a production site is entitled to green certificates if the production site produces electric energy based on renewable sources, is approved by the ministry after a written application and fulfill the duties to report to the Ministry.⁴⁵⁶ Renewable sources according to the Act are water, wind, the sun, the sea, geothermal energy and biomass,⁴⁵⁷ a definition based on the Renewable Energy Directive of 2009 from the EU.⁴⁵⁸

The market for green certificates is a long term obligation, which requires stability into at least 2035⁴⁵⁹ because of the high costs related to investments in renewable energy sources, and these expenses will have to be covered through many years of electricity production. The investors will have to make plans for some years into the future, when calculating prices for electricity and the green certificates as a foundation for their investments.

One of the main basics of the agreement between Norway and Sweden, and the following Green Certificates Act, is technological neutrality. This means that all producers of electricity based on any renewable energy resources can join the certificate market. This principle secures a better utilization of all available renewable sources which are suitable for production of electricity.⁴⁶⁰

The Swedish electricity certificate system was introduced in 2003 as an effort to meet ambiguous targets for the production of electricity from renewable sources.⁴⁶¹ The first

⁴⁵⁴ Prop.101 L (2010-2011) page 5

⁴⁵⁵ Prop. 101 L (2010-2011) page 8

⁴⁵⁶ The Green Certificates Act Chapter 2

⁴⁵⁷ The Green Certificates Act Article 7

⁴⁵⁸ Prop.101 L (2010-2011) page 31

⁴⁵⁹ The Norwegian Green Certificates Act Article 4 states that the certificates can be given for production until the 31 December 2035, while the last annulment of certificates will happen 1 April 2036.

⁴⁶⁰ Prop.101 (2010-2011) L page 7 and 8

Fredrik Wilkens and Christian Johannesson: Energy Law in Sweden: Recent Developments in the Swedish Energy Market. Article in *EER – The European Energy Handbook 2012*, edited by Silke Goldberg and Mark Newbery, (page 393 ff.) (EER – Recent Swedish Developments) page 393

legislative Act from 2003 has been replaced after the agreement in Norway.⁴⁶² It is no doubt that the agreement between the two Scandinavian states is strongly built on the Swedish model, and the experience from the nine years that the system has been used in Sweden. Most of the objectives of the previous legislation are still intact, but new provisions that are to secure joint projects with other countries is now introduced.⁴⁶³ The system has proven to be an effective instrument in increasing the production of renewable energy, and the Swedish Government did recently extend the system, and new quotas will apply from 2013 to 2035.⁴⁶⁴

In the opinion of the Swedish Market, an international market for electricity certificates has many advantages, international trade contributes to a more efficient market, with higher liquidity and increased turnover, which again generates greater effectiveness and an increased pressure on renewable electricity production costs.⁴⁶⁵ The agreement is also aimed at achieving increased renewable energy production in a more cost-efficient manner. This is done by targeting investment in areas where the conditions are most suitable. The Swedish Energy Agency has projected that the agreement between Norway and Sweden will lead to positive conditions for the expansion of wind power in both the countries. The agreement is also estimated to lead to increased hydro-electric power, primarily in Norway, and increased biofuel power, primarily in Sweden.⁴⁶⁶

With these ambitious targets for production of electricity from renewable sources, there will be a need for an increase in the cable capacity between Norway and the EU. This is as mentioned electricity that is extremely hard to store, and there might be need for a big investment in this field. Statnett have made a grid development plan, which necessitates investments up to 40 billion NOK the next 10 years. There is also need for a new cross-border interconnector, and this usually takes 7-10 years. The decision-making process needs to be very efficient to be able to reach the goals for year 2020.⁴⁶⁷

4.11. Some Concluding Remarks and a Look to the Future.

The energy policy is first and foremost a national concern, but the EU/EEA has been seen to have a bigger influence than anticipated. This is especially true for the resource management, politics on concessions and market relations in both the petroleum- and power sectors.⁴⁶⁸

⁴⁶² The Swedish Green Certificates Act, Lag (2011:1200) om elcertifikat

⁴⁶³ EER – Recent Swedish Developments page 393

⁴⁶⁴ Ibid.

⁴⁶⁵ Ibid.

⁴⁶⁶ Ibid.

⁴⁶⁷ EER – Norwegian Overview page 310

⁴⁶⁸ Utenfor og Innenfor page 562

Many changes have been made in the Norwegian energy policies since 1994, and the EEA Agreement has contributed to this development, but not alone. Global economic and political integration has also been a major contributing factors, as well as international liberal economic trends, changing markets and international requirements. The international development has also correlated to changes in the Norwegian oil industry, which again has contributed to developments in the energy policies.⁴⁶⁹

National and international need for energy does now raise new questions, and new problems occur. Lately there have been large public debates concerning transmission powers for electric power and whether to explore and utilize the petroleum resources in the North of Norway.⁴⁷⁰

It can be no doubt that the law on watercourses and energy will continue to develop, though it is not possible to say how. The perspective seems to be first and foremost national, but in a more extensive manner also international concerns are taken into consideration, as shown through this chapter.

Nationally, three major subjects can be mentioned as especially important and actual in the immediate future. Firstly will be interested to see how the Watercourse Act will be practiced in the future, secondly is the practice regarding nature conservation with the various Acts regarding pollution as the central elements and thirdly there is a question on coordination as all the various and conflicting interests that meet in the field of energy law has to be coordinated. The perspective will also become more international than it has been until now, and on an international level the main topics can be said to be natural conservation, pollution and water quality.⁴⁷¹

EU is the biggest market for Norwegian energy, and especially gas, over 95% of all gas produced on the Norwegian Continental Shelf is sold on the European market. The development of Union policies and legislation regarding energy is therefore of major importance to Norway, regardless of the EEA Agreement and its future. The need of gas in the Member States is anticipated to grow in the future, also because of the provisions on energy security, and since Norway produces more gas, EU's influence on the Norwegian energy field grows since the necessary infrastructure for export/import leads to structural dependence.⁴⁷²

⁴⁶⁹ Utenfor og Innenfor page 563

⁴⁷⁰ Backer page 22

⁴⁷¹ Falkanger and Haagensen page 62

⁴⁷² Utenfor og Innenfor page 548

On the field of energy, Norway has because of its market position a stronger influence than on many other fields that are relevant to the EEA Agreement. The dialogue with EU on this field has characters of cooperation, negotiations and conflicts.⁴⁷³ Norway has adopted all energy related acts from the EU, and there are not many exceptions, if any. Still, Norway is not part of the legislative process as the Member States of the Union, and this is a bigger problem on this field than on many others, because the EU Acts on this field touches Norway in a more direct way, on a more fundamental level regarding national interests.⁴⁷⁴ A major problem is also that the interest of the EU as importer of energy, and Norway as an exporter, can be colliding. EU focuses more on safety of energy supply, from renewable and sustainable sources. Norway is a big exporter of renewable energy, but the Union wants to bring the prices down, while Norway profits from higher prices.⁴⁷⁵

Though the arguments presented above seem to be the opinion of the majority, it is not a unanimous view, and some experts still thinks that Norway would do better outside of the EEA Agreement, also on the field of energy. For example is the Norwegian government prepared to lose money on implantation of some of the EU Acts relating to gas, and there might be a disadvantage that Norway competes with independent states like Russia, Algeria and Liberia, which do not have the same restrictions from EU as Norway does. Norway is the only state that cannot draw advantage from big scale cooperation between production, transportation and sale of oil and gas.⁴⁷⁶ For example did Norway claim that the transport of Norwegian gas through pipelines were not part of the production system, while the EU did not agree though no country has invested as much money and trust in a long term committed gas exportation to the EU.⁴⁷⁷

⁴⁷³ Utenfor og Innenfor page 563

⁴⁷⁴ Ibid.

⁴⁷⁵ Ibid.

⁴⁷⁶ Utenfor og Innenfor page 564

⁴⁷⁷ Ibid.

5.Iceland.



The Geysir Area, Iceland.

5.1. Iceland and EU – Also Outside and Inside.

5.1.1. Iceland and the European Union.

There are, as stated previously, many similarities between Norway and Iceland, and the Countries' connection and cooperation with the European Union. Though Liechtenstein is also connected to the Union through the EEA Agreement, this country has some special agreements with Switzerland as well, and does therefore have some other aims to pursue.⁴⁷⁸ Also, Liechtenstein is exempt from applying the Renewable Energy Directive because of special conditions, as stated in the incorporation document from the EEA Joint Committee, referred to above.

Still, there are also major differences between Norway and Iceland. Some of these differences will be addressed in this chapter, though it is important to remember that many of the factual and legal questions and answers in Chapter 4 on Norway also have validity for Iceland as well. Some of the main differences can be said to have become more visible the recent years, and one of the biggest differences now is the fact that Iceland are under accession negotiations with the Union, something that under the current political climate in Norway is not a relevant topic.

There are also considerable differences when it comes to available written, legal sources. The field of EU is changing rapidly, and sources are therefore quickly outdated. But during the accession negotiations there have been produced several documents of legal validity, both from Icelandic officials (in Icelandic, but also to a large extent in English) and from the various institutions of the Union. Iceland is also mentioned several times in the Norwegian report "Utenfor og Innenfor", and though this is a Norwegian report, its statements on Iceland is largely based on Icelandic sources and it also claims to be impartial.

The origin of the EEA Agreement and its function has been explained above. Still, there will be made some comments on the cooperation from Iceland's point of view. At the end of the 1990's, Iceland initiated a reevaluation of the main part of the EEA Agreement, since the Icelandic government wanted to update this in line with legislative acts from the EU and make more room for the EFTA States in the Commission's committees and to the Council and the Parliament, in light of the gained influence of these institutions.⁴⁷⁹ Iceland also wanted to

⁴⁷⁸ Utenfor og Innenfor page 304

⁴⁷⁹ Utenfor og Innnefor page 306

reduce the taxes on export of fish products. The initiation gained little support from Norway, and in the end nothing came of it.⁴⁸⁰

There have been several debates on the application to join the European Union in Iceland. Many of the topics of the debates have been similar as in Norway, national sovereignty and independence, but fishery policies and the Euro have been especially central in the Icelandic debate.⁴⁸¹ While Norway two times has applied to join the Union, Iceland applied for the first time July 2009 after the local financial collapse after the global financial crisis in 2008.⁴⁸²

The negotiations for Icelandic membership in the EU started in 2011, and are due to be finished in 2013. The application to join the Union was handed in after fierce discussions in the parliament (the Alþingi) and in the society as a whole.⁴⁸³ Regarding the bold letters in Icelandic newspaper and demonstrations on Austurvöllur in front of the Alþingi, the discussions are far from over. But, Iceland has been an active part of the European integration process since 1994, through the EEA Agreement, and this Agreement became Iceland's main instrument in international relations. Generally the experience in Iceland is that the Agreement has mostly functioned quite well, at least until the financial crisis struck in 2008. To prevent the crisis from getting any worse, Iceland introduced currency controls, which actually in principle violated the EEA Agreement.⁴⁸⁴

The Nordic countries, the Nordic five (Denmark, Sweden, Finland, Norway and Iceland) has chosen somewhat different paths on the connection to EU. These countries have been among the European States that have showed strongest reluctance towards the Union and the integration process, but still all of them have shown interests in and kept a close relationship with Europe, in various forms. The states are considered culturally and politically very similar in many ways. There are for example a number of legislative acts which have been made in cooperation between two or more of these States, and this is possible because of the many similarities, but one must also be aware of the differences. Iceland traditionally has particularly strong ties with the other countries, especially Denmark⁴⁸⁵

Denmark immediately left EFTA to join the Union in 1973, and Sweden and Finland joined the Union in 1995. Finland can be said to have tightened its ties to the Union stronger than the other Nordic States, for example by implementing the Euro. Denmark and Sweden have shown a bigger reluctance towards the Euro, and this might be a result of the traditional

⁴⁸⁰ Utenfor og Innnefor page 306

⁴⁸¹ Utenfor og Innnefor page 305

⁴⁸² Bergmann page 5

⁴⁸³ Utenfor og Innnefor page 305

⁴⁸⁴ Bergmann page 5

⁴⁸⁵ Bergmann page 11

Scandinavian view on sovereignty.⁴⁸⁶ Another part of the sovereignty-issue is of course that the Member States have given a part of their sovereignty to the institutions of the Union, but they also have the opportunity to influence the policies, an opportunity the EFTA States do not have.⁴⁸⁷ When Sweden and Finland joined the EU, Norway rejected accession for the second time. The “No” in Norway put a stop to the debate on whether Iceland should join EU at the time.⁴⁸⁸ Another thing that divides the Nordic five is the bonds with NATO. Iceland, Norway and Denmark are all funding members, while Sweden and Finland have chosen to stay neutral and are therefore not part of the organization.⁴⁸⁹

On a few occasions Iceland has been able to negotiate opt-outs and exceptions from the European Union’s legislation, for example regarding animal health and food production. Iceland has also negotiated special adaptations regarding implementation of the Renewable Energy Directive. As the most sparsely populated country in Europe, Iceland has also gotten some exceptions on rules regarding house heating, the electricity directive and rules on waste disposal in rural areas.⁴⁹⁰

There is no politic consensus on how Iceland is linked to the EU through various agreements. The importance of maintaining sovereignty becomes particularly visible in the ongoing debate on what the EEA Agreement really means and on how deeply involved Iceland is in European projects. The arguments vary with what political party that holds government. The No-side maintains that Iceland will be overwhelmed by new rules if the accession negotiations are successful, while the Yes-side claims that most areas are covered already. In 2003 the current foreign minister in Iceland (Halldór Ásgrímsson) stated that Iceland had adopted over 80 per cent of the whole EU legislation. Two years later, the new foreign minister (David Oddsson) said that only 6, 5 percent of the EU legislation had already been adopted in Iceland. This gap is not possible to explain by changes in the EU or EEA in the two years that passed, so the explanation must be the very different views the two foreign ministers had on the EU/EEA, the first one was very positive while the latter was forcefully against.⁴⁹¹

Though the formalities are the same when the Icelandic Parliament are passing Icelandic legal acts or acts that stems from the Union, European law is rarely discussed. The EEA Agreement has been disputed by a few occasions, and it has resulted in a more general

⁴⁸⁶ Bergmann page 11

⁴⁸⁷ Bergmann page 14

⁴⁸⁸ Bergmann page 11

⁴⁸⁹ Bergmann page 6

⁴⁹⁰ Bergmann page 14

⁴⁹¹ Bergmann page 12

political debate, for example over the possibilities of the veto right. Directives on electricity have been discussed, especially electricity providers.⁴⁹²

One way of measuring involvement from Iceland in the European Union is by mapping Iceland's participation through the EEA and Schengen according to the 35 chapters the EU uses during membership negotiations.⁴⁹³ In areas that are covered there will not be necessary with new implementation, or very small ones. Areas that are mostly covered already have extensive elements on EU law and though there is lot of implementation left, these areas are on the way. The last category is fields that is not covered by the EEA Agreement or other agreements with the Union, or areas where Iceland has been granted exceptions.

Covered	Mostly covered	Not covered
1. Free movement of goods	12. Food safety, veterinary and phytosanitary policy	11. Agriculture and rural development
2. Freedom of movement for workers	14. Transport policy	13. Fisheries
3. Rights of establishment and freedom to provide services	15. Energy	16. Taxation
4. Free movement of capital	18. Statistics.	17. Economic and monetary policy
5. Public procurement	19. Social policy and employment	22. Regional policy and coordination of structural instruments
6. Company law	20. Enterprise and industrial policy	29. Customs union
7. Intellectual property law	21. Trans-European networks	
8. Competition policy	23. Judiciary and fundamental rights	30. External relations
9. Financial services	24. Justice, freedom and security	31. Foreign, security and defense policy
10. Information society and media	27. Environment	32. Financial control
25. Science and research	28. Consumer and health protection	33. Financial and budgetary provisions
26. Education and culture		34. Institutions
		35. Other issues

As can be seen from this, Iceland already has involvement in 24 of 33 chapters covering the EU's legal base (the last two chapters are more general and do not cover a particular field).⁴⁹⁴ Areas that are not covered in any extent will be the hardest to agree upon, since there is no ground to build on, as for the other fields. The two areas of particular interest in this thesis are number 15 on Energy and number 27 on the Environment, both mostly covered.

⁴⁹² Bergmann page 13

⁴⁹³ Table 1 in Bergmann page 13, see also Bergmann page 20-22

⁴⁹⁴ Bergmann page 13

The most debated topics in Iceland regarding the EU/EEA have, besides the sovereignty question, been adaption of the Euro, fisheries and agriculture.⁴⁹⁵

5.1.2. Iceland's Application for EU Membership.

In June 2010, the European Council decided to start negotiations of accession with Icelandic authorities. The negotiations were officially opened in July 2010, and the screening process started in November 2010. Iceland has, as mentioned previously, been a part of the EEA Agreement from the beginning and it has been associated with the developments of the Schengen Agreements since 1996,⁴⁹⁶ and has applied the provisions since 2001.⁴⁹⁷ The Commission finds that the implementation of EEA obligations remains satisfactory, though there are some shortfalls.⁴⁹⁸ The screening is the first part of accession negotiations, and is an assessment by the Commission of Iceland's compliance with the relevant rules.⁴⁹⁹

According to the Commission, Icelandic institutions are stable, and the rule of law is guaranteed, along with human rights and protection of minorities.⁵⁰⁰

The Commission states that Iceland partly applies the European Union's rules on the field of energy through the EEA Agreement, and that lately there has been some progress in the area of security of supply. The steering group in charge of developing a comprehensive energy policy for Iceland derived a final report in January 2011 which focuses on energy strategies for the future.⁵⁰¹

Limited progress can be seen on the field of the internal energy market, a law has not yet been adopted regarding transparency of gas and electricity prices, but in December 2010 a law amending the Electricity Act was adopting, postponing the separation of competition and franchise operations.⁵⁰²

The Commission states in its report of October 2011 that little progress can be seen in the field of renewable energy, and that the National Renewable Energy Action Plan is still being

⁴⁹⁵ Bergmann page 19

⁴⁹⁶ The Schengen Agreement is a system of two international treaties signed in Schengen. The "Agreement between the Governments of the Benelux Economic Union, the Federal Republic of Germany and the French Republic on the gradual abolition of checks at their common borders" (*the Schengen Agreement of 1985*) and the "Convention implementing the Schengen Agreement" (*the Schengen Convention of 1990*)

⁴⁹⁷ Commission Staff Working Paper – Iceland 2011 Progress Report (Accompanying the document «Communication from the Commission to the European Parliament and the Council), Brussels 12.10.2011 (Commission Working Paper 2011), page 3

⁴⁹⁸ Commission Working Paper 2011 page 4

⁴⁹⁹ Ibid.

⁵⁰⁰ Commission Working Paper 2011 page 5

⁵⁰¹ Commission Working Paper 2011 page 27

⁵⁰² Ibid.

drafted under the National Energy Authority.⁵⁰³ Iceland is not in line with the 2009 Directive of Renewable Energy, though it has a share of 67% of renewable energy in final energy consumption.⁵⁰⁴ After the Commission's report was delivered, the goals for Iceland have been set through the implementation of the Renewable Energy Directive to the EEA Agreement, and these goals should be highly reachable for Iceland. Still, there could be some problems for Iceland regarding the transport sector, which is the most challenging from a renewable energy perspective. On the other hand, some process can be seen in the sector for energy efficiency.⁵⁰⁵ There have been no developments concerning nuclear energy, nuclear safety and radiation protection, as Iceland has no nuclear plants.⁵⁰⁶

As a conclusion, the Commission states that Iceland is highly aligned with the *acquis* in the field of energy, but that there is still some way to go when it comes to alignment in the areas of oil stocks, the independence of the regulatory authority and energy efficiency remains moderately advanced.⁵⁰⁷

The most comprehensive document on Iceland's relationship to the EU is the "Skýrsla utanríkisráðherra um Ísland á innri markaði" (Document of the Foreign Minister on Iceland and the Inner market).⁵⁰⁸ This official Document describes how the EEA Agreement has helped the Icelandic economy and society to become in line with the EU rules. The Document seem to be quite positive to the Union's influence on Iceland, and especially on the economy. Still, this Document is written before the financial crisis, and before Iceland applied for membership of the Union. Many of the views in the Document are still valid, but those need to be read bearing in mind that the report is written before Iceland applied for membership to the EU.⁵⁰⁹

As Norway, Iceland has been loyal to the EEA Agreement, and has had an efficient implementation of the rules under the EEA Agreement and has followed these rules in an efficient manner. Iceland has never used the veto power to deny implementation of new legislative acts from the Union, and there seems to be a high threshold to do so.⁵¹⁰ Iceland has a few derogations from the implemented rules, grounded in the small population and economy and special geographical conditions. Iceland has also had the opportunity to make some

⁵⁰³ Commission Working Paper 2011 page 27

⁵⁰⁴ Ibid.

⁵⁰⁵ Commission Working Paper 2011 page 27

⁵⁰⁶ Commission Working Paper 2011 page 28

⁵⁰⁷ Ibid.

⁵⁰⁸ Skýrsla utanríkisráðherra um Ísland á innri markaði Evrópu (Lögð fyrir Alþingi á 135. Löggjafarþingi 2007-2008 (Skýrsla utanríkisráðherra)

⁵⁰⁹ Utenfor og Innenfor page 305

⁵¹⁰ Ibid.

special adjustments, especially related to renewable energy, electricity, fisheries and airport security.⁵¹¹

One of the main issues in Iceland's relations to the EU is the dispute on Icesave, which started in 2008 and is still going on. Icesave was an online bank owned by the Icelandic Bank "Landsbanki", and operated in Britain and the Netherlands. The main question is who shall bear the losses of the individuals which had savings in the bank when the bank became bankrupt and Icelandic authorities took over the "Landsbanki". Britain and Netherlands argues that according to the EEA rules, Icelandic authorities are obliged to guarantee for the savings in the bank, and that they discriminated when covering the Icelandic individuals' losses, but not the foreign. There have been several attempts made to solve this dispute, but this far Iceland has rejected all the proposals. Formally there is not a connection between a solution to the Icesave-crisis and the accession of Iceland to the Union, but it is possible to imagine that Britain and Netherlands will be unable to accept Icelandic EU-membership if there is not a solution found.⁵¹²

The ESA started investigating the Icesave-dispute in 2009, and in June 2011 they gave a reasoned opinion where it was stated that Iceland had violated the EEA Agreement. Iceland replied in October 2011, but the parties did not come closer to a solution. Late in 2011 ESA decided to make a case against Iceland for the EFTA Court. The Icesave case is very sensitive among the various political parties, and it remains a question whether, and how, the case for the EFTA Court will affect the EEA Agreement and the legitimacy and trust in institutions of the EEA in Iceland.⁵¹³

The Institutions of the EU seem to be satisfied with the collaboration with Iceland, and the Commission did in 2010 consider the fields of energy and climate as particularly well-functioning. The Commission wishes to strengthen the ties with Iceland in respect the policies of the North, fisheries, renewable energy and climate change.⁵¹⁴ The Union is not happy with the situation of mackerel fisheries, and there were disputes regarding this in 2011 between EU and Iceland, where Norway was mainly supporting the Union. The EU does also comment that Iceland should address the financial obligations that ESA has commented in the Icesave-case.⁵¹⁵

⁵¹¹ Utenfor og Innenfor page 306

⁵¹² Ibid.

⁵¹³ Ibid.

⁵¹⁴ Utenfor og Innnefor page 306 with further references

⁵¹⁵ Utenfor og Innenfor page 306

5.2. Energy Policy and Law in Iceland Today – Iceland and the EU.

Energy balance in Iceland includes geothermal energy, hydro energy, oil and coal.⁵¹⁶ Currently, there is no Constitutional right for a healthy environment in the Icelandic Constitution,⁵¹⁷ but this might change in the near future. There is currently a proposal for a new Constitution which has not been finally approved.

Article 33 – Nature and Environment of Iceland
Iceland's nature constitutes the basis for the life in the country. All shall respect and protect it.
All shall by law be accorded the right to a healthy environment, fresh water, unpolluted air and unspoiled nature. This means that the diversity of life and land must be maintained and nature's objects of value, unhabitated areas, vegetation and soil shall enjoy protection. Earlier damages shall be repaired as possible.
The use of natural resources shall be such that their depletion will be minimised in the long term and that the right of nature and coming generations be respected.
The right of the public to travel in the country for lawful purposes with respect for nature and the environment shall be ensured by law.⁵¹⁸

This proposal resembles a lot to the Norwegian Constitution, with general statements and no precise obligations for the Government. The future will show if this proposal gets ratified.

When it comes to the area for free movement of goods, also energy, Iceland is bound by the legislation from EU. The national legislation must be in conformity with the legislative acts from the Union, it is the opinion that Iceland has reached a high level of alignment and it applies the *acquis* in this field, in line with the EEA Agreement, and implements a substantial part of the rules on energy.⁵¹⁹

In August 2009 the Icelandic Ministry of Industry and Energy established a committee supposed to draft and propose a new complete energy policy for Iceland,⁵²⁰ and the draft was introduced in January 2011. The main objective of this draft is to secure that energy production and consumption in Iceland is sustainable and that its management should benefit the public and the society as a whole.⁵²¹

⁵¹⁶ On 22 October 2009 the Icelandic Government submitted its answers to the questionnaire from the European commission as part of Iceland's application process. The questions on energy is answered extensively (Icelandic Energy Answers) page 6

⁵¹⁷ Constitution of Iceland, *Lög No. 33 17 June 1944: Stjórnarskrá lýðveldisins Íslands*

⁵¹⁸ English version of the new proposal for an Icelandic Constitution is available at:
http://stjornlagarad.is/other_files/stjornlagarad/Frumvarp-enska.pdf

⁵¹⁹ Screening report of Iceland, Chapter 15 – Energy page 11

⁵²⁰ Antoine Lochet, Gunnar Örn Petersen and Baldvin Björn Haraldsson: Recent Developments in the Icelandic Energy Market . Article in *EER – The European Energy Handbook 2012*, edited by Silke Goldberg and Mark Newbery, (page 187 ff.) (EER – Recent Icelandic Developments) page 187

⁵²¹ EER – Recent Icelandic Developments page 188

Another essential instrument for regulation of the energy sector is the master plan for hydro and geothermal energy resources.⁵²² This plan was started in 1997, and is divided into two phases. In May 2011 the Parliament passed a bill to give the master plan legal force.⁵²³ The main purpose of this Act is to ensure that utilization of territories that might have energy resources is based on an overall assessment of interests and long term objectives where the preservation of nature and cultural heritage, economical aspects and other public interests are secured.⁵²⁴

Another Act worth mentioning in this context is the Act in Investment by Non-residents in Business Enterprises, which prohibits residents outside of the EEA Area from holding energy exploitation rights for hydro and geothermal sources, unless especially authorized by international treaties.⁵²⁵ This Act has been debated in Iceland, and there is considerable political pressure for a change.⁵²⁶

Included in the Screening Report Chapter 15 Energy⁵²⁷ is there summary from information provided for by Iceland and the discussions at the screening meeting held on 20 June 2011. Iceland holds that it can accept the rules on the field of energy as of 1st June 2011, and that the country will not face any particular difficulties in implementing it by accession.⁵²⁸ However, Iceland has indicated that it will probably have to negotiate for some special derogation that already has been negotiated at the basis of the EEA Agreement. This is especially relevant in the areas of registration for imports of crude oil, regarding energy performance of buildings, the internal electricity market and the internal market for natural gas.⁵²⁹

Iceland has also indicated that it is in a very unique position when it comes to energy matters, since they have an extremely high use of renewable energy (also reflected in the goals set for Iceland when implementing the Renewable Energy Directive as a part of the EEA Agreement), and that Iceland has a low declining use of fossil fuels. It is argued that these special considerations regarding energy matters in Iceland should be devoted to the way

⁵²² Information on this document can be found in English at <http://www.rammaaetlun.is/english>

⁵²³ Act on Protection and Development of Energy Resources, Lög nr. 48 16. maí 2011: Lög um verndar- og orkynýtingaráætlun

⁵²⁴ Act on Protection and Development of Energy Resources Article 1.

⁵²⁵ Act on Investment by Non-residents in Business Enterprises, *Lög nr. 34 25 March 1991: Lög um fjárfestingu erlendra aðila í atvinnurekstri*. Article 4 paragraph 2

⁵²⁶ EER – Recent Icelandic Developments page 188

⁵²⁷ Screening report of Iceland, Chapter 15 – Energy, of 25 October 2011 by the European Union (Date of screening meetings: Explanatory meeting: 12 May 2011, Bilateral meeting: 20 June 2011) (Screening report of Iceland, Chapter 15 – Energy) page 1

⁵²⁸ Screening report of Iceland, Chapter 15 – Energy page 2

⁵²⁹ Screening report of Iceland, Chapter 15 – Energy page 2-3

certain elements of the rules would need to be implemented. Iceland has therefore requested some special attention, maybe especially regarding obligations on Member States to have minimum stocks of crude oil and/or petroleum products. The level of these stocks in Iceland amounts to about 43 days of average daily net imports (which is about half of the requirement, 90 days, as seen under subchapter 2.1. on Energy Law in the European Union), but still Iceland's stated policy in this field is to reduce, or even eliminate use of fossil fuels.⁵³⁰

After the oil crisis in 1973-74 there were made efforts in Iceland to promote the use of domestic energy sources to replace oil, and this was especially done in the field for space heating. Oil has now almost disappeared as a source for heating, and renewable energy has replaced oil in sector where this is feasible and economically viable. The heating sector is today mainly dependent on the use of geothermal energy.⁵³¹ Nowhere else in the world does energy from geothermal sources play a bigger role in the energy supply of a nation. Geothermal energy is used for house heating, electricity generation, industrial production, horticulture production and fish farming. Almost 90% of the total house heating requirements are met with geothermal energy, while 9% use electricity and only 1% are dependent on oil.⁵³²

Iceland holds that membership to the European Union will not affect the ownership of natural resources, or the utilization of the energy sources.⁵³³ This was, as mentioned, a popular opinion in Norway as well regarding the EEA Agreement. On the other hand, it is believed that Iceland has made the relevant changes according to the "Hjemfallsrett"-case, and that the system of ownership therefore is in line with the EU rules. The Icelandic rules were changed in 2008⁵³⁴ so that natural resources and their ownership were separated from the production of energy. Now, all resources that are owned by the authorities (the State, municipalities or companies owned by either of these) are to be in public ownership in the future.⁵³⁵

Most of the changes that need to be made in the field of energy if Iceland is to become a Member State of the European Union can be made through changing already existing law. However, the administrative capacity in Iceland to implement the acts might not be sufficient.⁵³⁶ There are some areas that need special attention, for example the timely build-up

⁵³⁰ Screening report of Iceland, Chapter 15 – Energy page 3

⁵³¹ Icelandic Energy Answers page 7

⁵³² Icelandic Energy Answers page 7

⁵³³ Screening report of Iceland, Chapter 15 – Energy page 2

⁵³⁴ Act on Changes in some Acts Regarding the Environment and Energy Utilization, Lög nr. 58 7 June 2008: Lög um breytingu á nokkrum lögum á auðlinda- og orkusviði.

⁵³⁵ Skýrsla strafsþóps um lagamramma orkumála – til iðnaðarráðherra, Oktober 2011 (Official document in Icelandic), page 7

⁵³⁶ Screening report of Iceland, Chapter 15 – Energy page 11

of oil stocks and regarding the development of a programme to ensure alignment with the rules regarding nuclear safety.⁵³⁷ If Iceland is to become a member of the EU, the derogations made under the EEA Agreement will have to be renegotiated, and the justifications, for example for exempting Iceland from applying these elements, must be carefully considered.⁵³⁸

In May 2011 there was decided on a new Act on Conservation and Energy Utilization.⁵³⁹ This act came after the 2nd phase of the Master Plan for Hydro and Geothermal Energy Resources were finalized. With this Act, sustainable development has been given a permanent standard for decision-making for protecting the environment and utilization of energy resources.⁵⁴⁰

In September 2011 there was given a report on Strengthening of the green economy in Iceland. The report states in its introduction a future vision: "...that Iceland can become an international leader as a green economy, focusing on clean natural environment, sustainable use of energy and education towards sustainability".⁵⁴¹ After this, the Committee on the Strengthening of the Green Economy proposes 48 actions to strengthen the green economy.⁵⁴² Energy is mentioned in six of the listed actions, number 13 (energy in public buildings), 17 (eco-friendly use of energy on public owned energy companies' policies), 38 (evaluation of the energy usage in Icelandic homes and businesses), 43 (energy savings in transportation), 44 (renewable energy in transportation) and 49 (support to projects aiming at sustainable energy use in Icelandic agriculture and/or energy production).

A green economy is considered an economy that increases the quality of life while environmental risks and the disruptions of ecosystems are minimized,⁵⁴³ not too far from the familiar definition of sustainable development. This definition also includes a more efficient use of energy and other resources, and the goal is an increased value creation which burdens the nature less.⁵⁴⁴

⁵³⁷ Screening report of Iceland, Chapter 15 – Energy page 11

⁵³⁸ Ibid.

⁵³⁹ Act on Protection and Development of Energy Resources

⁵⁴⁰ The Strengthening of the Green Economy in Iceland, Sustainable prosperity – a model society, Report of the Parliamentary Committee on the Strengthening of the Green Economy in Iceland, September 2011, (The Strengthening of a Green Economy in Iceland) page 53

⁵⁴¹ The strengthening of the Green Economy in Iceland page 5

⁵⁴² The strengthening of the Green Economy in Iceland, pages 6-11

⁵⁴³ The strengthening of the Green Economy in Iceland page 14

⁵⁴⁴ Ibid.

5.3. HS Orka and Magma Energy.

There is a case that seems very important in an energy perspective in Iceland. It has proven difficult to find accurate information on this case, especially in English and a lot of the available information is from newspapers.

Some years ago Reykjavík Energy had to sell its shares in HS Orka because of competition laws (or at least that is what they claimed), and Magma Energy⁵⁴⁵ won against another unknown bidder.⁵⁴⁶ Magma Energy signed a 65 year contract with the town of Rekjanesbær to conduct geothermal exploration in the area in 2010, with renewable for another 65 years.⁵⁴⁷ The Canadian company had established a Swedish company, sometimes referred to as Magma Energy Sweden AB,⁵⁴⁸ to get around the Icelandic law preventing non-Europeans from buying up Icelandic companies. Some newspaper articles claim that the whole thing “absolutely stinks of corruption”.⁵⁴⁹

In 2010 Magma Energy got another 52% stake in HS Orka in 2010, after they bought 46% in 2009, and secured control of the company.⁵⁵⁰ This caused national outrage in Iceland, and throughout the articles from the newspapers in Iceland is the artist Björk is very present. There was even made a petition where 47 129 have signed.⁵⁵¹ This is quite a remarkable number for a nation of 320 000! Even Eva Joly joined the discussion, and opposed the sale of HS Orka to Magma Energy.⁵⁵²

A request was sent to the Ombudsman of the Icelandic Parliament on 13 July 2010, and he was asked to investigate the process of the sale of HS Orka from Reykjavík Energy and Geysir Green Energy to Magma Energy Sweden AB.⁵⁵³ In the request it is on page one pointed out the administration in Iceland not utilized the various derogating provisions in the EEA Agreement, that deals with the uniqueness of the energy sector.

The main arguments against selling to Magma Energy seem to be an unwillingness to privatize the energy sector, and that the inhabitants of Iceland are concerned what will happen with the natural resources if the utilization of them is set out to external, private parties. It is noteworthy that Iceland chose such a different path than the Norwegian Government did after

⁵⁴⁵ Referred to as either Swedish or Canadian in the articles.

⁵⁴⁶ <http://icelandweatherreport.com/2010/10/on-keeping-icelands-energy-resources-under-icelandic-control.html>

⁵⁴⁷ <http://grapevine.is/Home/ReadArticle/Municipality-Sells-Its-Shares-In-Alterra>

⁵⁴⁸ Though this is a company without a mailbox at the stated address,

<http://icelandweatherreport.com/2010/10/on-keeping-icelands-energy-resources-under-icelandic-control.html>

⁵⁴⁹ Ibid.

⁵⁵⁰ <http://grapevine.is/Features/ReadArticle/Magma-Energy-vs-Iceland>

⁵⁵¹ <http://orkuadlindir.is/>

⁵⁵² <http://icelandweatherreport.com/2010/10/on-keeping-icelands-energy-resources-under-icelandic-control.html>

⁵⁵³ <http://www.orkuadlindir.is/docs/Request-english.pdf> . It is nowhere stated who sent the request.

the Hjemfallsrett EFTA Case. The Norwegian Government answered with stricter rules on private ownership, and in many ways closed the door for private investors in utilization of watercourses, while Iceland goes the opposite way. Finding explanations for this will only be hypothetical but Norway has always had a strong policy for public ownership, and is economically in a totally different place than Iceland after the financial crisis.

The Icelandic Government froze the HS Orka sale and started an investigation of Magma Energy,⁵⁵⁴ as wished for in the request to the Ombudsman. The latest news seems to be that Reykjanæsbær sold its shares in the Alterra Power, formerly the Magma Energy, to a private investment company.

5.4. Oil and Gas.

There is a single natural gas pipeline which has been in use in Iceland since 2008, and it delivers methane produced in the Reykjavík municipal landfill, to a filling station for cars ten kilometers away.⁵⁵⁵ Some state that there are two pipelines, since there is also delivery to an industrial plant from the same site.⁵⁵⁶ Part of the pipeline is under the ocean, and it has a capacity for 5 million Nm³ per year, though only a small part of this capacity is currently being used, as it transported 567,000 Nm³ in 2010. There are no plans for expansion of natural gas usage in Iceland.⁵⁵⁷

The EU rules concerning common rules for the internal market in natural gas is incorporated into the EEA Agreement, but has still not been implemented in Iceland.⁵⁵⁸ Iceland does not have any known resources for crude oil, oil shale, bitumen or natural gas, though there are some probabilities for oil and/or gas at the Icelandic territory.⁵⁵⁹ Iceland does not have any oil refineries, and therefore there is no import of crude oil. All secondary oil products are imported, but there is a limited consumption of gas in Iceland, although it has been on the rise the latter years. About 95% of the imported oil is used in transportation and fisheries.⁵⁶⁰

Iceland has not started exploitation for oil, but this might be changed in the future. On 22 January 2009 the NEA announced licensing rounds for hydrocarbon exploration and production licenses on the Continental shelf between Iceland and Jan Mayen (the Norwegian

⁵⁵⁴ <http://grapevine.is/Features/ReadArticle/Magma-Energy-vs-Iceland>

⁵⁵⁵ NEA 2011 National Report Page 17

⁵⁵⁶ Icelandic Energy Answers page 6

⁵⁵⁷ National Energy Authority (Orkustofnun): Report on Regulation and the Electricity Market 2011, Iceland (NEA 2011 National Report) page 17

⁵⁵⁸ EER – Recent Icelandic Developments page 191

⁵⁵⁹ Icelandic Energy Answers page 6

⁵⁶⁰ Ibid.

islands), in accordance with Icelandic laws and regulations transposing relevant EU rules, and international agreements between Iceland and Norway.⁵⁶¹ The Second licensing round for exploitation for the Dragon/Dreki Area (see picture) in the North Atlantic Sea started 3 October 2011 and the deadline was 2 April 2012.



The Picture shows the location of the Dreki area. Picture from the Arctic Portal.⁵⁶²

Three offers were submitted on the 03 April 2012, and Icelanders were part of them all, and Icelanders are happy that three offers were submitted under the financial crisis. The national Energy Authority will answer the bidders before end of November this year.⁵⁶³

5.5. Electricity.

According to figures from 2009, Iceland has a total of 2579 MW in installed capacity at its power stations, of which 73% is hydroelectric, and 22, 3% stems from geothermal sources. Actual capacity was set to 16,835 GWh.⁵⁶⁴ The aluminum industry uses 74% percent of the electricity produced in Iceland, ferrosilicon industries uses 5% and other industries consume 4%. Residential consumption is 5%, and Iceland has managed to reduce the use of oil in space heating from over 50% in 1970 to a much more negligible quantity today.⁵⁶⁵ Due to low population and many energy demanding industries, the electricity consumption per capita is

⁵⁶¹ Screening Report of Iceland, Chapter 15 – Energy page 6

⁵⁶² <http://arcticportal.org/news/23-energy-news/638-three-offers-for-the-dreki-area>

⁵⁶³ Ibid.

⁵⁶⁴ Screening report of Iceland, Chapter 15 – Energy page 3

⁵⁶⁵ Ibid.

the highest in the world in Iceland, but the system is relatively small in relative terms.⁵⁶⁶ There are three main producers and distributors of electricity in Iceland, the companies Landsvirkjun, Orkuveita Reykjavíkur and HS Energy (they provide respectively 75%, 15% and 9% of all energy in Iceland). In 2010 the total electricity production was 17,053GWh.⁵⁶⁷

The main legislative Act regarding electricity is the Electricity Act.⁵⁶⁸ This Act implemented two EU Directives concerning common rules for the internal markets of electricity,⁵⁶⁹ but also has a broader scope, since it has rules on generation, transmission, distribution and sale of electricity.⁵⁷⁰ Legislation regulating construction planning and environmental impact can also apply then constructing an electricity installation.⁵⁷¹ The Electricity Act was implemented in stages, but has now been fully implemented,⁵⁷² and a few regulations have been issued on the basis of the Electricity Act.⁵⁷³

The Electricity Act defines the structure of the electricity market, and provides the rights and obligations for the main market players. The market is divided into four sectors by the Act, generation, transmission, distribution and supply/sale, as can be seen from the individual Chapters the Act is divided into. This is to be in line with the Second Electricity Directive, which requires ownership unbundling.⁵⁷⁴

Electricity generation is subject to a special license issued by the ministry, a generation license.⁵⁷⁵ There is also need for a license to construct power plants, while no license is required for construction and operation of power plants with lower capacity than 1MW, if the power generated by the plant is not supplied to the distribution system or transmission system.⁵⁷⁶ The license to power development expires ten years after its date of issue, if the licensee has not begun development, but after fifteen years if the power station has not been taken into operation.⁵⁷⁷ All concession operations based on the Generation License must confirm the urban planning requirements in force.

⁵⁶⁶ Icelandic Energy Answers page 6

⁵⁶⁷ EER – Recent Icelandic Developments page 187

⁵⁶⁸ The Electricity Act, Lög No. 65 27 March 2003: Raforkulög.

⁵⁶⁹ First and Second Electricity Directives of the EU

⁵⁷⁰ National Report on regulation and the electricity market 2011 Iceland by The National Energy Authority (Orkustofnun) (NEA 2011 National Report), page 3

⁵⁷¹ EER – Icelandic Overview page 189 with further references

⁵⁷² NEA 2011 National Report page 3

⁵⁷³ EER – Icelandic Overview page 189

⁵⁷⁴ Skýrsla utanríkisráðherra um Ísland á innri markaði Evrópu (Lögð fyrir Alþingi á 135. Löggjafarþingi 2007-2008 (Skýrsla utanríkisráðherra) page 19

⁵⁷⁵ Electricity Act Article 4

⁵⁷⁶ Ibid.

⁵⁷⁷ Electricity Act Article 4 second paragraph

In Iceland, there are now five major producers of electricity; Landsvirkjun, Orkuveita Reykjavíkur HS Orka hf., Fallorka and RARIK ohf.⁵⁷⁸ These companies have 99% of all the installed capacity of electric power plants in Iceland. Four are owned by the public, hereof three are owned by the Government.⁵⁷⁹ HS Orka hf. is the only one that is not in public ownership.⁵⁸⁰ One of the topics of this Document is to change the ownership, and there is two ways to reach this goal, either by making an agreement with the company and the company's owners, or that the state by law expropriates the company.⁵⁸¹ In this respect it is important to keep in mind the Norwegian "Hjemfall"-Case from the EFTA Court, since the solution in Iceland must be in accordance with this decision.⁵⁸²

Regarding transmission of energy, the Electricity Acts states that transmission system only can be operated by an independent legal and taxable company.⁵⁸³ The current transmission system operator (TSO) in Iceland is Landsnet hf., a limited company created in 2004. The main role of the TSO is to maintain a transmission system that integrates the objectives of security, efficiency and reliability of supply and quality of electricity.⁵⁸⁴ Almost all inhabitants of Iceland except those living in small islands or on remote farms, are connected to a single transmission system through six distribution networks. In 2010, the transmission system consisted of about 3, 169 kilometers of high voltage lines, and about 70 substations and transformer stations.

The question on security of supply might be considered to be especially relevant regarding the small islands. The biggest threat here might be said to be pack ice, but import issues have not caused any disruptions in the energy supply the last 25 years. Several areas in Iceland are vulnerable to disturbances of the transmission, as they are dependent on a single transmission line. The largest town supplied with energy through a single transmission line has a population of 2, 500 inhabitants.⁵⁸⁵

In principle, Landsnet hf., as the TSO is not allowed to have any other activities. The Electricity Act does however authorize Landsnet to operate on the electricity market, provided that certain conditions are fulfilled. Landsnet has worked on the creation of an electricity

⁵⁷⁸ EER – Icelandic Overview page 189

⁵⁷⁹ Skýrsla starshóps um lagaramma orkumála til iðnaðarráðherra, October 2011. Official document on the legal boundaries in energy questions. (Skýrsla um lagaramma orkumála), page 22

⁵⁸⁰ Skýrsla um lagaramma orkumála, page 23. See the comments made on HS Orka and Magma Energy under subchapter 5.3.

⁵⁸¹ Skýrsla um lagaramma orkumála page 23

⁵⁸² Skýrsla um lagaramma orkumála page 25

⁵⁸³ The Electricity Act Article 8 first paragraph

⁵⁸⁴ Act on the Creation of Landsnet hf., Lög nr. 75 7 June 2004: Lög um stofnun Landsnet hf.. Also see EER – Icelandic Overview page 189

⁵⁸⁵ NEA 2011 National Report Iceland page 19

market, ISBAS, which was planned launched on the 1 November 2008. Due to the financial crisis, the launching of ISBAS has been postponed.⁵⁸⁶ Landsnet is owned by Landsvirkjun, RARIK ohf., Landsvirkjun Reykjavíkur and Orkubú Vestfjarða. Landsvirkjun owns the largest stake with 64, 73%, while Orkubú Vestfjarða has the smallest share with 5, 98%.

A license from the Minister is required to construct and operate a distribution system. Such a license gives the licensee right to distribute electricity in a specific distribution zone and to cease such operation.⁵⁸⁷ The majority of the distribution system operators (DSO's) shall always be owned by the Icelandic state, municipalities or entities wholly owned by them,⁵⁸⁸ but they shall be independent legal and taxable entities.⁵⁸⁹ The DSO shall oversee and manage distributions in the area allocated to them, and they have the duty to build and maintain distribution systems that integrates the objectives of security efficiency and reliability of supply and quality of the electricity.⁵⁹⁰ In Iceland there are six DSOs, in addition to the single transmission company (the TSO), and each of them has been allocated a specific area.⁵⁹¹

Trade in electricity is regulated in Chapter 5 of the Electricity Act. Market for sale of electricity has been open to competition since 2006.⁵⁹² There are some factors in Iceland that makes the market unfavorable to competition. One single firm, Landsvirkjun, dominates the production as well as wholesale of electricity with a market share of 74%. The percentage of costumers changing distributor of electricity has been low since the market was opened up in 2006, only 0 – 2,5% has switched suppliers each year, and the majority of the switching customers are in the industrial sector. Despite these negative conditions for competition, electricity prices have stayed fairly low since the process of liberalization began with the ratification of the Electricity Act in 2003,⁵⁹³ they are considered being among the lowest in Europe among end-users.⁵⁹⁴ The transmission system operator is developing an electricity trading hub in Iceland, scheduled to be operational in 2012.⁵⁹⁵

⁵⁸⁶ More information at the homepage of Landsnet
<http://www.landsnet.is/index.aspx?GroupId=1092&TabId=1102>

⁵⁸⁷ The Electricity Act Article 13

⁵⁸⁸ Antoine Lohet, Gunnar Örn Petersen and Baldvin Björn Haraldsson: Recent Developments in the Icelandic Energy Market. Article in *EER – The European Energy Handbook 2012*, edited by Silke Goldberg and Mark Newbery, (page 187 ff.) (*EER – Recent Icelandic Developments*), page 189

⁵⁸⁹ The Electricity Act Article 14 first paragraph

⁵⁹⁰ The Electricity Act Article 16

⁵⁹¹ NEA 2011 National Report Iceland page 4

⁵⁹² *EER – Icelandic Overview* page 190

⁵⁹³ NEA 2011 National Report Iceland page 3

⁵⁹⁴ NEA 2011 National Report Iceland page 4

⁵⁹⁵ *Ibid.*

To sell electricity, a license is required from the Minister. Such license does not entail a concession or any other privileges for the licensee.⁵⁹⁶ This license is therefore somewhat different from the licenses mentioned above, since those include a concession for the entity to which it is granted. There does not exist an actual electricity trading hub in Iceland yet, though the transmission system operator is currently developing such an exchange.⁵⁹⁷ There are currently eight market players in the field of electricity trading.⁵⁹⁸

The Electricity Act does provide for a hybrid model, halfway between a fully unbundled system and the ITO Model, which allows integrated companies to retain ownership of their gas and electricity grids.⁵⁹⁹ The TSO is a separate entity in ownership of other energy companies, in which the Icelandic state or municipalities hold a majority ownership interest.⁶⁰⁰ The board of the TSO must be independent from other energy companies active in generating, distributing or supplying electricity.

The Electricity Act sets out two authorities to be in charge of regulating the energy market. Firstly the National Energy Authority (Orkustofnun) which is under the Ministry of Energy, Industry and Tourism,⁶⁰¹ and second is the Icelandic Competition Authority which is under the Ministry of Economic Affairs.⁶⁰² The National Energy Authority (NEA) is in charge of ensuring that energy companies comply with their legal obligations under the Electricity Act and derived regulations, but shall consult the Competition Authorities on the regulation of the operation and tariffs of the TSO and DSOs.⁶⁰³ The NEA has a total staff of 35 persons, of which 3-5 persons work on energy market regulation, while the Competition Authority has a staff of⁶⁰⁴ 23 persons.

In Iceland, trade in electricity takes place through bilateral contracts. The law provides for a power market, but this has not been launched yet due to the financial crisis, as mentioned above (the ISBAS). Still, the electricity trading sector has been fully open for competition since 2006, and the electricity supplier is not necessarily the electricity generator. However in most instances the suppliers are also the producers of energy. Most of the shareholders are the Icelandic state or municipalities, but recently HS Orka was acquired by a privately owned

⁵⁹⁶ Electricity Act Article 18 first paragraph.

⁵⁹⁷ NEA 2011 National Report on Iceland page 4

⁵⁹⁸ EER – Icelandic Overview page 190

⁵⁹⁹ See the Electricity Act, EER – Icelandic Overview page 190

⁶⁰⁰ EER – Icelandic Overview 190

⁶⁰¹ See for example the Energy Act Article 24

⁶⁰² See for example the Energy Act Article 27

⁶⁰³ EER – Icelandic Overview page 190

⁶⁰⁴ Screening report of Iceland, Chapter 15 – Energy page 6

foreign company. Electricity supply to consumers in regular household is made on the basis of standard electricity supply contracts.⁶⁰⁵

All use of a transmission system is subject to a payment of an annual transmission tariff by the user, and the tariff is calculated but the TSO based on the revenue cap from the NEA.

Both the TSO and DSO are under an obligation to connect all parties that requests so a grid, provided that the party complies with the conditions in relevant regulations and pay the transmission or distribution fees.⁶⁰⁶ This to make sure that third parties are also granted access to electricity trading in Iceland.

According to the Act on Investment by Non-residents in Business Enterprises, there is a limit to foreign ownership of Icelandic energy companies, so in principles is it only Icelandic citizens and companies that may own rights to generate power from hydro and geothermal resources, for other than personal use, unless otherwise is specifically agreed upon in bilateral investment treaties. The same applies for businesses involved in generation and distribution of power. Since 2006 ownership of these businesses are open for individuals and legal entities with registered office or domicile in another Member State of the EEA, EFTA or on the Faroe Islands.⁶⁰⁷

The Electricity Act lays some public service obligation on the TSO and DSOs, for example to improve, maintain and develop network systems in an economic manner, when taking into account security, efficiency, reliability of supply and quality of the electricity.⁶⁰⁸ Though the Articles not state this in clear words, it is important to bear environmental concerns in mind. There is an obligation to take environmental concerns into consideration when utilizing energy resources, if not directly from the Icelandic legislative acts, then at least from the legislation implemented through the EEA Agreement. To take environmental concerns could also be regarded as a part of the obligation to development in a secure, efficient manner regarding the quality of the electricity.

When it comes to foreigners developing, utilizing or selling electricity in Iceland, this is not as easy as in other states on the European continent. The geographical position of Iceland makes it difficult to connect with other states, and there is no interconnection available yet. This is also why Iceland is granted derogation under the New Electricity Directive regarding cross-border connection.⁶⁰⁹

⁶⁰⁵ EER – Icelandic Overview page 190

⁶⁰⁶ Ibid.

⁶⁰⁷ Ibid.

⁶⁰⁸ The Electricity Act Articles 9 and 16

⁶⁰⁹ EER – Icelandic Overview page 191

At the present, there is no shortage of electricity, and the long-term potential for economically viable renewable energy sources is more than adequate to meet the levels of demand from the general public. In fact there are a very small percentage of consumers that rely on import of fuels. This illustrates that one, and also many other of EU's main concerns regarding energy, does not concern Iceland, like also interconnectivity, reliance on imported fuels and decreasing the levels of greenhouse gas emissions in the electricity sector.⁶¹⁰ Some of these questions are deemed to be the topic of negotiations with the EU, and changes might have to be made, also in Iceland.

There is now ongoing work to see whether it will be possible, and on what conditions, to build a submarine cable from Iceland and to the European Continent. The possible routes are to Scotland, Norway, Netherlands and Germany. Such a cable would not only enable safe sales of electricity generated by renewable energy resources, but it could also help the security of supply, enable a more efficient use of generation capacity and facilitate a market for electricity in Iceland. Research has established that it actually could be possible to lay what will then be the world's longest submerged cable, and there are several opportunities for what kind of cable that can be used.⁶¹¹ Such a submarine cable would enable exportation of electricity to other countries and therefore it would be a diversification of the energy market in Iceland.⁶¹² Though the research shows that there is a possibility to lay a cable from Iceland to the European Continent, it is not an economically preferred solution. This view might be contested in the future, new technological developments and more expensive electricity in Europe might make a cable from Iceland to the Continent also an economical advantage.⁶¹³

It will take further four to five years to examine the feasibility, technical and economic aspects of laying an interconnecting cable.⁶¹⁴ If there is decided to lay cable from Iceland, the production and installation as well as construction of converter stations and other related tasks would take further four or five years. The project could therefore commence operation around 2020 at the earliest.⁶¹⁵

⁶¹⁰ NEA 2011 National Report Iceland page 18

⁶¹¹ Information in English is available at the homepage of the leading, state owned energy producing company in Iceland, Landsvirkjun: <http://www.landsvirkjun.com/operations/research-and-development/submarine-cable/>

⁶¹² EER – Icelandic Overview page. 191

⁶¹³ Landsvirkjun's homepage

⁶¹⁴ Ibid.

⁶¹⁵ Ibid.



Picture showing the possible routes from Iceland and to the Continent for a submarine cable.⁶¹⁶

Iceland's legal framework for the electricity market is highly in line with the Second Energy Package from the European Union, due to transposition of rules implemented into the EEA Agreement. But there are, as previously mentioned some special derogation for the special circumstances in Iceland.⁶¹⁷

The Third Energy Package from the Union has yet to be fully implemented to the EEA Agreement, but Iceland plans to implement these rules by amendments to the Electricity Act, the Act on the National Energy Authority and other relevant acts.⁶¹⁸ Iceland foresees a transfer of the ownership of the TSO to the state or municipalities as of the year 2015 through amendments in the Electricity Act, and it also aims to secure the independence of the TSO in the future.⁶¹⁹

Implementation of the Second Package has not been problematic, neither has the enforcement of these rules. Revision of the independence of the regulatory authorities under the Third Package can on the other hand be more problematic, and reveal the need for additional administrative capacity.⁶²⁰

⁶¹⁶ Landsvirkjun's homepage

⁶¹⁷ Screening report of Iceland, Chapter 15 – Energy page 5

⁶¹⁸ Ibid.

⁶¹⁹ Screening report of Iceland, Chapter 15 – Energy page 6

⁶²⁰ Ibid.

5.6. Renewables.

Iceland is extremely rich in renewable energy resources, compared to the country's energy requirements. There are only rough estimates available on the size of Iceland's renewable sources, both hydro and geothermal. It is therefore considerable uncertainty involved in assessing to what extent the resources can be harnessed considering to what is technically possible, cost-efficient and environmentally desirable.⁶²¹ The promotion of energy from renewable sources has been a part of Icelandic energy policy for decades, and a number of measures are made to promote the use of renewable energy, and these include measures based on obligations by the EEA Agreement.⁶²²

The richness of renewable energy sources is reflected in the energy market, which is unique in its high level of renewable energy consumption and generation, like in Norway. In electricity generation and heating almost 100% of all energy comes from renewable sources, and the Icelandic model is therefore highly sustainable.⁶²³ Renewable energy amounts to 80 % of the country's consumption of energy, and yet has only a small amount of the available renewable resources been utilized. The remaining 20% comes from imported fossil fuels, which is mainly used in transportation and fisheries. As a result, about 67% of final energy consumption stems from renewable sources.⁶²⁴ Iceland's target for the share of renewable energy in the final energy consumption in 2020 is set to 64% in accordance with the calculation methodology of the Renewable Energy Directive.

Norway and Iceland both have a lot of renewable energy sources, and some are of the same kind, both countries use mostly hydropower in generating electricity. But one renewable source that separates the two is Iceland's access to geothermal energy sources. Iceland has an abundance of geothermal and hydro sources, and the Icelandic market for energy is based on the idea of selling electricity to industry that stands for high consummation of electricity, for example the production of aluminum. This is a deliberate strategy from the government to attract foreign investors, by offering affordable electricity.⁶²⁵ There is no medium or long term forecast for power intensive industries, though the Icelandic electricity sector is heavily dependent on development in this industry. It is therefore uncertainty regarding investment

⁶²¹ Icelandic Energy Answers page 5

⁶²² Icelandic Energy Answers page 42

⁶²³ EER – Recent Icelandic Developments page 187

⁶²⁴ Screening report of Iceland, Chapter 15 – Energy page 3

⁶²⁵ EER – Recent Icelandic Developments page 187

needs due to increased demand from power intensive industries after 2012, and such investments may amount to between 5 and 7 billion ISK a year.⁶²⁶

In 2009 a total of 74%, or about 12 000 GWh, of electricity production in Iceland was consumed by the aluminum industry.⁶²⁷ In 2008, industrial production, including the aluminum industry, passed fisheries as Iceland's leading export industry.⁶²⁸ This is remarkable when kept in mind how the nation before has been relying on fisheries as the main part of the country's economy. This is a striking example of how important energy is for Iceland's economy, after all, electricity is about 30% of the cost in production of aluminum.⁶²⁹ There are also several high energy consuming projects underway in Iceland, which again will require an even higher level of energy generation. This will increase the need for investments in the energy sector.⁶³⁰ With the focus on renewable energy, the requirements that comes from EU law and Iceland's high level to such sources makes it more than probable that such sources will be important in the future development.

Only a small part of the sources available for production of renewable energy in Iceland has been harnessed, and there is a rising level of criticism towards power plants. There is on the other hand a growing interest for geothermal energy.⁶³¹ It is therefore believable that the market will focus on geothermal projects as a source for energy over the next decades. Still, there is also ongoing research and development for other renewable sources in Iceland, such as wind and tidal energy.⁶³²

As a Member of the EEA Agreement, Iceland has incorporated the 2001 Renewable Energy Directive in the internal energy market, and it was implemented to Icelandic legislation with Act No. 30/2008.⁶³³ The objective is to promote generation and utilization of renewable energy resources, and trading with green certificates.⁶³⁴ There is no concrete evidence that there is cooperation with Norway, Sweden or other States. The main reason for this might be the difficulties in transportation of energy to or from Iceland.

The Renewable Energy Directive is as previously mentioned implemented in the EEA Agreement. Iceland is a country in the lead of utilizing renewable energy, and there is an

⁶²⁶ NEA 2011 National Report Iceland page 6

⁶²⁷ Report on Energy Statistics in Iceland 2010 by Orkustofnun (NEA) page 9

⁶²⁸ EER – Recent Icelandic Developments page 187

⁶²⁹ Ibid.

⁶³⁰ Ibid.

⁶³¹ Ibid.

⁶³² Ibid.

⁶³³ Act in the Guarantee of Origin of Electricity Produced From Renewable Energy Sources, etc., Lög No 30 16 April 2008: Lög um upprunaábyrgð á raforku sem framleidd er með endurnýjanlegum orkugjöfum o.fl.

⁶³⁴ The Act of origin of electricity produced from renewable energy sources etc. Article 1

extreme high percentage of energy that stems from renewable sources. Of all the electricity, 75% stems from hydro and 24% from geothermal sources.⁶³⁵ It can therefore be surely stated that Iceland is one of the most sustainable countries in the world when it comes to energy consumption; in Europe there is only Norway that is comparable.

In the Renewable Energy Directive there is a target to reach a share of 20% energy from renewable sources. Iceland will have no problems in this regard, but what could be a challenge is that the Directive also set a target of 10% energy from renewable sources in the transport sector, and the Icelandic ship fleet, as well as other sectors within the transportation, is still almost entirely fuelled with fossil fuels like oil.⁶³⁶ The current share of renewable energy in these sectors is under 1%!⁶³⁷ One of the objectives of Iceland's energy strategy is that renewable energy sources in general shall replace imported energy, mainly fossil fuels in the sector for transport. By 2020 Iceland plans that 10% of all fuel used in the transport sector shall be from renewable sources, and that 75% of all new cars shall use renewable energy.⁶³⁸

Regarding biofuel, there is no overall legislation on biofuels in Iceland, but the Biofuels Directive is EEA relevant. Iceland is a fisheries nation, and research shows that greenhouse gas emissions from the Icelandic ship fleet can be reduced by 70% by using biofuels. The biofuels in question are still only first generation biofuels, such as vegetable oil, and it is debated if this kind of biofuels actually benefits the environment, since the harvesting of them also is an energy consuming process.⁶³⁹ Research continues under the Ministry of Fisheries, and it is believed that the outcome could be globally beneficial.⁶⁴⁰

There is more focus on this area now than before, as the establishment of Metan hf. in 1999 shows.⁶⁴¹ This public owned company has the purpose to market and distribute energy in the form of bio-methane, and do research on the field.⁶⁴² Resources like biomass and waste have been utilized to some extent, and there is also great potential for energy derived from wind and tidal power.⁶⁴³ Norway can here be a good lead here, as there is a lot going on in the field of wind energy.

As of the present, there are no direct measures to promote production of energy and electricity from renewable sources in Iceland. But there are some indirect measures that have

⁶³⁵ EER – Recent Icelandic Developments page 192

⁶³⁶ Ibid.

⁶³⁷ Screening report of Iceland, Chapter 15 – Energy page 7

⁶³⁸ Ibid.

⁶³⁹ EER – Recent Icelandic Developments page 192

⁶⁴⁰ Ibid.

⁶⁴¹ More information can be found in English and Icelandic at <http://www.metan.is/English/>

⁶⁴² EER – Recent Icelandic Developments 192

⁶⁴³ Icelandic Energy Answers page 6

the purpose of facilitating explorations, research and development in the field of renewable sources.⁶⁴⁴ Such measures include a research programme on the field of geothermal energy of 2009, deep drilling projects and the State grants subsidies to space heating where neither electricity nor oil is used.⁶⁴⁵

For Iceland to become a member of the EU, it is on this field important to remember the special position Iceland has, with enormous potential for renewable energy.

5.7. Climate Change and Sustainability.

In October 2008, the Ministry for Environment issued a Climate Change Action Plan of behalf of the Government.⁶⁴⁶ This report grants the authorities the power to implement certain measures to reduce the total emission of greenhouse gases, and includes 10 key measures to reach a reduction. These measures include emission trading schemes, that the state uses environmentally sound vehicles and encourage public transport. This will ensure that Iceland meets its international obligation with respect to greenhouse gas emissions until 2020.⁶⁴⁷

Before the Act on registration of emission of greenhouse gases of 2006, Icelandic legislation on greenhouse gas emissions was almost nonexistent. The Act was replaced already in 2007, with the Act on emission of greenhouse gases,⁶⁴⁸ which aims at fulfilling Iceland's obligation after the Kyoto Protocol.⁶⁴⁹ The 2007 Act was not a direct result of the EEA Agreement, but it was strongly influenced by EU legislation and relevant Acts from the Scandinavian states.⁶⁵⁰

The Act on Emission of Greenhouse Gases was amended to implement EU Directives on greenhouse gases, establishing a scheme for trading greenhouse gas emissions allowance within the European Union.⁶⁵¹ By this, Iceland could take part in trading of emissions in the Union but very few domestic industries in Iceland are covered by the EU Emission Trading System, and the scheme has therefore not been fully implemented. However, it is foreseen that it will have bigger impact in the future, when aviation becomes part of the scheme. If the rules regarding aviation is (as anticipated) transposed into the EEA Agreement, it is foreseen

⁶⁴⁴ Icelandic Energy Answers page 42

⁶⁴⁵ Icelandic Energy Answers page 42-43 with further explanations and references

⁶⁴⁶ Aðgerðaáætlun í loftslagsmálum, Umhverfissráðuneytið, October 2010

⁶⁴⁷ Aðgerðaáætlun í loftslagsmálum pages 25-32

⁶⁴⁸ Act on the Emission of Greenhouse Gases, *Lög nr. 65 28. mars 2007: Lög um losun gróðurhúsalofttegunda.*

⁶⁴⁹ EER – Recent Icelandic Developments 192

⁶⁵⁰ Ibid.

⁶⁵¹ Ibid.

that it will cover about 40% of all greenhouse gas emission within a few years. In December 2011 the EEA States were still negotiating this Directive.⁶⁵²

Iceland has signed the Kyoto Protocol, but has quite a unique situation under this international Agreement, since Iceland was permitted the highest level of increase in greenhouse gas emission compared to any other countries under the protocol. This increase is justified by the small size of the country's economy and the fact that that one major industry can increase the amount of total emission considerably in relative terms.⁶⁵³

Iceland does not have industrial-scale carbon capture and storage projects, but research shows that afforestation and reforestation have considerable carbon capture possibilities. Still, this could only counterbalance the country's carbon emission to some extent.⁶⁵⁴ Iceland is not, and will probably not be a country with rich forests, in the foreseeable future.

5.8. The Future for Iceland in the European Union.

It can be stated that Iceland to some extent is even more "Unionized" than some of the Member States. Iceland does for example apply the Schengen Agreement regarding boarder control, while both the UK and Ireland have opted out of this Agreement, and Denmark has many opt-out from treaties of the Union that Iceland is subject to through the EEA Agreement.⁶⁵⁵

There are still debates in Iceland regarding membership of the Union, and both the politicians and the people seem to have separate opinions. Though the negotiations with the Union are going strong, there is no clear answer to the question if Iceland will join the Union.⁶⁵⁶ No matter what happens in respect of Iceland, the negotiations with the Union could lead to new debates on the EEA Agreement and whether this Agreement will be a part of the future or not, and in what form.⁶⁵⁷

Though Iceland has started membership-negotiations with the Union, there seems to be a general satisfaction on the EEA Agreement and the cooperation with the states outside of the Union. There seems to be some frustrations relating to Norway's independent attitude as the Icelandic government seems to think that Norway should consult the smaller states more, and that there is a Norwegian tendency to go outside of the EFTA-secretary. Also, the Icelandic

⁶⁵² EER – Recent Icelandic Developments page 192

⁶⁵³ See the Kyoto Protocol Annex B.

⁶⁵⁴ EER – Recent Icelandic Developments page 192

⁶⁵⁵ Bergmann page 26

⁶⁵⁶ Utenfor og Innenfor page 305

⁶⁵⁷ Ibid.

government thinks that Norway sometimes should be a little more reluctant in negotiations with the EU.⁶⁵⁸

Norwegian authorities seem concerned about the fact that Iceland does not have the resources or capacity to follow all the obligations that follows of the EEA Agreement, and that the “cleaning up” after the financial crisis in 2008 has taken toll of many administrative resources. The same can be said about the application for membership of the Union. Iceland has tried to convince its partners in the EFTA/EEA-cooperation that Iceland will be able to fulfill its obligations, according to the relevant agreements, in the ongoing processes.⁶⁵⁹

6. Conclusion.

6.1. The Introduction.

The Introduction showed some general points relating to the international environment regarding on the environment and energy, and especially the concept on sustainable development. Sustainable development is a growing concept which is gaining more attention and more actuality, which again actualizes the harmonization of different consideration in decision making processes on national and international levels. It can be helpful to remember the main principles of sustainable development in when studying and researching international law. This especially goes for the field of environmental law, since the concept of sustainable development seems to have gained a very strong acceptance here. The concept of sustainable development helps to remember what considerations that has to be taken, and what weight that should be given to these considerations.

6.2. The EU.

There can be made many different arguments on what the main goals of the European Union was initially, but environmental concerns was not one of the goals the States focused most on the beginning of what we now know as the European Union. This has now changed, at least to some extent. In the Chapter on the European Union one can detect an enormous change in the area for energy law. There are now environmental principles that have to be taken into consideration when making legislation, regardless of the field is in question. For the field of energy this has shown particularly true, and this is a development that currently is going faster and faster. The Union has chosen to make whole packages that focus on environmentally

⁶⁵⁸ Utenfor og Innenfor page 306

⁶⁵⁹ Ibid.

friendly energy. Still, it is clear that there also are many crossing concerns within the Union, and the environmental principles can to some extent be ousted by crossing concerns. For example is competition important to uphold the interest of the citizens of the Union, which is considered a social concern within the terminology of the concept of sustainable development.

Though the European Union can be said to be partially founded in energy treaties, the development to today's focus on energy in the Union was not anticipated. Natural resources are originally of fundamental national interest, and there can easily be disagreements between the Member States and the Institutions of the Union on the utilization of such resources. There are even examples of disagreements within the EU Institutions! But this far the EU is taking one step at the time, each time taking it a little further, and thereby maybe getting closer and closer to the boundaries of what is considered national jurisdiction.

The EU Climate Change Package introduces some new measures, provisions and principles though some are also well-known in more or less similar forms. It is not clear how these measures will work in practice in the future; the Package has not been fully implemented in the Member States yet. Also the legislative processes against breaks of the legislation takes a long time, and it is not until there has been seen a few of those that the effects of the Package can be fully evaluated. But one thing is for sure, the EU is not intending on giving up on renewable energy. It is currently being worked on further measures further into the future, and these do not show a Union that intends to stop the development on this field just yet.

6.3. The EEA.

The EEA Agreement obliges the signatory States to implement relevant legislation. The EEA Agreement also sets out actual legal actions if such implementation is not done within the given timeframes. The development here is therefore tied to the developments in the EU, and as energy is considered as "goods" within the meaning of the relevant legislation, acts on Energy in the Union are also implemented to the EEA States. As Iceland is now negotiating accession to the EU, the EEA Agreement is surrounded by uncertainty regarding the future. But until it is decided whether Iceland joins the Union or not, the Agreement plays a major role in the implementation of rules on energy into Norway and Iceland. This can for example be seen illustrated with the Hjemfallsrett Case for the EFTA Court, where ESA never gave in though the Norwegian government was reluctant to obey.

6.4. Norway.

In Norway the rules from the European Union on energy has had a much stronger impact than anticipated when signing the EEA Agreement. Many parts of the national law are influenced by EU legislation, both outside and inside the field of energy. Norway has a very special position regarding the European cooperation, as it is a major exporter of energy to the Union. This has made the cooperation with the Union somewhat difficult, since there are colliding interests involved. Still, there seems to be uniformity in Norway, both within the political parties and among the population, that a tight cooperation with the Union is necessary and important.

Norway is a world leader when it comes to renewable energy, and currently has the highest percentage of energy from renewable sources in Europe. Norway has been very fortunate when it comes to natural resources that can be used in energy production, with great waterfalls, big discoveries of oil on the Norwegian continental shelf and a windy seaside. As an extremely rich country regarding natural resources and economically, it might be expected from Norway to be a leader in renewable energy. It is also a fact that the business of renewable energy is getting bigger and stronger in Norway as in the rest of the world, and new innovations are being tried out.

Still there is always room for improvements. Norway is after all one of the biggest oil nations in the world. Are we allowed to think that since we are major producers of renewable energy, that an extremely polluting industry should be OK? For now, the world is dependent on deliveries of oil and gas. There is not an alternative to stop drilling in Norway, and at least the big percentage of renewable energy produced in Norway can help the world a little in the battle against climate change.

6.5. Iceland.

Iceland is currently under very special circumstances regarding the relationship with the Union, with negotiations on accession to the EU. This has colored the focus of this thesis, the arguments used and maybe especially the sources available.

Iceland is also a world leader when it comes to renewable energy, and has reduced the use of oil and gas. Iceland might therefore deserve to be called a more environmentally friendly State than Norway. Still there are challenges in Iceland as well. Fossil fuels do still stand extremely strong in the transport sector, and might bring major challenges for Iceland to reach the goals set for year 2020. Icelanders love their cars, and the country is still highly dependent

on the fisheries. These problems can be solved through biofuels, which is currently under research and testing.

Whether Iceland will join the EU or not seems to be an open question at the present and the public debate is still going strong. But is it not a little strange to use so much money and resources on something that might not become a reality, especially in a fragile economy? Well, at least the accession negotiations bring clarity to some question regarding the EEA cooperation, clarity that will be useful for the present EEA States no matter what happens with Iceland.

6.6. When Seen as a Whole... – Final Remarks.

When seen as a whole, it can be no doubt that the rules on energy have changed the legislation in both Norway and Iceland as a consequence of the EEA Agreement. Both Norway and Iceland are considered to be in line with present EU legislation. Norway even liberalized the energy market before the rules on liberalization came in from the EU. The rules of market liberalization are not of such importance in Iceland, since import and export of electricity is difficult at the present. But changes might be on the way. The influence from the EU can therefore be said to be strong in these states on the field of energy, as all acts made in EU on this field is of EEA relevance. Whether the influence is for the better or the worse is an impossible question to answer, but the EU rules on energy must be said to have brought clarity and equality into the national acts.

It is still impossible to predict the future, so no one knows what will happen. But there is a tendency to take environmental concerns into consideration in a much greater extent than before. Environmental concerns can collide with both social and economic factors, two other main objectives of the European Union, and there the concept of sustainable development can be of help. This far the obligation to produce more renewable energy has been a viable market option, but it is not certain it will remain this way. Maybe will there also in the Union be created “artificial” markets by the Institution, like the market for green certificates in Norway and Sweden.

But for now the provisions on renewable energy seem to function well, and the Member States as well as the Union have understood the impacts and dangers of climate change. International cooperation is the only way to fight climate change, as pollution knows no boundaries, and EU is doing a brilliant job to unite the European Continent on a sustainable policy into the future.

This thesis has focused on the existing legislation, with several views back to the past. The work has been difficult, especially the search for relevant sources. Traditionally sources available online has not been used as extensively, but in a growing international legal environment this is an easy way to make the relevant sources reachable. It has been fortunate to be able to read both Norwegian and English, and to some extent even Icelandic, and this has extended the scope of relevant sources considerably. Through this work the understanding of the constant dynamic character of the European Union has grown extensively.

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Méndez-Pinedo, M. Elvira: EC and EEA Law – A Comparative Study of the Effectiveness of European Law, Europa Law Publishing, 2009.

Müller-Graff, Peter-Christian: The Impact of Climate, Geography and Other Non-Legal Factors on EC Law and EEA Law. Article in *The EFTA Court – Ten years on*, Edited by Carl Baudenbacher, Per Tresselt, Thorgeir Örlygsson. Hart Publishing, Oxford and Portland, Oregon, 2005 (page 55 ff.)

Sejersted, Fredrik, Finn Arnesen, Ole-Andreas Rognstad, Sten Foyn and Olav Kolstad: EØS-rett, Second Edition, Universitetsforlaget, Reprinted in 2007.

Vanderberghe, Wim: Chapter VII, EU Rules Concerning Energy and Investment After the Lisbon Treaty. Article in *European Energy Law Report VIII*, Edited by Martha M. Roggenkamp and Ulf Hammer, Intercientia 2011 (page 133 ff.)

Waters, Lawrance : The Path to Sustainable Development 1972-2012, Article in *Pro Natura – Festschrift for Hans Christian Bugge*, Universitetsforlaget, 2012 (page 13 ff.)

Wasenden, Odd-Harald B.: Energimarkedsret – Om informasjonsplikt og markedsatferd i det finansielle kraftmarkedet, Cappelen Akademisk Forlag, 2007.

7.2. Agreements, Legislative Acts and Legal Documents.

As mentioned in the introduction, there will be given links to webpages to most of the sources used, other than the printed books. This is to make accessibility easier, and it is a fact in the technological world that we live in that almost all sources are available online. This also provides newer information than written books.

All webpages used are official for the institute/government/ministry/company/etc., and are therefore considered sufficiently reliable for this use. Sometimes there are links to versions both in Norwegian and English/Icelandic and English. If there is only one link, this does not necessarily mean that there are not versions in other languages available. It will be evident from the footnotes what language is used.

7.2.1. International.

Declaration of the United Nations Conference on the Human Environment – The United Nations Conference on the Human Environment, signed in Stockholm from 5 to 16 June 1972.

<http://www.unep.org/Documents.Multilingual/Default.asp?documentid=97&articleid=1503>
(Visited on 02.09.12)

Report of the World Commission on Environment and Development – 1987 Our Common Future. <http://www.un-documents.net/our-common-future.pdf> (Visited 01.09.12)

Rio Declaration on Environment and Development – The United Nations Conference on Environment and Development, signed at Rio de Janeiro from 3 to 14 June 1992.

(<http://www.unep.org/Documents.Multilingual/Default.asp?documentid=78&articleid=1163>)
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United Nations Convention on Biological Diversity – 1992.

<http://www.cbd.int/doc/legal/cbd-en.pdf> (Visited 20.08.12)

The United Nations Framework Convention on Climate Change UNFCCC – United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro from 3 to 14 June 1992. http://unfccc.int/key_documents/the_convention/items/2853.php (Visited 19.07.12)

The General Agreement on Tariffs and Trade (GATT) – April 1994.

http://www.wto.org/english/docs_e/legal_e/legal_e.htm (Visited 01.09.12)

The Kyoto Protocol: a protocol to the United Nations Framework Convention on Climate Change (UNFCCC), adopted on 11 December 1997 in Kyoto, into force 16 February 2005.

http://unfccc.int/essential_background/kyoto_protocol/items/1678.php (Visited 19.07.12)

7.2.2. The EU.

7.2.2.1. Treaties, Regulations, Directives, Decisions, etc.

The Treaty establishing the European Coal and Steel Community (ECSC) (1951), Paris 18 April 1951, with later amendments.

Treaty Establishing the European Atomic Energy Community (Euratom) (1957), Rome 25 March 1957, with later amendments

The Schengen Agreement is a system of two international treaties signed in Schengen. The “Agreement between the Governments of the Benelux Economic Union, the Federal Republic of Germany and the French Republic on the gradual abolition of checks at their common borders” (*the Schengen Agreement of 1985*) and the “Convention implementing the Schengen Agreement ” (*the Schengen Convention of 1990*)

The Maastricht Treaty, OJ C 191 of 29.7.1992, a series of amendments to existing legislation, signed in Maastricht 7 February 1992. Entered into force 1 November 1993.

The First Electricity Directive: Directive 96/92/EC of the European Parliament and of the Council of 19 December 1996 concerning common rules for the internal market in electricity

The 2001 Renewable Energy Directive: Directive 2001/77/EC of the European Parliament and of the Council of 27 September 2001 on the promotion of electricity from renewable energy sources in the internal electricity market

Regulation (EC) No 1228/2003 of the European Parliament and of the Council of 26 June 2003 on conditions for access to the network for cross-border exchanges in electricity.

The Second Electricity Directive: Directive 2003/54/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in electricity trading and repealing Directive 96/92/EC.

Treaty Establishing the Energy Community (OJ L/198/18 20.07.2006)

The Lisbon Treaty, OJ C 306 of 17.12.2007, Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community, signed at Lisbon, 13 December 2007. Entered into force 1 December 2009.

Treaty of the European Union (TEU) as amended by the Treaty of Lisbon

Treaty on the Functioning of the European Union (TFEU) as amended by the Treaty of Lisbon

The Third Energy Package (2009).

- Directive 2009/72/EC of the European Parliament and of the Council 14 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC (**the New Electricity Directive**).
- Directive 2009/73/EC of the European Parliament and of the Council 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/ECA Gas Directive, amending and completing the existing Gas Directive 2003/55 (**the New Gas Directive**)
- Regulation (EC) No. 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators (**the ACER Regulation**).
- Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for crossborder exchanges in electricity and repealing Regulation (EC) No 1228/2003 (**the New Electricity Regulation**).
- Regulation (EC) No 715/2009 of the European Parliament and of the Council 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005 1775/05 (**the New Gas Regulation**).

The Climate Change Package (2009):

- Directive 2009/29/EC of the European Parliament and the Council of 23 April 2009 amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community (**the New EU ETS Directive**).
- Decision No 406/2009/EC of the European Parliament and of the Council 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020 (**the GHG Reduction Decision**).
- Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on geological storage of carbon dioxide and amending Council Directive 85/337/EEC,

European Parliament and Council Directives 2000/60/EC, 2001/80/EC, 2006/12/EC, 2008/e/EC and Regulation (EC) No 1013/2006 (**the CCS Directive**).

- Directive 2009/30/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 98/70/EC as regards the specification of petrol, diesel and gasoil and introducing a mechanism to monitor and reduce greenhouse gas emissions and amending Council Directive 1999/32/EC as regards the specification of fuel used by inland waterway vessels and repealing Directive 93/12/EEC (**the Biofuel Directive**).
- Regulation (EC) No 443/2009 of the European Parliament and of the Council of 23 April 2009 setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO₂ emissions from light-duty vehicles (**the Emissions Standards Regulation**).
- Directive 2009/28/EC of the European Parliament and of the Council 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directive 2001/77/EC and 2003/30/EC (**the Renewable Energy Directive**).

7.2.2.2. *Reports, white papers etc.*

DG Competition report on energy sector inquiry (SEC(2006)1724, 10 January 2007) available at <http://ec.europa.eu/competition/sectors/energy/inquiry/index.html> (visited 21.08.12)

The Internal Energy Market – Time to Switch Into a Higher Gear, February 2011 available at http://ec.europa.eu/energy/gas_electricity/legislation/doc/20110224_non_paper_internal_energ_y_market.pdf (visited at 21.08.12)

The Draft EU Energy Efficiency Directive as proposed by the Commission 22 June 2011 available at <http://www.eceee.org/EED/> (visited 19.07.12)

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Energy Roadmap 2050 (Com(2011)885/2) available at http://ec.europa.eu/energy/energy2020/roadmap/doc/com_2011_8852_en.pdf (Visited on 20.07.12). See page 2.

European Parliament resolution on the preparation of the Commission Work Programme for 2012 available at

<http://www.europarl.europa.eu/sides/getDoc.do?type=MOTION&reference=B7-2011-0386&language=EN> (Visited on 20.07.12)

7.2.3. The EEA.

Agreement on the European Economic Area (OJ No L 1, 03.01.1994) (The EEA Agreement). Available at <http://efta.int/~media/Documents/legal-texts/eea/the-eea-agreement/Main%20Text%20of%20the%20Agreement/EEAAgreement.ashx> (visited 03.09.12)

Decision of the EEA Joint Committee No 162/2011 of 19 December 2011 amending Annex IV (Energy) to the EEA Agreement. Available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:076:0049:0050:EN:PDF> , (visited at 24.07.12)

The CCS Directive is included in the EEA Agreement Annex XX on the Environment, see <http://www.efta.int/~media/Documents/legal-texts/eea/the-eea-agreement/Annexes%20to%20the%20Agreement/annex20.pdf> (visited 24.07.12)

ESA Press Release 15. March 2012. Available at <http://www.eftasurv.int/press-publications/press-releases/state-aid/nr/1609> (visited on 24.07.12)

7.2.4. Norway.

7.2.4.1. *Laws and Regulations.*

The Norwegian Constitution, LOV 1814-05-17 nr 00: Kongeriget Norges Grundlov. The official language for the Norwegian Constitution is in Norwegian, but an English translation is found at the Parliament's official website, <http://www.stortinget.no/en/In-English/About-the-Storting/The-Constitution/The-Constitution/> (Visited 10.08.12)

The Industry Concession Act, LOV 1917-12-14 nr 16: Lov om erverv av vannfall mv., Industrikonsesjonsloven. Available in Norwegian at <http://www.lovdata.no/all/hl-19171214-016.html> (Visited at 14.08.12)

The Act on to scientific research and exploration for and exploitation of subsea natural resources other than petroleum resources, LOV 1963-06-21 nr 12: Lov om vitenskapelig utforskning og undersøkelse etter og utnyttelse av andre undersjøiske naturforekomster enn petroleumforekomster. Available in Norwegian <http://www.lovdata.no/all/hl-19630621-012.html>. English translation at <http://www.npd.no/en/Regulations/Acts/Scientific-research-act/> (Both visited 14.08.12)

The Nature Conservation Act, LOV 1970-06-19 nr. 63: Lov om naturvern (naturvernloven) Available in Norwegian at <http://www.lovdata.no/dnf/nl-19700619-063.html#map001> (Visited 10.08.12)

The Petroleum Act, LOV 1996-11-29 nr 72: Lov om petroleumsvirksomhet (petroleumsløven). Available in English at <http://www.npd.no/en/Regulations/Acts/Petroleum-activities-act/> (Visited at 10.08.12)

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The Petroleum Regulation. FOR 1997-06-27 nr 653: Forskrift til lov om petroleumsvirksomhet, only available in Norwegian. Available in Norwegian at <http://www.lovdata.no/for/sf/oe/xe-19970627-0653.html#map0> (Visited 23.07.12).

The Regulation on smart metering, FOR 1999-03-11 nr. 301: Forskrift om måling, avregning og samordnet opptreden ved kraftomsetning og fakturering av nettjenester. Available in Norwegian at <http://www.lovdata.no/for/sf/oe/xe-19990311-0301.html> (Visited 23.07.12)

The Watercourse Act, LOV 2000-11-24 nr 82: Lov om vassdrag og grunnvann (vannressursloven), available in Norwegian at <http://lovdata.no/all/hl-20001124-082.html> (Visited 10.08.12)

The Sea Energy Act, LOV 2010-06-04 nr 21: Lov om fornybar energiproduksjon til havs (havenergiløva), available in Norwegian at <http://www.lovdata.no/all/hl-20100604-021.html> (Visited at 24.07.12)

The Act on Green Certificates, LOV 2011-06-24 nr 39: Lov om elsertifikater. Available in Norwegian at <http://websir.lovdata.no/cgi-lex/wiftzsok?bas=nl&emne1=elsertifikat&button=S%F8k&sok=fast> (Visited on 24.07.12)

The Regulation on smarty metering etc., 24 June 2011 No 726: Forskrift om endring i forskrift om måling, avregning og samordnet opptreden ved kraftomsetning og fakturering av netttjenester which introduces a new Chapter 4 concerning advanced measuring and control systems in the Electricity Supply and Grid Services Regulation (FOR 1999-03-11 nr 301: Forskrift om måling, avregning og samordnet opptreden ved kraftomsetning og fakturering av netttjenester). Available in Norwegian at respectively <http://www.lovdata.no/for/sf/oe/xe-20110624-0726.html> and <http://www.lovdata.no/cgi-wift/ldles?doc=/for/ff-19990311-0301.html> (Visited on the 25.07.12).

Swedish: Lag (2011:1200) om elcertifikat, available in Swedish at <https://lagen.nu/2011:1200> (Visited 24.07.12)

7.2.4.2. Official documents.

Avtale om klimameldingen 2008, merknader til St. meld. Nr. 34 (2006-2007) Norsk Klimapiolitikk, available in Norwegian at http://www.regjeringen.no/Upload/MD/Vedlegg/Klima/avtale_klimameldingen.pdf (Visited 24.07.12)

Ot.prp.nr.107 (2008-2009). Om lov om fornybar energiproduksjon til havs (havenergilova). Available in Norwegian at <http://www.regjeringen.no/nn/dep/oed/dokument/proposisjonar-og-meldingar/Odelstingsproposisjonar/2008-2009/otprp-nr-107-2008-2009-.html?id=569843> (Visited 16.08.12)

Meld.St.28 (2010-2011). En næring for framtida – om petroleumsvirksomheten. Report to the Storting on Norwegian petroleum industry (White paper). Originally in Norwegian, but here the English translation is used. http://www.regjeringen.no/upload/OED/Petroleumsmeldingen_2011/Oversettelse/2011-06_White-paper-on-petro-activities.pdf .

Preparatory document for the Green Certificates Act, Prop.101 L (2010-2011). Lov om elsertifikater, available in Norwegian at <http://websir.lovdata.no/cgi-lex/wiftzsok?bas=nl&emne1=elsertifikat&button=S%F8k&sok=fast> (visited at 24.07.12)

NOU 2012:2 Utenfor og Innenfor – Norges Avtaler med EU (Translates to Outside and Inside – Norway's agreements with the European Union), Official Norwegian Reports. Parts of the report is available in English at http://www.regjeringen.no/pages/36798821/PDFS/NOU201220120002000EN_PDFS.pdf (where this is used, the reference is made to Outside and Inside). Norwegian version at <http://www.regjeringen.no/pages/36797426/PDFS/NOU201220120002000DDDPDFS.pdf> (Both visited at 02.05.12)

Decision from the Norwegian Ministry for Oil and Energy of 05.07.2012, available in Norwegian at http://www.regjeringen.no/upload/OED/pdf%20filer/EV/vindkraftverk_i_Rogaland_vedtak_050712.pdf (Visited at 11.08.12)

Official Press release from the Norwegian Ministry of Oil and Energy, dated 05.07.12, Available in Norwegian at the official website <http://www.regjeringen.no/nb/dep/oed/pressesenter/pressemeldinger/2012/konsesjon-til-fem-vindkraftverk-i-rogala.html?id=696518> (Visited at 11.08.12)

7.2.5. Iceland.

7.2.5.1. *Laws and Regulations.*

The Constitution of Iceland, *Lög No. 33 17 June 1944*: Stjórnarskrá lýðveldisins Íslands. Available in English at <http://www.government.is/constitution/> (visited 01.09.12)

The Act on Investment by Non-residents in Business Enterprises, *Lög nr. 34 25. March 1991*: Lög um fjárfestingu erlendra aðila í atvinnurekstri. Available in English at <http://eng.idnadarraduneyti.is/laws-and-regulations/nr/1129>, (Visited 01.09.12)

The Electricity Act, *Lög No. 65 27 March 2003*: Raforkulög. Available in English at http://eng.idnadarraduneyti.is/media/Acrobat/raforkulog_enska.pdf

The Act on the Creation of Landsnet hf., *Lög nr. 75 7 June 2004*: Lög um stofnun Landsnet hf. Available in Icelandic at <http://www.althingi.is/dba-bin/prentaloguti.pl?lnr=2004075&utg=136b&pdf=PDF> (Visited 06.08.12)

The Act on the Emission of Greenhouse Gases, *Lög nr. 65 28 March 2007*: Lög um losun gróðurhúsalofttegunda. Available in English at http://eng.umhverfisraduneyti.is/media/PDF_skrar/Act_on_greenhouse_gas_emissions.pdf (Visited 03.08.12)

The Act in the Guarantee of Origin of Electricity Produced From Renewable Energy Sources, etc, *Lög No 30 16 April 2008*: Lög um upprunaábyrgð á raforku sem framleidd er með endurnýjanlegum orkugjöfum o.fl. Available in English at http://eng.idnadarraduneyti.is/media/Acrobat/Log_um_upprunaabyrgd_a_raforku_ens.pdf (Visited 01.09.12)

The Act on Changes in some Acts Regarding the Environment and Energy Utilization, *Lög nr. 58 7 June 2008*: Lög um breytingu á nokkrum lögum á auðlinda- og orkusviði. Available in Icelandic at <http://www.althingi.is/altext/stjt/2008.058.html> (visited 01.09.12)

The Act on Protection and Development of Energy Resources, *Lög nr. 48 16 May 2011*: Lög um verndar- og orkynýtingaráætlun. Available in Icelandic at <http://www.althingi.is/altext/139/s/pdf/1411.pdf> (Visited 01.09.12)

7.2.5.2. *Official documents – Icelandic and from the European Union.*

Skýrsla utanríkisráðherra um Ísland á innri markaði Evrópu (Lögð fyrir Alþingi á 135. Löggjafarþingi 2007-2008) Available in Icelandic at <http://www.utanrikisraduneyti.is/media/PDF/evropuskysrsla.pdf> (Visited 02.08.12)

Icelandic Energy Answers: On 22 October 2009 the Icelandic Government submitted its answers to the questionnaire from the European commission as part of Iceland's application process. The questions on energy are answered extensively. Available at http://www.vidraedur.is/media/esb_svor/15_-_Energy/Ch._15_-_Energy-final.pdf (Visited 01.09.12)

Aðgerðaáætlun í loftslagsmálum, Umhverfissráðuneytið, October 2010. Available in Icelandic at http://www.umhverfissraduneyti.is/media/PDF_skrar/Adgerdaaaetlun-i-loftslagsmalum.pdf (Visited 05.08.12)

Report on Energy Statistics in Iceland 2010 by Orkustofnun (NEA). Available in English at http://www.os.is/gogn/os-onnur-rit/orkutolur_2010-enska.pdf (Visited 02.08.12)

The Strengthening of the Green Economy in Iceland, Sustainable prosperity – a model society, Report of the Parliamentary Committee on the Strengthening of the Green Economy in Iceland, September 2011. Available in English at http://www.althingi.is/pdf/Green_economy.pdf (Visited at 01.09.12)

Commission Staff Working Paper – Iceland 2011 Progress Report (Accompanying the document «Communication from the Commission to the European Parliament and the Council), Brussels 12.10.2011. Available in English at

http://ec.europa.eu/enlargement/pdf/key_documents/2011/package/is_rapport_2011_en.pdf
(Visited 01.09.12)

Skýrsla starshóps um lagaramma orkumála til iðnaðarráðherra, October 2011.
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Screening report of Iceland, Chapter 15 – Energy, of 25 October 2011 by the European Union (Date of screening meetings: Explanatory meeting: 12 May 2011, Bilateral meeting: 20 June 2011). Available in English at http://ec.europa.eu/enlargement/pdf/iceland/key-documents/screening_report_15_is_internet_en.pdf (Visited 23.08.12)

National Energy Authority (Orkustofnun): Report on Regulation and the Electricity Market 2011, Iceland. Available in English at http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_PUBLICATIONS/NATIONAL_REPORTS/National%20Reporting%202011/NR_En/C11_NR_Iceland-EN.pdf (Visited 23.08.12)

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7.3.1. EU.

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<http://www.eceee.org/EED/> (Visited 19.07.12)

http://ec.europa.eu/clima/policies/ets/index_en.htm (Visited 20.07.12)

7.3.2. Norway.

<http://www.ssb.no/minifakta/> (The Norwegian Statistical Authority) (Visited 17.07.12)

<http://www.enova.no/about-enova/259/0> (Visited 02.09.12)

www.statkraft.com (Visited 23.07.12)

<http://www.lovddata.no>

<https://lagen.nu/2011:1200> (The Swedish Green Certificates Act, Visited 02.09.12)

7.3.3. Iceland.

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http://stjornlagarad.is/other_files/stjornlagarad/Frumvarp-enska.pdf (Visited 15.08.12)

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<http://grapevine.is/Home/ReadArticle/Municipality-Sells-Its-Shares-In-Alterra> (Visited 02.09.12)

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<http://www.orkuaudlindir.is/docs/Request-english.pdf> (Visited 02.09.12)

<http://arcticportal.org/news/23-energy-news/638-three-offers-for-the-dreki-area> (Visited 20.08.12)

<http://www.landsnet.is/index.aspx?GroupId=1092&TabId=1102> (Visited 13.08.12)

<http://www.landsvirkjun.com/operations/research-and-development/submarine-cable/> (Visited 13.08.12)

<http://www.metan.is/English/> (Visited on 20.08.12)