

Norwegian Implementation of EU Directives on Energy Efficiency

Assessing and Explaining Variation

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Master thesis
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UNIVERSITY OF OSLO

Spring 2016

Words: 32 769

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<http://www.duo.uio.no/>

Print: ARENA Centre for European Studies, University of Oslo

IV

Abstract

Much has been written about the capacity of national policy systems to implement EU policies. In a multilevel system of governance such as the EU, directives stemming from the EU level can only be successful if member states comply with the new requirements by implementing the directives. An important question to ask is therefore what the determinants are that lead to successful implementation of EU directives at the national level. In this study, I am concerned with analysing the capacity of Norway to implement EU directives in the field of energy efficiency. I assess and explain Norway's implementation performance through the lenses of two existing theories on implementation within the EU system of governance, namely goodness-of-fit and domestic politics. In my analysis, I discovered that Norway in general has had a mixed implementation performance. Domestic politics proved to be most valuable in explaining and understanding the causal mechanisms behind the implementation outcome. Goodness-of-fit was accurate in its predictions, but also proved to be static and largely unable to explain the dynamics leading to the implementation outcome. The case of Norway suggests that what matters the most in explaining implementation is the preferences and access to decision-making of societal actors, as well as administrative organisation. If EU policies on energy efficiency are to become successful in the future, the EU should not go too far in harmonising and streamlining policies, since such harmonisation might not take local needs into consideration and thereby cause adverse effects.

Acknowledgements

This thesis marks the end of a long educational run. It is with some astonishment that I now look back at my eight years as student and realise the extent and variety of knowledge that I have gained. Although it may not be very useful in my future professional career, I am very grateful for having had the chance to analyse Nietzsche's theory on *das Apollinische und das Dionysische*, Thomas Mann's *Tristan* and W.G. Sebald's *Die Ausgewanderten*, which have profoundly influenced my thinking on the world and on the art of writing. It also amuses me to think back on the many detailed accounts of world history that I have had to learn, whose usefulness are uncertain, but which nevertheless serve perfectly as witty anecdotes at parties. Who wouldn't want to know that the word 'assassin' stems from the medieval Shiite Nizari sect, which terrorised a great many caliphs and crusaders with their perfectly executed killings? And how deeply intriguing isn't it to dwell on the fact that the Kölner Dom never was bombed by allied forces under World War II, because without it, the allied bombers wouldn't even know the location of Cologne? I am also very thankful for having had the chance to challenge myself intellectually by embarking on such a demanding research project as this thesis has been. It has not always been a pleasure, but it has certainly been the most rewarding experience I have had so far in my life.

Having said that, I would admittedly never have managed to finish this project, had it not been for a few select people who have supported me all the way from childhood to finishing this thesis. I would like to thank my supervisor Jon Birger Skjærseth for his invaluable advice throughout the process. His dedication and assistance is highly appreciated, and will not be forgotten. I would also like to thank my family, which has proofread every text I have ever written, including this. I would like to thank Hanna, for her patience and understanding. Thank you also to all my friends since childhood, who taught me how to think and who constantly challenge me with their impressive wit and intellect. And last, but not least, I want to thank my fellow students for their vigour, optimism and humour. Their presence has been of great importance.

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1 Introduction

In recent years we have witnessed a sharp expansion of interest in energy efficiency in the European Union (EU), and a wide range of policy innovations have been introduced to reduce energy use. These developments are driven by concurrent challenges facing the EU in a time of crisis. As new economic powers rise in the south and the east and eurocrisis looms, the EU has increasingly become aware that its competitiveness is seriously undermined by an ever-increasing dependency on energy imports. At the same time, the long-lasting dispute over gas prices between Russia and Ukraine has shown that many member states are vulnerable if a major energy supplier chooses to halt its energy flows to the EU.¹ And in the background, the severe challenges caused by climate change are becoming ever more clear. In this situation, energy efficiency has been claimed to have an important role to play in the EU's climate and energy policy as means to overcome these challenges. However, the successful introduction of new EU policies on energy efficiency requires sustained policy support and collaboration of and among numerous private and public actors, especially at a time when there exist disagreements within the Union on which crises to solve first and how to solve them. In this thesis, I am concerned with analysing the capacity of national policy systems to implement EU policies on energy efficiency within a multilevel system of governance. Energy efficiency is a controversial policy field that can help us in understanding the problems that climate and energy policies must overcome in order to become successful. And as different countries face different challenges, it is important to determine and generalise which factors lead to successful implementation at the national level.

The EU has aimed to be a global leader in the fight against global warming, and at the same time seeks to free itself of its energy import dependency and improve its security of energy supply. As a result, strategies to promote energy efficiency have become a core strategy within its climate and energy policies. Current EU policies on energy efficiency consist of a patchwork of measures affecting virtually every sector of society. Energy efficiency was one of the three main priorities constituting the EU's 2008 climate and energy package, which sets an indicative target to reach a 20 per cent gain in energy efficiency by 2020. By 2030, the gain in energy efficiency has been targeted to reach 27 per cent. And in the newly proclaimed

¹ Since 2006, Russia has halted gas flows to Ukraine on a number of occasions, contributing to major drops or complete cut-offs in gas supplies in many member states.

Energy Union, energy efficiency is mentioned as one of five core priorities. However, as energy efficiency increases in importance at EU level and new policies emerge, it is difficult to find existing scholarly literature that can help us understand how this policy field develops within a European frame. In recent years, we have seen a minor surge in scholarly contributions towards understanding the causes and mechanisms at play in the development of a comprehensive EU climate and energy policy (see for example Buchan 2009; Boasson and Wettestad 2013; Birchfield and Duffield 2011; Skjærseth et al. 2016), but we know very little about the role of energy efficiency.

1.1 Research question

In this study, I intend to use existing theories on implementation within a multilevel system of governance to examine how and why nation states implement EU policies on energy efficiency. The study will take the form of a case study, and the case in question is Norway. Norway is a very interesting object of study: Although Norway is not a member of the EU, the country must as a signatory to the EEA Agreement nevertheless implement EU policies concerning the internal market; and its rather unique energy-economic situation as energy exporter is arguably one of a kind and may not be reflected in the new policies stemming from the EU level. Against this background, it will be interesting to investigate how, if at all, Norway has managed to implement new EU policies on energy efficiency, as well as the reasons why such policies have been implemented. This study therefore addresses the following research questions:

To what extent, how and why has Norway implemented EU directives on energy efficiency?

Analytically, this is a two-tiered approach. First, the study will investigate the extent to which Norway has managed to implement the EU's most important policy measures on energy efficiency. Next, I analyse and try to determine how and why these policies have either been implemented or not by explaining variation in the Norwegian implementation performance.

Theoretically, the study is relevant because it relates to ongoing research on the role of the nation state in EU policy-making and the overarching concept of *Europeanisation*.² Within

² The concept of Europeanisation is defined as the 'emergence and development at the European level of distinct structures of governance', and refers to processes of formalizing interactions among political, legal and social

the Europeanisation literature, much emphasis has been put on the multilevelness of the EU in policy-making.³ The multilevel governance tradition offers two theoretical perspectives that may help us in understanding why nation states implement EU legislation, both of which will be employed here. The first of these is *goodness-of-fit*, which leans on previous insights from neo-institutional theory and assumes that successful implementation depends on the ‘fit’ between European policy requirements and existing institutions or policy traditions at the national level (Knill and Lenschow 1998; Börzel and Risse 2000). The second is *domestic politics*, which pays more attention to processes at the national level when explaining implementation (Treib 2014). This study aims to contribute to this literature by using these theoretical frameworks on a new case (Norway) in a new policy field (energy efficiency), and to discuss the theoretical approach in light of the empirical findings.

Empirically, these questions are highly relevant. There is a need to understand how Norway is affected by and integrated into the EU policy framework, both in general and in climate and energy policies. Norway is not a member of the European Union (EU), but has since 1994 been part of the single market through its membership in the European Economic Area (EEA). Only by implementing EEA-relevant legislation does Norway get market access, however. This means that the country in many ways is being subject to the same pressure for compliance with EU norms as can be observed in member states. To be sure, it can be argued that the most important driver for change in Norwegian society during the last 21 years has been EU legislation, as a fairly recent government-appointed official report on Norway’s relationship with the EU stated (NOU 2012). Yet it is also a fact that Norway has no formal power in the EU’s decision-making institutions. Under such circumstances, the legislative outcomes of policy discussions at the EU level might be in direct conflict with Norwegian political interests or administrative traditions.

In climate and energy policies, Norway is increasingly becoming integrated into the EU’s policy framework. Norway has implemented three of the four directives that constitute the so-

institutions associated with political problem solving in the creation of authoritative European rules (Risse et al. 2001: 1).

³ In a multilevel governance system such as the EU, actors from the European, the national and sometimes also from the subnational level engage in joint decision-making. Decision-making may also be cross-sectional in that specialized actors from different policy domains often are brought together in the decision-making process (Hooghe and Marks 2001; Benz 2006; Hofmann 2009).

called climate and energy package of December 2008. This includes legislation on carbon capture and storage (CCS), renewable energy (RED) and emissions trading (ETS), but excludes the Effort-Sharing Decision (ESD) for the non-ETS sectors, such as transport, agriculture and buildings. Moreover, Norway has implemented transport legislation, which is quite important within the non-traded sectors but nevertheless delinked from the main climate and energy package. In February 2015, Norway announced that the country seeks to align its carbon emission commitments with the EU towards 2030 by setting up a new bilateral agreement (KLD 2015). Through the ETS, Norway aims to contribute to reducing EU carbon emissions by 43 per cent, compared to 2005. Norway also intends to contribute to emission reductions in the non-tradable sector by setting a national emission target that corresponds to the targets set in other comparable EU countries. Lastly, Norway will make use of the possibility available to EU member states to accomplish emission cuts by buying allowances in the ETS or by performing mitigation efforts in other EU countries. As these new developments signal a general inclination on the part of Norway to integrate itself more closely with the EU in climate and energy policies, an important question to ask is whether Norway is also inclined to align itself to the more sector- and policy-specific legislative measures that are introduced to reach the overall emission targets. An investigation into the extent to which Norway has integrated itself with the EU in the field of energy efficiency and the rationales behind the country's decision to implement such policies could provide knowledge on the preparedness and willingness of Norway to align itself with the whole of EU climate and energy policies, and not only with the overarching framework.

Lastly, the field of energy efficiency is itself an interesting object of study. Developments at the EU level indicate that energy efficiency will have a leading role in the development of EU climate and energy policies towards 2030 and 2050, with the European Commission (henceforth: Commission) serving as the agenda setter. Yet, the failure to come up with a legislative measure as means to reach the 2020 target for energy efficiency in the 2008 climate and energy package suggests that member states may not be as ambitious as the Commission. Being in favour of energy efficiency *in principle* is something completely different from putting energy efficiency measures *into practice*, since the new measures might come in conflict with governmental priorities, administrative traditions, economic realities, or cause other unforeseen effects in each member state. In this regard, Norway represents an intriguing case. From the outset, Norway seems to be quite ambitious to improve energy

efficiency in industry, transport and in the construction sector.⁴ But the topic has also been ridden with controversies, with heated debates on the benefits of improving energy efficiency in an energy exporting country, as well as disagreements on the potential to contribute to reducing CO₂-emissions. Norway must as a signatory to the EEA Agreement implement EU legislation concerning energy efficiency. An analysis into how and why Norway has implemented such directives can therefore further our understanding of how nation states respond to new and ambitious energy efficiency policies stemming from the EU level, as well as the causes behind successful implementation.

1.2 The role of energy efficiency in the EU's climate and energy policy

Although energy was at the core of the creation of the European Coal and Steel Community (ECSC), the EU and its predecessor institutions have exercised relatively little competence over energy policy over the years (Duffield and Birchfield 2011: 1). The same can be said about climate policies, which according to some has remained 'little more than an empty shell' until recently (Jordan et al. 2012: 50). Since the turn of the century, however, there has been a minor surge in academic documentation of what appears to be an unprecedented relocation of expertise in the field of climate and energy policies from the member states to the EU level (Eberlein 2012; Wettestad et al. 2012; Skjærseth 2013; Skjærseth et al. 2016; Buchan 2009; Birchfield and Duffield 2011). The promising role of energy efficiency as means both to battle climate change and to improve energy security has been acknowledged by the EU since the 1980s, but has nevertheless more often than not ended up as the second priority in the field of both climate and energy policy (Henningsen 2011: 132).

The first small steps toward a more active and integrated climate and energy policy were taken in the second half of the 1980s with the introduction of the 1986 Single European Act, which paved the way for taking environmental concerns more seriously in the harmonisation of the internal energy market (Hancher 1990: 238; Padgett 1992: 56). The Commission presented for the first time a white paper on climate change in 1988 (Commission 1988).

⁴ Norway allocates much funding to energy efficiency measures in industry and construction through the state-owned enterprises Enova and Husbanken. Norway is also recognized as a world leader in electric mobility, which improves energy efficiency in the transport sector by replacing transport vehicles run on fossil fuels with electric vehicles.

Energy efficiency was mentioned in a 1990 Commission working paper as an area where action was necessary to promote energy security and to reduce CO₂-emissions (Commission 1990). In the lead up to the 1992 UN Conference on Environment and Development (UNCED) in Rio de Janeiro, the Commission pushed for an ambitious policy that could help stabilise CO₂-emissions by 2000 at 1990 levels, as had been decided upon by a Council decision in 1990. Energy efficiency was yet again mentioned as a promising area, and the Commission proposed to strengthen budgets for the energy-efficiency programme SAVE (Commission 1991). With little support from member states, however, the SAVE programme was dramatically weakened in the EU legislative process, and the resulting directive (93/76/EEC) failed to change member state behaviour in a profound way (Oberthür and Kelly 2008: 40).

The period following the 1992 conference in Rio di Janeiro was characterized by slow development of new climate and energy policy initiatives at the EU level. Member states focused mainly on the internal market, and commitments for renewable energy and energy efficiency were non-binding (Skjærseth et al. 2016). But as the 1997 Kyoto Protocol offered the EU a window of opportunity to become a leading actor in mitigating climate change, climate policy emerged as a distinct policy area within the EU (Boasson and Wettestad 2013: 36). In the years that followed, some policy packages were introduced as means to reach the EU's Kyoto commitment to reduce GHG emissions by eight per cent by 2008-2012. Among them was a directive for renewable energy in 2001 (2001/77/EC) and the world's first emissions trading system (ETS), adopted in 2003 (2003/87/EC). In 2002, energy efficiency was more closely linked to climate policy with the adoption of the Energy Performance of Buildings Directive (EPBD) (2002/91/EC). These measures were nevertheless limited in their degree of centralisation and left much authority to the member states (Boasson and Wettestad 2013: 41).

In the following years, energy efficiency was repeatedly mentioned as a promising area of improvement, both to battle climate change, improve energy security and to improve competitiveness. The Commission saw a huge potential in energy efficiency, and suggested to increase energy efficiency by 20 per cent by 2020 in a 2005 communication entitled 'Winning the Battle Against Global Climate Change'. A Green Paper on energy efficiency was presented in 2005 (Commission 2005) and followed up by a more specific action plan in 2006 (Commission 2006a). However, as Henningsen (2011: 132) notes, the action plan simply

reported on already proposed or agreed upon measures and did not bring any substantial new initiatives to the table. The action plan nevertheless suggested a number of improvements in appliances and energy-using equipment, buildings, transport and services and energy end-use efficiency.

The legislative outcomes of this action plan were for the time being rather meagre. An Ecodesign Directive (2005/32/EC) for appliances and energy-using equipment had already been introduced in 2005, but the reinforcement of the Directive was stalled by insufficient allocation of resources in the 2007-2008 period. A recast of the Directive was finally introduced in 2009 (2009/125/EC). Another Directive on Energy End-Use Efficiency and Energy Services (2006/32/EC) replaced the 1993 SAVE Directive and required the member states to set indicative energy savings targets and to ensure that final energy consumption is measured and paid for by the consumers. It also obliged the member states to develop and regularly update national Energy Efficiency Action Plans. The Ecodesign Directive was also complemented with a directive on labelling and standard product information of the consumption of energy and other resources by energy-related products in 2010 (2010/30/EU).

Ahead of the 2009 Copenhagen summit, EU member states sought to bring something substantial to the table that would provide leverage in the international negotiations. In a Council decision in March 2007, the member states agreed to decrease its CO₂-emissions with 20 per cent by 2020, as well as increasing its share of renewable energy to 20 per cent and increase energy efficiency by 20 per cent (Council 2007). On 17 December 2008, the climate and energy package was adopted after an unusually swift legislative process (Commission 2008b; Boasson and Wettestad 2013: 48). The climate and energy package centralised the ETS and introduced binding targets for renewable energy, but only introduced indicative targets for energy efficiency (Wettestad et al. 2012). The EU did not manage to bring legislation on energy efficiency up to date with its declared targets until 2012, with the introduction of the Energy Efficiency Directive (EED) (2012/27/EU).

When the European Council agreed on new climate targets for 2030 in the Council Summit on 23-24 October 2014, member states also agreed to set a new target for energy efficiency: By 2030, the EU is to achieve at least 27 per cent energy savings. In February 2015, the Commission presented its Energy Union strategy (Commission 2015c), in which energy efficiency was mentioned together with security of supply, a fully integrated internal energy market, emission reductions and research and innovation as the five core priorities for the

time ahead. In order to reach the target for 2030, the Commission in November 2015 announced that energy efficiency is to be treated as a source in its own right (Commission 2015a). Thus, in the roughly 25 years that have passed since energy efficiency was mentioned by the Commission for the first time, energy efficiency has developed from being a second priority to becoming a top priority at the EU level, and should be expected to remain a top priority in the time ahead.

1.3 Directives to be studied

This study will concentrate its attention on the Norwegian implementation of the four directives that constitute the essence of EU policies on energy efficiency. The first of these is the original and revised versions of the Directive on the Energy Performance of Buildings. This directive came as a response to an increased awareness that the European building stock represents a major obstacle to the creation of a low-carbon energy system (Commission 2002; 2005; 2006b). Today, it consumes some 40 per cent of European energy and is responsible for about a quarter of the CO₂-emissions not covered by the ETS (Commission 2015). The first EPBD (2002/91/EC) was the first measure to confront this challenge, and introduced a determined and holistic approach to the understanding of the energy performance of buildings. Articles 5 and 6 of the directive require member states to apply minimum requirements on the energy performance of new buildings over 1000 m², as well as for large existing buildings that are subject to renovation. Member states are also obliged to apply a methodology of calculation of the energy performance of buildings, to introduce an energy performance certificate, and to perform regular inspections of boilers and air-conditioning systems in buildings. Qualified experts are to ensure that the certification process and the inspection of boilers and air-conditioning systems are carried out in an independent manner.

The revised EPBD (2010/31/EU) built further on the already established measures, but also introduced a number of innovations. Firstly, it specified the already established methodology for calculating the energy performance of buildings (Article 3 and Annex I), in which a number of aspects of the building envelope should be taken into consideration. These include the thermal characteristics of the building, installed heat and hot water systems, air-conditioning, ventilation, lighting, the design and positioning of the building, passive solar systems and solar protection, indoor climatic conditions, and internal loads. The energy certificate system was also expanded by a requirement to issue certificates to public buildings

over 500 m². Moreover, the Commission established a comparative methodology for the calculation of the most cost-optimal levels of minimum energy performance requirements and obliged the member states to report their results of the calculations to the Commission at regular intervals. In cases where a member state's minimum energy efficiency requirements are less energy efficient than cost-optimal levels of minimum energy performance requirements, the member state has to present a plan with appropriate steps to reduce the gap before the next report to the Commission. The directive further requires that all new buildings are nearly zero-energy buildings by the end of 2020 and that all new buildings occupied and owned by public authorities are nearly zero-energy buildings by the end of 2018.

The next directive to be studied is the original and the revised version of the Ecodesign Directive (2005/32/EC and 2009/125/EC). The original directive sets EU-wide minimum requirements for a wide variety of energy-using products, such as household appliances, information and communication technologies or engineering. Among energy-using product groups, only the transport-sector is exempted from the directive. It requires that energy-using products be affixed with a CE conformity marking based on the product's energy use, anticipated emissions to air, water or soil, anticipated pollution through physical effects such as noise, vibration, radiation or electromagnetic fields, the expected generation of waste material, and the possibilities for re-use (2005/32/EC, Annex I). Products that do not conform to these requirements are prohibited from being placed on the market or put into service. In order to secure that non-conforming products are not being placed on the market, it is required of the member states to perform market surveillance and to take appropriate measures to prevent non-conforming products from entering the market. Such measures include informational assistance, random compliance controls of product samples and sanctions (e.g. withdraw the product from the market). The *revised* Ecodesign Directive later increased the scope of the directive by requiring the CE marking not only on energy-using products, but also on any energy-related product, defined as any product that has an impact on energy consumption during use.

The third directive to be studied is the Energy Labelling Directive (2010/30/EU), which is a reformulation of a previous labelling directive from 1992 (92/75/EEC). The directive complements the Ecodesign Directive by establishing a framework for harmonisation of end-user information through labelling and standard product information on an energy-related product's consumption of energy, which thereby should make it easier for end-users to choose

more energy efficient products. Thus, whereas the Ecodesign Directive contributes to a 'market pull' by prohibiting products not compliant with the minimum energy requirements, the Energy Labelling Directive provides a 'market push', because consumers are given the possibility to push the market in an energy efficient direction by choosing products based on their energy use. The directive states that all relevant information relating to the consumption of electric and other forms of energy is to be brought to attention of end-users by means of a fiche (i.e. a standard table of information relating to a product) and a label. Companies may create their own labels for providing the necessary information, and have a wide variety of energy labelling templates to choose from, provided for by the Commission. As with the Ecodesign Directive, member states are required to provide appropriate informational measures, perform market surveillance by conducting product controls and, if necessary, withdraw products from the market.

Finally, the fourth directive to be studied is the Energy Efficiency Directive (2012/27/EU). The directive was a result of an awareness that member states were not on track to reach the 20 per cent target of the 2008 climate and energy package, and that there thus was a need to strengthen measures (European Council 2011). In contrast to the Renewables Directive, which was one of the main policy outcomes of the climate and energy package, and which sets binding targets for each member state, the Energy Efficiency Directive contains no such requirement but instead obliges member states to implement minimum measures for energy efficiency improvements. Many different types of measures are to be implemented in each member state, but only the most important of these will be mentioned here. Firstly, each member state must set an indicative and quantitative target for energy efficiency. Secondly, they must set up energy efficiency obligation schemes that require energy companies to achieve yearly savings of 1,5 per cent of annual sales to final consumers. Thirdly, they should also renovate three per cent of government-owned buildings every year. Both the obligation scheme and the renovation of government-owned buildings are to be financed by an Energy Efficiency National Fund. Furthermore, it is required of member states to ensure that central authorities purchase only goods, services and buildings with high energy efficiency performance. As long as it is technically feasible and economically sound, end-users of electricity, natural gas, district heating or cooling and hot water shall be provided for with competitively priced individual energy meters that accurately reflect actual energy consumption. Lastly, member states are to ensure that end-users have access to cost-effective energy audits, provided for by independent experts. The Commission oversees the

transposition and application through national action plans that are to be evaluated every three years.

1.4 Norwegian implementation of EU legislation

As of 2011, Norway was among the countries that were quickest to transpose new EU legal acts on the internal market. At times when legal acts have been overdue, the average Norwegian delay before finally implementing has been around 4,6 months in the period between 1994 and 2011. This is slightly better than the EU member states, which on average have been delayed by 5,5 months (MFA 2012: 118, 125). After 2011, however, an increasing number of legal acts have been delayed. In September 2011, the EFTA Surveillance Authority (ESA) published an internal market scoreboard (ESA 2011b), in which Norway was in line with the EU demand that the total amount of EU directives not implemented is to remain below one per cent of the total amount of existing directives. Norway had a deficit of exactly 1 per cent, slightly lower than the EU average, which was 1,2 per cent. This percentage further increased in the following years, and became a matter of concern and political attention before and after the parliamentary elections in September 2013. In April 2015, ESA's new scoreboard showed that Norway's implementation deficit had risen to 2 per cent, which was the second highest deficit in the whole EEA and corresponded to 23 overdue directives. ESA expressed its concern with this 'alarming trend' and urged Norway to do its utmost to reverse it (ESA 2015a). However, when ESA published a new scoreboard in October 2015, Norway had managed to reverse this trend to such an extent that they brought their deficit down to 0 per cent, with all directives implemented on time and being the best performer of all EEA states (ESA 2015b).

1.5 Outline of the thesis

The rest of this thesis will be structured in the following way: In Chapter 2, I discuss the prevailing literature on implementation of EU legislation and use this as a background for my own analytical framework. Two theoretical perspectives will be used, namely goodness-of-fit and domestic politics. Thereafter, Chapter 3 presents the methods to be used and discusses the methodological considerations of importance to this approach. In Chapter 4, I analyse and assess the Norwegian implementation of the directives according to their timeliness and

correctness. Next, Chapter 5 links the theoretical perspectives to the empirical findings and discusses their explanatory power. Additionally, I discuss whether these theoretical perspectives are insufficient explanations for the outcome and whether there might exist some other valid explanations. Finally, Chapter 6 summarizes the main findings of the thesis and suggests some new directions for research.

2 Analytical framework

This chapter outlines the analytical framework that will guide the empirical enquiry into how, why and the extent to which Norway has implemented EU legislation on energy efficiency. The study takes as a starting point that the EU is a multi-level system of governance where authority in decision-making and implementation is dispersed between several administrative and political bodies at supranational, national and sub-national levels (Hooghe and Marks 2001). Within the multilevel system of governance, putting EU policies into practice is characterised by intricate and complicated processes. EU level initiatives are just the starting point for changed practices in society. What follows is compliance and implementation at the national level. The success of the EU's policies on energy efficiency therefore depends on how the policies are downloaded from the EU level to societal target groups through national policy action. This is also relevant for Norway, as the country must implement EU policies that are deemed EEA relevant. The scholarly literature on multilevel governance has generated theories to explain national implementation within this system of governance (Di Lucia and Kronsell 2010: 546). Such implementation theory will be used to assess and explain the Norwegian implementation of the EU's directives on energy efficiency. But in order to explain a country's implementation performance, one must first define what is actually meant by implementation. I therefore start this chapter by conceptualising implementation as I intend to use the concept, and thereafter present the theoretical framework to be used.

2.1 Conceptualising and assessing implementation

What do we actually mean by implementation? Policy implementation is described in the scholarly literature as one of several phases of a policy cycle, ranging from problem definition and agenda-setting to policy formulation, implementation, evaluation and to termination or re-formulation. In this sense, implementation refers to what happens after a policy proposition has become a law – when a policy is translated into action (Treib 2014: 5). For students of EU policy-making, this phase is particularly interesting. The EU is generally a very decentralised

system and has a limited administrative capacity,⁵ and the member states themselves have to implement EU policies into national law. Because of the textual ambiguity and vagueness that often characterise the EU's legislative bills, national administrations often get much leeway when implementing it, and may choose policy instruments in line with their own interpretation of the bill. And even though the European Court of Justice (ECJ) can impose fines on states that have violated EU law, the EU has no European police force to rely on if member states still do not obey the rules. As a result, there is a chance that a legislative bill is implemented into national law, but without actual compliance with the norms expressed in this bill. Conversely, it may happen that a national practice already conforms to a new requirement by an EU directive, but without having implemented it into national law. For this reason, to use the degree of 'compliance' as a measure of conformity with the EU *acquis communautaire* is troublesome and needs to be carefully nuanced.

In order to measure implementation as a dependent variable, it is necessary to separate the different phases of a policy-implementation process and the factual degree of implementation performance in a member state. Implementation can be separated into three different phases: The first phase is transposition, which means that when the EU has decided on a policy and written the text of the directive, member states have to incorporate the text into national law within the specified deadline and in a correct manner. The next phase is that of application. In this phase, administration, citizens and enterprises work to guarantee that the legal norms laid down in the directives are actually being followed, i.e. that society actors change behaviour. The last phase is enforcement. Here, administrations and the legal system are to provide mechanisms for ensuring that non-compliant behaviour is detected and that non-compliant actors are forced to change their behaviour in accordance with the intent of the directive in question (Treib 2014: 17). Ideally, all three of these phases should be studied to be able to assess the complete degree of performance.

This study examines the implementation performance in the transposition and – to some extent – the application phases of the four main directives that constitute the EU's policy on energy efficiency. The enforcement phases will not be studied, since the extra work related to the collection and analysis of data on enforcement for four directives would be too demanding

⁵ In general, this is true. In climate policies, the EU does however have more administrative capacity, since the ETS is harmonised at the EU level and enforced by the Commission. The ETS also targets installations rather than countries.

for the researcher to complete within the deadline set for this study. While the study will concentrate mostly on the transposition phase, application will be analysed in those cases where the implementation process has reached a stage where data on the application phase has begun to emerge. The implementation performance in the transposition phase will be measured along two dimensions: correctness and timeliness. The variation in implementation performance can be seen as varying between low and high, as shown in Table 2.1.

	Timely	Yes	No
Correct			
Yes		High	Intermediate +
No		Intermediate -	Low

Table 2.1: Implementation performance score. Adapted from Jevnaker (2014)

Transposition is timely when the requirements of the EU directives on energy efficiency are incorporated into national legislation within a certain deadline. Moreover, correct transposition is operationalized as approval from ESA, which oversees the implementation in EEA countries on behalf of the EU. Regarding timeliness, it is important to note some differences in implementation routines between EU member states and EEA countries. In general, it is requested of EEA countries to transpose legislation in parallel with EU member states. In practice, however, this normally takes longer time for the EEA countries. A given legal act has to be incorporated into the EEA Agreement. As the process of integrating EU legislation into the EEA Agreement usually takes some time, it is considered to be normal to have a certain time lag in transposition, compared to EU member states. A postponed deadline of around six to nine months is therefore an informal rule, and on some occasions, even a whole year could be accepted (MFA 2012: 95). In this thesis, the implementation of a directive has to be transposed no later than one year later than the deadline set for EU member states, if it is to be regarded as timely.

It is also worth noting that to distinguish between transposition and application sometimes can be blurred. For example, in the case of the Ecodesign and Energy Labelling Directives, a vast amount of product regulations has to be incorporated after the formal transposition of the directive has been completed, a sequence which could be regarded as both transposition and application. Here, I analyse such incorporation as part of the transposition phase; I do

however not intend to analyse each and every one of them according to their timeliness and correctness, but look after general patterns in assessing the implementation performance of these regulations.

Furthermore, it could be argued that there is a certain normative difference between the two dimensions: A delayed but correct implementation would probably be better than an incorrect but timely one, because a correct implementation has a greater chance of attaining a directive's goal than an incorrect one. If a directive has been implemented in a manner that increases the chance of reaching both the short-term as well as the long-term goals, then, it should be valued higher than other instances where the implementation is on time but where the goals will not be attained. For this reason, a correct but delayed implementation is marked by an 'Intermediate +' implementation performance score in Table 2.1, and 'Intermediate -' implementation performance has been given when the implementation is incorrect but on time.

The study will take a more flexible approach in the application phase. In this phase, it is difficult to find indicators from which we might aggregate clear measures on timeliness and correctness. Ideally, implementation in the application phase is correct when the public administration executes proper measures that target groups respond to by changing their behaviour in a manner that conforms to the policies and the policy direction promoted by the EU. It would be timely if these measures were introduced early enough for the targets to be reached on time. Measuring this in practice is tricky, however. A valid measure for correctness could be based on actual energy efficiency improvements in target groups. But with no such data available, all we can do is make some preliminary conclusions based on the data at hand. Regarding timeliness, CO₂-emission reduction targets or energy efficiency improvement targets for 2020, 2030 or 2050 could serve as valid benchmarks. But here, too, it is difficult to assess when a measure is introduced early enough for the targets to be reached on time. Moreover, the application might be introduced too late to reach the 2020 or 2030 targets, but at the same time early enough to contribute to reaching the long-term target for 2050. It is challenging though, if not impossible, to determine that a long-term target is within reach, while at the same time failing to reach the short-term targets. Thus, it makes little sense to study the application phase according to their timeliness and correctness. Instead, I try to make a preliminary assessment based on the data that so far has emerged, and reflect on how

any eventual behavioural changes observed so far might give indications on what the future will bring.

2.2 Explaining implementation

For many years, students of the European Union were mostly interested in the EU integration process from a bottom-up perspective, in which the dynamics and outcome of the European institution-building process were the main dependent variable (Börzel and Risse 2000: 1). Beginning in the late 1980s, however, the scholarly literature increasingly directed attention to what happens after an EU policy has become a law. This change came about as a result of a shared view from both academics and EU officials that member states' non-compliance with EU law had become a problem for further integration (Mastenbroek and van Keulen 2006: 20; see also Duina 1997 and Metcalfe 1992). The logic is simple: the EU might develop a vast amount of directives and legal acts, but it matters little if member states refuse to implement or if they try to evade the influence of the EU. It is therefore important to ask how and to what extent member states make the effort to bring European policies into practice (Mastenbroek 2005).

The literature on implementation has evolved through a sequence of four phases, according to Treib (2014). First-wave researchers saw domestic implementation of European law as a rather apolitical process, and emphasized clearly worded provisions in the directives and effective administrative organisation as important factors for explaining implementation performance. The inclusion of domestic actors such as parliaments, interest groups or subnational entities was seen as important for domestic implementation performance, but in general, domestic politics was given little attention and on the whole was considered to be irrelevant (Treib 2014: 7-8). In the second wave, researchers pointed to the degree of fit or misfit between European rules and existing institutional and regulatory traditions at the domestic level (commonly referred to as goodness-of-fit). By exploring how far institutional differences could explain implementation processes, it was possible to reduce the complexity of the analysis. Further actor-based explanations would only be taken into account if the outcome could not be explained by the institutional context alone (Treib 2014: 8). However, as the empirical results were rather meagre, some proponents of the misfit-argument complemented it with an increased attention to the number of domestic veto-players and negatively affected societal actors (e.g. Cowles, Caporaso and Risse 2001). This concern with

domestic opposition to EU pressure then gradually evolved into a third wave of implementation theory, which asks how and under which conditions domestic opposition plays a role (Mastenbroek 2005: 1115). In the last and fourth wave, the application and enforcement phases of the implementation process were studied in more detail. Qualitative studies focused on member-state responses to ECJ rulings and the role EU agencies play in monitoring and assisting domestic implementation. This phase also saw an increase in quantitative studies, which examined the relationship between member-state opposition within EU negotiations and domestic implementation (Treib 2014: 13-15).

In this study, I will use two perspectives from the implementation literature to explain Norway's performance in implementing directives on energy efficiency. These are goodness-of-fit and domestic politics. The misfit-argument assumes that institutional and regulatory differences between the EU and domestic level will lead to low Norwegian implementation performance. It also assumes that there generally exists a bias towards maintaining the Norwegian status quo. The domestic politics-perspective complements the misfit-argument by examining the phenomenon from below. Here, it is assumed that various domestic actors might support or oppose EU legislation. Moreover, domestic actors will not necessarily favour the status quo. These theoretical perspectives complement each other in a way that enables us to study our phenomenon from above as well as from below, and thereby increases the likelihood of capturing the variance of the phenomenon to be studied. I now turn to these two perspectives and provide a more detailed discussion of what these perspectives should lead us to expect.

2.3 Pressure from above: goodness-of-fit

The misfit-perspective leans heavily on previous insights from neo-institutional theory, which suggests that exogenous pressure will not automatically cause adaptational change in institutions – the institutions might well resist to adapt, despite the pressure from outside (Knill and Lenschow 1998; see also Krasner 1988; DiMaggio and Powell 1991; March and Olsen 1996). As previously noted, the misfit-hypothesis rests on the basic assumption that successful implementation depends on the fit between European policy requirements and existing institutions or policy traditions at the national level (Knill and Lenschow 1998; Börzel and Risse 2000). It is therefore an approach that tries to explain a lot with very little. Countries are also regarded as unitary actors who favour the status quo and accordingly

oppose any challenges to this (Jevnaker 2014: 6). Hence, policy alignment between the EU and national level would lead us to expect that domestic implementation performance is high. Conversely, if national policy objectives and instruments were challenged by new EU requirements, there would exist a misfit and therefore lead to low implementation performance.

The misfit-approach has received some criticism for having weak explanatory power, for excluding actor interests and for being too static and top down (Treib 2014). It could nevertheless be a potentially powerful explanation if these shortcomings are addressed (Di Lucia and Kronsell 2010). One of the ways to improve the explanatory power is to broaden the fit-argument so that it includes more than just institutions. Relevant in the field of energy efficiency is a country's energy-economic situation, which could potentially be significantly affected by powerful policies on energy efficiency. Countries with a high share of fossil fuels in the energy mix and that are dependent on energy imports are expected to be more positive towards action in the field of energy efficiency than countries that are less dependent on energy imports and that have less fossil fuels in the energy mix. This thesis therefore examines the degree of fit between Norway's pre-existing policies on energy efficiency as well as its energy-economic situation and the final policy outcomes (the directives).

The 'distance' between Norway's pre-existing policies, policy traditions and energy-economic situation on the one hand and the four directives on the other expresses the degree of fit. 'Pre-existing policies' refer to the types and compositions of Norwegian policies adopted before the different directives were introduced. 'Policy traditions' are specific lines of reasoning about energy policies in the Norwegian government that can be observed over a longer period of time. 'Energy-economic situation' is operationalized as the energy mix and the energy trade balance, compared to the EU average. As the hypothesis suggests, I expect Norwegian implementation performance to be low if there is a misfit between each directive and Norway's pre-existing policies on the subject. I expect implementation performance to be high if the directive fits with the existing domestic status quo. As regards the energy-economic situation, I hypothesise that a Norwegian fit with the EU's energy-economic situation will increase the feasibility of policy implementation. Conversely, if there is a misfit, policy performance should be low. Moreover, I expect that some directives will cause greater energy-economic misfit than others, since some will have a larger impact on a country's

energy system than others. The Energy Efficiency Directive is one such directive, but also – to a lesser extent – the Energy Performance in Buildings Directive.

2.4 Counter-pressure from below: domestic politics

The misfit-hypothesis has also been criticised for having under-theorised several aspects of the implementation process (Treib 2014: 10). For this reason, there is a need to open up the ‘black box’ of domestic politics, according to some scholars (Mastenbroek 2005; see also Bähr 2006). It is not necessarily so that domestic actors will defend the status quo, as the misfit-hypothesis assumes. If the new EU requirements are in line with the interests of domestic actors, they might be positively inclined towards these new changes and support implementation. If these interests are to have an impact on the implementation performance, however, it is necessary that they have a channel into the policy-making process, in which they can present their view and persuade other actors with conflicting views. Three variables will be used to explain how domestic politics affect the implementation performance: the number of veto players, administrative organisation, the role of societal groups and their access to decision-making. It is expected that some of these variables, most notably the role of societal groups and administrative organisation, will be more important than others. Moreover, the variables are expected to vary between directives.

2.4.1 Veto players

Veto players are either individual or collective actors within the executive and legislative branches of government, whose support is needed to agree on a proposed policy change (Tsebelis 2002: 2). The basic proposition is that it becomes more likely that the implementation process gets stuck or fails to be transposed within the directive’s deadline as the number of actors that have to agree to the measures increases (Treib 2014: 25). Whereas support from the veto players on a given EU directive will increase implementation performance, a lack of support will lead to low implementation performance. In Norway, the parliament (Storting) can vote down governmental proposals. This becomes harder when there is a majority government in place, however. In periods of majority government, then, we should expect high implementation performance, at least as long as the majority government agrees with the policy requirements of the directive. It is also likely that changes in government will lead to a change in implementation performance, as the interests of the new

government might be different from the former, or the new government might want to re-examine the directive. Conversely, if the governmental constellation is consistent throughout the implementation process, we should expect to observe high implementation performance.

2.4.2 Societal interests

Societal actors may support or resist EU legislation, and could possibly influence implementation if their interests deviate from those of the government. The key factor in determining the incentives a societal actor may have in complying with EU goals is the extent to which the actor is affected by EU policies, including how different actors are affected in the same way or in different ways. So, when looking at the influence of societal interests, we should examine how costs and benefits among societal actors are widely distributed among actors or concentrated (Wilson 1973). We can expect that the incentives for opposing EU policy is high when the costs are concentrated to only a few specific actors or groups, while benefits are broadly distributed. On the other hand, if benefits are concentrated and costs distributed, those who are expected to benefit will increase support. With wide distribution both in terms of costs and benefits, societal actors will have less of an incentive to mobilize against or for the directive. When both costs and benefits are concentrated, the response from societal actors will depend on the relative balance between them (see Table 2.2). I expect to find variation between the directives, but also variation between regulations on different product groups in the case of the Ecodesign Directive and the Energy Labelling Directive.

Costs	<i>Concentrated</i>	<i>Distributed</i>
Benefits		
<i>Concentrated</i>	Response depends on balance of costs and benefits	Support
<i>Distributed</i>	Opposition	Low response

Table 2.2: Support or opposition from targeted societal actors (Jevnaker 2014)

Opposition or support from target groups will not automatically be translated into influence on the transposition process. Societal influence is dependent on the degree of participation

and access to the policy-making process.⁶ As some segments of society work closer together than others – like for example ministries, parliamentary committees and specific industrial sectors – there sometimes exist alliances that can work in tandem to oppose or support EU policies. Societal target groups may have formal or informal access to decision-making. Some target groups, such as industry groups that are of particular importance to the national economy, may gain privileged access and represent the ‘core’, while other groups are more peripheral (Maloney, Jordan and McLaughlin 1994).⁷ In the case of environmental policy, which frequently imposes costs on affected target groups, proposed policies could be watered down through the influence of the affected societal actors. Thus, the extent to which different societal actors have *access* to decision-making processes is expected to influence implementation performance. If EU policies are likely to threaten the interests of important societal groups with close connections to political and administrative bodies, they are expected to resist the new EU requirements and thereby reduce the likelihood of implementation. Overall, Norway is known to have a relatively open and consensual governing system. However, some target groups have also had privileged access to decision-making. This has been especially so for core target groups like energy-intensive industries (Kasa and Malvik 2000). As energy efficiency affects the traditional and important energy

⁶ The way this societal influence is channelled into the policy-making process is what might be called regulatory or policy styles; with policy style referring to the way a country includes affected societal actors in policy-making. The basic proposition is that a country’s policy style will affect how EU policies are implemented. Policy styles can be either ‘consensual’ or ‘conflictual’ (Jänicke 1992). A consensual policy style seeks to establish consensus through broad and extensive participation of affected societal groups. A conflictual policy style would be more closed and exclude societal actors from the decision-making, thereby making it easier for the government to reach a conclusion. Policy style has often been used as an independent variable in large, and often quantitative, comparative analyses of national implementation. But here, the usefulness of the variable is reduced. It makes sense to use such a variable to compare large and different governance systems, but it is not very clear how a more or less constant policy style can manage to explain variation in implementation among different directives in one single country.

⁷ Some conceptual clarification is needed here. Concepts such as ‘privileged’ or ‘core’ societal groups have often been used in the scholarly literature to suggest a more structural or systemic phenomenon observed in many European states after World War II, where interest groups, ministries and administrations were so intertwined that the interest groups could be considered to be parts of the state themselves. In the scholarly literature, this has often been referred to as ‘iron triangles’ (Skidmore and Hudson 1993). This use should not be confused with my own use, which is more loosely defined and intended to include less structural differences in access to the decision-making procedure.

suppliers in Norway, it could be that privileged access has been given in some of the cases to be examined in this thesis. On such occasions, it is expected that the implementation performance is high if the core group favours the new requirements, and low if it opposes them.

2.4.3 Administrative organisation

Even when societal interests and governmental priorities correspond, there might occur implementation problems due to a fragmentation in the administrative organisation. Fragmentation is defined as the distribution of competence between governmental agencies involved in implementation (Skjærseth et al. 2016). When implementing EU legislation, the relevant competence may be vested in a single public administrative organisation, or it could be shared between several administrative agencies (Jevnaker 2014: 8). It is assumed that directives will be understood differently by different regulatory agencies, and that they thus also apply different criteria for decision-making. This assumption is based on Allison's (1971: 176) notion that 'where you stand depends on where you sit', which means that formal roles shape the way regulatory agencies perceive a directive or regulation.

The fragmentation of competence can be both horizontal and vertical. Whereas horizontal fragmentation refers to the number of governmental agencies involved at each level of government, a vertical fragmentation refers to the number of administrative levels involved in implementation, such as the state, regional and municipal levels (Jevnaker 2014: 8). If the transposition of a directive is fragmented among several ministries, we are likely to observe reduced implementation performance. While the transposition usually is seen through at the state level, other specialised regulatory agencies at a lower administrative level will often administer the application phase of the implementation. On such occasions where several administrative levels are involved, we should expect to observe reduced implementation performance in the application phase. Lastly, we should expect to observe variation between directives.

2.5 Other explanatory factors

While the two theoretical perspectives presented here analyse the variation in implementation performance from above as well as from below, it might nevertheless be the case that the

empirical material shows support for implementation patterns that cannot be explained by the perspectives applied here. Such factors may be patterns or events occurring in Europe or internationally, or unknowns that appear in the empirical analysis. In order to complement the two theoretical perspectives, I therefore account for such unforeseen factors and try to determine their degree of influence on the final implementation performance of the directives.

A particular note should be made on the special situation in which Norway finds itself. Norway is a full member of the internal market, but at the same time excluded from the EU's decision-making bodies. In EU policy-making, member states try to upload their own policies to the EU level as a means to reduce compliance problems in the implementation phase (Börzel and Risse 2003: 62). Norway does not have a chance to participate in decision-making and will accordingly have limited influence on the legal acts that are being produced. Norway does however have a possibility to provide inputs to policy preparation and to communicate its positions to EU actors, thereby giving some but little leverage to the uploading phase. The Norwegian government does this to a varying extent, depending on the perceived importance of the policy proposal being discussed at EU level. Nevertheless, even when Norway very actively tries to influence policy-making in the EU, this lobbying will rarely result in any profound changes to the policy-outcome or to reserve Norway from some parts of a policy. There is thus a tendency towards misfit embedded in Norway's EU relations, which increases the likelihood that there is a low match between policies made at the EU level and Norwegian policy traditions. There might also appear other unforeseen consequences because of this special relationship with the EU. It is therefore difficult to expect how the EEA Agreement might influence implementation, but we should be attentive to any observed outcomes that might stem from this agreement.

3 Method and data

This chapter sets out to present the methodological approach of the study. Choosing a method requires that it be derived from the research question (Gerring 2007: 71). The general research question to be addressed in this study is the following: *To what extent, how and why has Norway implemented EU legislation on energy efficiency?*

3.1 Choice of method

This research project addresses its research questions by use of a theory-testing in-depth case study, using both process tracing and pattern matching (congruence method). According to Gerring (2007: 19-20), a case is defined as a ‘spatially delimited phenomenon (a unit) observed at a single point in time or over some period of time’. A case study involves an intensive study of a single case, and the study should to some extent ‘shed light on a larger class of cases (a population)’. In this study, the Norwegian implementation of EU directives on energy efficiency is the case. The larger population could be considered to be the full amount of EU legislation that Norway has to implement, but also EU member states’ and/or EEA countries’ implementation of EU directives on energy efficiency. There are therefore both national and European ‘larger classes of cases’ from which we could draw comparisons. However, the goal of this study is not to generalise to a wider population, but to examine our case as thorough as possible, so that we can reach a better understanding of Norwegian responses to the EU’s increased output of energy efficiency legislation. We do not know much about Norwegian attitudes towards energy efficiency, and are therefore in need of empirical insights in this field. Nonetheless, the study might also gain theoretical insights in that the implementation theories used are designed for EU member states only; considering that Norway is part of the EEA and not the EU itself, we might be able to assess how useful these theories are on non-member countries such as Norway and other EEA countries.

If a theory is fairly well developed, case studies may be used to test the theory. In such instances, the goal of the study should not be to falsify or confirm a theory, but rather to identify whether and how the scope conditions of competing theories could be expanded or narrowed (George and Bennett 2005: 115). Theory-testing case studies normally take the form of either most-likely or least-likely case formats in order to give maximum leverage to the conclusions (Eckstein 1975). However, case studies could also be tested against two rival

theories. Indeed, as Blatter and Blume (2008: 325) point out, the main control mechanism of theory-testing approaches is the testing of rivaling theories. In my approach, I test the relative explanatory power of two complementing theories. By testing the theories of goodness-of-fit and domestic politics against each other, it is not the goal to refute or confirm any of these theories in general, but rather to examine which of these best explains the outcome of our case. Conclusions from this study can therefore be drawn to help in understanding the causes and pathways of an implementation process, but also to strengthen, exemplify, weaken or nuance claims made in the implementation literature.

The congruence approach is theory-driven; the goal is to draw inferences based on specified predictions from abstract theories in order to assess the relative strength of these theories for explaining or understanding the case (Blatter and Blume 2008: 325). Process tracing, on the other hand, pays more attention to so-called smoking-gun observations and helps explain the causal mechanisms in more detail (George and Bennett 2005: 182). By combining these two approaches, it is possible to use the full richness of information related to the empirical case in order to make well-founded inferences about the relevance of theoretical concepts (Blatter and Blume 2008: 327). Such an approach enhances the possibility that the virtues of case studies are best maximised. With case studies, there is always a trade-off with the goal to generalise over a wider population of cases. We therefore need to ensure that case studies are used in a way that maximises their strengths. The strength of case studies might best be described as its ability to maximise *thickness*. According to Blatter and Blume (2008: 348), thickness refers ‘to the number and diversity of observations which are conducted within a case, and the intensity with which the researcher reflects on the relationship between the empirical observation and the theoretical reference’. Case studies can provide *deeper* insights into causal mechanisms, but also reveal *dense* causal links and draw conclusions towards a *broad* set of specific theories or abstract concepts. Case studies do not produce trade-offs when it comes to the depth, density and breadth of case studies. By maximising the thickness, therefore, case studies can become valuable tools ‘for getting deeper, denser and broader insights’ (Blatter and Blume 2008: 349).

3.2 Case selection and within-case observations

It is widely assumed that random selection often generates serious biases in small-N research, and that any analysis of a small number of cases is in need of careful and theory-guided

selection of non-random cases (Levy 2008: 8; see also King et al. 1994: 124-128 and Gerring 2007: 87-88). As was made clear above, the choosing of the case to be studied is largely based on empirical grounds, rather than on representative sampling. Being able to describe and fully understand the case is to some extent an end in itself. But the case selection is also theory-guided, as it seeks to test usefulness and scope of basic implementation theory on an EEA country. If we follow the line of argumentation of Lijphart (1971) that as many observable cases as possible should be included in the study, it could be argued that at least all of the EEA countries need to be included. The universe of EEA countries consists only of Norway, Iceland and Liechtenstein (excluding EU member states), of which Norway is by far the largest one – both in terms of population, geography and economic power. One might therefore argue that a large proportion of the universe is already covered by choosing Norway as a representative EEA country. On the other hand, by having regard to the fact that there is a great diversity in size, administrative traditions and economic infrastructure between the three EEA countries, one might also assume that too little variance would be captured with only Norway as the sole case. Moreover, if one were to study only EEA countries, one would not have the ability to control the findings by comparing them to other EU member states, thereby increasing the chance of reaching biased conclusions. While these considerations should be regarded as important and not to be forgotten, it is also the view of the author that the Norwegian case is of such interest that it can be studied by itself. Nevertheless, we should always have in mind that comparisons are of vital importance to any research design, and that the findings in this study can be useful for comparisons with other EEA and EU member states.

Another selection issue revolves around the question of how many units or observations to choose within the case to be studied. Even in a single case-testing format, at least a small number of observations within the case must be examined and compared. Otherwise, it would be impossible to escape the ‘Fundamental Problem of Causal Inference’ (King et al. 1994: 208). The four directives that comprise the observations within the case constitute more or less the whole universe of current EU legislation on energy efficiency, since most directives relating to energy efficiency have either been repealed or amended with the introduction of the four chosen directives. It is not very likely that the gains of increasing the number of observations – for example by including the SAVE Directive on the improvement of energy efficiency to limit CO₂-emissions (1993/76/EEC) or the Directive on Energy End-Use

Efficiency and Energy Services (2006/32/EC) – would surpass the cost of increasing the amount of data to be gathered and analysed.

3.3 Sources of data

The most important sources of data are the materials gathered from semi-structured interviews with experts from administration, organisations and industry. Industry actors mainly include electricity producers, on the one hand, and providers of energy efficiency solutions, on the other. The organisations interviewed were selected on their perceived interest in energy efficiency policies, based on a preliminary judgement from government hearings and public statements, as well as on their perceived power (e.g. their ability to influence the outcome). The aim of these interviews has been to collect data that can give detailed information on the thoughts and considerations of important actors during the implementation processes. By using interviews, the interviewees may provide useful information that has not been possible to gather from written sources, and may also provide more information on conflicts of interests between actors. For the purpose of this study, it was important to find out who the main actors were, who they communicated with, and the extent to which societal actors managed to get their views heard and acknowledged by decision-makers. Data were collected primarily through one semi-structured interview with representatives of each involved actor in February, March and April 2016, except on one occasion when a phone interview was conducted instead. The strength of semi-structured interviews rather than structured or unstructured interviews lies in the ability to ensure that relevant topics are covered according to the research questions of the interviewer, while at the same time being flexible enough for the interviewees to guide the interviewer through the implementation processes on his or her own accords (Bryman 2004: 321).

All interviews were taped and transcribed. Afterwards, the respondents were given the possibility to provide feedback on the presentations of the material. The interviewees were granted anonymity on the grounds that the topic could be perceived as sensitive, but none of the interviewees found it necessary. Triangulation was used to ensure the reliability and validity of the data. For example, interview data were checked against written material such as press releases and other data gathered in document studies. The representatives of interest organisations were asked about their positions on the different directives, how they had lobbied concerning the different directives, who their cooperation partners within and outside

the industry were, and what kind of information they provided to decision makers. The representatives of government administration were asked about their own thoughts on the implementation processes, how they thought the directives would fit into Norwegian policy practices and administrative traditions, and how they perceived the positions and arguments of stakeholders. They also commented on the speed of the implementation process by explaining why the process evolved so fast or slow as it did. In cases where the implementation of a directive was not correct, they were asked about the reasons for the apparent failure to implement correctly and to elaborate on the differences in interpretation between Norwegian administration and ESA.

Additional data were gathered by collecting a vast amount of written sources related to the four directives. Among them are public hearing documents, strategy documents, government-appointed white papers, parliamentary propositions and various reports from industry actors and civil society. Newspaper articles were used to get an overview of the processes and the actors involved. Lastly, documents pertaining to assessing the implementation performance were gathered from ESA's public database as well as from documents withheld from the public, to which I was granted access.

3.4 Evaluation of the research design

Whereas validity refers to the extent to which we are measuring what 'we think we are measuring' (King et al. 1994: 25), reliability is concerned with the accuracy of the study and the verifiability of the results. Reliability implies that other researchers should be able to reach the same conclusion by following the same procedure as was done before (Yin 1994: 36). The next paragraphs will discuss relevant challenges to internal, external and construct validity, as well as reliability.

External validity is strong if it is possible to draw general conclusions from a small number of cases to a larger population or universe (Lund 2002: 105). Case studies are often criticised for their weak external validity. A general warning on behalf of case studies is that one should be cautious to generalise findings from case studies to wider populations of similar cases. This study does not have a clearly stated ambition to generalise the findings to any other population than Norway, as has already been made clear above. But as this is also a theory-testing study, one of the ambitions is to confirm or validate pre-developed hypotheses in order

to assess the explanatory power of the theories. This is in line with Yin's (1994: 10) statement that the investigator's goal in a case study 'is to expand and generalize theories' – to develop analytic generalisations.

Internal validity is strong if causal inference(s) can be made (Lund 2002: 105). This is also one of the strengths of case studies. Case studies are characterised by their *thickness*, which means that they are useful tools for providing deep insights into particular phenomena, they can reveal dense links and interactions, and generate new and broad sets of theoretical concepts and propositions based on their conclusions (Blatter and Blume 2008: 349). Case studies can maximise internal validity by gaining insight into the causal pathways of a given phenomenon. This is especially so for process tracing, which is conducted here. The internal validity is also maximised by use of triangulation. Whereas interviews are a means to fill out the picture where written sources fail to provide the whole picture, written sources can be used to proof check statements made by interviewees.

A third challenge to validity is that of construct validity, which is concerned with whether the theoretical concept is operationalized to measurable indicators (Lund 2002: 104). The indicators presented in Chapter 2 are operationalized in a way that meaningfully captures the concepts they are intended to measure.

Reliability means that applying the same procedure in the same way will always produce the same measure (King et al. 1994: 25). Even though interviews are difficult to replicate, the reliability of the data is strengthened by transcribing every single interview and verifying the content with other written sources.

Although I tried many times through different channels, the Ministry of Petroleum and Energy (MPE) regrettably refused to participate in an interview on the grounds that the object of study was too sensitive. The fact that such an important source of information is excluded from the empirical data poses a threat to the internal validity of the study. In analysing statements from other interviewees, I have therefore taken this into consideration and ensured as best I can that my conclusions are not based on sample bias. I have been especially careful on those occasions where claims about the MPE made by the interviewees have been hard to confirm through written sources of information. Only when a majority of the statements have pointed in the same direction, have I considered them valid.

Another challenge that came up in the data collection was the fact that one of the interviews was performed over telephone. By conducting interviews over the phone, it can often be difficult to ‘gain rapport’, which is essential in a semi-structured interview (Beckmann and Hall 2013: 207). This happened here too. As the interviewee was sitting in a noisy room, it was not always easy to follow the other person’s arguments, and it certainly wasn’t easy to transcribe with such background interference. Furthermore, as we had no eye contact with each other, the communicative aspect of the conversation was lost, which made it difficult to engage in a discussion on the subject. Instead, the interview was characterised by short questions followed by short answers. While these challenges reduced the usefulness of the interview, I did however get the most important information that I was looking for. Hence, although the interview preferably should have been performed face to face, the validity would have been relatively more reduced if the interview had not been performed at all.

4 Assessing implementation

This chapter presents the empirical analysis and assessment of the Norwegian implementation of the directives. I start by analysing the implementation of the different directives according to their timeliness and correctness in the transposition phase. I then conclude with an overall assessment of the implementation performance so far with a view to reaching the short-term as well as long-term goals of the EU. The directives will be analysed in the following order: the Energy Performance of Buildings Directive; the Ecodesign Directive; the Energy Labelling Directive; and lastly the Energy Efficiency Directive.

As regards the EED, which sets goals for 2020, it could be argued that timeliness is just as important as correct transposition. 2020 is only a few years away, and Norway has already been given a time lag because of the special arrangements in the EEA Agreement. But since this directive is still under scrutiny in the Norwegian government and thus might not be implemented within the deadline of this thesis, there is a limit to how far the analysis of the implementation of this directive will go. In the assessment of the EED, therefore, only transposition will be analysed. Since the implementation process is already past deadline, we should pay particular attention to the correctness of the transposition. The Ecodesign and Energy Labelling Directives will be analysed both in terms of transposition and application, and correctness will be given more weight than timeliness in the transposition phase, as proposed in Chapter 2. In the case of the EPBD, both transposition and application will be analysed, and an overall assessment of the *transposition* performance will be given based on the total ability to implement *both* directives. The same procedure will be followed in the case of the Ecodesign Directive.

It should be noted that the implementation procedure for EEA countries is somewhat different from the normal implementation procedure in the EU. The EEA Joint Committee determines the EEA-relevance of a legal act in a screening process, in which representatives from both the EU and the EEA countries are gathered. All the EEA states have to be in agreement for the EEA Joint Committee to take a decision. A legal act is EEA-relevant if it concerns issues that are already regulated by the EEA Agreement. Even though deadlines for transposition are usually the same for EEA countries as for EU member states, the EEA Joint Committee may also set new deadlines if the implementation of a legal act is overdue, and the implementation date set by the EEA Joint Committee then refers to the date when the legal act is to be

transposed into Norwegian law. Decisions taken in the EEA Joint Committee usually don't require approval from the Storting or a royal decree, but this is necessary when a legal act relates to changes in the treaty protocols of the EEA Agreement, if Norwegian laws have to be changed, if a legal act is considered to be of utmost importance, or if the Constitution demands a royal decree (MFA 2012: 75-76). ESA monitors the implementation process, and may initiate infringement proceedings in the case of non-compliance. ESA may also take an EEA state to the EFTA Court, but ESA does not have the authority to initiate an infringement case on a particular directive until the directive has been added to the EEA Agreement. The infringement process is stepwise: First, ESA must send a *letter of formal notice* to inform the country in question that an inquiry into the matters has been opened; secondly, if the case is not solved, ESA may as a next step send a *reasoned opinion*; and thirdly, if ESA remains dissatisfied with the implementation, it can take the case to the EFTA Court.

4.1 Energy Performance of Buildings Directive

Implementing the EPBD – both the first and the revised version – has been a lengthy and cumbersome process, and is not yet finalised, since the transposition of the revised EPBD is still underway. Especially in the case of the first EPBD, implementation was postponed several times, with two rounds of infringement procedures with ESA as a result.

Transposition

Starting with the *first EPBD*, the EEA Joint Committee decided to incorporate the directive into the EEA Agreement on 23 April 2004 (EEA Joint Committee 2004). The deadline set for transposition into Norwegian law was 4 January 2006, the same as in the EU. The directive needed approval from the Storting, since it required changes in Norwegian law. A parliamentary proposition was prepared by the MPE and released on 25 June 2004, in which it recommended the Storting to approve of the MPE's decision to implement the directive (MFA 2004). In November that year, the Storting approved and gave the MPE a green light to prepare the implementation (Stortinget 2004). The Norwegian Energy Directorate (NVE) was later given the responsibility to develop a draft of a certificate scheme. With elections coming up in 2005, the conservative/liberal government then chose to put the certification scheme on hold until after the elections.

After the election, the implementation process stagnated, with few signs of progress. Norway passed the deadline in January 2006, and ESA started to enquire informally into the matters. In a letter correspondence in October 2005 and January 2006, Norway had contemplated on making use of Article 15(2) of the directive, which gives member states the right to postpone the implementation of the certificate scheme and inspections of boilers and air-conditioning systems by three years (EFTA Court 2009). The MPE did however refrain from taking such a step, and admitted to the fact that no profound progress in the implementation process had been achieved. ESA therefore sent a letter of formal notice to Norway on 17 May 2006. In a response letter, the MPE argued that they would need more time to prepare for final solutions (EFTA Court 2009). In the absence of any subsequent information, ESA delivered Norway a reasoned opinion for its implementation failure, and gave Norway three months to take the measures necessary to comply (ESA 2006). On 31 January 2007, Article 3 of the article was transposed into Norwegian law when the Ministry of Local Government and Modernisation (KMD) introduced the new method of calculating energy use into the building code. The MPE also launched a hearing on a consultation draft in 2007 (MPE 2007). The draft suggested that building owners could ensure certification on their own by calculating the building's energy needs by means of a web tool, and not by consulting independent experts as the directive prescribed. It also excluded certain buildings from the certification obligation, which should have been included according to the directive's definition of buildings. Furthermore, almost all hearing documents contained complaints on the vague and ambiguous wording of the draft, which made it difficult for the interested parties to know exactly what was being proposed. Irrespective of this hearing process, the MPE continued to delay implementation. In November 2008, ESA referred Norway to the EFTA Court for infringement. In May 2009, the EFTA Court supported ESA's claim against Norway (EFTA Court 2009). In the lead up to the final judgement of the court, Norway had indicated that they would implement the necessary rules by 1 January 2010. While parts of the regulations on a certificate came into force on 1 January, it nevertheless took until 1 July 2010 before the energy certification scheme finally came into force. Norway then sent a letter to ESA on 7 September 2010, in which ESA was informed that all the implementing measures had entered into force by 1 July 2010. Thereafter, ESA decided to close the case against Norway on 22 September 2010 (ESA 2010).

The certification scheme that was implemented in 2010 was more or less the same as the draft from 2007, and therefore deviated from the directive's requirements in some important

respects. Thus, in March 2010 ESA had launched a new and parallel round of enquiry on the failure to implement the directive correctly. A letter of formal notice was sent on 14 July 2010 (ESA 2011a). The Norwegian transposition of the directive failed in three regards: First, it failed in the sense that it allowed for self-certification by the owner of a building, which does not guarantee that the certification will be carried out in an independent manner; secondly, it also allowed certification of existing residential buildings to be carried out by persons who have no particular qualification or accreditation and thus lack the necessary expertise to produce certificates. Lastly, some of the rules established pertaining to the inspection of boilers and air-conditioning systems were incorrect. Norway and ESA held a meeting on the subject in November 2010. But as no concrete progress was observed by July 2011, ESA sent a final warning for failing to correctly implement the directive. On 3 November 2011, Norway provided an answer to the reasoned opinion with reference to the new revised regulation on the certificate scheme that would come into force on 1 January 2012. The revised regulation complied on all issues, except on the requirement that certification is carried out in an independent manner. In the subsequent months, Norway and ESA had extensive discussions on this matter. ESA finally decided to close the case against Norway in December 2013, after NVE had agreed upon a control-contract with an independent expert company in May 2013 (ESA 2013).

During these last years, when Norway struggled to transpose the first EPBD correctly, a new EPBD was already in the making at the EU level. The *revised* EPBD was published in the Official Journal of the European Union on 18 June 2010, about two weeks before Norway introduced its first attempt at a certificate scheme. The new directive demanded that national governments transpose the revised EPBD by 9 July 2012. The MPE invited interested parties to present their views on the directive in a public hearing on 1 November 2010. Since then, not much happened until the Government in February 2016 announced its official position on the directive. After a ‘thorough evaluation’, it has been decided that the directive barely makes it within the confines of EEA-relevance. The MPE currently works on implementing the directive, but with some adaptations (MPE 2016). It remains to be seen what these adaptations actually imply.

Application

Turning now to the application phase, there are indications that the agencies that are in charge of overseeing the implementation are working hard to ensure that the new rules are being followed. After the initial troubles with the transposition, the changes brought about by the first EPBD have been implemented into Norwegian practice. The certificate scheme has been up and running for some years now. NVE has overseen both this and the regular inspection of boilers, air-conditioning and heating installations. In the starting phase, NVE worked to provide building owners with information and assistance, and set up a website for this purpose.⁸ NVE also published information sheets on the new regulation, targeting building owners and independent experts on both energy certificates and assessments of technical installations (NVE 2012b, 2013a and 2013b). Enova introduced a new phone service called 'Enova Svarer', through which building owners had the possibility to talk to experts on the energy use in buildings.⁹ In 2015, a survey was conducted to examine how these informational measures had worked. The survey showed that the new regulation on energy certificates was relatively well known, but that the knowledge was dispersed among different groups of building owners. For example, whereas 93 per cent of professional owners of commercial buildings had knowledge of the regulation, the share of private citizens who had heard of it was only 34 per cent (Norwegian Building Authority 2013).

NVE has also conducted inspections. In 2011, they surveyed the share of energy certificates in Internet advertisements for residential buildings (NVE 2012a). In 2012, they inspected both residential and commercial buildings in different parts of the country (NVE 2013c). In 2013-2014, they performed more thorough inspections in 81 commercial buildings; only 19 of these had an energy certificate or performed an assessment of the energy use in technical installations. This meant that around 75 per cent of all the buildings inspected had serious deficiencies. As NVE threatened to impose daily fines on the deficient buildings, most of them performed the necessary improvements during 2015. In October and November 2015, NVE imposed daily fines on the remaining 13 buildings until they had fulfilled the necessary requirements. This was the first time NVE imposed fines when a commercial building had not been in line with the regulations. In late 2015, NVE signalled that they would continue the inspections and engage more actively as an enforcer of the rules (NVE 2015; 2016c).

⁸ See www.energimerking.no.

⁹ See <http://www.enova.no/verktoy/chat/fa-svar-enkelt/48/257/>.

There does not exist any data on actual energy efficiency improvements stemming from the certificate scheme. In order to assess how target groups have contributed to reaching the target, therefore, we can only look at the way these target groups have responded to the new rules, and use this data as a proxy that may suggest some tentative conclusions. And so far, the finding that so many commercial buildings were not in line with the new regulations indicate that many building owners have been indifferent to the new rules, since the previously mentioned survey shows that the new requirements are well known among the professional building owners. The reason for this indifference might be that inspections and credible threats of sanctions for a while were non-existing. Accordingly, building owners did not have incentives to change their behaviour. This assumption is strengthened by the experience with NVE's first inspections, which show that building owners are quick to perform the necessary improvements if they are threatened by financial sanctions. Moreover, the share of residential building owners who have received an energy certificate is high. In July 2013, some 300 000 certificates had been given to owners of residential buildings. In March 2015, this number had risen to 480 000 (Riksrevisjonen 2015). Thus, the evidence shows some change in behaviour among building owners, albeit at a slow pace for owners of commercial buildings.

It is difficult to assess how NVE could have brought about a quicker change in behaviour among the owners of commercial buildings. It is understandable that it is a bigger decision for owners of commercial buildings, than it is for owners of residential buildings, to start the process of assessing the energy use in their buildings. Commercial buildings are not only larger than residential buildings; they also demand more detailed and complicated assessments from independent experts, which costs money to the building owners. It is therefore natural that it takes some more time to induce a change in behaviour among owners of commercial buildings. If we base our predictions for the future on the experience from NVE's first round of inspections, we should expect that more commercial building owners will assess their energy use as inspections continue and they realise that the costs of not receiving an energy certificate will exceed the costs of receiving one. The MPE recently decided that Enova is to take over the responsibility for the certificate scheme and inspections of technical installations in July 2016 (MPE 2015a). We can therefore assume that the MPE wishes to coordinate better between Enova's financial measures and expertise on the one hand, and the certificate scheme on the other, so that it becomes easier for building owners to know who to reach and to receive all the help they need at one place.

When it comes to the other parts of the first EPBD, such as creating a methodology of calculating energy use and applying minimum energy requirements in new and large existing buildings that are subject to renovation, the KMD has been in charge of developing the necessary rules and to assist the building sector in following the new requirements. This responsibility has been delegated to the Norwegian Building Authority, which ensures that the new rules and method of calculation is implemented in the building sector. The Norwegian Building Authority, as well as NVE, Enova and Standards Norway, are also participating in the European expert group ‘Concerted Action EPBD’ under the Commission.¹⁰ Here, they not only cooperate with other European actors to exchange information and best practices with regards to the first EPBD, but also follow other EU countries’ implementation of the revised EPBD closely. The Norwegian Building Authority has started to operationalize the definition of ‘nearly zero-energy building’ and follows the work of other member states through the European expert group. The Norwegian Building Authority does this not only to follow up on the Norwegian government’s goal of setting such requirements by 2020 (KMD 2012), but also to prepare the implementation of Article 9 in the revised EPBD, in which it is required of the member states that all new buildings are nearly zero-energy buildings by 31 December 2020. The Norwegian Building Authority also follows the work of other member states on how to calculate the cost-optimal levels of minimum energy performance requirements (Article 5), and has started to develop its own calculations (Norwegian Building Authority 2012).

Summing up

Norway transposed the *first* EPBD several years too late, and also had to go through a series of hurdles with ESA before the country managed to transpose it in line with the interpretations of ESA. The *revised* EPBD is already past deadline, but we are seeing some signs now that transposition and inclusion in the EEA Agreement might be just around the corner. We already know that the transposition will involve some kind of adaptations. The nature of these adaptations will decide if the transposition should be considered to be correct or not.

¹⁰ For more information about this group, see <http://www.epbd-ca.eu/>.

Directive	Implementation phase	Timely	Correct	Overall Performance
EPBD	Transposition	No	No	Low
Revised EPBD	Transposition	No	No	Low

Table 4.1: Norwegian implementation performance of the first and revised versions of the EPBD

In the application phase, NVE and the Norwegian Building Authority are overseeing the implementation of the first EPBD, and have already taken some small steps to meet the requirements of the revised EPBD. Enova will take over the certificate scheme in the summer of 2016, in order to better coordinate the certificate scheme with Enova’s financial services and expertise in assisting building owners. Some change has been observed in society, most notably in the building sector, which has to follow the building codes and methods of calculation that the KMD developed and that the Norwegian Building Authority oversees. The effect of the energy certificate scheme is however less visible for the time being. But with more inspections in the time to come and a more coordinated approach with Enova as the responsible agency for both the certificate scheme *and* for financial and practical assistance, we can expect that the amount of building owners who receive an energy certificate will increase in the years ahead.

This brings us to a conclusion and an overall assessment of Norway’s performance in implementing the EPBD. The transposition of the first EPBD was neither timely nor correct, as has been shown previously. And considering that the revised EPBD still hasn’t been transposed, it is difficult to give any other score than *low* in the transposition phase, as shown in Table 4.1. Added together, the implementation performance of the first and revised EPBD shows a consistently low ability to transpose the directive in time and in line with the requirements. The overall implementation performance in the transposition phase is therefore *low* when these two directives are considered as one. In the application phase, Norway performed rather well in implementing the measures related to the first EPBD, but still has a long way to go to put the revised EPBD into practice. Thus, the overall performance in the

application phase is reduced. While a quick and correct implementation of the revised EPBD in the time ahead might be early enough to contribute to the EU's 2050 target, we are nevertheless witnessing an application process that takes longer time than would be considered optimal, and we still don't know how long it will take before these new measures are introduced.

4.2 Ecodesign Directive

The *first* Ecodesign Directive was an extension of previous EU legislation on white goods, which had already been implemented in Norway. It was therefore obvious from the outset that the new directive would also be EEA-relevant. The scope of the directive expands continually as new regulations are made for new product groups. Accordingly, it may be easier to transpose the directive than to actually follow up on the many detailed specifications and regulations that follow from it. It is also demanding for industry actors to stay updated on the many new regulations that constantly appear. Successful implementation therefore depends on consistent and thorough follow-up from NVE, which has been instructed by the MPE to develop the necessary changes to Norwegian law and to oversee the application of the directive.

Transposition

The EU had set the transposition deadline to 11 August 2007, but the directive did not come into force in the EEA Agreement until later that year, on 29 September (EEA Joint Committee 2007). Constitutional requirements demanded that Iceland got approval from parliament before it could transpose the directive, which meant that a new and final compliance date would have to be set after the parliamentary approval. On 20 May 2009, Iceland reported that the requirements were fulfilled, and a new deadline was set to 1 July 2009, in line with Article 103 of the EEA Agreement (EFTA 2016a). On 4 July 2008, Norway had already reported to ESA that the directive had been transposed into Norwegian law, with reference to the Act of 11 June 1976 No. 79 relating to the control of products and consumer services (ESA 2008).

NVE was officially given the responsibility to oversee the implementation on 21 December 2009. A new Ecodesign Regulation was introduced on 23 February 2011 and came into force on 1 March 2011. In the introduction of this new regulation, NVE also took into consideration

that the *revised* Ecodesign Directive was right around the corner, and therefore incorporated most of the new requirements coming from this last directive into the initial regulation. Thus, when NVE was charged with the responsibility of preparing the transposition of the revised directive, only minor changes were needed. The EEA Joint Committee had decided on 1 July 2011 that the revised directive was EEA-relevant and that it therefore was to be implemented in the EEA countries (EEA Joint Committee 2011). But constitutional requirements under Article 103 of the EEA Agreement were still needed for Iceland, as was the case with the first version of the directive. The Icelandic parliament gave its approval on 6 September 2012, and a new and final deadline for compliance was set to 1 November 2012 (EFTA 2016b). At that time, Norway had already introduced the minor changes needed for the Ecodesign Regulation to be in line with the new requirements on 1 January 2012. As these changes came into force on 1 March 2012, the Norwegian transposition was well within the new deadline set after the parliamentary approval in Iceland. Since the first Ecodesign Directive was transposed into Norwegian law, Norway has continually taken in new product groups and legal acts under the directive. But although Norway at the present moment has incorporated nearly all new regulations under the directive, many of these regulations were incorporated later than prescribed by the Commission, and some regulations were even years too late.

Application

When the first Ecodesign Directive came into force, NVE was granted access to the Commission's Ecodesign Consultation Forum,¹¹ in which the effectiveness of the implementation process is constantly reviewed by representatives of both member states and industry actors who produce the kinds of products that are subject to energy requirements through the directive. This is of vital importance, since the specifications for many product groups are so detailed and so demanding that cooperation between countries and the diffusion of best practices are imperative.

So far, the product groups that have been incorporated have fitted with NVE's areas of expertise; yet there are some product groups being discussed at the EU level that are outside the confines of NVE's expertise, such as products related to buildings or the EU's new

¹¹ Information about the Consultation Forum can be found here: <http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail,groupDetail&groupID=1798>.

Circular Economy Strategy.¹² Three such product groups are windows, indoor electricity cables and water fittings. In these cases, the Norwegian Building Authority is better suited at administering the implementation. These new product groups will most likely lead to some coordination dilemmas and may further complicate the already complicated and demanding implementation process, but reports from representatives of the Government administration suggest that the involved actors are aware of this and follow these processes thoroughly in order to effectively transpose and apply the rules of these new product groups in the Norwegian market. For instance, the Norwegian Building Authority is granted access to the Consultation Forum on matters that come into their competence area.

NVE first started to conduct controls of products in 2011 (NVE 2012a). The first controls of refrigerators were conducted in 2011. The three refrigerators that were inspected were not in line with requirements, and NVE thus threatened to withdraw these goods from the market. In 2013, these three products were denied the right to be put into the market. All of the refrigerator producers complained; one complaint was approved by the MPE, but the two other complainants had to bring their refrigerators in line with the requirements before they could put them back on the market (NVE 2016a). In 2012, light bulbs were for the first time controlled. In this first round, all of the products fulfilled the requirements (NVE 2013c). In late 2013, NVE assigned 10 different models of light bulbs for laboratory controls. Whereas eight of these were in line with the requirements, two were not, and were withdrawn from the market in 2015. In this time period, NVE has also conducted laboratory tests of TVs. All of the TVs controlled have so far been in line with the requirements (NVE 2016a). In May 2016, NVE announced that they in the time ahead would increase the amount of controls on products (NVE 2016b).

Summing up

In order to conclude, Norway was very quick to transpose the first Ecodesign Directive correctly and to transpose it correctly. The Norwegian transposition was therefore both timely and correct, and thus receives a high implementation performance score in this phase. In the application phase, Norway continually incorporates new ecodesign regulations, but the new

¹² The EU's Circular Economy Strategy emphasizes a consumer product's whole life cycle: from production and consumption to waste management and the market for secondary raw materials. For more information, see http://ec.europa.eu/environment/circular-economy/index_en.htm.

product groups have not always been incorporated within the time frames set by the Commission. Further, NVE has begun to conduct controls and testing of products and to withdraw from the market those products that are not in line with requirements. Next, as the revised Ecodesign Directive was transposed within deadline and in line with requirements, a high implementation performance score is given in the transposition phase. And since the application of the revised directive merely is a continuation of the implementation process that had already been initiated before, it is reasonable to conclude that Norway is well on the way to at least reach the EU’s long-term target. The results can be seen in Table 4.2 below. When the implementation performance of these two directives is added together, the Ecodesign Directive *as a whole* receives a high overall performance in the transposition phase.

Directive	Implementation phase	Timely	Correct	Overall Performance
Ecodesign Directive	Transposition	Yes	Yes	High
Revised Ecodesign Directive	Transposition	Yes	Yes	High

Table 4.2: Norwegian implementation performance of the first and revised Ecodesign Directive

4.3 Energy Labelling Directive

Just as in the case of the first Ecodesign Directive, the Energy Labelling Directive was a reformulation of previous EU legislation on energy labelling (Directive 92/75/EEC), which Norway had already implemented. Hence, the directive was considered to be EEA-relevant. The Commission had signalled that it desired the directive to complement and in some ways overlap the Ecodesign Directive, which meant that Norway needed to consider this when developing the necessary regulations. Since NVE had already overseen the implementation of the first energy-labelling directive, and also had been given the responsibility to implement the Ecodesign Directive, it was only logical that the agency also was charged with overseeing the implementation of this new directive as well. Just as in the case of the Ecodesign

Directive, new regulations on new product groups continually have to be incorporated into Norwegian law.

Transposition

The transposition phase was rather swift, with few noteworthy occurrences. The EU had set the deadline for member states to implement the directive to 20 June 2011. The MPE invited interested parties to a hearing in November 2010, and officially asked NVE take on the responsibility of overseeing the implementation on 1 September 2011. A decision by the EEA Joint Committee to take the directive into the EEA Agreement was taken on 7 December 2012 (EEA Joint Committee 2012). After the hearings, NVE had developed a new regulation on energy labelling, which was planned to come into force on 1 January 2013 (NVE 2012c). But yet again, Iceland needed approval from parliament before a final transposition deadline could be set. Iceland got its approval in April 2013, and the new and final compliance date was set to 1 June 2013 (EFTA 2016c). Norway then transposed the directive into Norwegian law on 27 May 2013, and the new Energy Labelling Regulation came into force on 1 June 2013, exactly on deadline. Since then, Norway has incorporated a number of regulations on product groups for lamps, refrigerators, boilers, electrical ovens and heating systems in rooms, ventilation, air conditioning systems, and products being sold on the Internet. Each time the EU produces new legal acts for new product groups, NVE invites interested parties from society to public hearings. At the time of this writing, NVE has incorporated every piece of legislation on product groups that so far have reached the implementation stage.

Application

Since Norway had already implemented the 1992 directive on energy labelling, NVE had some practice from the start in overseeing that the new rules are being followed in the Norwegian market. NVE had for several years been in charge of controlling the energy use and labelling of white goods. Now they were given the responsibility to conduct controls and testing of the new product groups under the Energy Labelling Directive as well. So far, NVE has aligned its ecodesign and labelling controls in such a way that both ecodesign and labelling requirements are taken into consideration during the tests. During the tests of TVs and light bulbs in 2013 and 2014, therefore, both ecodesign and labelling requirements have

been taken into consideration. And as was mentioned in the case of the Ecodesign Directive, NVE intends to increase the amount of controls in the time ahead.

Summing up

What we have seen in the case of the Energy Labelling Directive is a strong resemblance to the Ecodesign Directive. The Norwegian transposition came into force exactly on deadline and the regulation transposed into Norwegian law was in line with the text of the directive. In the application phase, NVE was early to inform interested parties of the new rules, and initiated controlling of products one year after transposition. As we have seen from the controls, the products that are not in line with requirements are taken out of the market until improvements have been made. As a consequence, producers of energy-related products have to follow the new requirements if they wish to sell their products in the Norwegian market. New legal acts for new product groups are also continually transposed into Norwegian law. Norway therefore receives a high implementation score on both the timeliness and correctness of the transposition phase (see Table 4.3), and is well prepared to reach the EU’s long-term target.

Directive	Implementation phase	Timely	Correct	Overall Performance
Energy Labelling Directive	Transposition	Yes	Yes	High

Table 4.3: Norwegian implementation performance of the Energy Labelling Directive

4.4 Energy Efficiency Directive

The EED supersedes both the 1993 SAVE Directive and the 2006 directive on Energy End-Use Efficiency and Energy Services. The latter directive was never implemented in Norway, even though it is regarded as EEA-relevant. In a way, the EED is ‘all-encompassing’, since it requires member states to set indicative energy efficiency targets for their final energy consumption. The definition of ‘final energy consumption’ includes transport, industry, households, services and agriculture (Article 2). These are areas that are under the administration of several different ministries. The directive therefore requires not only

coordination among ministries, but also expertise in a range of fields, and very sophisticated reporting on the energy use in many sectors. The MPE has been given the responsibility to implement the directive, but it will be necessary for other ministries to get involved in some way or another. This is especially the case for the KMD, which will have practical responsibility for those parts of the directive that concern buildings.

Transposition

The EU set the deadline for implementation among member states to 5 June 2014. In January 2013, interested parties were invited by the MPE to present their opinions on the directive in a public hearing. According to reports from newspapers and statements, the MPE has spent the last two years scrutinising the directive and trying to assess whether it is EEA-relevant or not. At one point, the minister of petroleum and energy Tord Lien stated that the directive might not be implemented at all (Nationen 2015). In February 2016, however, the Ministry of Foreign Affairs (MFA) issued an information leaflet, in which it was announced that the directive was considered to be just within the boundaries of EEA-relevance, and that Norway thus was obliged to implement it. But just as with the revised EPBD, it was noted that the Norwegian implementation would contain some adaptations (Regjeringen 2016). In a recent white paper on Norway’s energy policy, this message was repeated, but the MPE neglected from giving any further indications on the implementation progress (MPE 2016). Accordingly, Norway receives a *low* implementation performance in the transposition phase, as Table 4.4 shows.

Directive	Implementation phase	Timely	Correct	Overall Performance
Energy Efficiency Directive	Transposition	No	No	Low

Table 4.4: Norwegian implementation performance of the Energy Efficiency Directive

Although the EED is yet to be transposed, there have been some occurrences worth noting. Firstly, the incumbent conservative government stated in their Sundvollen declaration of 2013 that they plan to set an ambitious and quantifiable target for energy efficiency, just as Article 3 of the directive prescribes (Regjeringen 2013). Such a target has not yet been established,

however. So far, the building sector is the only sector in which a quantifiable target has been set. In 2012, the former red-green government estimated that already existing policy measures would bring 15 TWh more energy efficient buildings from 2010 to 2020. Thus, while Norway still has not transposed the directive or announced a specific target for energy efficiency, it nevertheless is the official policy of the government to establish one. Secondly, interviews revealed that the MPE currently is working to sort out the necessary legal adjustments that have to be made and to sort out how the directive can be put into practice, both with regard to financing and to the practical administration of the new regulations, such as reporting, statistics, etc.

4.5 Assessing implementation

In this chapter, I have assessed how Norway has implemented the four directives on energy efficiency, based on timeliness and correctness in the transposition phase, and based on the observed behavioural change in the application phase. For transposition to be timely, it was required that a directive be transposed into Norwegian law one year after the directive's deadline at the latest, or within the new deadline set by the EEA Joint Committee on those occasions where this has been necessary. In the application phase, I looked at the progress so far in order to provide a general outlook towards the future and towards reaching the EU's long-term target. The EPBD received a low performance score in the transposition phase and there has been some progress, but not enough, in the application phase. As regards the Ecodesign Directive and the Energy Labelling Directive, Norway performed high in the transposition phase, and seems to be more or less on track in the application phase. Since the EED is yet to be implemented, here too, a low implementation performance was observed. The overall assessment is summarized in Table 4.5. As I do not have any measurable indicators from which we could be able to draw comparisons between directives in the application phase, only the transposition phase is summarized and compared.

Directive	Transposition
Energy Performance of Buildings Directive	Low
Ecodesign Directive	High
Energy Labelling Directive	High
Energy Efficiency Directive	Low

Table 4.5: Norway's overall implementation performance of EU-directives related to energy efficiency in the transposition phase

When looking at the implementation performance of these four directives together, a very clear and consistent pattern emerges. While Norway has skilfully managed to implement the directives related to energy-using and energy-related products, the implementation of directives that in some way or another relate to buildings has been consistently slow or at least somewhat delayed. The assessment also shows that the implementation performance has been higher for the two directives that are only administered by one ministry (Ecodesign and Energy Labelling) than it has been for the two directives where implementation involves more than one ministry (EPBD and EED). In the next chapter, I shall try to explain the reasons for the high implementation performance on the two directives relating to products and the low performance on the EPBD and EED. Based on the findings that the Norwegian implementation performance follows the pattern just described, it makes sense to make a distinction between these two branches of directives in the upcoming chapter. Thus, in the following explanation of this implementation pattern, I look at the Ecodesign and Energy Labelling Directives as one distinct phenomenon, and the EPBD and EED as another.

5 Explaining implementation

Why has Norway so skilfully implemented directives on products, while struggling to implement the two directives that somehow relate to buildings, as the assessment in Chapter 4 shows? This is the leading question of this chapter, which sets out to explain variation in Norwegian implementation performance between the directives. The implementation outcome is explained through the lenses of the two theoretical perspectives presented in Chapter 2: goodness-of-fit and domestic politics. I start by exploring the explanatory force of the misfit-perspective, and then continue with domestic politics. As suggested in the conclusion of Chapter 4, the Ecodesign and Energy Labelling Directives will be analysed as one distinct phenomenon, and the EPBD and the EED as another. Next, I briefly sum up my findings and evaluate the explanatory force of the two theoretical perspectives. Lastly, I consider the possibility that the two proposed theoretical perspectives are insufficient in explaining the outcome, and discuss how other forces may have influenced the implementation performance. The analysis will limit itself to studying variation in the transposition phase.

5.1 Goodness-of-fit

As outlined in Chapter 2, the misfit-perspective assumes that domestic implementation performance is high when policies at EU and national levels are aligned, and that it is low when national policy objectives and instruments are challenged by new EU requirements. It is assumed that domestic actors will defend the status quo. In assessing the degree of fit, I looked at the distance between Norway's pre-existing policies, policy traditions and energy-economic situation, and the requirements of the directives. Whereas the energy-economic situation largely is a constant, since the situation is the same for all directives, the degree of fit between Norwegian policies and the directives is expected to vary.

EPBD and EED: Misfit

It was expected that a low fit between the Norwegian energy-economic situation and the EU average would reduce the overall implementation performance. I also expected a misfit between each directive and Norway's pre-existing policies would lead to low performance. The empirical enquiry largely supports these expectations and indicates that there has existed a misfit throughout the studied time period, both with regard to pre-existing policies and to

the energy-economic situation. But the picture is nuanced, and the misfit can only explain parts of the implementation performance.

The Norwegian energy-economic situation has been and remains something of a *sui generis* because of the country's abundance of waterfalls and streams, which makes the energy system more or less fully covered by hydropower. In 2000, 99 per cent of onshore stationary production was renewable (MPE 2008), and this situation remains the same today. Thus, onshore energy production has been and continues to be practically without any carbon footprint. Throughout the last few decades or so, Norway has for the most part been a net exporter of electricity, except for a few years with low precipitation in the beginning of this century. Consequently, there have traditionally existed few incentives for engaging actively in the development of new measures on energy efficiency in Norway, except when there has been low precipitation and concerns for security of supply have arisen. This sharply contrasts the situation in the EU, which for several years has had an import-dependent energy system based on fossil fuels. The differences in the energy-economic situation between Norway and the EU can be seen in Table 5.1 below. Although the statistics presented here are from 2007, they are more or less compatible with the situation in Norway and the EU throughout the period studied.

Whereas 12,8 per cent of the total Norwegian energy production was consumed in Norway, and the rest exported, the EU had an import dependency of 53,1 per cent in 2007. Table 5.1 also reveals that the share of renewables consumed in Norway is much higher than that of the EU, due to the fact that Norway exports most of its fossil fuels and uses electricity for consumption. In fact, only six per cent of all the gas produced in Norway in 2007 was consumed domestically (Commission 2010a). Furthermore, whereas Norway mainly uses electricity from renewables for heating, the EU's electricity is mostly based on fossil fuels such as coal and gas. This is reflected in the fact that the most important contributor to domestic CO₂-emissions in Norway is the transport sector, while it is electricity and heating in the EU (Commission 2010b). Because of the large amount of clean electricity made available for heating, it has been argued by some that an improvement in energy efficiency in buildings will have little or no effect on Norwegian CO₂-emissions; some even suggest that CO₂-emissions might increase (Bye et al. 2015). Whether this is true is debatable, but the fact remains that the effects of improved energy efficiency in Norwegian buildings are uncertain.

	Norway		EU27	
	<i>Total primary energy production</i>	<i>Gross inland consumption</i>	<i>Total primary energy production</i>	<i>Gross inland consumption</i>
<i>Gas</i>	78.08 (36 %)	4.82 (17 %)	167.4 (19.5 %)	23.9 %
<i>Renewables</i>	12.88 (6 %)	12.94 (45 %)	138.8 (16.2 %)	7.8 %
<i>Solid fuels</i>	2.68 (1 %)	0.75 (3 %)	187.8 (21.8 %)	18.3 %
<i>Oil</i>	122.37 (57 %)	10.02 (35 %)	121.6 (14.2 %)	36.4 %
<i>Nuclear</i>	-	-	241.3 (28 %)	13.4 %
<i>Total</i>	216.01 (100 %)	28.53 (100 %)	859.45 (99.7 %)	1806.38 (100 %)

Table 5.1: Total primary energy production and gross inland energy consumption in 2007, in Mtoe¹³ and percentage (Commission 2010a)

Over the last 16 years, Norway has imported more electricity than it has exported only in 2002, 2003, 2006 and 2010 (MPE 2015b: 57). During the last few years, the total amount of renewable electricity produced on Norwegian soil has also increased as a response to some concerns with security of supply after some years with low precipitation, and after the introduction of the Renewable Energy Directive (2009/28/EC),¹⁴ which Norway had to implement. The consequence of this has been a sharp decline in electricity prices and excess electricity. Electricity prices are expected to remain low, as Norway continually increases its share of renewable energy towards 2020 (MPE 2016).¹⁵ Low electricity prices affect not only the economy of the Norwegian utility companies – which to a great extent are owned by

¹³ The Commission's statistics on the EU's gross inland consumption do not specify the amount of Mtoe for each fuel category.

¹⁴ With the implementation of the Renewables Directive, Norway agreed with the EU to increase its share of renewable energy consumption from 58 per cent in 2005 to 67,5 per cent in 2020 (Regjeringen 2011).

¹⁵ These projections also take into account that Norway is in the process of building two new interconnecting electricity cables to Germany and Great Britain, which are projected to be ready for use in 2018 and 2020, respectively (Regjeringen 2014). While these cables probably will contribute to a slight increase in prices, the overall picture will not be considerably changed. Excess electricity in Norway's Nordic neighbours, such as Finland and Sweden, will also contribute to low prices (MPE 2016).

regional municipalities – but also the state itself through a resource rent tax, which is based on the level of production and spot price.

Norwegian policies on energy efficiency reflect the fact that the country is energy independent and a large exporter of both fossil fuels and electricity. The main concern of Norwegian governments has generally been energy demand rather than energy supply, with much emphasis put on well-functioning energy markets and on new energy production. Energy efficiency has generally received little attention, particularly if Norway is compared to the EU. Already in 1991, the EU strengthened its efforts in the field of energy efficiency by increasing funds available through the SAVE programme. Meanwhile, energy efficiency was largely neglected in Norway throughout the 1990s. Since the turn of the century, Norway has nevertheless developed some ambitious measures to improve energy efficiency in some areas. The Storting for the first time introduced a specific objective for energy efficiency in 2000, when it proclaimed that it should work to reduce growth in energy demand considerably more than the business-as-usual scenario would prescribe (MPE 1999). An overall goal for improving energy efficiency in buildings was set in the two grand settlements on climate policy in the Storting in 2008 and 2012, when it was decided to improve energy requirements in the building code to passive house level in 2015 and nearly zero-energy level in 2020 (KLD 2007; 2012). Although this target is quite ambitious in itself, it largely ignores the fact that some 40 per cent of Norwegian energy consumption stems from buildings already built (Regjeringen 2015a).

As regards policy measures, Norway has mainly three instruments at its disposal. The first is Enova, which was established in 2000 to ensure the security of supply by granting state aid to new investment projects that increase renewable energy, district heating and energy saving (MPE 2000; 2001). Today, Enova is the Government's most valuable financial instrument in promoting energy efficiency.¹⁶ Another important policy measure is the Norwegian building code, which is a very powerful tool in regulating which techniques and technologies may be applied in building construction. Much emphasis is put on standardisation in regulation when developing policies on energy efficiency in buildings. The building code has been substantially changed on three occasions during this time period: in 2007, 2010 and 2015. The

¹⁶ Between 2002 and 2008, Enova allocated NOK 3,7 billion to new investments in renewable energy and energy efficiency. 37 per cent of this – or 1,35 billion – was spent on projects related to energy savings in industry, construction and buildings (Riksrevisjonen 2010: 32).

last instrument is the state housing bank, Husbanken, which is the state's central agency for implementing Norwegian policies on buildings.¹⁷ Husbanken provides information, counselling, competence building, and financial loans to producers of low-energy buildings and to new innovative technologies for buildings.

The two directives clearly contain elements that to a little extent match Norwegian policy traditions in the field. When the first EPBD was introduced, Enova had already been set up, and discussions on the 2007 building code had begun. Enova's approach was piecemeal and reflected the fact that the agency is subordinate to the MPE, which to a little extent has expertise on energy efficiency in buildings. Enova had been instructed by the MPE to support only cost-efficient measures, thus creating an incentive for Enova to focus on energy efficiency in industry and large building projects where the greatest energy gains could be realised. Hence, the already established policy measure clashed with the EU's requirement to establish a certificate scheme, which would clearly be expensive and contrary to the priorities of the MPE. Additionally, since the new certificate scheme would require inspections of boilers, air-conditioning systems and certification of buildings by qualified and independent experts, these experts had to be trained and guidelines prepared. This would not only take time, but also entail additional costs, which further increases the mismatch.

The mismatch was less pronounced with regard to the other requirements of the directive, however. Although there existed no equivalent Norwegian policies to the EU requirements to establish a framework for a methodology to calculate energy performance in buildings and to set minimum requirements for new and existing buildings, the preparations for the 2007 building code coincided with the development of the measures to meet the requirements of the EPBD, and looked at similar measures. The new code of 2007 required that new and renovated buildings were to use 25 per cent less energy than the former building code from 1997 had required. It also required that all building components (roofs, floors, walls, windows, etc.) must meet certain insulation standards in order to develop high-density

¹⁷ Husbanken's aim, set in 2003-2004, was that 50 per cent of all new residential buildings in 2010 should decrease their energy needs by 50 per cent, compared to prescriptions from the 1997 building code (KMD 2005). The aim for 2020 is to contribute to the overarching target of 15 TWh energy efficiency in buildings set by the Government in 2012 (MPE 2012), mainly through improvements in already existing residential buildings (Husbanken 2015).

building shells with high thermal quality, and opened up for covering a building's energy needs by other energy supplies than electricity or fossil fuels, such as district heating (KMD 2007). As these two processes coincided, it was easier to implement the EPBD's requirements that did not concern energy certificates or inspections by independent experts. This largely explains why these requirements were implemented before the certificate scheme and the inspections.

The misfit between pre-existing Norwegian policies and EU requirements was naturally reduced with the revised EPBD, since this directive mostly strengthens already established practices. The introduction of the revised EPBD also coincides with a general strengthening of Norwegian efforts to reduce the energy use in buildings. The strengthened building codes of 2010 and 2015 specify requirements for energy supply and for technical installations controlling energy use from ventilation, heating and lighting, in effect demanding that all new buildings have passive house standard (KMD 2010; 2015). In 2020, Norway shall according to the grand climate settlements of 2008 and 2012 require that all new buildings are to be nearly zero-energy buildings. Current policies are therefore on track towards reaching this target. This fits neatly with the directive's requirement that all new buildings are to be zero-energy buildings by the end of 2020. Aside from this, there exists a misfit concerning the calculation of cost-optimal levels of minimum energy performance requirements, since Norway is yet to establish such a measure. Norway also has no tradition of setting minimum energy requirements for buildings that are to be rehabilitated, as Article 7 of the directive prescribes. Thus, here too there is a misfit.

Looking at all the new requirements of the EED, it is also clear that the directive as a whole goes against the traditional thinking in Norway. The directive entails a large amount of analyses, statistics, reporting and planning, which no doubt will be costly, and thus might come in conflict with the MPE's traditional priority: cost-effectiveness. Only in those cases where an article of the directive touches upon the competence areas of Enova does Norway have policy measures in place that in some way or another come close to meeting the new demands. Especially the part concerning obligation schemes fits very badly with the way the Norwegian energy market has been designed, and if implemented, will require the utility companies to perform a completely new task that is beyond their core field of operation. But also in the field of rehabilitation of existing buildings, there is a clash between the new requirements and Norwegian policy traditions, as already mentioned above in the discussion

on the revised EPBD. As regards the indicative target for energy efficiency, the government in a recent white paper suggested that its target for energy efficiency should be to gain a 30 per cent improvement in energy intensity by 2030, compared to 2015 (MPE 2016: 208). While this is the first time the government sets an all-encompassing target for energy efficiency, it is also merely an extrapolation of the last 15 years of experience, and the target does not specifically enable us to measure de facto gains in energy efficiency. We are however seeing some signs now that Norway is about to introduce new purchasing requirements for public bodies in which climate and environmental considerations will be taken (NFD 2016), but as this new regulation is still under discussion in the Storting, the misfit remains for the time being.

As this shows, the new EU requirements have continually challenged the Norwegian status quo. Although there was some fit with parallel policy processes in Norway, as was the case with the strengthening of the building code, both the energy-economic situation and policy traditions in general do not fit with the new requirements. While the EU is struggling with a severe import dependency, which disrupts its competitiveness and poses a climate challenge, Norway is in a position where the gains of improving energy efficiency are more difficult to find, at least from the outset. Statements from the interviewees, who all but one strongly argued that the mismatch between Norwegian and European realities was important in explaining the low implementation performance, also support this proposition.

While the empirical material confirms the expectations stemming from the misfit-perspective, the question remains on exactly how much the perspective manages to explain the low implementation performance of the EPBD and EED. The misfit surely explains why it is difficult to implement the two directives, and might to some extent explain why implementation has been protracted, but it does not explain the implementation outcome as such. As the two directives came at a time when Norway was increasing its attention towards energy efficiency and introduced ambitious new building codes and targets for new buildings towards 2020, we are confronted with a rather puzzling paradox: On the one hand, Norwegian policies on energy efficiency have improved incrementally throughout the study period; and on the other hand, Norway struggles to implement the first EPBD and is overdue in implementing the revised EPBD and the EED. Why is Norway improving such policies while simultaneously struggling to implement the two directives? Surely, the directives have had

some elements that do not match Norwegian traditional practices, but overall, both Norwegian and European policies tend to point in the same direction.

Energy efficiency in products: Some misfit, but altogether unproblematic

More so than the EPBD and EED, the two directives on products directly concern the single market. One of Norway's main objectives since it became part of the EEA in 1994 has been to facilitate market equality between Norway and the EU in order to gain access to the single market and to be able to compete with the rest of Europe. And generally, Norway opposes separate national regulations that could lead to trade barriers. To align Norwegian and European standards is therefore official Norwegian policy, not only as means to increase trade, but also to prevent 'dumping' of products with poor environmental standards in Norway, which contradicts Norwegian environmental policy. Thus, Norway is more inclined to implement new EU policies when these are considered important for Norway to be able to compete in the single market. Moreover, Norway had already implemented previous directives that established ecodesign requirements for different combinations of refrigerators and freezers (96/57/EC) as well as fluorescent lamps (2000/55/EC), and had implemented the 1992 directive on the energy labelling of household appliances (92/75/EEC). As the new EU requirements were merely a continuation of previous policy already implemented in Norway, the distance between these new requirements and pre-existing Norwegian policies was therefore minimal. Lastly, the fact that the requirements of the two directives are to be implemented as unbinding regulations – as soft law – makes most of the regulations rather unproblematic.

There is however a misfit between two of the regulations related to the Ecodesign Directive and the design of the Norwegian energy system. In calculating energy use, a primary energy coefficient has been developed by the Commission to weigh the energy end-use of different energy carriers.¹⁸ As gas has been calculated to be more efficient than electricity, gas is automatically favoured before electricity in buildings and in products. This calculation is based on the fact that European electricity for the most part is covered by coal and that the EU wishes to reduce its energy use and CO₂-emissions by replacing coal with gas. But if this arrangement were to be introduced in Norway, gas would replace electricity from renewables instead of coal, which would increase CO₂ emissions considerably. As this coefficient has

¹⁸ This coefficient was first introduced in Annex II of the 2006 directive on energy end-use efficiency.

been used setting energy requirements for space heaters, combination heaters, water heaters and hot water tanks (Commission 2013a; 2013b), conventional large electrical space and combination heaters, electrical water heaters and hot water tanks will practically be prohibited by 2017 and 2018. Considering that these products are to be found in most Norwegian residential buildings, the new requirements would seriously challenge the Norwegian status quo.

Summing up

The assumptions derived from the misfit-perspective proved to be supported by the empirical material. In the case of the EPBD and the EED, I observed that both the Norwegian energy-economic situation and the pre-existing policies and policy traditions clash with the new EU requirements. I did however also observe that Norway's policies on energy efficiency improve incrementally, but nevertheless independent of the implementation process. The misfit-perspective gives us no clue as to why this pattern occurs. There existed no misfit in the case of the two directives on products, on the other hand, and the fit observed between pre-existing policies and the new requirements explains for the most part the high implementation performance. But as the two regulations on space and combination heaters and on water heaters and hot water tanks were incorporated rather swiftly, the misfit observed in the case of these two regulations suggests that the misfit-perspective is unable to explain the whole story. This seems puzzling, and requires more nuanced explanation.

5.2 Domestic politics

The domestic politics perspective relaxes the assumption that retaining the status quo is the favoured option. Sometimes, new EU requirements may be in line with the interests of domestic actors, and their response might be to work to implement the directives. It is assumed that different constellations of governmental veto players, societal interests, and administrative organisation may influence implementation performance and lead to high implementation performance even when there is a significant mismatch between national and European policies. Conversely, a high match does not necessarily lead to high implementation performance. It is expected that the importance of the variables will vary from one directive to the other, and that some variables will be more important than others in explaining the implementation performance. I start by looking into the role of veto players in the executive

and legislative branches of government. Next, I look into the distribution of costs and benefits between societal actors imposed by the directives and examine how societal actors have gained access to the policy-making processes. Finally, I look at the horizontal and vertical fragmentation of competence in the administrative bodies.

5.2.1 Veto players

The basic assumption was that low implementation performance becomes more likely when the number of actors that have to agree to the measures increases. Whereas a high implementation performance was expected when veto players are in favour of the new requirements, a low implementation performance was expected when new requirements lack support in government or in parliament. It was also expected that majority governments would perform better than minority governments if they are in favour of the new requirements, and that changes in government during an implementation process reduces implementation performance if the new government opposes a directive. In the empirical enquiry, I probed into the preferences and actions of politicians and different governmental constellations to determine how changes in government, majority or minority governments or parliament influenced the implementation process.

The empirical enquiry suggests that the four directives received low interest from the political branches of government, regardless of governmental constellation. In every interview, the respondents reported that neither politicians in parliament nor members of government paid the directives much attention. Only on those occasions where a directive might correspond to the interests of the politicians did they refer to the directive as a justification of their own proposals. Also, when policy measures that somehow related to the directives were being proposed and developed, the contents of the directives were rarely taken into consideration.

EPBD and EED: Indifference in government and not much pressure from parliament

In the case of the *first EPBD*, there was a change in government in 2005, when the new red-green majority coalition replaced the former conservative government, which supports the assumption that a change in government leads to a change in implementation performance. The enquiry indicates that the directive received scant attention both in the Storting and in the red-green government. At the time when the 2007 building code was being developed, the politicians responsible for the new proposal did not consider the directive at all. Practically

every interview confirmed that the red-green government had skilfully strengthened policies on energy efficiency in new buildings with the building code, but that they had been less eager to improve energy efficiency in existing buildings. Apparently, the government considered Enova's work on district heating and large and cost-effective projects in industry as sufficient, and did not push for strengthened efforts in existing buildings. One interviewee very harshly criticised the Centre Party, which held the minister posts both in the KMD and the MPE throughout the implementation process, and therefore had responsibility for the whole range of implementation measures that had to be introduced. Apparently, the Centre Party cared for only one thing:

We [the organisation] experienced that the red-green regime was totally uninterested in energy efficiency. [...] The Centre Party had its own political agenda. [...] They tried to make anything into agriculture, also within energy policy. So, for them, the solution on every energy matter concerning buildings was tile. It was like, you know, 'tiles tiles tiles', and nothing else. And what is the largest deposition for tiles within heating systems in buildings? Indeed, district heating.

Although the other interviewees were less bombastic, they nevertheless confirmed that the government all in all was satisfied with Enova's work and did not push for other efforts that could increase energy efficiency in existing buildings. One might therefore not go as far as to say that the EPBD lacked governmental support, but rather that the main governmental actors were indifferent to the directive and that they directed their attention elsewhere. Thus, their indifference explains to some extent why the directive was not implemented at once; there simply did not exist anyone in government eager enough to speed things up.

The red-green government was still in charge at the time when the *revised* EPBD was introduced in 2010, but resigned in 2013, when the Conservative Party and the Progress Party created a new blue-blue minority coalition with support from the Christian Democrats and the Liberal Party. After some years with relative neglect, politicians were increasingly starting to develop new policies on energy efficiency, also in existing buildings, as a response to the grand climate settlement in 2008. Between 2010 and 2013, the discussion revolved around so-called 'white certificates',¹⁹ which had been proposed by the Socialist Left Party (Stortinget

¹⁹ White certificates are tradable documents certifying that a certain reduction in energy consumption has been attained. Each certificate represents a certain amount of energy, and energy suppliers and/or grid companies

2010). The white certificate-scheme was being discussed very seriously both in the Storting and in the MPE, but in the end, there was not enough engagement for the proposal to be accepted, and the scheme was never realised. During these discussions, the politicians in favour of the certificate-scheme did not argue that the scheme could be introduced as a possible measure to comply with the revised EPBD, but referred instead to how other countries such as Great Britain and Denmark had developed such a scheme. With little engagement in government, the Socialist Left Party was dependent on support in the Storting. But the main opposition party, the Conservative Party, consistently argued in favour of a tax deduction-scheme instead of white certificates. The resulting outcome of these discussions came as late as 1 January 2016, when the blue-blue government opened up the possibility to choose between receiving financial support from Enova or receiving tax deductions when upgrading residential buildings (Regjeringen 2015b). But since the overall amount of money set aside for supporting energy efficiency in existing buildings remains the same as before, the new scheme simply implies a reallocation in the government's budget, to put it bluntly.

This put aside, the pattern described above concerning the first EPBD remained until the red-green government resigned. The new blue-blue government largely followed the same path, but there were some indications that they were hesitant to implement the directive (Nationen 2015). The Minister of Petroleum and Energy, Tord Lien, repeatedly argued that the directive has serious implications for Norway because of the differences in the energy-economic situation between Norway and the EU, and that the directive, if implemented, would require modifications (Stortinget 2015b). The Minister of European Affairs, Vidar Helgesen, argued along similar lines (Stortinget 2015c). In the Storting, the Liberal Party, the Greens and the Socialist Left Party were those most in favour of a quick implementation, and sometimes took the subject up in parliamentary meetings. But in general, there has not been much engagement neither against nor in support of the directive.

The blue-blue government has signalled the same cautious stance towards the *EED*. As with the revised EPBD, Tord Lien has argued that modifications would be needed if the directive were to be implemented (Stortinget 2014). In the Storting, some of the smaller opposition parties have suggested to implement the directive. In February 2015, the Storting turned down

receive a certificate if they have managed to implement annual saving measures decided upon by the state beforehand. An independent third party would be responsible for handing out the certificates (Bertoldi and Rezessy 2008).

a parliamentary proposal put forward by the Socialist Left Party, the Centre Party and the Greens to implement the EED and to establish an indicative target for energy efficiency in line with the directive's requirements (Stortinget 2015a).

To sum up, the degree to which political factors have influenced the implementation performance has been largely constant. Throughout the period studied, both majority and minority governments have been indifferent or somewhat uninterested in pushing the implementation process forward. In the Storting, some smaller parties have argued in favour of a quick implementation of the revised EPBD and the EED, but these parties combined have not had the majority needed in the Storting to have an impact on the final outcome. The empirical findings therefore show support for the general assumption that a lack of support in government or in parliament increases the likelihood of a low implementation performance. With a constant majority of politicians uninterested in or indifferent to a quick implementation – both in the governmental constellations and in parliament – no changes in government or parliamentary power has changed the overall standpoint of the political branches of government, which is to refrain from engaging actively in the processes and to let the administrative bodies of the ministries handle them as they deem fit.

Ecodesign and labelling: Low interest, but also positively inclined

The red-green government was in charge during the whole initial implementation process from transposing the directive into Norwegian law to introducing administrative practices ensuring that the new rules are being followed. The enquiry shows that there was a general lack of interest in the two directives, but that it was considered important to at all times remain harmonised with the internal market in order to remain competitive and to prevent dumping in Norway. Thus, it was considered unproblematic to transpose the new rules quickly. From the outset, therefore, there did not exist any veto players neither in government nor in the Storting.

However, there is reason to assume that the government and politicians to some extent underestimated the scope of the two directives, especially when it comes to the Ecodesign Directive. Statements from interviews indicate that the politicians might not have realised how much the scope of the directive would expand, as new product groups would be taken in continually. Moreover, they might not have realised how much the characteristics of a regulation can be influenced by using different methods of standardisation and calculation,

which as a rule reflect European needs and not Norwegian. The government was therefore taken by surprise in the autumn of 2010 when they realised that the already incorporated regulations on space and combination heaters, water heaters and hot water tanks might in effect lead to a prohibition of such products if they are run by electricity, and that Norway might have to replace many of these products with similar products run on gas. This new and unforeseen issue sparked worries from within the Storting. Members of the Conservative Party and the Christian Democrats expressed their worries and probed into the matter in March 2011. But the worries from the opposition were shared in the government (Stortinget 2011a; 2011b). There was thus a consensus that the new requirements would implicate serious costs for Norway. Thereafter, the Norwegian government engaged in a coordinated lobbying effort together with NVE and a number of interest organisations representing different segments of economy and society. Among these were Energy Norway, representing the electric power industry; NELFO, consisting of producers of technical installations for buildings; the Federation of Norwegian Construction Industries, also known as BNL; the Federation of Norwegian Industries; and the two environmental organisations Bellona and Friends of the Earth Norway. Together, they tried to persuade the Commission into re-evaluating their methods of calculating energy use in these products. When the new blue-blue government overtook responsibility, they continued this effort, and it remains to be seen if the Commission accepts the Norwegian view.

Summing up

As shown above, the four directives did not receive much interest from the political branches of government. Throughout the period studied, politicians showed more interest in establishing national policies on energy efficiency than ensuring that the directives were implemented. This affected the implementation performance in two separate ways. First, as the politicians neglected to engage in the implementation of the EPBD and EED, there existed no players with the legislative and executive power to push the implementation process forward, which means that implementation to a large extent was dependent on other actors. Second, as the Ecodesign and Energy Labelling Directives were implemented *irrespective* of the indifference among politicians, there was simply no need for a push to bring implementation forward.

5.2.2 Societal interests

It was assumed that societal actors might influence implementation if their interests deviate from those of the government, depending on the distribution and concentration of costs and benefits among the societal actors. In the empirical analysis, I looked into the distribution of costs and benefits and the channels through which societal actors have a possibility to influence decision makers in the Norwegian administration. I expected the incentives for opposing EU policy to be high when the costs are concentrated to only a few specific actors or groups, while benefits are broadly distributed. With concentrated benefits and distributed costs, those who are expected to benefit will increase support. Wide distribution both in terms of costs and benefits would lead to less of an incentive to mobilize against or for the directive. On those occasions where both costs and benefits are concentrated, the response from societal actors would depend on the relative balance between them. Lastly, I expected that the likelihood of implementation would be reduced if alliances made up of segments of industry and government opposed new EU requirements, or if some societal actors had better access to the policy-making processes than others.

EPBD and EED: Costs outweigh benefits

The empirical material shows that the two directives imposed costs on a range of different actors, and the costs imposed were concentrated to very powerful actors in the building and construction industry and in the electric power industry. Benefits, on the other hand, were also concentrated, but the benefiting actors were fewer and have less influence on Norwegian policy-making than the negatively affected actors. Moreover, a close relationship between some of the negatively affected actors and the MPE and important segments of government ensured that these actors had some leverage over the benefiting actors in the most important decision-making forums. The enquiry also indicates that societal actors became interested in these directives quite late, somewhere around 2007, and that they increasingly started to actively lobby the government when the revised EPBD became an issue.

The most powerful of the negatively affected actors is the electric power industry, consisting both of companies concerned with electricity generation and distribution.²⁰ Whereas

²⁰ The empirical material shows no evidence that the oil and gas industry, which is Norway's most important industry in terms of providing tax levies to the state, has had any role in the implementation process. Although

electricity producers are mostly concerned with low electricity prices, grid operators would also be negatively affected since they benefit from as much electricity running through the grid as possible, thereby creating a need to invest in new grid infrastructure. Although the electric power industry in its public hearing statements took a rather moderate view of the directives, some of their comments suggested that they might be more reserved than they were willing to admit. For example, one comment in the hearing on the EED laments that ‘with nearly 100 per cent renewable electricity production, Norway is in a special position that should lead us to set a lower target for energy efficiency than countries that to a large extent can reach their target by improving efficiency in the power sector’ (Energy Norway 2013). The interview material very clearly indicated that these negative effects led the energy sector to oppose the new EU requirements, but that the opposition wasn’t materialised until the revised EPBD appeared. The following statement represents the majority view of those interviewed:

[...] we have a power industry which, a few years ago, was positive towards energy efficiency because of the Norwegian electricity deficit back in 2003, but also later, because of high electricity prices two winters in a row. You could sense this eagerness in the power industry to contribute to energy efficiency, because they are not interested in skyrocketing electricity prices. But the situation today suggests that the last thing the power industry wants is energy efficiency. Because the only thing energy efficiency leads to, is more available energy and lower electricity prices. That is something the power industry has no interest in.

Furthermore, the building and construction industry seems to be split between different fractions: Some actors are very eager both to implement the revised EPBD and the EED and to improve energy efficiency irrespective of the EU requirements; and other actors are sitting on the fence, weighing the costs and benefits back and forth. After the 2010 building code was introduced, the very large and powerful building constructors Obos and Selvaag Bolig have increasingly opposed new energy requirements in buildings. The new requirements already established in the 2010 building code are too expensive, they argue, and Norway should postpone any strengthening of energy efficiency policies in buildings (Aftenposten 2011; NRK 2013; NOU 2015; Teknisk Ukeblad 2016). Public hearing statements also

this industry has been observed lobbying against energy efficiency at the EU level (Guardian 2015), no evidence was found that they have run similar campaigns related to the Norwegian implementation of the four directives.

indicate that these actors are only favouring the implementation of the two directives insofar as they do not severely increase the costs of constructing new buildings. Many of the actors in the building sector who are not directly responsible for constructing new buildings, on the other hand, see the new requirements as a way of increasing their market potential and to provide new and competitive solutions. Such actors are typically suppliers of windows, better insulation, ventilation, lightning and other such solutions that contribute to more effectiveness in the building's life span.

Among those actors in the building sector who benefit the most from the new EU requirements are suppliers of new and innovative technical solutions for buildings. New energy requirements in buildings would necessarily lead to new potential for innovative technical solutions both inside and outside the building, both to decrease energy use and to produce energy in the building itself. By strengthening energy requirements and thereby creating an incentive for installing new devices such as intelligent energy metering, heat pumps, photovoltaics, etc. these actors could gain an enormous advantage. The potential benefits to be realised by means of the directives was revealed to these actors around the time when the 2007 building code was being prepared, but they did not manage to develop a concerted lobby strategy until after the 2007 building code, when the 2010 building code and the revised EPBD were approaching. At that time, they allied with the three largest Norwegian environmental organisations to coordinate the lobbying effort; they lobbied in favour of white certificates as means of complying with the revised EPBD, and argued very strongly for establishing an indicative target for energy efficiency, this time with the EED in mind. The environmental organisations themselves see energy efficiency in buildings as one of the most important measures to reach a low-carbon society, and some of them also consider energy efficiency as vital in protecting the environment from the construction of unnecessary wind-farms in fragile eco-societies throughout the country. Together, they organised several meetings with both the MPE and the KMD to gain support for their views.

This alliance between suppliers of insulation and technical installations and environmental organisations has nevertheless struggled uphill since the beginning. In energy matters, the electric power industry has historically had a closely knitted relationship with the MPE; and in the building sector, the country's largest building constructors have been Norway's most important instrument in providing affordable homes since the wake of World War II, and this special relationship has remained to this day. Thus, there is a huge imbalance in political

influence between the two fractions, favouring the government's historically most important allies in civil society. As the costs imposed on the energy sector and building constructors greatly outweigh the benefits of the rather small cluster of suppliers of technical installations, there were simply not enough benefiting actors to create an alliance that could counter the historically strong alliances between Norway and the energy sector and building constructors. Moreover, the empirical material suggests, with some uncertainty, that it was easier for the electric power industry to come into contact with the MPE than it was for other actors who had more interest in implementing the revised EPBD and the EED. Those actors in favour of a quick implementation often had to take detours to gain support for their opinions, targeting both the KMD and members of government. But the material does not give any clear indications that these actors had fewer opportunities than the electric power industry to communicate with the MPE. Nonetheless, it is likely that the MPE has been more inclined to listen to and share the views of the electric power industry, thus leading them to hesitate to implement the revised EPBD and the EED.

Ecodesign and labelling: Benefits outweigh costs, but some variation

With a steady stream of new regulations on new product groups, the number of societal actors affected by the two directives is constantly increasing. Affected actors consist mostly of producers of those products that are being regulated by the directives. For each product regulation, only small segments of these producers are affected, which means that both costs and benefits are concentrated to these segments.²¹ The empirical material provides evidence that the benefits of complying with European standards – and thereby ensuring that the producers can compete within the whole internal market – outweigh the costs of having to improve the energy performance of their products. Thus, a fast implementation of the two directives was considered of utmost importance to the producers affected by the new requirements.

However, a different pattern was observed for those regulations concerning space and combination heaters, water heaters and hot water tanks. As such products might be prohibited by 2017 and 2018 if they are run on electricity – due to the aforementioned primary energy coefficient – a range of Norwegian actors delivering different kinds of products and technical

²¹ The affected producers are based in Norway or in other countries. The share of Norwegian producers is higher in some of the product groups than in others.

solutions based on electricity would be seriously hurt,²² while foreign suppliers of similar products run on gas might benefit and increase their market potential. Moreover, since such electric devices are present in almost every Norwegian home, the new requirements also imply a decreased market share for the electric power industry. Suppliers of biogas and district heating, on the other hand, would benefit and increase their market share. Hence, in this case, benefits are concentrated to those few Norwegian actors who could be able to deliver gas for heating, while costs are distributed among several different product groups and sectors. Not surprisingly, a coalition of producers of technical installations and the electric power industry joined forces to persuade the Norwegian government that the primary energy coefficient would seriously damage some very important sectors in the Norwegian sector and undermine the whole energy system. Since the beginning of 2011, this alliance has constantly lobbied both the Norwegian government and the Commission to ensure that Norway is exempted from these rules, or that the rules are changed in their favour altogether.

The empirical material shows no evidence that some societal groups have had better channels into the decision-making processes than others. The MPE invited societal actors to voice their opinions on all the four studied directives. At agency level, NVE makes all new documents on new ecodesign and energy labelling regulations available for the public, and depends on an alert civil society to detect potential challenges stemming from the regulations.

Summing up

Concerning the EPBD and EED, we have seen that the costs of implementing these two directives were concentrated to the historically important and powerful electric power industry and large building constructors. On the benefiting side, the coalition of the not-so-powerful cluster of suppliers of technical solutions for buildings and some environmental organisations teamed up to push the implementation process forward, but most likely failed to do so because the views of the electric power industry and large building constructors are more easily heard and understood in the MPE. Concerning the Ecodesign and Energy Labelling Directives, on the other hand, we saw that the benefits of implementing outweigh the costs, which eased implementation.

²² In these two product groups, there exists a variety of Norwegian producers who provide electrical devices designed specifically for the Norwegian market.

5.2.3 Administrative organization

The basic assumption was that different regulatory agencies or ministries will understand directives differently, and that fragmentation of competence may influence implementation performance. It was expected that a fragmentation between several ministries would increase the likelihood of observing a low transposition performance, while a fragmentation between different administrative levels would increase the likelihood of observing reduced application performance. Although fragmentation was observed both in the transposition phase and in the application phase, the degree to which this fragmentation explains implementation performance varies between directives and between implementation phases.

The empirical material shows that, in general, administrative bodies both at ministry level and at agency-level have hugely impacted implementation performance. The enquiry also very clearly indicates that the MPE and the KMD have had very different lines of reasoning about the role of energy efficiency in buildings in a country that, during the last few years, has had more available electricity than it has use for. As one interviewee said, ‘I can only say that there have been many disagreements, seen from our point of view, between the KMD, which has legal responsibilities for buildings, and the MPE. It is obvious that they are not on the same wavelength. I have a feeling that they are working against each other’. At agency level, several agencies have been involved, contributing to occasional coordination challenges.

Fragmentation between the MPE and KMD: moderate explanatory force

In the case of the EPBD, the evidence shows support for the assumption that fragmentation between several ministries reduces transposition performance, but it is somewhat uncertain exactly how much the fragmentation itself explains the performance. Whereas the MPE has had the formal responsibility for transposing both the first and the revised directives, the KMD has been heavily involved in implementing those articles that directly concern buildings. The empirical material shows that both ministries had to evaluate both versions of the directive very seriously in terms of assessing their costs, their EEA-relevance and the kinds of legal adjustments that had to be made, as well as their consequences in terms of possibly losing sovereignty in an area that for the most part had previously been the domain of the nation state. During these evaluations, the ministries held joint meetings and had to communicate extensively back and forth. Such discussions can of course be lengthy, and they do to some extent explain why transposition has been overdue on both occasions. But the

picture is more nuanced. As we shall see, the outcome might have been just the same if the MPE had had the sole responsibility; whereas the KMD seemed determined to transpose both versions of the directive, since the ministry had already begun discussing similar measures, the MPE seemed outright hostile to the new requirements.

Statements from interviewees suggest that the directive throughout the implementation period has represented a new line of reasoning about energy that directly contradicts the MPE's traditional priorities, which almost certainly has led the ministry to hesitate before reluctantly agreeing to implement. Every interviewee except one stated in one way or another that the primary reason for the delayed transposition was hesitancy in the MPE to engage in something they traditionally had never prioritised. According to one interviewee, '[...] the authorities have taken a very reactionary stance against the directive, and [...] they have a focus on [energy] production rather than on energy efficiency. The MPE is almost without exemptions concerned with [energy] production'. Another interviewee explained it similarly: '[...] increased focus on energy efficiency will take money, resources and political attention away from district heating, which in a way would be to contradict the policy tradition we have had in the last 10-15 years'. The KMD, on the other hand, did not seem to spend much energy on the first EPBD, but became more engaged when the revised EPBD became an issue, and was inclined to accept the views of the alliance of suppliers of technical installations in the building industry and of environmental organisations. Especially in the case of the revised EPBD, the KMD saw that the requirements for buildings would not necessarily deviate very much from the policy measures that they had already introduced and were planning to introduce. So far, the KMD has not been as much involved in the implementation of the EED as with the EPBD, but the ministry will probably have to engage more actively at a later stage when the implementation process has made some progress. Hence, the outcome so far rests solely on the shoulders of the MPE. And again, the main issue revolves around energy efficiency in existing buildings, as the following statement suggests:

That is where the MPE says no, they really don't want us to save energy, at least as I see it. They are interested in selling energy. Energy efficiency, that is almost something they just do because they think they have to. I mean, it is just outright politically incorrect not to be interested in energy efficiency in buildings. They are interested in energy efficiency in their own production chain, in their own installations, but they are not interested in energy efficiency in buildings.

Products: No fragmentation in transposition, but incorporating new regulations will become a challenge

The MPE had the sole responsibility for implementing the Ecodesign and Energy Labelling Directives, and indeed, the fact that both directives received a high implementation score gives support to the assumption that the implementation performance improves when only one ministry is involved. But in the incorporation of new product regulations, NVE is increasingly becoming aware of the fact that the agency cannot follow the EU processes on new product groups and at the same time conducting controls on already implemented product groups. They are not only understaffed and lacking financial resources – they also lack competence on many of the new regulations that are currently under development at the EU level. NVE's strategy has therefore from the start been to prioritise those product groups that are expected to have an impact on important segments of the Norwegian economy, and direct as little attention as possible to those product groups that from the outset seem to be less important for the Norwegian economy. Lately, NVE has allowed the Norwegian Building Authority to participate in the Commission's Consultation Forum when products for buildings have been discussed. And recently, NVE started informal talks with the Norwegian Environment Agency on how to solve challenges related to new regulations concerning the EU's Circular Economy Strategy. At the present moment, this cooperation is yet to become formalised, which means that NVE so far has had the formal responsibility when the Norwegian Building Authority has participated in the Consultation Forum. Not surprisingly, being formally responsible while simultaneously allowing another agency to take over the practical responsibility poses several challenges, which so far has resulted in mixed success.

The informal and rather uncoordinated fragmentation between these three agencies does nevertheless fail to explain the implementation performance, since the Norwegian Building Authority and the Norwegian Environment Agency are following regulations that are still being developed at the EU level, and are yet to reach the implementation phase. NVE's lack of resources and competences does to some extent explain why the incorporation of new product groups has been somewhat delayed, and it is very clearly explains why conducting controls of products has been somewhat neglected, but it does not explain why so many of the regulations were piling up in the EEA Joint Committee.

Summing up

The assumption that fragmentation between more than one ministry reduces implementation performance was supported in the case of the EPBD, where both the MPE and the KMD have been involved. But it is hard to see why the fragmentation in itself led to the low implementation performance, since the KMD showed more willingness than the MPE to push the implementation process forward. And in the implementation of the EED, no ministry other than the MPE has so far had any formal responsibility, which suggests that fragmentation may not be the sole issue here. In the case of the two directives on products, we saw that the MPE alone was responsible for transposing the two directives. Here, the assumption that implementation performance increases when only one ministry is involved was supported. In the incorporation of new product regulations, I observed that NVE lacks competence and resources, and that the informal coordination with the Norwegian Building Authority and the Norwegian Environment Agency so far has had mixed results. But since the fragmentation between NVE and these two other agencies is only in the starting phase, it fails to explain why the incorporation of some of the regulations were delayed.

5.3 Analysis of the explanatory force of the theoretical framework

So far, I have looked into how Norway's implementation performance can be understood by seeing through the lenses of goodness-of-fit and domestic politics. Here, I will sum up what I have discovered so far and provide a brief account of what the theoretical perspectives cannot explain. I start by discussing the relevance of misfit in explaining the implementation performance, and then continue with domestic politics. Lastly, I look at the two perspectives combined to assess their overall relevance and explanatory force.

Starting with the misfit-perspective, the empirical material supports my theoretical assumptions. There was a general misfit in the energy-economic system, which largely remains a constant but nevertheless can influence implementation differently, depending on the characteristics of the directives. I discovered that there was a misfit in the case of the EPBD and the EED, as well as the ecodesign regulations on space heaters, combination heaters, water heaters and hot water tanks. While my theoretical assumptions concerning the EPBD and the EED were supported by the empirical material, they failed to predict the swift

incorporation on the two ecodesign regulations. Regarding pre-existing policies and policy traditions, a fit was observed in the case of the two directives on products, and a general tendency towards misfit was observed in the case of the EPBD and the EED. The misfit-perspective has therefore been quite accurate in predicting the implementation outcome.

Yet, while the misfit-perspective is accurate in predicting the outcome, we are still very much left in the dark when it comes to explaining the dynamics behind the outcome. By looking at the fit or misfit between the directives and Norwegian policies, I discovered that Norway incrementally improves its policies in the same areas as the directives, but at a slower pace. For example, although there was a misfit between the EED and Norwegian pre-existing policies, I observed that Norway actually is in the process of discussing or planning to introduce some of the measures that are included in the directive, one example being climate and environmental requirements for public purchases. And in the case of the EPBD, Norway is on track towards requiring nearly-zero energy buildings by 2020, just as required by the directive. Moreover, the grand climate settlements of 2008 and 2012 have in principle locked the whole Storting (except the Progress Party) on a path towards a more energy efficient society. What is interesting here is that these Norwegian policy-processes are developing independently of the directives, which suggests that the country altogether is going in the same direction as the EU. If Norway already is in the process of moving in the same direction as the EU in many areas, why then does it take such a long time before the EPBD and EED are transposed into Norwegian law? Here, the misfit-perspective is unable to further our understanding. Thus, while the perspective has proven to be valuable in predicting the outcome, it is more difficult to see the usefulness of it in trying to understand the dynamics behind the implementation performance.

At the domestic level, I discovered that there was little variation between the directives when it comes to influence from political veto players. Throughout the period studied, governments and politicians in the Storting largely ignored the directives or directed their attention elsewhere to matters deemed more important. While the veto player-variable did not have direct influence on the outcome *as such*, it did however influence the outcome indirectly, since the lack of interest from politicians made it possible for other interested actors in the administration and in society to put their stamp on the outcome. Thus, the implementation performance depended on the distribution of costs and benefits among societal actors as well as their ability to get their views heard in the administration and the preferences of and

organisation within the administration. In terms of benefits and costs, the benefits from implementing the EPBD and EED proved to be concentrated to providers of technical solutions for buildings, while costs were concentrated to the electric power industry and building constructors. Regarding the two directives on products, both benefits and costs are concentrated to the producers of products that are affected by new requirements. In the administration, there was a fragmentation between the MPE and the KMD in the implementation of the EPBD, and there will occur a fragmentation between the MPE and KMD (and possibly other ministries) as the implementation process on the EED continues. I also discovered that the EPBD and EED represent a new way of thinking for the MPE, which does not have competence on buildings and prefers solutions that are cost-efficient. In the transposition of the directives on products, there was no fragmentation, as the MPE had the sole responsibility. But in the incorporation of new product regulations, an informal fragmentation between different agencies has occurred, which will become a challenge if no measures are taken to improve coordination. The findings are summarized in Table 5.2.

Theoretical perspective	Variable	Energy Performance of Buildings Directive and Energy Efficiency Directive	Ecodesign Directive and Energy Labelling Directive
Goodness-of-fit	Pre-existing policies and policy traditions	<i>Misfit</i>	<i>Fit</i>
	Energy-economic situation	<i>Misfit</i>	<i>Mostly fit</i>
Domestic politics	Veto players	<i>Indifferent politicians</i>	<i>Indifferent politicians</i>
	Societal actors and access to decision-making	<i>Costs outweigh benefits</i>	<i>Benefits outweigh costs</i>
	Administrative organisation	<i>Fragmentation</i>	<i>No fragmentation</i>
Implementation performance		<i>Low</i>	<i>High</i>

Table 5.2: Summary of the analysis

Since affected societal actors were benefiting from the two directives on products in order to remain competitive within the internal market, and since the product regulations are

implemented as soft law, implementation was rather unproblematic. In the implementation of the EPBD and EED, I discovered that the electric power industry and building constructors generally tend to get their views heard by decision-makers more often than the benefiting actors, and that this most likely occurred here too. And as the ministry formally responsible for implementation – the MPE – is unaccustomed to thinking of energy efficiency in other terms than its cost-efficiency and also lacks competences on buildings, the ministry was not inclined to implement the two directives before it could be ensured that the costs imposed on the electric power industry and building constructors were reduced to a minimum. Indeed, this is the most important explanation for the failure to transpose the revised EPBD and EED.

While I consider these explanations to be sound and generally telling the story as it occurred, the three variables stemming from the domestic politics-perspective fail to cover some interesting developments that I discovered in the empirical data. First, I discovered that NVE has had a lack of competence and resources when putting directives into practice. There have also been indications that the MPE itself is understaffed or at least lacking in expertise in the area of energy efficiency. Second, developments in Iceland came up as a possible explanatory force in interviews and email correspondence. Third, I discovered that Norway actually tries to affect the characteristics of directives if they are deemed costly or inconvenient. Fourth, developments in the rest of the EU largely follow the same pattern as in Norway. Thus, the domestic politics-perspective by and large complements the misfit-perspective and furthers our understanding of why the two directives on products were implemented faster than the EPBD and EED. But it does not tell the whole story. It is for this reason that I now turn to a brief discussion on the possible explanatory force of these empirical findings not covered by my theoretical framework.

5.4 Other possible explanations

As explained in Chapter 2, the proposed analytic framework might not fully explain the implementation performance of the four directives. Other factors not accounted for by the two theoretical perspectives might explain why Norway has been less successful in implementing some directives than others. Especially, there was some uncertainty as to how the characteristics of the EEA Agreement would influence the outcome. While I did find some indications that the EEA Agreement played a role, there were also some other noteworthy observations related to lack of administrative capacity in the Norwegian administration,

patterns in the rest of the EU, as well as indications that Norway attempts to influence how the Commission will evaluate the directives and prepare for eventual revisions. The rest of this chapter will be treated as follows: I start by discussing how the EEA Agreement influenced implementation and then discuss how Norwegian lobbyism in Brussels, European patterns and administrative capacity played a role.

As mentioned in Chapter 4 and elsewhere, the implementation procedures in the EEA Agreement are somewhat different from those of the EU. Directives can only be incorporated into the EEA Agreement when every non-EU member – Norway, Liechtenstein and Iceland – have agreed to do so. Thus, if one country refuses or stalls the approval, the implementation is put on hold until that country has finally decided to give its approval. Reports from interviews suggest that such delay has occurred on a number of occasions. Especially in the incorporation of new regulations on new product groups related to the Ecodesign and Energy Labelling Directives, the Icelandic administration seems to be the number one reason for delayed incorporation in Norway. Indeed, documents attained from ESA's public database show not only that ESA initiated infringement procedures against Iceland for failing to implement both of the directives (ESA 2014a, 2014b), but also that Iceland had failed to incorporate new product regulations on so many occasions that it is impossible to refer to all of them here. It has also been reported that Iceland stalls the incorporation of the revised EPBD and the EED into the EEA Agreement, but here, the evidence is not strong enough to come to that conclusion.

Moreover, as shown in Chapter 1, Norway was between 2011 and 2015 slow to implement new directives, which alarmed ESA and led them to express their concerns in their yearly implementation scoreboards. This period corresponds to when the revised EPBD and EED were to be implemented, which might suggest that the transposition load in the Norwegian administration had some influence on the implementation performance of these two directives. Such an assumption is in line with other studies that have found that transposition load in the administration has influence on the implementation performance (e.g. Borghetto et al. 2006). Thus, while the empirical material provides no evidence of such a connection in this case, we should not exclude this possibility altogether.

Another aspect of the EEA Agreement that was mentioned in Chapter 2 was the fact that Norway is excluded from the decision-making bodies at the EU level. Yet the country does have channels into which it can influence policy processes at the EU level. As previously

mentioned in this chapter, Norway – together with relevant administrative bodies and industry and environmental organisations – has worked through as many channels as possible to ensure that Norway is exempted from using the primary energy coefficient that favours household products run on gas rather than electricity. In fact, there seems to be a concerted and continuous lobbying effort at play, in which every interested actor tries to influence the Commission through their relevant channels. It seems as if this alliance might have some success in this effort, although nothing is certain yet. But since the Commission apparently has received similar complaints from other European actors that their regulations are too uniform in character and fail to take local challenges into consideration, we may see that the Norwegian effort becomes successful in the future. As this lobbying effort was initiated *after* the incorporation of the relevant product regulations, it has so far had no influence on the implementation outcome, but it shows that there exist channels into which policy processes can be influenced at the European level if the Norwegian administration is alert and able to become active at an early stage.

Let us now look at how the Norwegian implementation performance compares to the performance in other EU member states. Generally, the trend observed in Norway is not so different from what has been observed in other member states. Just as in Norway, implementing the first EPBD in Europe has been both slow and inefficient (Henningsen 2011: 133). This pattern has continued with the revised EPBD (EurActiv 2015; Commission 2013c). Member state implementation performance of the Ecodesign and Energy Labelling Directives was for the most part in line with Commission demands. The Commission started infringement proceedings against five member states for their failures to transpose the first Ecodesign directive (Commission 2008c; 2008d); and most countries were able to transpose the Energy Labelling Directive, with only three countries being subject to reasoned opinions by the Commission (Commission 2012). However, by March 2015, only nine member states had fully transposed the Energy Efficiency Directive into national law, with as many as 27 member states hit by infringement procedures and risking penalties due to the slow implementation (Commission 2015b). One might argue, therefore, that the Norwegian implementation performance mirrors the mixed performance observed in the rest of the EU.

How can the pattern observed in the EU explain Norwegian implementation? First, it is interesting that such a pattern has been observed, since the misfit between the Norwegian and the EU's energy-economic situation is so pronounced, which suggests that there exist some

common traits at the domestic level that can explain why roughly the same implementation pattern has been observed both places. For instance, it may be that the interests of powerful societal actors in the EU are considered to be so important that these actors too have managed to impede implementation, despite the Union's energy-economic situation. Surely, Norway is not the only European country in which the electric power industry traditionally has had an important role and close relationships with their government.²³ Another such trait could be that the countries are similarly organised, either in terms of fragmentation between administrative bodies or in terms of administrative capacity.

Second, it would not be far-fetched to assume that norms are of importance. What one person or country does is often conditioned by what other persons or countries do, as argued by Elster (1989: 97). While no evidence was observed in the empirical material that the mixed implementation performance in the EU had any effect on the Norwegian performance, we should not exclude the possibility that Norwegian decision-makers have been aware of this pattern and taken it into consideration during the implementation process. This might especially be so for the EPBD and EED, where the new requirements have been met with half-hearted measures or a complete failure to implement in many of the member states. Indeed, in her analysis of national climate policy-making, Boasson (2015: 147) finds that the MPE was taken by surprise when ESA in 2006 initiated an infringement process on the failure to transpose the first EPBD, because they had not expected ESA to show such determination at the same time as the other member states were failing to implement. Although Boasson's finding was not replicated in my own empirical material,²⁴ it should not be ruled out that the slow implementation in the EU has made it easier for Norway to delay implementation not only of the first EPBD, but also the revised EPBD and the EED.

²³ Historically, energy policy has been an important national matter with close relationships between the energy industry and the state. Until the EU began its effort to create an internal energy market in the 1990s (a process still not completed), utilities were often state owned and electricity markets monopolized. While the relationships between the electric power industry and the state today are not as formal and institutionalized as before, the electric power industry still has a special role in many European countries.

²⁴ Since many of those who worked on the first EPBD have now changed jobs or retired, it has been difficult to attain information from interviewees on the first few years of the implementation process of the first EPBD. This challenge was exacerbated by the MPE's refusal to agree to an interview, since the responsible persons in the MPE have been involved in the implementation processes since the beginning and thus also should have the most knowledge of how European events played a role in the implementation process.

We should also not exclude the possibility that administrative capacity, i.e. lack of resources – both in terms of budget allocations and staff – might have affected the implementation of all of the four directives. In the field of international law, proponents of the so-called ‘managerial school’ (e.g. Chayes and Chayes 1995) have long argued that the capacity and efficiency of national administrations is of great importance in explaining the ability of nation states to implement international law. In the field of European law, too, many studies have come to the same conclusion (see among others Börzel et al. 2010; Haverland and Romeijn 2007), but there are also studies where no such connection can be made (see for example Hartlapp 2009). In my own material, I found evidence that NVE has struggled to keep track of the implementation of those measures that come under their responsibility, such as administering the energy certificate scheme for buildings and the ecodesign and energy labelling regulations. In fact, the empirical material suggests that one of the reasons that Enova is taking over the formal responsibility for the certificate scheme for buildings in July 2016 is that NVE is understaffed and lacking in financial resources.²⁵ Whereas the Ecodesign and Energy Labelling Directives were rather easy to transpose and more challenging to follow up, we should expect that challenges related to lack of resources would occur at an earlier stage in the case of the EPBD and the EED. With those two directives, much more work is needed in the preparatory stages of the implementation phase to evaluate their scope and eventual consequences for the Norwegian economy and society, as well as to make decisions on budgetary priorities. In such a situation, where the ministry in charge lacks the necessary staff to evaluate the directives quick enough, a delayed transposition is not only a possibility, but highly probable. While the empirical material only occasionally touches upon this subject, there are some indications that the two directives have been demanding for the MPE, and that this is one of the reasons why especially the implementation of the revised EPBD and the EED has been delayed. Considering that the same implementation pattern has been found in the EU, it might as well be that this is a phenomenon occurring in most of the member states. While this assumption seems highly likely, we should nevertheless not jump to a conclusion without empirical confirmation. Nonetheless, this proves to be an important finding and suggests that future research takes administrative capacities into account in the domestic politics-perspective.

²⁵ While this obviously is one of the reasons, the formal argument for putting Enova in charge of the certificate scheme has been to coordinate it better with the other measures under Enova’s umbrella, as mentioned earlier.

6 Conclusion

In this thesis, I have attempted to answer to what extent, how and why Norway has implemented EU directives on energy efficiency. I have investigated the extent to which Norway has managed to implement such directives and explained the dynamics behind the implementation performance. In answering these questions, I applied a theoretical framework inspired by existing scholarly literature on implementation within a multilevel system of governance. By using two complementing theoretical perspectives on implementation – goodness-of-fit and domestic politics – I attempted to explain the implementation performance from above as well as from below.

In assessing the extent to which Norway has implemented EU directives on energy efficiency, I analysed the implementation performance according to their timeliness and correctness in the transposition phase, and used the data I could find to give a preliminary assessment in the application phase. In the transposition phase, I discovered that Norway has had a high implementation performance in the implementation of the Ecodesign Directive and the Energy Labelling Directive. I also observed that the country has struggled to implement the Energy Performance of Buildings Directive and the Energy Efficiency Directive. As a consequence, I concluded that the implementation performance of these two directives was low. I nevertheless discovered some tendencies in Norwegian politics towards a more active engagement on behalf of energy efficiency, which might suggest that Norway on the whole is moving in the same direction as the EU in the long run, despite the mixed implementation performance observed so far. In the application phase, Norway is lagging behind in the application of the EPBD and EED, but if efforts are improved quickly in the time to come, it might still not be too late to reach the EU's long-term targets. In the case of the Ecodesign and Energy Labelling Directives, on the other hand, application has come a long way forward and seems to be on track towards reaching the EU targets.

From the outset, it is quite obvious that new EU requirements on energy efficiency are very demanding, and sometimes also in conflict with Norwegian interests. This proved to be the case in the implementation of the EPBD and the EED, as the two directives conflicted with the interests of both the MPE, the electric power industry and large building constructors. This explains for the most part why it has been so difficult for Norway to implement these

directives, and it did not get easier when the majority of politicians in changing governments and parliaments were consistently indifferent to the directives.

In the implementation of the Ecodesign and Energy Labelling Directives, transposition was unproblematic, since the affected actors were in favour of the new requirements and since the directives' regulations come in the form of soft law. However, as NVE was observed struggling to cope with all the new developments at EU level, it will be highly interesting to see how Norway manages to incorporate the increasing amount of product regulations that are about to be introduced by the EU. This will be a challenge for the Norwegian administration, and some of the regulations will probably also impose costs on important Norwegian actors similar to those already observed with the introduction of the primary energy coefficient for space heaters, combination heaters, water heaters and hot water tanks.

Theoretically, the study shows that the combined use of the two theoretical perspectives enables us to understand why nation states implement EU policies. But it also supports previous criticisms from scholars that goodness-of-fit is static and to a large extent unable to explain the dynamics leading to the implementation outcome. In so doing, the domestic politics-perspective has proven to be more valuable than goodness-of-fit. Yet, we have also seen that this perspective does not include some factors that have influenced the implementation performance. Future applications of the domestic politics-perspective should take the administrative capacity of a country into consideration, not only in the application phase, but also in transposition. Moreover, none of the two theoretical perspectives took the characteristics of the EEA Agreement into account. The fact that the EEA Agreement was observed influencing the outcome suggests that there are some limitations to the two theoretical perspectives in explaining implementation in EEA states.

In light of these findings, what can be said about the prospects of the EU to succeed in its effort to become more energy efficient? While the gains of improving energy efficiency might seem obvious on paper, the case of Norway suggests that implementation will only be successful if enough societal actors agree that improved energy efficiency is to the benefit of themselves and to society as a whole. The use of the primary energy coefficient for household devices also shows that too much harmonisation and streamlining across countries could lead to adverse effects. This suggests that the EU should make room for some leeway and allow member states to take local needs into consideration.

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Appendix

List of informants

- Interview I* Dag Christensen, Energy Norway. Oslo, 24 February 2016.
- Interview II* Tore Strandskog, NELFO. Oslo, 25 February 2016.
- Interview III* Marit Hepsø, Ministry of Local Government and Modernisation (KMD). Oslo, 9 March 2016.
- Interview IV* Audun R. Johnson, Friends of the Earth Norway. Oslo, 10 March 2016.
- Interview V* Berit Sørset, The Federation of Norwegian Industries. Telephone interview, 11 March 2016.
- Interview VI* Rannveig R. Landet, The Federation of Norwegian Construction Industries (BNL). Oslo, 16 March 2016.
- Interview VII* Heikki Holmås, current member of the Standing Committee on Energy and Environment in the Norwegian Storting, member of the Socialist Left Party. Oslo, 8 April 2016.
- Interview VIII* Kirsti H. Fagerlund, The Norwegian Water Resources and Energy Directorate (NVE). Oslo, 20 April 2016.

Interview guide

1. Perhaps you could start by telling me a little bit about how the field of energy efficiency has relevance to your line of work, and I would also appreciate it if you could tell me a little bit about what kind of work you yourself have done relating to the four directives that I study.

Questions on the fit between Norway and the EU

2. What is your general impression of Norwegian policies on energy efficiency?

Follow up: How do you see Norwegian policies on energy efficiency correspond with the EU's policies?

3. In which way might the fact that Norway is net exporter of energy and that the country has approximately 100 per cent renewable electricity explain the Norwegian implementation performance?

The role of administration and political veto players

4. Have you noticed any difference between governmental constellations when it comes to prioritizing energy efficiency and the implementation of the four directives?

Follow up: How has the [EPBD/ Ecodesign / Energy Labelling / EED] Directive been received in the Storting?

5. Which impression do you have of the MPE and the administration when it comes to implementing these four directives?

Follow up: How does the administration (ministries, agencies and the like) coordinate the implementation of the directives?

Follow up: Have some of the EU requirements pertaining to the [EPBD / Ecodesign / Energy Labelling / EED] Directive been difficult for the administration (ministry or agency) to accept or to put into practice?

6. Do you know if there has been more than one position on the [EPBD / Ecodesign / Energy Labelling / EED] Directive in the administration, for example that different ministries have had different preferences?

7. Have regional and local administrative bodies had a role in the implementation processes?

The role of societal actors

8. When the [EPBD / Ecodesign / Energy Labelling / EED] Directive arrived, did you have any specific views on this directive?

Follow up: Did the directive involve any benefits or costs to your organisation/industry?

Follow up: Did you work in any way to ensure that your view was taken into account during the implementation process?

Follow up: In what way did the Norwegian administration take your views into account?

9. Did you notice if there were any actors from industry or civil society that were arguing strongly in favour or against the directive, or if the requirements of the directive would involve benefits or costs to different types of actors? (Question to administrative bodies).

Follow up: With which actors have you communicated in your work on the implementation on the [EPBD, Ecodesign, Energy Labelling, EED] Directive?

Questions on specific policy processes

10. Why has it taken such a long/short time before the [EPBD / Ecodesign / Energy Labelling / EED] Directive has been implemented?

11. How have Norwegian policy processes such as the [2007, 2010 and 2015 building code / white certificates / tax deduction scheme] influenced the implementation process?

12. I see mentions of a so-called 'primary energy coefficient' in many hearing statements and position documents. Could you please elaborate a bit about this and say something about why this coefficient was so controversial?

Concluding the interview

13. Is there anything you would like to add that you consider important in explaining the implementation of the directives, which so far has not been included in our conversation?

14. Do you know of any specific persons in the administration or in civil society that I should talk to in order to understand the implementation processes better?