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Multistakeholder Agreements in Climate Governance and Energy Transition: The Dutch Energy Agreement

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Multistakeholder Agreements in Climate Governance and Energy Transition: The Dutch Energy Agreement

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Abbreviations

Climate governance	the diplomacy, mechanisms and response measures aimed at steering social systems towards preventing, mitigating or adapting to the risks posed by climate change.[1]
Collaborative governance	a governing arrangement where one or more public agencies directly engage non-state stakeholders in a collective decision-making process that is formal, consensus-oriented, and deliberative and that aims to make or implement public policy or manage public programs or assets.[2]
Energy transition	long-term structural change in energy systems.
Hybrid multilateralism	new landscape of climate cooperation with intensified interplay between state and non-state actors.[3]
Joint fact-finding	a public engagement strategy that creates a space for technical and scientific discussions between all sides.[4]
Low carbon transition	long term shift away from fossil fuels.
Multi-level governance	the vertical (multiple levels) and horizontal (multiple actors) dispersion of central government authority.[5]
Multistakeholder Agreements	negotiated agreements setting out national long-term objectives which include a range of stakeholders.
Negotiated rule-making	consensus-based process for making rules and regulations.
Neo-corporatism	cooperative relationship between an interest group and the government for the purpose of maintaining a fixed procedure of developing and implementing economic policies.[6]

1 *Jagers & Stripple, (2003).*

2 Ansell & Gash, (2008).

3 Bäckstrand *et al.*, 2017.

4 Adler, (2014).

5 Bache & Flinders, (2004).

6 MBASkool at https://www.mbaskool.com/business-concepts/human-resources-hr-terms/16848-neo-corporatism.html.

Network governance	networks of interdependent actors that contribute to the production of public governance.[7]
Polder Approach/model	a Dutch term for an approach *i*n which efforts are made to reach a broad national (or local) consensus on important issues by social partners traditionally unions and employers organisations.[8]
Polycentric governance	used to describe the empirical multitude of actors involved in natural resource, environmental, and climate governance at different scales.[9]
Regime complex	loosely coupled set of specific regimes.[10]
Regulatory standard setting	process of voluntary agreement on standards.
Social dialogue	process of negotiation by which different actors in society (or social partners) reach agreement to work together on policies and activities.[11]
Transition management	governance approach that aims to facilitate and accelerate sustainability transitions through a participatory process of visioning, learning and experimenting.[12]

7 Torfing, (2012).

8 ESPN, (2017).

9 Dorsch, & Flachsland, (2010).

10 Keohane & Victor, (2011).

11 ETUC at https://www.etuc.org/en/what-social-dialogue.

12 *Rotmans, et al., (2001).*

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Executive Summary

Introduction

The transition towards a low-carbon society represents a particularly difficult governance challenge. Increasingly, governments are exploring collaborative ways to problem-solve, set long-term policy direction and share the responsibility for climate action. This research, undertaken by the NESC Secretariat, examines one type of collaboration, multistakeholder agreements, with a view to understanding their role, potential and limitations more closely. The research focuses in particular on the Dutch Energy Agreement between the social partners, environmental groups, government and local authorities. Inter-party political agreements have been used in Sweden and Denmark.

Multistakeholder Agreements

Agreements among a broad range of actors to support energy transition have emerged from different traditions. One is the growth of global multilevel governance for sustainability, climate change and the energy transition. A second, overlapping tradition is regulatory, whereby governments and industry collaborate to develop mechanisms to set standards and verification in energy efficiency and greenhouse gas (GHG) emissions. A third tradition is that of social dialogue, which can yield consensus and negotiated agreements.

The Dutch Energy Agreement

The 2013 Dutch Energy Agreement (Energieakkoord) provides a significant example of a multistakeholder agreement. This report from the NESC Secretariat highlights six themes:

i. Stakeholder Participation and the Polder Approach: The agreement represented a considerable extension of Dutch social dialogue and a new approach by the Dutch social and economic council, SER. Government was a participant and the negotiations included 47 stakeholders, including employers, unions and environmental NGOs.

ii. The Changing Role of Government: The role of government changed during the process, as it had to deliver on many of the actions in the Agreement.

iii. Level of Ambition: The extent of ambition in most elements of the Agreement was low to modest. Its main achievement was the expansion of offshore wind energy.

iv. Momentum as Part of Dutch Energy Transition: The agreement helped to shift Dutch energy policy from being stuck to unstuck.

v. Effectiveness of Monitoring and Implementation: The monitoring process was sophisticated in some respects, and more limited in others. The process included an active High-Level Committee which reviewed progress and negotiated adjustments. This probing and searching for new solutions did not seem to engage front-line actors in problem-solving in a meaningful way.

vi. Role of Evidence and Policy Analysis: As is usual in Dutch social dialogue, the partners accepted the evidence and analysis supplied by public 'knowledge institutions'. However, in this case the evidence, projections and analysis were incomplete, given the uncertainties inherent in the energy transition and climate change.

Conclusions

This report poses questions for further reflection for the Council and wider policy system.

Four broad questions arise from this research:

i. What are some key considerations in the use of multistakeholder agreements to progress the energy transition?

ii. To what extent would more sectoral and sub-sectoral networks and learning processes in key climate-change areas be of value to the development of the Irish energy transition?

iii. In what way could, and should, the existing evidence base and policy analysis for climate-change policy be extended and integrated with Irish climate policy-making and evaluation?

iv. In what ways can the strategic, collaborative and learning role of government be further developed as part of Irish climate governance?

Chapter 1
Context and Approaches

1.1 Introduction

This research report from the NESC Secretariat examines the use of national multistakeholder agreements for energy transition and climate action, as part of climate governance strategies. These refer to negotiated agreements setting out national long-term energy and climate objectives which include a range of stakeholders, from social, economic and environmental actors to political parties. Political agreements have been used in other countries, including Sweden and Denmark, while the Netherlands used a multistakeholder agreement between social partners, environmental groups, government and local authorities (Krarup & Ramesohl, 2000).

The transition towards a low-carbon society represents a particularly difficult multilevel, multiphase and multi-actor governance challenge. Governments are exploring collaborative ways to problem-solve, set long-term policy direction and share the responsibility for climate action with increasing urgency.[13] This is within a wider European context of increased ambition through the 2030 Climate and Energy Framework and new governance arrangements (European Commission, 2018) and the UNFCCC Paris Agreement 2015. This research examines one type of collaboration, multistakeholder agreements, with a view to understanding their role, potential and limitations more closely.

While the Dutch context and transition have distinctive features, examining their experience raises some useful questions for other countries, such as Ireland. In recent years, NESC has focused on governance and institutional arrangement for policy analysis, engagement, decision-making, and exploring innovation in sustainable policy and practice.[14]

The current research informs NESC's sustainability work and is part of a broader Climate Governance project. It further builds on previous work on climate change (NESC Secretariat, 2012; O'Donnell, 2012; Moore, 2012) as well as NESC work on

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[13] For further discussion on this, see Jordan *et al*., (2017); Keohane and Victor (2011).

[14] The Department of Communications, Climate Action and Environment provides NESC with resources to assist it in integrating a sustainable development perspective into its work.

building community engagement and social support in relation to wind energy (NESC, 2014).

1.1.1 Structure of Report

The report begins with an introduction to multistakeholder agreements, approaches taken, types and concepts. Chapters 2 and 3 provide an in-depth look at the Dutch Energy Agreement. Chapter 4 presents NESC Secretariat's reflections on the Dutch case study.

1.2 Introduction to Multistakeholder Agreements

Agreements on energy and climate action have emerged from different traditions and often fulfil more than one function, most commonly regulatory, participatory and strategic governance. What they have in common is that are made between two or more key actors, including government, business and industry and NGOs/civil society actors and cities.

One tradition, or part of the climate governance story, is the growth of global multilevel governance for sustainability, climate change and the energy transition. Since the publication of *Our Common Future, Report of the World Commission on Environment and Development* (the Brundtland report) (World Commission on Environment and Development, 1987), multistakeholder processes have been increasingly established as part of international and national climate governance (Laes *et al.*, 2014; World Commission on Environment and Development, 1987). Multistakeholder initiatives or partnerships have been described as examples of collaborative or collective governance that 'bring together government, civil society and the private sector to address complex development challenges that no one party has the capacity, resources and know-how to do so more effectively' (Thindwa, 2015).

These initiatives are often largely consultative or participative in purpose, quite broad in focus, with representative actors, and are undertaken at national, regional and local levels. They tend not to seek agreement or binding commitments but rather provide a mechanism for governments to engage or even collaborate with a range of stakeholders in a structured way.

For example, multistakeholder participation processes are commonly embedded in the United Nation's Development Programme work towards low climate-emissions solutions and building climate resilience (UNDP, 2012) and in the United Nations Climate Change Conferences (COP). The Paris Climate Agreement and its implementation is underpinned by systematic engagement with various actors and governments (UNFCC, 2015). Participatory processes are used to provide a structured framework for encouraging pluralist inputs and can also provide a

mechanism for building consensus and potentially for transforming interests (Meadowcroft, 1999; Melhus & Paton, 2012).

A second parallel, and overlapping, tradition is regulatory, whereby governments and industry have been collaborating to develop more responsive mechanisms to bring standards and verification to energy efficiency and GHG emissions.

A third tradition is that of social dialogue, in which consensus-building and negotiated agreements are an established practice in policy-making.

The next section provides examples of agreements that have emerged in recent decades, out of these broad traditions, for energy and climate matters.

1.3 Types of Agreement

While not an exhaustive list, this section outlines six types of multistakeholder agreement. These vary on the levels of scale (from international to national), the range of stakeholders included (from multiple civil society and state actors to political parties), and tradition (from multilateral action and dialogue to more traditional regulatory contracts). In most instances, some measure of regulatory focus serves the state or states, and represents a shift away from more formal top-down regulatory approaches. However, most are presented as voluntary agreements despite this regulatory element.

i. Recent transnational climate agreements

ii. Energy and climate covenants/agreements

iii. Regulatory standard-setting

iv. Negotiated rule-making

v. Social dialogue agreements

vi. Party-political climate and energy agreements

1.3.1 Recent Transnational Climate Agreements

In relation to climate change, new forms of governing are emerging 'beyond', 'below', and 'outside' the state-dominated climate regime (Jordan & Huitema, 2014). These new forms have proliferated around the Sustainable Development Goals and climate change, and have been referred to as 'an orchestration instrument' (Klingebiel & Paulo, 2015, cited in Folwer & Biekart, 2017).

There has been a much more decentralised climate policy architecture since the UN Climate Meeting in Copenhagen in 2009 (Victor, 2011). This has formed the ground

for the growth of multilateral action and dialogue. The climate policy arena, along with inter-governmental agreements, is 'characterized by civil society-led standard setting, self-regulation by transnational corporations and hybrid governance arrangements, such as multistakeholder partnerships' (Bäckstrand, 2008: 76).

The non-state action is occurring within nations and across them. This has shaped a new landscape of climate cooperation internationally, referred to as 'hybrid multilateralism' by some, referring to the intensified interplay between state and non-state actors (Bäckstrand *et al.*, 2017).

At a global level, multilevel governance was introduced at the UN summit in 1992 as a new model for mobilising different actors in sustainable development, and now extends to climate governance (Jänicke, 2017). The model is broadly described as 'a multiplicity of actors and modes of governance operating in diverse and overlapping spheres of authority' (Newell *et al.*, 2012: 369; citing Andonova & Mitchell, 2010; Bulkeley & Kern, 2006; Hall & Biersteker, 2002).

One term used to describe these wide governance arrangements is 'regime complex': interrelated and overlapping forms of public and private authority and their hierarchical and non-hierarchical forms of organisation (Newell *et al.*, 2012: 374, citing Raustiala and Victor, 2004, and Keohane and Victor, 2011). Another term is 'polycentric governance' (Ostrom, 2010), which points to the multiple, physically adjacent jurisdictions that negotiate rules and policies to solve common problems (Feldman, 2015). The European Environment Agency places polycentric governance at the centre of the low-carbon transition, whereby a system of actors at multiple levels and scales enables collective actions addressing global environmental problems (EEA, 2017).

Abbott (2012: 571) describes this complex system:

> Transnational climate change governance is fragmented or polycentric: responsibilities for tasks such as adopting rules and funding public goods are shared among multiple organizations that have diverse memberships and operate at different scales. It is also decentralized: most organizations have been created from the bottom up by particular groups of actors and pursue their individual goals with little if any central coordination.

The global agreement on climate change, the 2015 Climate Paris Agreement, has contributed to a rapid intensification of enquiry on approaches to global climate governance. One view is that the Paris Agreement 'strikes a middle position between bottom-up polycentricity and top-down targets-and-timetables by combining intergovernmental and transnational action' (Bäckstrand *et al.*, 2017: 567).

Box 1.1: The Paris Agreement

The Paris Agreement is a legally binding, global agreement within the United Nations Framework Convention on Climate Change (UNFCCC) dealing with GHG emissions mitigation, adaptation and finance. It sets out a global action plan to put the world on track to avoid dangerous climate change by limiting global warming to well below 2°C—and pursue efforts to limit the temperature increase to 1.5°C (UNFCC, 2015).

To achieve the long-term goals contained in the agreement, governments are required to set or update their emissions reductions targets through nationally determined contributions—NDCs—covering five- or 10-year periods starting in 2020. As of May 2018, 195 UNFCCC members have signed the agreement, and 176 have become party to it.

Other more informal alliances and agreements are formed between cities and regions. For example, the Global Covenant of Mayors for Climate and Energy now covers over 9,000 cities around the world, and more than 770 million people.[15]

1.3.2 Energy and Climate Covenants/ Agreements

There are agreements or covenants on climate emissions and energy efficiency that generally function more as regulatory tools for energy-intensive industry.[16] These usually have a concrete focus on efficiency, and are agreed between government and industry. These agreements vary from voluntary commitments to more formalised negotiated agreements as an alternative to legislation, and are usually between industry and government/state agencies.

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15 https://www.globalcovenantofmayors.org/about/

16 Other types of contractual arrangements are used for energy savings, not called agreements but similar in function; for example, in Ireland, the first Energy Performance Contract (EPC) project between an Energy Service Company (ESCO), Dublin Energy Agency and Dublin City Council was agreed in 2016 to reduce energy and maintenance costs in key sites (Codema, 2016).

Voluntary agreements (VAs) are usually

> between a government authority and one or more private parties with the aim of achieving environmental objectives or improving environmental performance beyond compliance to regulated obligations. Not all VAs are truly voluntary; some include rewards and/or penalties associated with participating in the agreement or achieving the commitments (IPCC, 2007).

These agreements can be considered to be part of a 'regulatory system' that is a composite of state, local, private, voluntary and community bodies, rather than one single regulator driving standards and improvements (NESC, 2012).

A voluntary commitment, the Irish Energy Agreements Programme, operates in Ireland. Run by the Sustainable Energy Authority of Ireland (SEAI), it involves a commitment by companies to adopt the Irish Energy Management System IS393, which provides for continuous and sustained improvements in energy efficiency.[17] SEAI has developed a Large Industry Energy group with 200 of Ireland's largest energy-using companies. Companies are eligible if they are either spending at least €1m on energy annually, or are certified to or pursuing ISO 50001 certification. Certain commitments must be fulfilled by companies signing up to LIEN.[18]

This type of agreement has been a common governance and regulatory tool in Denmark, Finland and the Netherlands since the early 1990s, and in other states such as Sweden and Ireland more recently. Typically, they resemble contracts, with two or three parties, include concrete actions, and are weighted by a strong penalty default such as involuntary regulation. These agreements tend to focus on industrial process energy consumption.

An example of a voluntary climate agreement is the UK's Climate Change Agreement (Box 1.2).

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17 https://www.seai.ie/energy-in-business/training-and-standards/energy-management-systems-and-iso-50001/

18 https://www.seai.ie/energy-in-business/lien/

Box 1.2: UK Climate Change Agreement Scheme

In the UK, voluntary agreements are made by UK industry and the Environment Agency to reduce energy use and carbon dioxide (CO2) emissions. They have been used since 2001. The current Climate Change Agreement (CCA) scheme started in April 2013 and will run until 31 March 2023.

Operators receive a discount on the Climate Change Levy (CCL), a tax added to electricity and fuel bills. The Environment Agency administers the CCA scheme on behalf of the whole of the UK. These CCAs are 'negotiated agreements embodied in a sophisticated policy mix as they are combined with a tax exemption and an emission trading scheme' (Glachant & de Muizon, 2006).

Two types of CCA are used. The first is the umbrella agreement which sets the energy efficiency targets for a sector, while the second is held by a site or group of sites. Progress reports produced by the Environment Agency show that emissions across these sectors have been reduced by 10 per cent since 2008. For 2015 and 2016, all the agreements combined over-performed against their targets of 3.2 million tonnes of CO2 emissions, but nearly half (47 per cent) of the target units underperformed (Environment Agency, 2017).

1.3.3 Regulatory Standard-Setting

Similar to covenants is the arrangement whereby 'regulatory standard-setting' is undertaken by a range of public and private organisations in energy and climate and sustainability matters. This shapes the final voluntary governance and the commitments made. This type of agreement includes private sustainability governance (PSG), such as the business-led World Economic Forum, civil society schemes such as the Gold Standard,[19] and business/civil society-led collaborations such as the Climate Disclosure Standards Board (see Box 1.3) (Abbott, 2012).

[19] https://www.goldstandard.org/

Box 1.3: The Climate Disclosure Standards Board

The Climate Disclosure Standards Board (CDSB)[20] is an international consortium of business and environmental NGOs which seeks to advance and align the global mainstream corporate reporting model on environmental information, climate and natural capital.

The board has developed a framework that can be referenced as a method of compliance in regulation/guidance, and informing business decision-making related to the use of natural resources, land and sustainable behaviour.

These agreements can be led by public agencies, business or NGOs. For example, the International Criminal Police Organization (Interpol), established in 1923, enables law-enforcement authorities around the world to cooperate in tackling crime through advanced technical and operational systems. In 2013, Interpol introduced the Pharmaceutical Industry Initiative to Combat Crime. The initiative represents an agreement among 29 of the world's largest pharmaceutical firms to expand law enforcement operations targeting organised crime in counterfeit drugs, increase training and capacity-building for police, and foster deeper cooperation between Interpol and the private sector (Council on Foreign Relations, 2014).

Another example, using standard-setting, is the Forest Stewardship Council (FSC), a voluntary standard-setting organisation promoting the sustainable management of the world's forests, established in 2003 (Council on Foreign Relations, 2014). The FSC has successfully facilitated multisectoral determination of new standards for forestry and actively developed a form of private self-regulation.

There are increasing examples of voluntary self-regulation of businesses and self-commitments for sustainability and climate purposes, which stem from a further tradition of corporate social responsibility.

A recent Irish example is the Business in the Community's Business Working Responsibility Mark, and a recent initiative, the Low Carbon Pledge (Box 1.4). The Business Working Responsibility Mark is the only independently audited standard for corporate social responsibility (CSR) and sustainability in Ireland. While the ambition in the pledge is currently relatively low, the intention is to review and strengthen commitments in the near future.

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[20] https://www.cdsb.net/

Box 1.4: Low-Carbon Pledge

The CEOs of 23 companies that have achieved the Business Working Responsibly Mark (and ISO 2600 certification) developed a pledge that commits them to reduce their scope 1 & 2 GHG emission intensity by 50 per cent by 2030. Scope 1 emissions are those that arise directly from sources that are owned or controlled by the company, e.g. fuels used in boilers or the vehicles that the company owns. Scope 2 emissions are those generated by purchased electricity consumed by the company.

The Low-Carbon Pledge, an initiative led by Business in the Community, is the first dedicated pledge generated by Irish business to set industry standards on sustainability and reduce carbon usage in the business sector in the transition to a low-carbon economy.

The purpose of this pledge is (1) to practically demonstrate Irish business commitment to reducing carbon emissions and (2) to act as a catalyst for wider, complementary initiatives and actions. Collaborative platforms are being developed that will encourage shared learning. The pledge is underpinned by the Greenhouse Gas Protocol Corporate Standard, which records emissions and applies gas accounting standards.

Source: (BITC, 2018).

1.3.4 Negotiated Rule-Making

A similar approach is 'negotiated rule-making' (or regulatory negotiation, abbreviated as reg-neg), a consensus-based process through which an agency develops a proposed rule by using a neutral facilitator and a balanced negotiating committee composed of representatives of all interests that the rule will affect, including the rule-making agency itself (United States Department of Agriculture, 2006). Used in the United States since the 1980s, but less so now, it was endorsed by Congress for use by federal agencies to bring interested parties into the rule-drafting process at an early stage, under circumstances that foster cooperative efforts to achieve solutions to regulatory problems. The purpose and intent of negotiated rule-making is to avoid any legal challenge to a new rule so that interested parties will abide by it (Durant, 2017).

In the recent past, the process has been used by large-scale regulators in the United States such as the Environmental Protection Agency, Nuclear Regulatory Commission, Federal Aviation Administration, and the Occupational Safety and Health Administration (United States Department of Agriculture, 2006).

1.3.5 Social Dialogue Agreements

Social dialogue includes formal processes of negotiation, consultation and information exchange to varying degrees across European member states, and covers both economic and social policies and agreements. In most EU member states, there is an economic and social council that plays a central role in supporting and conducting social dialogue—although these differ considerably in their structure, method and relationship to government (O'Donnell, 2014). In the 1990s and into the early 2000s, these processes of social dialogue gave rise to social pacts or social partnership agreements (Avdagic *et al.*, 2011; Berger & Compston, 2002; Fajertag & Pochet, 1997, 2000). Ireland's social partnership agreements were a prominent example of this trend, both because they constituted an evolution of the system of industrial relations and governance and because they continued for a 20-year period (O'Donnell *et al.*, 2011).

Many of the pacts in EU member states were focused on achieving the economic, social and fiscal conditions necessary to qualify for membership of the euro. In the Netherlands, the process of social dialogue and the commitment to negotiation is often referred to the 'polder' tradition. As noted later in this paper, many participants in the recent Dutch energy agreement see it as a reflection of this long-standing polder tradition, while some are less certain that this is an adequate account.

Other social (dialogue) agreements or pacts include the Green Economy Accord, South African which was signed in 2011 by the Government, with the backing of employers, three labour and other civil society organisations. Also, the Belgian social partners are part of the Federal Council for Sustainable Development to which the Government has to report annually on the implementation of its recommendations.

There have been a number of developments in social dialogue in recent years. While some countries turned sharply away from social dialogue and marginalised their economic and social councils, in others an evolution of both negotiation and institutions took place. As the complexity and volatility of economic and social conditions and problems increased, it was recognised that dialogue and negotiation among the peak associations of labour and business, though still relevant in some respects, was insufficient. Although the exact nature of the response differs, there was a general move to include actors among the social partners closer to the front line and to involve wider sets of stakeholders engaged on social, economic and environmental issues. Indeed, Ireland was something of a leader in this, with the focus on complex economic and social problems, the creation of local partnerships and the widening of the social partnership process to include social and eventually environmental NGOs.

These developments meant that, in some countries, systems of social dialogue and pacting shade into the kind of network governance that was increasingly in evidence in the 1990s and early 2000s. Network governance involves some shift from

traditional hierarchical governance forms, where the state and/or peak associations are dominant, to processes in which a range of actors participate in policy-making and delivery. Network governance can take a variety of forms, including informal personal interactions, public-private partnerships and stakeholder participation (Khan, 2013: 134).

The Netherlands is a good example of these trends, although it has some distinctive characteristics which will be outlined in Chapter 2.

1.3.6 Party Political Agreements on Energy and Climate

Political parties have recognised the value of agreements and public commitments to climate action as a climate governance tool. In Scotland, for example, all parties made a pre-election commitment to take climate action in 2015 (World Wildlife Fund, 2015). The agreement was brokered by WWF Scotland, on behalf of a diverse group of civic organisations.

Norway, Denmark and Sweden have all sought and achieved cross-party agreements on climate policy. Norway concluded agreements in 2008 and 2012 that reached a political consensus that Norway will take responsibility for reducing GHG emissions through an active national policy (Norwegian Government, 2014).

Boxes A.1 and A.2 (in the Appendix) present a short overview of two examples from Sweden and Denmark.

What emerges from these examples is the value of agreements which have a lifespan longer than a single political cycle in shaping the direction of climate and energy policy. In addition, the use of a commission for a particular problem is of interest. In the Swedish example, the work of the Energy Commission in dealing with a highly contested policy issue of nuclear energy illustrates how it temporarily removes a sensitive issue out of the day-to-day political debate, but also provides a structured process and format for wider engagement, to inform the party-political negotiations that follow.

1.3.7 Multistakeholder Deliberation

While these represent the main types of multistakeholder agreement, there is a much broader range of multistakeholder deliberation approaches and initiatives which are not outlined here. Deliberation of this kind has become increasingly used as part of climate governance and climate adaptation in particular (Schenk, 2018).

Creating consensus for action remains a key political challenge arising from climate change (Giddens, 2008). This points to the role of coalition-building and reframing

issues so that a wider range of actors can see benefits in a given course of action (Meadowcroft, 2009). Part of the governance[21] challenge is to contribute to a positive economic and social narrative for the low-carbon transition, which highlights not only challenges but also opportunities (Torney, 2018).

1.4 Benefits and Limits of Voluntary Agreements

There are some broad benefits and limits to voluntary agreements for climate mitigation and energy transition governance. Some of the benefits of voluntary agreements referred to by Somanathan *et al.*, (2014) as part of an IPCC working group review. Other critiques are provided by Brockmyer and Fox (2015); Abbott (2012) and (Pattberg and Widerberg, 2016). However, there is no comprehensive review of all types of multistakeholder agreements.

There is no single approach to multistakeholder agreements (as this brief overview demonstrates). Each country that uses one shapes it distinctively. However, where a shared understanding and set of expectations can be established, it can provide a useful mechanism for dialogue and collaboration. Multistakeholder agreements can also consolidate ad hoc stakeholder engagement into one distinct forum. Each approach and example provides an opportunity to learn by doing with key stakeholders and sharing knowledge.

Multistakeholder agreements tend to be used as a strategic climate governance tool for aspects of energy or climate challenge where there is more certainty, such as energy efficiency practices, or CO2 reductions for key sectors, such as transport. Multistakeholder agreements take time to undertake and complete, as building consensus and negotiating solutions is a time-intensive process. Agreements reportedly can aid relatively quick planning and actions when technological solutions are largely known, but still face uncertainties.

Most agreements focus on longer-term time horizons, which provides an opportunity to develop strategies and planning beyond the political cycle. Agreements can help to clarify and consolidate strategic policy direction and have the potential to create stable and legitimate policy outcomes. Multistakeholder agreements can help to create momentum for long-term policy change. Learning by doing is one of the acknowledged benefits of a multistakeholder agreement process and sharing experiences (Somanathan *et al.*, 2014).

Multistakeholder agreements can provide a broad, shared network to collaborate on climate action in a way that few tools can achieve. Agreements can serve to

[21] Governance is used here to refer to the relationship and cooperation of state and non-state actors in solving societal problems (Tosun & Schoenefeld, 2017).

share the responsibility to act and fulfil a regulatory function with voluntary practices and targets. Reaching creative, innovative, collaborative solutions in climate governance is key, while at the same time being necessarily realistic in acknowledging the costs and potential impacts in the energy transition. The regulatory value of multistakeholder agreements is evident from the voluntary energy efficiency agreements and points to how more responsive regulatory approaches are required within a multistakeholder context.

Some types of agreement, such as covenants, offer little in the way of building social support, while others, such as political agreements or social dialogue agreements, may do more to engage the wider public through involving civil society directly, but this is not necessarily the case.

However, some impacts of agreements may be restricted by the limited scope of the agreement or lack of proper institutional framework to ensure actions are taken (Somanathan *et al.*, 2014). Other issues can arise when used as part of climate governance where: the problem is too narrowly defined; the economic and political costs of failure are high; powerful economic and political interests are papered over rather than being addressed; and the wider societal implications and challenges of transition are not acknowledged (Meadowcroft, 2009; Somanathan *et al.,* 2014).

The following chapters provide a detailed case study of the Dutch Energy Agreement which represents a distinctive and notable example.

Chapter 2
The Dutch Energy Agreement for Sustainable Growth

2.1 Introduction

The 2013 Dutch Energy Agreement is a unique example of a multistakeholder agreement and represents a serious effort at stakeholder engagement, which is worth study and reflection. The Netherlands is of interest to Ireland as another small country on the road to decarbonising an economy heavily reliant on fossil fuels. It is a densely populated country, being approximately half the size of Ireland but with nearly four times its population. Land is heavily used for industrial, residential or agricultural purposes, and the energy sector is an important sector for the Dutch economy. The Netherlands has an astonishing amount of food exports; it is the world's number two exporter of food as measured by value, second only to the United States, which has 270 times its landmass (National Geographic, 2017).[22] It uses intensive greenhouses to grow and export fruit and vegetables and is relies heavily on gas (Appendix 1 provides a short overview of the Dutch energy context).

This chapter seeks to convey the story of the Energy Agreement (Energieakkoord). The story is informed by interviews with a small number of key stakeholders during a NESC Secretariat field visit to the Netherlands in February 2018. As the research visit coincided with the preparatory process for a Dutch Climate Agreement, that new initiative will also be briefly examined. This chapter and the next also provide analysis and interpretation, drawing on the different perspectives of the stakeholders who participated in this research, as well as published accounts. Interviewees are not identified in this report directly, for confidentiality reasons, except where permission was granted.[23]

Table 2.1 provides an overview of the organisation acronyms used in this chapter. Key environmental organisations involved in the Energy Agreement include

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[22] Total agricultural exports represented a value of 100.8bn euros in 2017.

[23] The Secretariat's field trip to the Netherlands (February 20 to 23) included visits to The Hague, Amsterdam and Rotterdam. Meetings were held with SER staff, the Ministry of Economic Affairs, and representatives from the unions, employers, industry and environmental NGOs. Additional meetings were held with Professor Jan Rotmans of the Dutch Research Institute for Transitions and Dr David Laws, a senior lecturer in the Department of Political Science at the University of Amsterdam. Interviews were confidential but a thematic analysis of notes and transcripts produced a number of key themes, which are drawn upon in the report.

Greenpeace, a non-governmental environmental organisation (with an international coordinating body based in Amsterdam), the Dutch branch of which had 370,000 donors in 2017 and an income of €25.4m, and Natuur and Milieu, a Dutch nature conservation and environment organisation (DutchNews.nl, 2018a).

Table 2.1: Key Dutch Energy Agreement Organisations

Organisations	
SER	The Social and Economic Council of the Netherlands
PBL	The Netherlands Environment Assessment Agency (Planbureau voor de Leefomgeving)
ECN	Energy Research Centre of the Netherlands
VNO-NCW	Dutch Employers Federation
FNV	Netherlands Trade Union Confederation
	Natuur en Milieu
	Greenpeace

This is not intended as an exhaustive account, due to the limitations of a short research project conducted by non-experts to the Dutch context. Also, the climate and energy sector, context and trajectory in the Netherlands is fluid and dynamic. A new agreement process is underway, different in many respects, but involving many of the same stakeholders.

The following sections take a chronological view of the Agreement, telling the story from the beginning, then briefly outlining the energy and social dialogue context before setting out some of the drivers that led to the Energieakkoord. This is followed by analysis of the key stakeholders, process and negotiation of the Agreement. The implementation, evaluation and impact of the Agreement is then discussed. The final sections examine developments since the Agreement was signed in 2013 and the current energy and policy context.

2.2 Prior Developments and Context

There were two important background developments, first in relation to the history and use of covenant types of agreements and a broader social dialogue approach and, secondly, in relation to energy and the energy transition.

Box 2.1: What is the Dutch Energy Agreement 2013-2023?

The Social and Economic Council (SER) offered to facilitate an agreement process on energy and sustainable growth in 2012, which was sought by the Dutch Government.

The Energy Agreement was signed by 47 organisations in September 2013, after a 10 month process facilitated by SER. There was a broad range of stakeholders, including central, regional and local government, employers' associations and unions, nature conservation and environmental organisations, and other civil-society organisations and financial institutions(SER (2013b).

The Energy Agreement presents a 10 point action plan for 2023. The negotiated agreement is described by the Dutch Government as establishing 'the basis for a broad, robust and future-proof energy and climate policy' (Government of the Netherlands, 2017a). The aims are to ensure a balance between sustainability and competitiveness, enhancing energy efficiency and stimulating new investment in the sector, while reducing the financial burden for citizens and companies (IEA, 2014).

Under the Energy Agreement, the Netherlands is committed to achieve the following objectives:

- **Achieving an average energy efficiency saving of 1.5 per cent per year by reinforcing energy efficiency in buildings, industry and agriculture, and the commercial and transport/mobility sectors.**
- **An additional 100 PJ energy saving by 2020;**
- **Establishing a 14 per cent share of renewable energy in the Netherland's total consumption of energy by 2020, and 16 per cent by 2023, with a focus on offshore wind and decentralised energy at local and regional levels.**
- **Creating at least 15,000 additional jobs by 2020.**
- **Achieving 60 per cent CO2 reductions by 2050 in the transport and mobility sectors and 17 per cent reductions by 2030, compared to 1990 levels.**

The Energy Agreement is monitored by an Assurance Committee and through an annual review cycle.

2.2.1 The Social Dialogue or 'Polder' Approach

There is a long-standing tradition in Dutch society of coalition-building between socio-economic actors: the polder approach. Used for economic and social policy-making, the polder approach played a key role in the 1980s and 1990s.[24] Poldering connotes a commitment to consultation but can mean a reliance on compromise. Made famous by the Accord of Wassenaar in 1982, in which the unions and employers organisations reached an agreement on employment policy that would bring a new era of industrial relations and is credited, in part, for job growth in the 1990s. The Dutch Government negotiated a consensus on those socio-economic policy reforms with the 'social partners' (Visser & Hemerijck, 1997), and later with immigrant associations on integration policies and with immigrant religious minorities on religious issues (Musch, 2011).

The polder model is based on 'cooperation despite differences' and 'a pragmatic recognition of pluriformity', originally in the field of employment and wages (Provoost *et al.*, 2014). However, others argue that there is no single Dutch polder model and no 'constant Dutch culture of consensual decision-making' (Visser & Hemerijck, 1997: 185). Others point to the Dutch public decision-making system as viscous and sluggish (Chavannes, 1994) and that its careful consensus-building approach has not always been considered to be effective (Hendriks, 2017).

Dutch neo-corporatism—the system whereby trade unions and employers get to decisively shape social and economic policies—still displays a remarkable degree of stability compared with other European countries (Culpepper & Regan, 2014). Indeed, the Dutch Social and Economic Council, SER, did not widen its membership beyond employers, unions and independents (the Dutch council does not contain representatives of government departments and is chaired by an independent). However, it moved relatively early to include a wider range of stakeholders in many of its project-specific working groups. The Energy Agreement marked a significant extension of the number and range of stakeholders involved. Most strikingly, the participation of government representatives in the negotiations and working groups in SER was a distinct change in practice.

2.2.2 Dutch Energy Context and Transition

Three earlier developments are worth noting here in relation to the Dutch energy story. First, the well-established use of voluntary agreements or covenants between industry and government since the 1990s, second, the government's adoption of a transition management approach to policy that began in 2001, and, third, the slow pace of the energy transition, with relatively poor growth of renewable energies.

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[24] Historically, Dutch communities in the Middle Ages had to cooperatively build and maintain reclaimed land-polders (Schreuder, 2001).

2.2.3 Voluntary Agreements or Covenants

Negotiated agreements or covenants have been used by the Dutch Government for energy efficiency measures since the early 1990s and are still used for a range of economic, social and environmental areas; for example, for the chemical industry and for sustainable textiles (SER, 2016; EEA, 2016). Negotiated agreements are contractual arrangements between public authorities and an industry that the authorities have targeted to improve its environmental aspects (Toovey, 2006). These long-term agreements (TLAs) have been made with large energy-intensive companies and are a form of regulatory tool.

While these agreements were popular, energy savings were reported to be modest. Studies found mixed results (Bressers & Bruijn, 2005).[25] However, companies still preferred agreement to more stringent forms of regulation.

2.2.4 Project Implementation Transition Management (PIT)

A decade before the Energy Agreement, an experimental energy transition project ran from 2002-2010 in the Ministry of Economic Affairs and Climate Policy. The Fourth National Environmental Policy Plan (NMP4) developed a long-term vision for energy demand and supply to 2050 (VROM, 2001). (See Box 2.2)

The plan received a mixed response. On the one hand, it was seen as an innovative and ambitious approach to long-term planning involving business. Others criticised it as providing a new platform for incumbent societal interests instead of activating and challenging entrepreneurial change agents as intended (Hoppe *et al.*, 2012). The plan also was considered to be weak in terms of wider stakeholder and societal engagement (Hendriks, 2008: 1009-31). Participants in the energy transition programme were mostly drawn from business and large research organisations. Those who took part did not include SMEs, diverse societal groups and NGOs, except Stichting Natuur en Milieu (SNM—the Netherlands Society for Nature and Environment) and, to a lesser extent, Greenpeace (*ibid.*). Interestingly, the strong connection between science and policy-making in the Netherlands played a crucial role in adopting the transition management approach. Energy and climate evidence was both highly sought and deeply embedded in the resulting activities (Smith & Kern, 2009).

[25] One study by CE Delft on the impact of the Energy Efficiency Benchmarking Covenant shows that, between 1999 and 2007, energy-intensive industries improved their efficiency by only half a per cent per annum (Blom & Wielders, 2010).

Box 2.2: Transitions Management Approach in the Dutch National Environmental Policy Plan

The transitions management approach was developed by Dutch academic Jan Rotmans and colleagues into a model for policy to support the transitions process and transition management (now referred to as transition governance) (Rotmans *et al.*, 2001; Loorbach, 2007). The approach provided the conceptual impetus to change the Dutch approach to energy policy development. The core idea is that four types of governance activities can be distinguished when observing actor behaviour in the context of societal transitions:

- **Strategic: activities at the societal level that take long-term planning into account, and involve restructuring a complex societal problem and creating alternative futures.**
- **Tactical: activities at a subsystem level that relate to the build-up and breakdown of system structures (institutions, regulation, infrastructures, etc.).**
- **Operational: activities that relate to short-term and everyday decisions and action (Loorbach & Rotmans, 2010).**
- **Reflexive: activities that involve evaluating existing situations at various levels and reframing and restructuring them.**

The Fourth National Environmental Policy Plan (NMP4) pointed to the need for large-scale transitions in key societal sectors in order to address persistent environmental problems. For example, the transport system requires a fundamental transformation—because of its current dependence on oil—if society is to avoid the risk of dangerous climate change caused by GHG emissions. Similar changes are required in other areas. But such deep change might take one or more generations to achieve.

The idea of transition management was introduced as a technique for orienting and managing such long-term change (Meadowcroft, 2009). This led to a set of policy measures, experiments and collaborations under six transition platforms as part of Project Implementation Transition Management (PIT) within the Ministry for Economic Affairs. Each of the platforms involved temporary working groups comprising an ad hoc selection of experts, entrepreneurs and NGOs (Hoppe *et al.*, 2012).

The NMP4 set out six transition platforms: on green resources, sustainable electricity, sustainable mobility, new gas, built environment and chain efficiency. The transitions initiative that followed, the Project Implementation Transition Management (PIT), included experiments in each pathway, starting in 2005. A taskforce of 17 people was established to coordinate the platforms, chaired by the CEO of Shell Netherlands. Examples of transition experiments developed in the energy sector included energy efficiency in paper and cardboard production and energy-producing greenhouses

Source: (Smith & Kern, 2009; Meadowcroft, 2009; Loorbach & Rotmans, 2010).

The project evolved into different iterations until a new government in 2010 changed direction towards more short-term commercialisation of new innovations and shut down the initiative, ending ten years of transition management experimentation with the involvement and support of the national government in the Netherlands (Hoppe *et al.*, 2012: 10). The ending of the project created frustration among those involved and the closure of hundreds of pilot projects. One perspective on the closure was that the new government had a more market-led approach to energy policy and, in a recessionary climate, the funds were redirected. Another is that the corporate sector preferred a slower pace of transition. Some of those involved in the transition management initiative had a role in developing the Energy Agreement, such as Diederik Samson, who later became the head of the Labour Party and part of the 2012 Rutte coalition government that supported the Agreement. Rotmans, who had been instrumental in the transition management project, became indirectly involved in the Energy Agreement as a critical observer and advisor to negotiators.

Despite this energy transition initiative, the pace of change was slow.

2.2.5 The Slow Pace of the Dutch Energy Transition

In 2012, the Netherlands had a relatively poor share of renewable energy (4.5 per cent) in its energy system, compared to other European countries. It looked unlikely to those involved that it would meet its 2020 target (14 per cent share) without further action (European Commission, 2014).

In addition to the challenge of increasing renewable energy generation, there was a lack of policy consistency. With no clear majority in parliament, the government was restricted in developing energy policies with a long-term trajectory. Investors and renewable energy start-up enterprises sought assurances on policy stability. This was combined with a sense of urgency to get something done across many sectors of society, including bottom-up movements in decentralised energy production. This led to an influential grassroots movement and campaign, Nederland Krijgt Nieuwe Energie (The Netherlands Gets New Energy), a foundation of stakeholders directly or indirectly involved in the energy sector. There was a sense that Parliament was not going to deliver and that civil society had to take action instead. In response to this campaign, in April 2011 the Dutch Parliament passed a motion called for a longer term vision and more consistency in policy making.

2.3 Initiation of the Energy Agreement

An advisory report on the energy transition was commissioned by the Ministry of Economic Affairs and Climate Policy from the Social and Economic Council SER, the advisory and consultative body of employers, trade unions, independent scientific

members and non-voting reps of Dutch Ministeries and planning agencies. In November 2012, SER produced the report, *Towards an Energy Agreement for Sustainable Growth* (SER, 2012). The report recommended an agreement on sustainable growth to be negotiated with all relevant stakeholders. A new government had formed a few months prior to that, and delegated the leadership of this task to the SER (see Box 2.3).

The government was not in a position to take a stronger role and was a bit removed from energy policy. As the representative from the environmental NGOs put it, the wider stakeholders 'got the stage—and the government was OK with that idea because it realised it had made a mess. And now the situation changed' (D8).

This provided an opportunity to set a long-term direction for energy policy. The government took a seat at the table (SER, 2013a) and the Social and Economic Council, SER, led the process.[26]

Box 2.3: The Social and Economic Council of the Netherlands (SER)

Founded in 1950, the Social and Economic Council of the Netherlands (SER) advises the Dutch government and parliament on key points of social and economic policy. SER also undertakes activities arising from governance tasks and self-regulatory matters, and functions as a platform for discussions of social and economic issues. It consists of independent crown-appointed members, employers and employees. SER has set up a number of committees and working parties to carry out its tasks and prepare its advisory reports. The committees are partly permanent, and partly formed ad hoc (especially formed for specific advisory projects, e.g. for advice on labour migration). Like the SER itself, its committees are made up of employers representatives, union representatives and independent experts. In principle, committees are chaired by a crown member.

SER's role has shifted in recent decades towards more of an advisory role. In the 1950s, 60s and 80s, SER played a key role as the platform for dialogue between the government and its social partners, and helped to defuse labour conflicts. The approach SER has taken has developed over the years to involve wider engagement in its working groups and committees, while still retaining only the same core membership.

Source: SER; AICESIS.[27]

[26] https://www.energieakkoordser.nl/nieuws/2017/uitvoeringsagenda-2017.aspx

[27] https://www.ser.nl/en/; http://www.aicesis.org/database/organization/73/print/

Two important features were agreed at the outset of the Agreement. First, the 'life span' it would cover would be much longer than the four-year terms of government and parliament, because its objectives could not be realised within four years. Second, the focus was on energy, rather than climate action, in part because the target of 16 per cent reduction as compared with 1990 levels looked within reach, and, in part, because it was considered easier to focus an agreement primarily on energy (ibid.).

2.3.1 Stakeholders/Key Actors

The composition of the Agreement's stakeholders set it apart from previous polder-type dialogue processes that had also been led by SER. With 47 stakeholders, there were both new environmental NGOs and renewable-energy industry representatives, which meant it was no longer just the 'founding fathers', traditionally including employers, trade unions and crown members. This followed on from greater involvement of NGOs in some SER committees and working groups. Their Committee on Sustainable Development had included NGOs and it was that committee's recommendation that the way to meet government's request for input on how to meet the low-carbon transition was to draw up an agreement with a wide range of stakeholders. The unions, employers and environmental organisations developed a new process which included a wider range of stakeholders as well as government. Described by a union representative as government sharing 'a little bit of the power' (D5).

However, in some ways this marked a significant change in terms of the number of stakeholders involved, the length of the process and the commitment of resources. The pull towards participation was strong, expressed by some of those interviewed as a belief that such an Energy Agreement would make a contribution to energy policy. From the perspective of NGO stakeholders, it was worth taking part because they could see they could play a role and there were resources available. This availability and reference to funds was important, and was referenced by a number of stakeholders.

Stakeholders had different motivations for entering into the Agreement. The employers groups were incentivised to engage in the process by the inclusion of subsidies for renewable energy development, in particular offshore wind energy, and entered negotiations to seek ways to alleviate losses for any closures of coal-fired plants. Employers had years of experience of energy efficiency covenants and preferred negotiation with government to any involuntary regulation. They were also part of the 'founding fathers'—the core group of social partners that were used to social dialogue in SER.

The trade unions were focused on the labour goal rather than energy issues. The Netherlands was coming out of the economic crisis, especially in the building and construction sector. The unions were looking for 50,000 new jobs, mainly in the built environment and construction sector and through energy savings programmes,

to help with the economic recovery. While the unions were in the inner circle of the Agreement process, this was a challenging transition. Many of their members were in more traditional and fossil-fuel oriented sectors and energy issues were not high on their agenda. Trade unions drew on the emerging narrative of a just transition in which workers are protected from missing out or losing out.

The unions at that time did not invest in expertise on energy issues but were engaged in a strategic partnership to work together in cooperation with the environmental organisations, which predated the Energy Agreement. This was important in helping to build shared understanding.

The environmental NGOs, including Greenpeace and Natura Milieu, were focused on the closure of coal-fired power stations and on renewable energy, both wind energy and biomass. Their influence was not insignificant. Greenpeace played a role in supporting the rollout of wind projects and stood alongside governance officials at community meetings.

A significant feature of the Energy Agreement was that the environmental NGOs had something to offer. Also, various tactics were learned and strategically used in the negotiations, such as forming 'poldering coalitions' between the environmental NGOs and the unions and pushing for green jobs, seeking expert advice on how to negotiate, and protesting outside of the formal process on other related issues so as to keep up the pressure. Some of the environmental NGOs sought advice from experienced union negotiators and past ministers about how they should go about the Energy Agreement and were told to form a block. The NGOs formed a coalition with all the other NGOs and resolved any small disputes before they went to the negotiating table. They also sought alliances with green energy companies and the unions, thus strengthening the focus on both jobs and green measures.

SER's role was instrumental and multifaceted. In the formal evaluation of the Energy Agreement by the Kwink Groep, this role included elements of mediator, arbitrator, monitoring, a boosting role to push progress, agenda-setting, communicating and policing (Kwink Groep, 2016).

The personal involvement and characteristics of the main stakeholders were noted by participants and also detailed in other accounts.[28] The facilitative and communicative role of the chair, Wiebe Draijer, also the president of SER, was frequently referenced as being fundamental to reaching the Agreement. A strong personal commitment to the process was attributed to the chair, along with strong communication skills and being trusted by government. He reportedly was effective in encouraging the parties to move in the same direction, even at times when they disagreed. The chair of the monitoring committee, Ed Nijpels, was similarly

[28] Magazine article which provides an 'inside view' of the Energy Agreement process (Heilbron *et al.*, 2013).

attributed with leadership and facilitative skills critical to the Agreement's implementation and also in relation to the forthcoming climate agreement.

Another key element that set the Agreement apart was the role of government. The government's involvement in energy efficiency agreements, as noted previously, was not new, but it was a new departure for it to participate while SER was leading the process. Central government took a seat at the table and remained close to the negotiations, alongside local and provincial government. This role provided 'an anchoring mechanism' in that central government was responsible for elaborating, implementing, executing and evaluating the policy measures and was accountable to parliament (Bressers & Boer, 2013).

2.3.2 The Agreement Process

SER Council Members and the Secretariat played a key role in the framing, design and facilitation of the process. There had been careful consideration and planning, in consultation with government, before the agreement process began as to what the focus of discussion would be and what would not be on the table; for example, gas production and agriculture. This served to make the agreement process feasible, as the inclusion of these controversial areas would have proved extremely challenging.

SER created what it viewed as a non-traditional process with multiple stakeholders and a focus on energy. Designing the process represented a logistical challenge to organise deliberations with so many parties and with a tight timetable. SER's expertise in developing the agendas and designing the issue-focused 'tables' for discussion, and its role in providing secretariat support in each of these areas and drafting the final reports was noted. One of the key SER Secretariat involved in the Energy Agreement, Ton van der Wijst, provides a useful personal account of the process which is drawn upon here.

The agreement processed focused on a 'table' design with four tables/themes. Four thematic negotiation tables were established as well as cross-cutting (or horizontal) themes These were in:

- energy savings in the built environment and small-scale renewable energy generation;
- EU Energy Trading Scheme (ETS) sector and large scale energy generation;
- transport; and
- technology and innovation.

Employment was one of the cross-cutting themes of the Agreement that did not have its own table.

At every 'table' there was a maximum of 20 organisations, including government, local government, provincial government but also the central government. These table negotiations were supported by an overarching steering process. Care was taken on the composition of each of the tables to ensure a balance between the various interests and that those participating had the necessary professional and negotiation skills. Knowledge experts in PBL Netherlands Environmental Assessment Agency and ECN Energy Research Centre of the Netherlands, also sat at every table in the negotiations, and frequently supplied analysis of the feasibility of measures being proposed, alongside SER Secretariat.

SER established a management team, comprising the committee that prepared the SER advisory report, including the chair, Wiebe Draijer, representatives of VNO-NCW, FNV, environmental NGOs and the Ministry of Economic Affairs and Climate Policy, assisted by experts from PBL and ECN. Each table was assigned an independent chair and a secretariat consisting of a consultant, a SER policy officer, an energy expert from ECN or PBL and an official with extensive case knowledge of the relevant theme.

At the beginning of the negotiation process, participants were asked to endorse a set of principles. This was considered necessary because of the inclusion of new actors, who had little direct experience of a polder-type process. These principles included the need to compromise at the table, represent one's own organisation but also be open to discussion and the views and interests of others, achieve and support the resulting agreement, and respect facts and scientific insights. In addition, participants were asked to commit to confidentiality and refrain from tweeting or sharing information publicly.

An emphasis was therefore placed on the stakeholders' personal capabilities to take part in a negotiated process, in addition to their requisite technical expertise. One example was that, in advance of their participation, Greenpeace were probed on their stance towards pragmatic rather than idealistic solutions. Their inclusion was at the time jokingly referred to as a change from coming in through the window to coming in by the elevator, in their shift from activists to negotiators. However, they did challenge the rules during the negotiations as they continued active campaigns, approaching companies and asking them to verify their green credentials. This did not sit well with other stakeholders and they were asked to stop.

2.3.3 Expert Knowledge

The expertise and evidence supplied by PBL and ECN played a strong role. The two organisations were regarded as important independent knowledge providers. Their evidence, largely uncontested, was viewed as an independent, valuable contribution to the process.

The key role of such expertise has a long-standing history in the Netherlands and these institutions are well regarded. SER has traditionally used a starting process

that involves a type of 'joint fact-finding', in which a member of the SER provides economic input. A working practice of polder agreements is to accept the evidence presented, although additional analyses are conducted outside of the formal process.[29]

The central role these knowledge institutions played was important for reaching agreement. A representative from one of the knowledge institutions noted that this role has never been written down but is simply accepted. The evidence, which was referred to as robust but conservative at times, was designed into the process at all levels (at the tables, in the overview and design process, and in the monitoring of the Agreement). Stakeholders acknowledged that, despite regarding the evidence as over-pessimistic at times, they accepted that these institutions had to be the referees in the process. These experts were adept at working with different stakeholders, and at times their inputs were used to resolve conflict in the process.

2.3.4 The Negotiations

During the negotiations, weekly discussions were held with the Ministry of Economic Affairs and Climate Policy. Ministerial meetings were also frequent between the five ministries concerned. A core group met weekly, including employers, trade unions, environmental NGOs, the chair and the secretariat, and a high-level representative of the Environment Ministry. The negotiation process itself was described as intense, exciting and chaotic at times, and required considerable logistical and secretarial support from SER.

The agreement process involved stakeholders at tables, but these were supported by other staff in their organisations, to varying degrees. Civil society and NGO stakeholders were active in the process, including planned alignments and tactical exchange of information.

The ten-month negotiation process was not straightforward and was described as having its 'ups and downs' both inside the official meetings and outside. There were periods of conflict and instability. Onlookers thought the process would break down at least twice, which was attributed to the opposing positions of NGOs and the employers.

Intense side-discussions were held, including a fabled impromptu meeting between the NGOs—the directors of Greenpeace, Natuur & Milieu—and the Dutch employers' federation, VNO-NCW, to push forward the negotiations. One account

[29] Joint fact-finding has been advanced as a method for helping stakeholders grappling with technically intensive policy and planning challenges to collaboratively engage in research and arrive at shared sets of facts to inform their decision-making (Schenk *et al.*, 2016). Fact-finding is used outside of the polder approach to dialogue and provides a structured way of looking at the facts together, and seeing their complexity. This provides a context for parties to develop cooperation before moving on to more contentious issues.

of this is given in a fly-on-the wall account in the oldest opinion magazine in the Netherlands, *De Groene Amsterdammer* (Heilbron *et al.*, 2013). The negotiations process was described in detail by journalists who were given access throughout. Sylivia Borren, director of Greenpeace and Tjerk Wagenaar, director of Natuur & Milieu, went to VNO-NCW to see its director, Bernard Wientjes. Ms Borren and Mr Wagenaar reportedly texted to say they wanted to meet straightaway and would not leave until they had done so. This resulted in a long meeting where the possible outline of an agreement was sketched out.

2.3.5 Challenging Elements of the Agreement

Two of the most contentious aspects of the Agreement focused on the closure of coal-fired power stations and the co-firing of biomass in coal-fired stations.

The closure of three of the older coal-fired power stations was agreed in principle by stakeholders if a coal tax was abolished by the Ministry, to help increase the profitability of the remaining (newer) coal-fired plants for industry. This compromise received support from the NGOs. However, before the deal could be finalised, the Dutch Authority for Consumers and Markets (ACM) intervened over competitiveness concerns about the removal of the coal tax. This was disappointing for the employers and industry. The chair set up a working group to resolve the issue, including the NGOs, the Ministry, SER and employers. The group found a workable solution after six months. The result was that the Ministry introduced a minimum-efficiency requirement as part of environmental legislation, which effectively led to the closure of the power plants in 2016 and 2017 (Energy Outlook, 2015).

The second area that caused difficulties concerned the amount of biomass that could be used to co-fire coal-fired stations as part of an overall approach to increase the amount of renewable energy. Based on a study by ECN, a conclusion was reached on the optimal amount that could be used in a cost-effective way. This was to be combined with a set of sustainability criteria for sourcing biomass, to be developed using a stakeholder approach. However, a working group established by SER could not reach agreement on the biomass issue and its sustainability criteria. Several other protracted attempts followed. The key elements of the sustainability criteria have now been agreed between industry and environmental NGOs. However, other elements remain unresolved, so that that dispute has been going on for nearly three years. This has been difficult for all the parties involved.

By contrast, other elements of the Agreement, such as a wind energy subsidy, were more straightforward but nevertheless carefully designed and formed a key and integral part of the Agreement (discussed below).

2.4 The Agreement

Perhaps the most significant element of the Agreement was the SDE subsidy for wind energy (see Box 2.4), combined with the adjustment of the Agreement's target date to 2023 to deepen and widen how the resources could be shared across components. This adjustment enabled a broadening of focus, which helped to bring more elements on to the agenda for discussion. Moving the target to 2023 when offshore wind would become cheaper enabled funds to be used instead for energy efficiency. There was confidence that employment would grow as well.

Box 2.4: SDE Subsidy for Renewable Energy

The SDE+ (in Dutch: Stimulering Duurzame Energieproductie) is an operating grant whereby producers receive financial compensation for the renewable energy they generate. Where the cost price of renewable energy is higher than the market price, SDE+ compensates producers for this unprofitable component for a fixed number of years, depending on the technology used for renewable electricity, renewable gas and renewable heat or a combination of renewable heat and electricity (CHP).

Source: Netherlands Enterprise Agency (see https://english.rvo.nl/subsidies-programmes/sde).

The other pillars of the Agreement are presented in Box 2.5, including actions on fossil fuels through the closing of three coal-fired power plants.

Across the pillars, there are actions involving all sides: government, in terms of subsidies, infrastructure, grants and tax breaks; industry, in terms of energy savings, building on the long-term covenants between government and industry, and unions and environmental NGOS in terms of supporting renewable energy development in local communities. Local energy production and co-operatives are specifically supported in the Agreement, through tax breaks. Green skills training, supported by both employers' associations and trade unions, is also included.

The Energy Agreement includes a jobs target: that the various measures 'should lead to 15 thousand net additional working years in the Netherlands each year, or 90 thousand net additional working years in the period 2014-2020' (PBL, 2017b).

Key areas of Dutch energy and climate policy were not included in the Energy Agreement. Reductions in GHG emissions were included only in relation to the transport and mobility pillar of the Agreement. Gas and agriculture, despite their substantial contribution to emissions, were not on the negotiation table. In this sense, the Agreement provided a pragmatic but perhaps unambitious set of objectives. *De Groene Amsterdammer* described the Agreement's conclusions as

'full of second-best solutions with which everyone is dissatisfied, so it is a good agreement'. The article pointed out that it included no firm agreements about matters that were 'politically unpalatable' (Heilbron *et al.*, 2013). However, as documented here, the process to reach even those 'second-best solutions' was not easy.

Box 2.5: The Ten Pillars of the Energy Agreement for Sustainable Growth of September 2013

- **Energy savings and energy efficiency in the buildings, industry, commercial, transport and agriculture sectors of around 100 PJ by 2020 and 1.5 per cent energy efficiency savings.**
- **The package of measures builds on long-term energy-saving covenants, complemented by company-specific agreements, and includes the enforcement of the energy-saving obligations under the Environmental Management Act; the strengthening of energy labelling in buildings, and the review of energy efficiency measures, notably in buildings and non-ETS industries (energy performance assessment pilots). Next to the creation of a revolving national energy-saving fund of €600m in the buildings sector, public grants are made available to the rental housing sector. There is also an action plan on industrial waste and a CO2-saving system in the greenhouse horticulture sector.**
- **Scaling-up of renewable energy generation, notably in onshore and offshore wind capacities through the creation of an integrated offshore electricity grid by TenneT, competitive tendering of offshore wind capacities and the participation of local residents in the planning and operation of wind farms. The use of biomass will be supported up to a sustainable level of 25 PJ in 2020. Specific SDE+ funds are to be dedicated to RD&D support for renewable energy demonstration and deployment, which should drive down technology costs and reduce the future SDE+ support.**
- **Encouraging local sustainable energy through tax breaks (EUR 0.075 per kWh as of 1 January 2014) for locally generated renewable energy by a cooperative or by an association of owners located in the same neighbourhood (with the same four-digit postcode plus adjoining postcode areas), and using the production for own-consumption.**

- **Completing the energy transmission network (smart grids, innovative use of energy infrastructure, including storage and demand-side participation). The investments are to be supported by adequate conditions for infrastructure financing and strong regional and EU-wide cooperation on the integration of energy networks.**

- **A properly functioning EU-ETS to secure effective volumes of emissions reductions and a link-up to the global level, while ensuring the competitiveness of energy-intensive companies that operate internationally, on the basis of the criteria for best-performing companies in the sector worldwide.**

- **Coal-fired power stations and CCS to support the sustainable use of fossil fuels. To ensure the phase-out of the least efficient coal-fired power plants, the three oldest plants are to be closed in the coming years, subject to review by ACM, the Dutch Authority for Consumers and Markets. A commitment to the longer-term importance of CCS is part of the Energy Agreement.**

- **Mobility and transport to contribute to energy savings (15 to 20 PJ of the overall 100 PJ savings by 2020) with a view to reduce the emissions in the sector by 17 per cent by 2030 and by 60 per cent by 2050 (below 1990 levels). Twelve priority measures include traffic management and the roll-out of the charging infrastructure for electric vehicles.**

- **Employment and training in the installation and construction sectors and, in the longer term, in the renewable energy sector (approximately 15,000 extra jobs from 2017 onwards). A cross-sector training pilot is to be set up in collaboration with educational institutions, sector-specific training centres, business and regional employers associations and trade unions to provide training ('green skills') for professionals and job-seekers.**

- **Encouragement of commercialisation of new technologies for growth and export to join the global top ten cleantech rankings by 2030. Measures are to be developed to boost financing of demonstration and innovation, and the necessary legislative framework, to foster the domestic and international market development, building on the Top Sector policy, the SME sector and investment in human capital.**

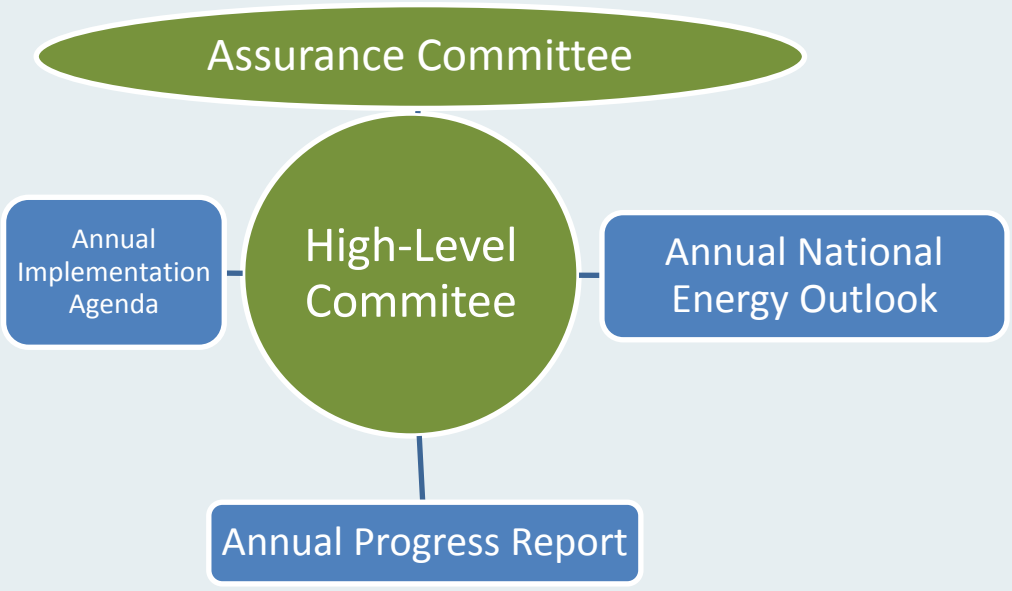
- **Leveraging financing of investments in sustainable energy, notably for renewable energy and energy-saving projects, by increasing the contribution from the capital markets. New financing models are to be developed in co-operation with the financial parties and various umbrella organisations (the Dutch Banking Association/NVB, the Dutch Association of Insurers and the Federation of Dutch Pension Funds).**

2.5 Monitoring and Implementation

SER and the other stakeholders recognised that, without a robust monitoring system, the Agreement would have limited impact. The establishment of the Commissie Borging Energieakkoord or Borgingscommissie, referred to here as the Assurance Committee, was agreed in the closing stages of the negotiations, along with several key tools to support its work.

Figure 2.1 illustrates the different elements of the Energy Agreement's monitoring system. There were two main areas of focus: a platform, primarily provided by the Assurance Committee in its public role, and assurance, the function of which fell to the High-Level Committee.

Figure 1.1: Energy Agreement Monitoring System



Role of the Committees

The Assurance Committee

The Assurance Committee's role is to monitor and support the implementation of the Energy Agreement. The Committee comprises all parties to the Agreement and is chaired by Ed Nijpels, a former Minister for the Environment. It meets around four times a year to exchange experiences, discuss progress and address any obstacles. The meetings are public, with minutes reported online, alongside presentations from stakeholders.[30] The committee operates under the following principles:

- Signatories to the Agreement are responsible for implementing the described actions, particularly for those actions assigned to them.

- Signatories to the Agreement have a common obligation to successfully implement the Agreement.

The committee provides a platform where the signatories can share knowledge, network, express their concerns and point to bottlenecks. The meetings thereby contribute to support, unity and connection between the parties (Kwink Groep, 2016).

High-Level Committee

The detailed monitoring work is carried out by a smaller working committee, called the High-Level Committee, along with the chair and secretariat.[31] This committee meets monthly or more frequently if necessary and consists of 10 people and is more informal, held in private, with no minutes taken. Members consist of the employers (VNO-NCW), unions (FNV), green coalition (NGOs) and central government. During the negotiations that led to the Energy Agreement, this meeting functioned as a steering committee; they made decisions when the negotiation tables, for whatever reason, could not do so.

The tasks of the committee include monitoring the progress of the Agreement, directing activities when delays become apparent, reviewing the need to amend the Agreement in order to meet its objectives and to develop an agenda that 'goes beyond the Agreement's validity' into the future (SER, 2013b; Nijpels, 2014). The process of monitoring is time-consuming for the committee and secretariat, while the Assurance Committee doesn't always reach agreement on what actions to take. The High-Level Committee is considered to be more successful, in part because it is

[30] https://www.energieakkoordser.nl/doen.aspx

[31] A third committee was established during the evaluation in 2016, referred to as the Custodial Committee. It provided a review panel to the evaluation only.

smaller and is conducted in private. It focuses in its meetings on strategic overviews of each of the sectors and invites in outside speakers on key issues.

Progress was intended to be tracked online via a monitor (dashboard) but this does not seem to have developed as planned. An annual progress report is produced, while the Dutch National Energy Report is also published annually, ensuring analysis of the Agreement's progress.

Annual Monitoring Cycle

The monitoring of the Agreement has an annual cycle and tools, as follows:

i. The Annual Progress Report gives an overview of progress and results achieved.

ii. The National Energy Outlook (Nationale Energieverkennin) (NEV) provides up-to-date quantitative information about the Dutch energy system. Produced by PBL (PBL, 2017b) annually since 2014, it analyses the energy system and sketches out plausible future developments under established and proposed policies, including the measures of the Energy Agreement (Government of the Netherlands, 2017b: 94). The NEV monitors the trajectory of energy savings, renewable energy development and energy efficiency in key sectors to identify distance to targets. This data points to improvements in performance in relation to the key targets for 2020 (Van Dril, 2014). The National Energy Outlook is considered to be an independent instrument, albeit a conservative one. This was referred to as 'the bible' by one stakeholder (D3).

iii. The Implementation Agenda is an updated overview of the most important achievements in the 10 substantive pillars of the Energy Agreement. The Agenda includes:

    a. formal evaluation of the Energy Agreement in 2016, and

    b. a dashboard (Result Meter), which was to provide a picture of progress for the main goals of the Agreement. The dashboard was only periodically updated so was not a core part of the monitoring cycle.

The annual monitoring process is as follows—illustrated in the Evaluation Report by an example of the process from 2015.

First, in advance of the publication of the National Energy Outlook, the secretariat, pillar coordinators and those leading on each action started to explore possibilities for intensifying measures. Each of the 10 pillars of the Agreement consists of actions, each of which was assigned to a representative of one of the stakeholders or parties to the Agreement. Each pillar has one or two coordinators, who are representatives of the organisations that signed the Agreement. The coordinator

overviews the progress (of actions) within a pillar. When a coordinator is unable to solve problems, s/he can approach the chair of the High-Level Committee. Meetings are convened to discuss progress in more detail. In addition, the Assurance Committee organises conferences to exchange and deepen relevant knowledge and expertise.

Second, to inform discussion, ECN calculated a package with approximately thirty options across the actions and pillars, including a detailed look at their feasibility and potential.

Third, stakeholders meet and agreed the supplementary actions to be taken. These were included in the Progress Report 2015, including how they will be implemented and their timeline (Kwink Groep, 2016: 27). Other meetings that followed led to further measures.

Stakeholders find the annual review process useful as a means of seeking improvements, and reportedly take it seriously. Environmental NGOs come up each year 'with new wishes', and one representative outlined how the monthly meetings are well attended because 'business is done there' (D8).

The evaluation report noted that the National Energy Outlook played a key role in the monitoring process, in 'keeping parties involved sharp', adding: 'In that light, for example, it was indicated that the [stark] results of the National Energy Outlook in 2015 were perceived by many parties as a shock'. But, through its insights, the parties to the Energy Agreement developed an additional package of measures that should bring all targets within reach (Kwink Groep, 2016: 30).

Each year, because of the strong focus on what was needed to implement the Agreement, actions have increased and become more concrete, while resources have also been increased. Measures introduced as a result of the review cycle in 2015 include a support scheme for heat pumps and additional energy efficiency efforts on buildings.

2.5.1 Weaker Progress on Jobs and Energy Savings

Despite action in some areas, it was felt that there has been a lack of follow-through on labour issues, both during and after the agreement. Since the new jobs were expected to come at the end of the timeframe, this presents a difficulty in assessing this element of the Agreement, and in terms of monitoring, jobs are not included in the National Energy Outlook.[32] A union representative pointed to the gap in research

[32] In April 2018, SER published an advisory report on climate change and the labour market. This emphasises the importance of a just- transition approach and the development of a just transition fund for workers in the coal industry. This will provide support for the unions in the new Climate Agreement negotiations (SER, 2018).

knowledge on employment growth and, in particular, the limits of macroeconomic extrapolations to assess the reality of this aspect of the transition (D5).

The Energy Outlook in 2017 outlined the context for jobs and how the target would be difficult to reach, pointing to the measures in the Energy Agreement that will result in around 76,000 net additional working years, rather than the 90,000 targeted in the Agreement (PBL, 2017b).

Another area that was not showing signs of progress was the energy savings target of 100 petajoules in industry. The employers federation VNO-NCW argued that this element of the Agreement was an 'intention', and that, as the economy was growing, energy savings had not been made. The Minister for Economic Affairs then challenged industry to meet its commitments. But it seems that, at the time, there was a lack of awareness about the implications of signing up to the Energy Agreement.

This difficulty served to test the integrity of the Agreement. Government and SER swiftly emphasised that the energy savings were an outstanding commitment. SER had to act as arbiter or gatekeeper. SER confirmed that, rather than an intention, the energy savings element was indeed a commitment. That decision was supported by the Minister for Economic Affairs, who signalled that regulation would be swiftly applied if industry didn't take action. He reportedly had the relevant letter on his desk, ready to go unless companies agreed to voluntary action.

The consequence of this challenge to the Agreement was that VNO-NCW worked with companies such as Shell and Tata Steel to draw up a voluntary agreement on energy savings. This allows companies to exchange savings among each other, but if they do not meet their targets they will be fined (Pieters, 2017).

In this case, SER acted as a referee, upholding the commitments of the Agreement. Such a process of clarification is a regular feature of polder-type agreements.[33]

From the government's perspective, it was important to strengthen the mandate for action among the participants:

> And I think that's been a big learning experience, both for us and for all the different parties at the table on the Energy Agreement. That this whole mandate question is not something that's just purely based on how you can make agreements with each other, but it also means that when you sign something people can actually hold you to your signature (D4).

[33] David Laws describes the process of sustaining agreement as a process of discovering and resolving misunderstandings.

2.5.2 Pressure for Results

There were considerable expectations that the Agreement would produce early results. A SER representative outlined how, even after only four months, NGOs were impatient to see tangible results. There was also political pressure to see growth in renewable energy. Projections had shown that this growth would be linear, but it did not develop straight away.

2.6 Evaluation of the Energy Agreement Process (2016)

An evaluation of the Agreement was carried out by independent consultants, Kwink Groep, funded by government, in 2016 (Kwink Groep, 2016). This section draws extensively from this report. The evaluation approach taken was to focus on the process and the system dynamics of the Agreement and not on its impacts. The evaluation sets out how the 'content and the estimated effect of the agreements made also fall outside the scope of this evaluation'. The main question it posed was 'to what extent does the Energy Agreement's approach manage to achieve the ambitions agreed in the Agreement?' This conceptual framework amounted to a subtle move to focus on the dynamics rather than the impacts to date. Taking such an approach avoided a linear, cause and effect analysis.

The report outlines its perspective on the Agreement being designed in accordance with the polder model and a form of network governance, resulting in an exchange of interests in the pursuit of consensus. 'The result is therefore never the maximum result, but always an optimal result: not the highest possible bar, but a bar where the parties want to jump together' (*ibid.*: 59).

The evaluation was comprehensive and detailed in its covering of the monitoring and implementation process, drawing from interviews with stakeholders. The evaluation reflected on what was working well, and where greater attention needed to be focused to increase the speed and effectiveness of implementation.

The report notes that the Agreement was not ambitious in the goals it set out. Some of them were no higher than goals that had already been set. It also noted that the mix of concrete and ambiguous measures included meant that some could not easily be monitored. Some have the character of a black and white obligation (for example, to realise 6,000 MW of wind on land) while others are more nuanced (for example, drawing up a joint information programme to inform the residential consumer about investing in energy saving). The Evaluation Report points to all this as a reason for slow progress initially, because the first period of the work of the chair and secretariat involved clarifications on what had been agreed and how to monitor it. This ambiguity and lack of concreteness is described as the 'Achilles heel of the Energy Agreement'.

However, the report stressed that the added value of the Agreement was above all in the process: creating a mechanism through which the parties were committed to achieving the goals. In other words: the Agreement should help them to jump over the bar together.

The evaluation said that the stakeholders considered the implementation to be slow at the start, and that, up to 2015, there had been a lack of focus on making progress (*ibid.*: 42). For example, according to a number of parties, the National Energy Outlook 2014 showed that the targets of 14 per cent renewable energy and the extra energy savings of 100 PJ were out of reach with the existing agreements. But they also recognised that realising and operationalising the agreement demanded a great deal of attention from the chair and the secretariat.

Another critical area concerned the members and actors of the organisations represented, to a disconnect with the wider actors. In some cases, societal support was absent (for example, on onshore wind) but in other cases it was so high it surpassed expectations (for example, the support for energy efficiency measures in offices). The report concludes: 'These examples show that it is important for agreement parties to (continue to) involve their members in the decision-making and implementation of measures' (*ibid.*: 32).

The evaluation report considered that the Agreement had increased support for the energy transition in civil society and that it had created a platform for issues relating to sustainability. However, it noted that this wider support was not always there for particular aspects of the Energy Agreement and its implementation. For example, in relation to onshore wind, 'too much emphasis was placed on the measures and the goals, and too little attention would be paid to creating a movement and initiating a social debate' (*ibid.*: 37).

The evaluation also notes a gap in the current approach, in that the emphasis was on the technological and financial side of the energy issue. The question was: how could the approach be broadened, so that attention was also paid to social and ethical issues related to the energy transition (for example, affordability and social inclusiveness) (*ibid.*: 52)?

The report found that more attention was being directed at the concrete measures in the Agreement, while other, more qualitative or conditional elements such as training, quality of work and financing, and ones that demanded a longer-term perspective (for example, innovation), were getting less attention.

The report, while not providing an overall evaluation of the success or limitations of the Agreement, did conclude that it was plausible that the Agreement had achieved more or achieved results sooner than if there had been no agreement. The report argued that, before the Energy Agreement, energy policy had been characterised by fragmentation and a lack of urgency and continuity. However, it made clear that 'the Agreement has not always led to higher ambitions, but to partly new policy and a further interpretation of existing policy' (*ibid.*: 43). It also argued that looking to

the future, more radical changes were needed in future if the existing social, economic and technological structures and patterns were to be transformed.

2.7 Implementation of the Agreement

The Dutch Government published an Energy Agenda (Energiedialoog) in 2016 and led a series of public consultations called the Energy Dialogue, which lasted three months. Czada and Musch outline how this ran in parallel with the implementation of the Energy Agreement and included discussions with business, academics and citizens about the future energy supply in the Netherlands (Czada & Musch, 2017). The agenda, published in December 2016, contains long-term targets for reaching a low CO2-emitting energy system (Ministry of Economic Affairs, 2017).

In March 2017, energy-intensive industries signed an agreement on saving energy to bring savings of 9 PJ by 2020 to meet their Energy Agreement obligations.

Since the Energy Agreement was signed, Dutch social partners have continued to reach agreement on issues such as wages, social and employment policies (including implementation of EU directives), industrial relations and labour law, including collective bargaining practice and procedures, and anti-crisis measures on competitiveness and productivity (Molina & Guardiancich, 2017). The polder approach has been a strong factor in the mode of political operation and public policy-making deployed by the two most recent governments (SGI, 2015). The approach has also been used in local and regional infrastructure development. A consensus-building, stakeholder approach was applied to projects on the expansion of Schiphol airport and the port expansion in Rotterdam, as well as in the field of spatial planning (Czada & Musch, 2017).

SER and the social partners have been discussing the employment elements of the Energy Agreement and, in 2018, SER produced a report which argues that a shortage of skilled employees and lack of a prepared labour-market and education policy is a threat to realising the energy transition (SER, 2018).

While the Energy Agreement is still being monitored in 2018, no additional measures will be introduced. Those interviewed considered it important that the Agreement be completed. Recent international and domestic developments have combined to increase the political ambition both to deliver the Energy Agreement and to create a new climate agreement focused on reducing GHG emission, further examined in the next chapter.

2.8 Impacts of the Agreement

In broad terms, the Agreement can be viewed as a mixed bag of impacts and results. Stakeholders considered that the Agreement had 'woken up' energy policy, created a menu of compromise, and established relationships and trust. Some referred to the way the policy system had been stuck in relation to energy and climate change and how the Agreement helped to build momentum, enabling long-term goals to gain short-term policy traction.

A key point here is that the Agreement is not a single entity but an umbrella of agreements and actions. The data from the National Energy Outlook (2017) indicates that three out of the five key goals were on track to be met by 2023, but not by 2020:

> The goals of 16 percent renewable energy in 2023 and energy savings rates of 1.5 percent per year are within reach. Also the realization of 90,000 jobs in the period between 2014 and 2020, although uncertainty margins still apply (PBL, 2017b).

The key areas where the Agreement is credited in having an impact, noted by all interviewees, is the success in offshore wind energy and energy savings. There has been a big cost reduction in offshore wind as it was scaled up, leading to projects being planned with no subsidy.[34] The subsidy was designed to stop once the cost price lowered. It took a number of years before renewable energies showed signs of growth. The cost price coming down was key, however, most would agree that the subsidy played a driving role in this. Other positive impacts are reduced co-firing of biomass and that offices will have energy efficiency labels by 2020. And the Agreement includes an objective to create 15,000 additional full-time jobs by 2020, a target that is expected to be reached (Government of the Netherlands, 2017b: 95).

There is some consensus that the 2020 targets will be not be fully attained. The 14 per cent share of renewable energy target is thought to be difficult to meet. Estimates from stakeholders range from 11 to 13 per cent. However, the 100 PJ target will almost certainly not be achieved.

A ministry official expressed disappointment that the Agreement had not been as successful as they had hoped. However, he indicated that, although only 20 or 30 per cent of what the Agreement set out to do was being achieved, and in different ways than had been planned, there was support for the Agreement. 'Nobody

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[34] The tender to develop the Hollandse Kust Zuid offshore windfarms—two 350 MW windfarms to be built by 2022 that will be the world's first to be built without public subsidy—was won by Swedish energy company Vattenfall, a bid made possible partly as a result of the Dutch government's willingness to take on and manage a share of the project risk, in this instance assuming responsibility for grid connection (Foxwell, 2018).

complains because everybody is pretty happy with the result that we have now' (D4).

Several stakeholders said they found the necessary compromises difficult at times, while they also faced the challenge of convincing their organisations to agree on certain actions. From the environmental NGO perspective, the reduction in biomass used to co-fire coal plants was important, as well as the increase in offshore wind energy and the closure of five coal plants. The environmental NGOs indicated that taking part in the Agreement was not easy but that they were achieving more with it than they would have without it. At the same time, they recognised that the energy savings results had been disappointing. However, work has continued in the years since the Agreement was reached. A representative of an environmental NGO said that, in the years since the deal had been reached, they had been working hard to reach the goals. Every year they return to insist, 'we need more measures' (D8).

For the environmental NGOs, the Agreement represented a good result for that particular time, with some positive elements. One representative acknowledged that they did not get everything they wanted, but considered the results on offshore wind and coal-plant closures as successes.

A union official was more critical of the Agreement but also recognised that, without it, less would have happened. However, it was a regret that the Agreement's governance structure had not had the labour agenda embedded throughout (D5). The agreement in recent years had also had somewhat of a negative effect, and it had led to a kind of lock-in whereby the government was saying it needed to stick to the old agreement, despite the new developments.

Other interested experts were critical. Professor Jan Rotmans, an academic and practitioner in energy transition management, argues that the Agreement was too much of a compromise and had not taken on energy-intensive industry. In his view, it gave employers (and multinationals) an opportunity to shape energy developments and more control over the pace of developments than would have otherwise been the case.

From the government's perspective, the design of the Energy Agreement was problematic in that it did not give parliament an active role which led to tensions. The minister at the time was having to defend the Agreement to a parliament that had not played a role in producing it and came under pressure when early results were expected. Parliament would threaten action if Energy Agreement stakeholders failed to take action. In this way, the Ministry had to deal with these 'two parliaments' putting pressure on each other. For example, when the National Energy Outlook is published, parliamentary discussion about it takes place putting pressure back on the High-Level Committee to boost performance

Despite this, when political support was required at key strategic moments, it was forthcoming in both the House of Representatives and the Dutch Senate. For example, they supported motions on phasing out coal-fired power plants and

legislation to progress the offshore wind target (Kwink Groep, 2016: 34). Another issue was that the employers federation seemed to lack the mandate to deliver the energy savings. According to a representative, government had expected to see a shift in the different parties, industry and NGOs, so that they would not necessarily be just looking at government to get something done but would actually talk to each other as well to get results. This had been driven by awareness that 'if we leave it all to the government we know one thing for sure—we're never going to reach our goals because we won't be able to do it' (D4). However, what transpired was different.

> We signed up to an agreement in which we said you could tell us where we are not fulfilling our commitments but we can also tell you where you are not living up to what you agreed to. And if you don't live up to what you agreed to, that can have consequences. (D4)

From a governmental perspective, it had been disappointing that industry had not committed fully to delivering energy savings from the outset. The IEA in 2014 had foreseen some of the challenges of implementation that lay ahead:

> The IEA applauds the strong engagement of stakeholders and the ambitions of the Agreement. It is challenging, however, to ensure the actual delivery of the many actions and commitments. In particular, if one party steps out, it might delay or even risk the implementation of other actions. The monitoring of progress and the continuous dialogue with all stakeholders involved is therefore crucial for future success (IEA, 2014: 28).

One perspective is that government's threat of regulation was a normal part of testing the validity of the Agreement. A key challenge to the implementation of the Agreement was the failure of key stakeholders (employers) to deliver energy savings. Industry had not delivered on this element of the Agreement as the economy recovered. The threat of regulatory action was therefore considered as a necessary and timely reinforcement of the Agreement and government played a supporting role. This views government as having been instrumental in reaching agreement, providing more funds and tax breaks than it had expected to, and it continued to have a key role in the implementation, when the Agreement's commitments had to be upheld. Another perspective is that government's more direct role was due to a crisis of implementation of the Energy Agreement, whereby stakeholders did not live up to their end of the bargain and deliver on their commitments.

One modest but interesting impact of the Agreement was that some local initiatives emerged in solidarity with it. For example, the municipality of De Bilt, together with an energy corporation, has signed the Bilts Energy Agreement with the ambition to be energy-neutral by 2030. The evaluation report also outlines how 'regional Energy Agreements have also been concluded (for example, the Gelders Energieakkoord and the Brabant Energy Agreement) that have sought to connect with the National

Energy Agreement' (Kwink Groep, 2016: 38). Another is the 'Lochemse Energieakkoord' (Lochem Energy Agreement) (Lepping, 2014). However an overview of municipalities and sustainability by Natuur & Milieu points out that such initiatives are not widespread (Natuur & Milieu, 2018).

The following chapter documents developments since the 2013 Energy Agreement.

Chapter 3
Recent Dutch Developments

3.1 Introduction

In the years since the Energy Agreement was agreed, there have been significant developments in the Netherlands and internationally which have given it additional momentum.

In 2015, the Netherlands signed the Paris Agreement on climate change (UNFCC, 2015). PBL (2017) estimates that, to meet its obligations, the Netherlands will need to reduce its GHG emissions by around 50-55 per cent compared to 1990 levels (PBL, 2017a).

Other key national events, detailed below, were the Urgenda court case; the Groningen gas fields and the change in government, with the new Climate Agreement process underway.

3.1.1 Urgenda Court Case

In 2015, a court ruling added further pressure on the Dutch Government to act in relation to climate Change. The Urgenda Climate Case and Court ruling (outlined in Box 3.1) required a reduction in emissions by at least 25 per cent by the end of 2020 (compared to 1990 levels).[35] This was appealed by the Dutch Government but the ruling was upheld by the Hague Court of Appeal in October, 2018. Interestingly, one of the key actors behind the Urgenda case was Jan Rotmans (along with Marjan Minnesma) who was also involved in setting up the Dutch government's transition management initiative in 2001-2010.

[35] http://www.urgenda.nl/en/themas/climate-case/

Box 3.1: The Urgenda Climate Case

The 2015 Urgenda Climate Case against the Dutch Government was the first in the world in which citizens held their government accountable for contributing to dangerous climate change. On 24th June 2015, the District Court of The Hague ruled that the government must cut its GHG emissions by at least 25 per cent by the end of 2020 (compared to 1990 levels). The ruling required the government to immediately take more effective action on climate change.

The case, brought on behalf of 886 Dutch citizens, made climate change a major political and social issue in the Netherlands and transformed domestic climate-change policy. The case has inspired climate-change cases in Belgium, New Zealand, Ireland, the UK, Switzerland and the US.

In September 2015, despite calls from leading scientists, lawyers, citizens, companies and the 886 co-plaintiffs for it to accept the decision, the Dutch Government decided to appeal the judgment—even though it was taking steps to meet the target set by the court. The appeal was upheld by the Hague Court of Appeal in October, 2018.

Ireland has a similar case before the High Court currently taken by Friends of the Irish Environment and this is expected to be held in January 2019.

3.1.2 Groningen

Another key shift has been the seismic activity in the Groningen gas fields, which has provoked the start of a move from gas towards renewable heating options. The journey from gas 'addiction' to the push away from gas is a dramatic turn. In the space of fifty years, the Netherlands has moved from enjoying one of the biggest gas sources in Europe to recognising that it is a major problem. The Dutch government have announced that gas production from Groningen will cease by 2030 and production is expected to reduce considerably by 2021.[36] As Jan Rotmans described, it, 'People want rid of gas and the emotion has changed' (D7).

Recently it was reported that 'production will now be further brought down from 21.6 billion cubic metres to under 12 billion cubic metres by 2022, eventually closing the taps by 2030. Some 450 billion cubic metres of gas will remain underground once extraction stops, valued at around €70bn' (French Press Agency, 2018).

[36] https://www.reuters.com/article/netherlands-gas-groningen/update-1-possible-to-reduce-groningen-gas-output-faster-dutch-minister-idUSL5N1T91FZ

Box 3.2: Natural Gas, Groningen and Earthquakes

Over the past 50 years, revenue from the extraction, refinement, storage, transportation and sales of natural gas in the Netherlands is estimated at more than €250bn, which has been primarily reinvested in infrastructure, including tunnels, train tracks, upgrades to highways, water management, train stations and urban development initiatives. The largest gas field in Groningen has been the 'cash cow' of the Netherlands (van der Voort & Vanclay, 2014). However, since 2003 seismic activity has increased in Groningen, coinciding with an increase in production (Dost *et al.*, 2017). In August 2012, an earthquake measuring 3.6 on the Richter scale, the largest ever recorded in the region, occurred in the village of Huizinge. This event created much concern among local people and gave earthquakes a much higher priority in the community and in politics (van der Voort & Vanclay, 2014).

There were 133 confirmed earthquakes in 2013 in the Netherlands. Of those, 121 occurred in the province of Groningen. Thousands of tremors have hit the province in the past 20 years as a result of natural-gas extraction operations. In 2016, research by the University of Groningen estimated that up to 100,000 people in the province had suffered damage from the quakes (White, 2018). The social impacts experienced by local residents include damage to property, declining house prices, concerns about the chance of dykes breaking, feelings of anxiety and insecurity, health issues, and anger. These social and emotional impacts are exacerbated by the increasing distrust Groningen people have towards the national government and the gas company, NAM, a partnership between Shell and ExxonMobil. The earthquakes have reopened discussions about the distribution of benefits from gas production and the extent to which benefits are retained locally (van der Voort & Vanclay, 2014).

3.1.3 New Dutch Government

At the end of 2017, after protracted discussions, a four-party coalition government was formed, with Mark Rutte as prime minister. The Programme for Government includes an ambitious strategy for energy and climate policy, and GHG reductions, as well as plans for a Climate Law and Climate Agreement (Government of the Netherlands, 2017c). This includes a GHG emission reduction of 49 per cent in 2030 that will require an extra CO2 reduction of 56 Mt on top of the current policy scenario. The 49 per cent target amounts to a CO2 reduction of 48.7 megatons over the next 12 years. The rationale for this is primarily to meet Dutch obligations under the Paris Agreement. Other elements include phasing out coal-fired power plants by the end of 2030 at the latest and giving residents a right to heating, but moving away from gas supply.

An early initiative of the new government, with support from a coalition of seven political parties, was to introduce a Climate Law which was agreed in June 2018 and will come into effect in 2019, once it completes the passage through Parliament.[37] The ambitious aim of the law is to reduce emissions levels by 49 per cent by 2030 and 95 per cent by 2050, compared to 1990 emission levels.

3.2 Towards a New Climate Agreement

In February 2018, discussions began on a Climate Agreement process with key stakeholders from the private sector, employers, unions, civil society organisations and industry. The government has been leading the process and is seeking to reach broad consensus on ways that the Netherlands can reduce its CO2 emissions by 49 per cent by 2030 (compared to 1990 levels) (Pieters, 2018a). Through joint exploration with stakeholders, the government is probing how future policy could be successfully designed, how expertise can be developed and what pilot projects can be carried out. A total of €300m per year will be set aside in the budget for this purpose (Government of the Netherlands, 2017c). However, it has been reported that the measures in the Climate Agreement will ultimately cost around 0.5 per cent of the Dutch economy (Pieters, 2018b).

The main aspects of this new agreement were circulated in July with the details to be worked out over the coming months. The Dutch parliament will ultimately decide what proposals are included in the Agreement but it has the support of the VVD, currently the largest party in government. Implementation of the Agreement, when agreed, will start in 2019.[38]

While this agreement has a number of distinctive features compared to the Energy Agreement, it does represent continuity in many respects in its approach to long-term climate and energy governance.

A tentative comparison between the two agreements at this juncture indicates that:

i. The context has changed.

ii. Government leading from the front: The role of government has changed as it is now leading from the front, rather than taking a seat at the table. SER is actively involved in the preparation for and facilitation of the negotiation process.

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[37] Negotiators acting on behalf of seven parties in parliament reached agreement on the text of the new climate law which will set a carbon dioxide reduction target of 49% by 2030 and 95% by 2050 (DutchNews.nl, 2018b).

[38] https://www.government.nl/topics/climate-change/news/2018/02/23/government-kicks-off-climate-agreement-efforts

iii. More direct actors at the table: The broad range of stakeholders includes many of those from the Energy Agreement, but includes fewer representatives, and more direct stakeholders such as large energy intensive companies. Some of the representative stakeholders previously involved in the Energy Agreement are not be directly negotiating at the Climate Agreement tables.

iv. Focus is now solely on carbon emissions.

v. Greater uncertainty over data

vi. Conflicts and concrete problems are more evident

(i) The context has changed

The political, economic technological context is different than it was in 2013. Heightened political ambition and international commitments are coupled with a greater acceptance of renewables measures that weren't feasible, cost-effective or socially acceptable four years ago.

The Rutte government has emphasised that it is serious about delivering the 2030 climate targets, and it is lobbying to increase the EU's ambition in this regard. A ministry official considered that more action is feasible politically than it was four years ago. An environmental NGO representative believed this to be part of the coalition government's liberal conservatives' 'can-do' approach.

In this way, there is a government that is more ambitious on climate and environmental matters than previous governments, combined with the issue of climate itself becoming more political. The Climate Agreement is likely to be more ambitious agreement than the Energy Agreement. While this is due to the international and national developments in part, it is also a reflection of the advice given in the evaluation report and by Rotmans and others that the old agreement and its approach were inadequate and that a more radical approach on climate change was needed.

(ii) Government leading from the front

For the Climate Agreement, government is taking a more active role in the process. SER is a partner, but not the primary drivers.

In a letter to stakeholders from the Minister for Economic Affairs in early 2018, guiding principles for achieving the overall national CO2 reduction goal were outlined, including leading roles for cost-efficiency and specificity requirements for the proposed measures, and the possibility of the Netherlands Environmental Assessment Agency validating the proposed measures (Janssen, 2018).

This leadership shift is considered a positive development by both the representative from environmental NGOs and the employers. Employers see

government as key enablers for the necessary action in industry. SER has no role in policy-making, on which, the employers believe, future actions need to be based. However, industry is more cautious in welcoming the different approach of government as they consider it might mean 'regulation in a different form' (D9).

The government is committed to the agreement process as it sees the value in an agreement that can help bring societal backing. Compared to the Energy Agreement, it has sought that the mandate for action is stronger for stakeholders and the role of government is clearer. It provides a more sophisticated tool than traditional regulatory options.

(iii) More direct actors at the table

There are new stakeholders at the table for this agreement, including big industry, at an operational level and not all representational. These stakeholders include a broad mix of representational and direct actors (Government of the Netherlands, 2018a). The minister has requested people at the table that are willing and able to commit to something to which he can hold them accountable. From their perspective, it is a question of mandate so that, when an agreement is signed, government can hold them to their signature.

The multistakeholder approach appears to be strongly embedded in Dutch energy and climate governance. The ministry sees agreements as useful in so far as it can make longer-term choices, maintain continuity with stakeholders on the basis of the relevant agreement and, at the same time, achieve societal backing.

The alternative—of no agreement—would mean 'no choice at all' from the employers' perspective. Reflecting the threat of regulation, he commented: 'When you're not at the table you're on the menu' (D3).

The stakeholders to be included were reportedly the subject of intense lobbying. Stakeholders that have been excluded include the incumbent energy supplier and waste incinerators, while others reportedly included include cyclist unions, motorist clubs and green energy start-ups (*ibid.*).

(iv) Focus is now solely on carbon emissions

The Climate Agreement is focused on carbon-reduction measures. Sectors including industry, transport, the built environment, electricity, and agriculture and land use will have a CO2 reduction goal (in megatonnes).

Table A.2 in the Appendix indicates the sectoral share of GHG reductions by 2030 as first set out in the coalition agreement (Government of the Netherlands, 2018b). The table was prepared using data from PBL as part of the pre-government negotiations but later revised, following the publication of the Energy Outlook. The government referred to the revised table in relation to the Climate Agreement process as representing an indicative share of emissions reductions.

This table indicates that the electricity sector must reduce emissions by 20.2 megatons, industry by 14.3 megatons, mobility by 7.3 megatons, the built environment by 3.4 megatons and agriculture by 3.5 megatons.

> The table gives an indication of the reduction allocation per sector, based on foresight studies by the Netherlands Environmental Assessment Agency. In the framework of the national climate and energy agreement, timetables for achieving these targets will be agreed with all sectors (Government of the Netherlands, 2017c).

This table, also discussed in Section (iv) was the focus of some debate among those interviewed with some participants concerned that industry and agriculture's shares were too low. Some welcomed it as a starting point that helps to make the discussion specific (D1). From the employers perspective, it provides an opportunity for choice in how to meet the emissions reduction targets, which is better than government being prescriptive.

(v) Greater uncertainty over data

Some gaps and tensions were identified when reflecting on the implementation of the Energy Agreement. One issue that emerged was the use of linear projections. The ministry reflected on the previous four years and the development of renewable energy. An official pointed out that the renewable energy numbers had been almost flat for the last four years, whereas the models had projected a linear development. Nevertheless, nobody doubted that those years had been crucial to reach the renewable energy targets, and they expected now to see the numbers rise further:

> There's still this linear idea of, well, it will grow step by step by step. They (knowledge experts) don't know how else to do it. And they wouldn't be credible if they did it some other way, because everybody would say, so, what on earth were your assumptions when you came up with that sort of exponential idea? You have no evidence why that would happen… in a way it has to be sort of imperfect (D4).

What has happened in practice has exceeded projections. A SER representative gave an example of when there was data to support reaching 17 per cent renewable energy in 2023; experts didn't believe it could be achieved, but reality has beaten the projections. Construction costs have reduced by 40 per cent for offshore wind and wind farms are now being developed without any subsidy. As a result, the knowledge experts are now willing to learn and adapt. The SER representative commented that 'practice doesn't follow models theory' (D1).

> For the Climate Agreement, there was a view that evidence going forward would be needed that would reflect the exponential, rather than linear, development of new technologies, but that is not yet possible. The employers' perspective was that the reality of transition

> will be exponential, rough and disruptive, with a lot of insecurities. As a representative commented, 'I never heard of a transition which is linear. It's not going to be an incremental five per cent step every year and in 2040' (D3).

Jan Rotmans argued also that the transition would not be a linear process either in terms of new technological developments and also in the decarbonisation of energy. 'The way we think about gas now is totally different to ten years ago. Nobody could expect that' (D7). While acknowledging it was hard to come up with a better way of calculating the cost of measures in models, in his view, the models in use are highly deficient, being input-output models that miss the long-term dynamic.

Others pointed to gaps in knowledge that need a qualitative approach to capture stories of change that are informative about multilevel action among the multiple stakeholders and the societal transition. This invisible growth was described as the 'buzz' of societal change among the greener companies, entrepreneurial communities and NGOs working towards the low-carbon transition. This is not yet delivering tangible results in terms of CO2 reductions, but it is clearly happening. Additional data that might capture some of the dynamics surrounding that kind of development would be needed for the energy transition:

> … where we experience what happens day to day, what changes, where you can see attitudes changing, people starting new initiatives. So I think that it gives a different sense of feeling, of what is happening in this whole energy transition (D4).

Environmental NGOs felt that there's a technocratic bias in the data which results in policy measures that do not go beyond existing economic and technology parameters.

Where data and evidence has become more contested is illustrated by the sectoral emissions table included in the coalition's programme for government, previously outlined in Section (ii) above and in the Appendix. Commentators view the table as reliably technocratic. Others view it as being a product of a politicised process. For example, the share for agriculture is low, despite its high emissions and that some aspects were included, such as the high amount of carbon capture and storage (CCS) despite being viewed as something of 'a fairytale' (D7).[39] From the employers' perspective, while CCS will be part of the measures, a more fruitful approach for industry would be to think about how to develop carbon-neutral processes, rather than storing pollutants underground. Other commentators pointed out that the level of CCS outlined in the table is unprecedented worldwide, and both costly and

[39] From new reports of broad agreement being reached in July 2018, the sectoral share amounts have been modified in some cases, notably with a reduction in expected CCS from 18 Mt to 7 Mt.

risky. For some this overemphasis on costly technological solutions that may not be feasible was being considered, rather than on changing the energy system.

In this way, the table raised interesting issues about the differences between theoretical evidence and what is feasible to achieve politically. From the ministry's perspective, the most cost-effective measures can be achieved in industry, and it would be costlier to transition seven million households from natural gas, so that is not the starting point. The ministry representative acknowledges that, as currently set out, agriculture should probably do more, but the share outlined in the indicative table was the result of a political decision.

(vi) Conflicts and concrete problems are more evident

The new agreement negotiations are anticipated as challenging because the reality of change is becoming more apparent. A union representative described the energy transition as visible and 'on the ground', and said the conflicts and concrete problems are now more evident (D5).

It is expected that issues such as the risk of carbon leakage and competitiveness are likely to feature during the negotiation process, alongside concerns over the distributional impact of future carbon taxes. A representative of the employers referred to the import of electricity from Germany in future even though German coal-fired stations are less efficient than Dutch ones.

There is a further concern among stakeholders that the new agreement is not going to address key union concerns over the need to ensure a just transition or to look at employment matters. Focusing on the issue of cost, the trade unions want a transition fund to deal with the social consequences. They are concerned about likely job losses in the coal and gas sectors. They point to the risk that, if you don't get employees involved, you won't have a successful transition. But this is countered by a sense that, at least, energy and climate policy could move forward.

Stakeholders raised the issue of finding resources to pay for any measures that come out of the new agreement. For some stakeholders, the solutions are technologically feasible, but resourcing them is the issue. There is also a lively debate in the Netherlands about how any new measures will affect consumers.[40] For the unions, the societal aspects are most pertinent. They raised the question of who is paying and who is profiting (D5). Their research suggests that the cost was not being equitably shared, with companies paying less than households, and low-income households paying relatively far more than higher-income ones (SER, 2018). They found also that without the funds to invest in green choices, low income

[40] The Dutch homeowners association estimates that annual energy taxes and levies for renewable energy will rise on average by 220 euro per household between 2017 and 2019. Taxes on energy and waste are expected to increase by approximately 670m euro—some 500m euro for citizens and the rest for companies (Tijs, 2017).

groups are not benefitting from subsidies and tax-reduction schemes such as green shares (for tax-reduction), subsidised solar collectors or hybrid cars. They found that 80% of these environmental friendly facilities go to high income groups, only 20% to low income groups.

Jan Rotmans outlines a fundamental problem:

> But the problem is more the institutional problem, the social problem, the economic-financial problem. And it's not only interplay of technologies. An institutional, social, finance problem that is not easy to fix, not just technological. Need to go into the pain—no way of escaping—then the elephants will die out….I always speak about the pain of the energy transition. It is a painful process. It is rewarding in terms of CO2 benefits in terms of jobs and innovation but it is painful. There are many mental and financial barriers that stand in the way and these should be openly discussed (D7).

The following chapter presents the NESC Secretariat's reflections on the Energy Agreement.

Chapter 4
NESC Secretariat's Reflections on the Dutch Energy Agreement

The story of the Dutch Energy Agreement provides a fascinating opportunity to reflect on both specific Dutch insights and more generic themes relevant to the Irish energy transition. The following themes will be briefly examined:

i. Stakeholder Participation and the Polder Approach;

ii. Changing Role of Government;

iii. Level of Ambition;

iv. Momentum as Part of the Dutch Energy Transition;

v. The Effectiveness of Monitoring and Implementation; and

vi. The Role of Evidence and Policy Analysis

4.1 Six Themes

4.1.1 Stakeholder Participation and the Polder Approach

The evolution of social dialogue and the polder approach is one significant emergent theme. While polder-type dialogue and advice is long-rooted in the Netherlands, the Energy Agreement represented a considerable departure for SER and the polder approach. The Agreement process led to government being seated at the table and SER extended the reach of the process to 47 stakeholders, far wider than the usual 'founding fathers' of social partners, and included environmental NGOs and representatives of emerging green enterprises. SER invested time and resources beyond its usual committee structures as its chair took on the role of driving the agreement process. Furthermore, the widening and engagement of other actors in a sophisticated 'table'-designed process over was time-consuming and intense at times.

It is not clear how this 'polder-plus' approach represents a strengthening or weakening of the polder approach. One view is that it allowed the polder model to be adapted so that it was adequate to the complexities and multistakeholder nature of the energy transition. Another view is that it marked another gradual weakening of the polder approach (which is beyond this current discussion). The latter view is perhaps reinforced by the current Climate Agreement process, in which direct

operational actors have moved to the front of the table, while representational actors, such as the unions, have a weakened role.

What this will mean for the Climate Agreement remains unclear. One perspective, suggested by an academic specialising in conflict resolution, David Laws, is that 'who is at the table changes the conversation', as well as the rules of the process (D6). Another driver is that climate governance, perhaps more than any policy challenge for government, requires dialogue in other ways, giving new life blood to the polder model but necessitating changes in both who and how it operates. That would suggest that the polder approach will adapt and evolve, but possibly will not be sufficient for this most 'wicked' of contemporary governance challenges.

Notwithstanding these changes to the polder approach, there remained a strong commitment to social dialogue. A SER official described the 'pragmatic tolerance of stakeholders' (D1) and their commitment to the process despite its difficulties. The Agreement process required a deep understanding of the polder process and a search for compromise and consensus. A union official said that 'everybody knew that you have to give something and to take something' (D5).

The polder approach would certainly seem to have a strong foothold in the Netherlands and taking part is something of a social norm. A representative of an environmental organisation described both the appeal of the approach and the risk of not taking part. In his view, it is a deeply held conviction that you have to make deals with stakeholders in the Netherlands and that there is genuine concern about staying out of the process:

> … because if you don't give it a try in the Netherlands, everybody is going to blame you. The politician is going to blame you for four years—I don't talk with you, we invited you to talk, you were not there (D8).

David Laws described how the polder approach can provide an opportunity to convince the other side, bring evidence into play and make creative proposals, while also acknowledging that it can result in the 'lion's share going to the lion' (D6).

Despite not being the 'lion', it is a significant factor that the NGOs had surprising power around the table. While they were portrayed as somewhat of a necessary annoyance by some, they were also recognised as bringing expertise to the table, particularly in renewable energy. Their acknowledged impact or power is based on the fact that they reportedly have several million members in the Netherlands. A number of stakeholders talked about Greenpeace as being important in gaining social support, particularly for renewable energy developments. A ministry official said:

> They 'bring peace to the table and community acceptance to on and offshore wind energy' and 'NGOs bring political weight, binding them in the process' (D4).

Stepping beyond the Energy Agreement, the polder approach remains a central tool for regional energy and climate, as well as infrastructure projects in the Netherlands such as Schiphol Airport and the port of Rotterdam. The Maasvlakte 2 expansion of Rotterdam port was only possible because of a multistakeholder process, involving NGOs, the port authority and a professional arbiter focusing on 'mutual gains', building on the poldering tradition (Schenk, 2018: 52). While the process was not smooth, it followed global best-practice techniques, and Schenk concluded that the poldering approach had played a part:

> The Port of Rotterdam and government agencies were willing to genuinely engage in extensive deliberations with other stakeholders out of a belief that this could generate stable and wise outcomes.

4.1.2 The Changing Role of Government

Another theme identified is the role of government in the story and how it evolved. At the start, given the somewhat stagnated energy policy and lack of progress in renewables, government came to the process with resources, but without a strong policy focus. The government expressed a willingness to share responsibility initially and observe deliberations but became more engaged as negotiations thickened and reached a series of difficult impasses. In the end, government played a considerable role in the Energy Agreement's delivery and implementation, through the offshore wind subsidy, legal interventions to enable the closure of coal-fired plants, and its regulatory threat over industry's failure to bring about energy savings. From its involvement, government came to the view that, in fact, it had never been far from the action. Other stakeholders did not deliver results as it had hoped and instead looked to government for action. It seemed better to make a virtue out of necessity and just take the lead for the new agreement. A Ministry official described the situation as:

> … government being just one of the partners at the table but not a very decisive one at the start. But by the end I think everybody could see that without the government moving one way or the other, none of the ambitions that everybody strived for would be obtainable (D4).

For some of those involved in the negotiations, government was considered to be sharing the agreement process rather than leading on it, which was welcome. Others, however, considered its role to be more significant from the outset as it always had regulatory, financial and legal measures at its disposal, should an agreement not be reached. The employers were aware that regulation was likely to be government's response should the agreement process fail. A stakeholder from industry described it as 'government having more power than others but not showing it' (D9).

From the outset, government recognised that it did not have the tools to regulate the complex energy area that it would in other areas. The Energy Agreement

provided a voluntary approach to regulation for government. When this was not delivered, government had to threaten a blunt instrument, which was less satisfactory:

> So we could start with a voluntary agreement because 'we always have the legislative instrument in our back pocket' sort of thing. In most of the cases that we found in the Energy Agreement, we didn't have that same sort of instrument. And it wasn't as easy to pinpoint what your target group would be if you would want somebody to . [take action].. (D4).

> … because what we agreed to in the Energy Agreement was, I think, a quite sophisticated way of saying the industries that are most at the forefront of trying to improve their energy efficiency would get the voluntary chance to do so. And we might be able to support them, not so much in financial ways but trying to remove any sort of regulatory or legislative barriers that they find. What we ended up with, because nobody delivered on the promise of voluntary commitments, was a very… blunt instrument to say 'well now, everybody just has to do it'. It's not a choice anymore of those who are willing to take up their responsibility to do something extra. Now we're just going to ask everybody (D4).

Government did have to deepen their involvement after the Energy Agreement as they had to deliver on many of the concrete actions that came out of the Agreement, such as providing infrastructure and enabling conditions for developments.

One perspective is that the increased political salience and the nature of climate and energy policy rendered a more passive approach more difficult. The increased role of government is viewed by stakeholders as both a sign of their commitment, but also a potential risk to the polder type agreement. 'An agreement should be about, an effective or a successful agreement should be one of equals. Otherwise it comes down to another regulation in a different form'. (D9)

4.1.3 Level of Ambition

A third theme is the importance of design and customisation of the menu of elements included in the Energy Agreement. The Agreement comprises energy supply elements such as the future of coal-fired power stations and wind energy supply with economic and social elements, including the development of new jobs. This suite of elements was required to reflect the interests of the stakeholders around the table. It included a sufficient number of concrete elements that would 'bring their own luck', with the required level of investment, such as offshore wind development. However, the more intricate elements, such as job creation, training

and education, were included but not carried forward with the same commitment or effort.

Part of the design process was the low to modest level of ambition of most of the elements, a contentious aspect of the Agreement. The ambition for radical changes to the energy system or to the climate policy context was muted among government and industry in 2012. At the time, according to an energy expert, energy policy was in a 'big slumber' (D10). There was little political appetite to include GHG emissions in the Agreement to any extent, especially in relation to agriculture and gas, and this was reinforced by the seemingly reachable 2020 EU targets. The renewable energy targets were raising concerns. However, even if it is described as unambitious in the depth of reach of the elements it included, few would say that implementing even a modest Agreement has been easy.

What the Agreement has achieved is relatively slim compared to the suite of envisaged goals. But a saving grace has been the growth of offshore wind energy development due to the reducing costs of the technology and its rollout, following the government's investment as part of the Agreement. This has, in effect, quietened critical debate. The renewable energy support scheme required considerable public investment so it came at a cost to the government. A more ambitious agreement might have floundered in the Netherlands at the time, but the focus of the Climate Agreement seems to have increased the level of ambition, even though it is too soon and things are too unpredictable to predict how successful it might be in reducing emissions.

On balance, the suite of elements were not ambitious but demonstrates that a focused deliberative process on a feasible suite of elements has its benefits.

4.1.4 Momentum as Part of Dutch Energy Transition

A fourth theme is to understand the Energy Agreement as only one step in the journey of the Dutch energy transition. This helps to appreciate how its contribution has been to help further shift energy policy from a period in which it was stuck to a period in which it is unstuck and has increasing momentum.

At the time of the Energy Agreement, energy policy was in something of a hiatus, without a stable, long-term trajectory in place. The International Energy Agency's 2014 country review of the Netherlands outlined how the Dutch parliament's decision to instigate an agreement process grew out of a period of stagnation:

> Observers had seen that the Dutch energy transition policy, which was largely an industrial policy, had reached a point of stagnation and suffered from short-term priorities of changing government coalitions. The Dutch Parliament therefore called for a longer-term vision and more consistency in policy making with regard to energy in its motion of April 2011 concerning a 'National Energy Transition Agreement' (IEA, 2014: 24).

A union representative conveyed the sense in which the agreement process brought issues to life for those participating:

> It was a very exciting time. We talked, talked, talked a lot, sometimes in the daytime, sometimes also in the evenings with a small group and, under the chair of the Social Economic Council… (D5).

In one sense, the apparent policy hiatus before the agreement process is perhaps surprising given the ambitious energy transition management initiatives in the previous decade. These transition management initiatives had seemed to represent an exciting departure, bringing a new model of systemic policy governance. However, a change in policy direction put an end to them before they could be completed. And, in another sense, the timing of the agreement process was not surprising. Disappointed academics and policy actors wanted to try other approaches, and brought with them some of the learnings from the transition management projects. Since the Agreement was reached, political ambition for further climate action and agreements, combined with other key legal and international developments, has served to boost its performance in the last phase of its delivery. This would seem to have created a tail wind of the Agreement that is likely to increase its effectiveness further and increased the embeddedness of the energy transition in Dutch governance.

A more generic insight is that, without a supportive and facilitating political and governance context, a deliberative initiative or process could not have much impact on the energy and climate policy system. This context was required to invigorate its delivery. Another enabling factor is that a deliberative process has to build on a rich and fertile past (in terms of innovation, experimentation and policy learning).

A legacy of the Agreement is that networks were activated and are still active. A SER official said:

> The employers organisations had their own meetings. The NGOs in the environmental field had their own meetings. So there were all kind of networks that were created and they still exist, which did not exist before. Because they had to come to a kind of common ground (D1).

4.1.5 Effectiveness of Monitoring and Implementation

A fifth theme is the role and efficacy of the Agreement's monitoring process and implementation, often the impediment to the success of many policy initiatives. In this instance, it seems that the monitoring process was sophisticated in two respects, and limited in a third.

First, the dual function of platform and assurance given to the Assurance Committee and its working arm, the High-Level Committee facilitated both sharing of new practices and action among the stakeholders and wider public in terms of a platform role. Second, in terms of assurance, a multifaceted annual review cycle

and business-like probing and negotiation characterised the High-Level Committee. Each year, the cycle began with the National Energy Outlook and overview of the energy system and its performance, as well as progress in relation to the goals of the Agreement. This triggered further negotiation and review, indicating that monitoring was far from a passive notetaking of performance, and more like a focused managerial/delivery unit, working around impediments and seeking new ways of improving performance.

The third, more limited feature was in the extent that this probing and searching for new solutions did not seem to engage frontline actors in any meaningful way, in either a problem-solving role or in seeking further partners to drive action on the ground.

The story of the Agreement can be viewed as a play in three acts: first, the process of stakeholder inclusion, negotiation and signing of the Agreement; second, the stalling of the implementation and progress in energy savings in industry during 2015/16 and its resolution through the threat of regulation by the minister, and, third, the tail-wind, shift in political ambition and momentum of the new Climate Agreement. Judgment of its overall success crucially depends on how the second act is interpreted.

One view is that implementation was always going to be extremely difficult and the process was designed to push action further. The annual review process showed where the Agreement was not working and existing measures lacked sufficient impact. In 2015, additional measures were agreed by the High-Level Committee; in 2016 the problems were identified and additional measures were introduced, which, with the minister's support, led to a speeding-up of the results. The minister (the same person for four years) had been committed from the start and unlikely to let things flounder.

A different view is that the Agreement was in crisis in 2016 when industry and the employers were not keeping their end of the bargain and that progress had stalled—i.e. the implementation had failed in this key area. If the minister had not threatened regulation, the Agreement would have lost credibility. It is important to note that the minister had to push hard for the additional resources to secure the final agreement, and almost viewed it as too costly to be completed. However, even if that had happened, the success of the offshore wind energy projects would have sufficed politically for the Agreement to have been deemed effective, despite the other elements that were not achieved.

Neither interpretation changes the ending of the Energy Agreement story substantially, as the 'third act' remains a rapidly evolving and dynamic narrative.

4.1.6 Role of Evidence and Policy Analysis

A sixth theme is the role of evidence and the knowledge institutions. A key part of the polder approach is the respect given to and acceptance of evidence supplied by Dutch knowledge institutions in relation to key policy problems. The Energy Agreement process relied heavily on the expertise and evidence supplied by PBL and ECN. This played a fundamental role in negotiations and in the monitoring and implementation of the Agreement. However, a focus on the energy transition and climate change, and all the uncertainties that come with long-term climate governance, has started to raise questions about both the completeness of evidence considered and its validity for projections. Such knowledge has tended to be pragmatically received as imperfect, but nevertheless influential. However, this is not to suggest that in the Dutch case, the evidence provided as part of the Agreement process was inadequate or led to wrong decisions being taken. Rather, it is the process of analysing climate change and policy implications that is being opened up for questioning.

The problem of knowledge and analysis has started to appear in several ways. First, the projections on the growth of renewable energy (and in particular how the offshore wind element of the Agreement would unfold) were linear rather than exponential. Taking no account of the dynamic of innovation and learning, they indicated that more progress in renewal energy should have been achieved in 2014 and 2015 than was evident. While there was a general perception that the projections were typically conservative, there was political pressure to achieve results. The lack of any alternative measure of progress contributed to additional pressure on the High-Level Committee to increase its actions. In one sense, the limited linear analysis served to spur on action, rather than impede it.

As it turned out, offshore wind has grown exponentially, to a degree that was not captured by projections. In preparing the new Climate Agreement, government officials, NGOs and the unions all suggested that additional types and sources of evidence would be needed so that a more qualitative set of tools could be developed to capture systemic and transformative change, albeit in a more tentative way.

In another sense, this can be viewed as ‘the worm in the apple’ in the evidence for the energy transition. The uncertainty and methodological limitations of existing evidence combined to give rise to doubts and questions. In other words, the substantive understanding of the climate-change policy problem and the approach to analysing is itself challenged.

Other ways in which the evidence was limited was in relation to the soft measures— qualitative, long-term or difficult to capture. Certainly, where there was evidence on gaps in the goals of the Agreement, included in the National Energy Outlook, there was a push to try harder within the High-Level Committee. This represents a generic problem for climate policy-makers seeking to practise evidence-based policy-making.

4.2 Learning from the Dutch Experience

In broad terms, the Energy Agreement played a role largely by 'unsticking' Dutch energy policy. The Dutch are not 'best in class' but they are making progress in offshore wind and energy savings, in part due to smart policy design and the traction of the multistakeholder agreement. Despite facing considerable challenges in energy and climate, the Dutch are experimenting with a variety of solutions and using deliberative methods to support longer-term planning. While it is imperfect, the Dutch Energy Agreement demonstrates the value of a process and set of shared commitments that helped move energy policy from 'stuck' to 'unstuck'.

But the Netherlands is not a leader in energy efficiency, renewal energy or decarbonisation. Internationally, the countries noted by the World Economic Forum as outperforming their neighbours in providing secure, affordable and sustainable energy are Switzerland, Norway, Sweden, Denmark and France (Mehlum, 2017). But even the Nordic countries face challenges, and one view is that, despite progress there, it shows us that energy 'transitions are more technologically contingent, contextually specific, and politically contested processes than perhaps we would like to believe' (Sovacool, 2017).

The Agreement constituted a significant modification of the traditional Dutch polder approach, although it can be seen as an extension, or perhaps transformation, of it. It created new networks of actors that engaged in joint reviews of progress and renegotiation of goals and actions. This contributed to strengthening a large network of actors, working towards, and sharing knowledge and experience, on a suite of agreed measures across all sectors of society. This seems to provide both a resource and early warning system when shocks/disruptions occur or when mitigation is not being delivered and further measures are required. Even where networks of relevant non-government actors got going, government remained critical in delivering infrastructure and incentives, and regulatory threats where required.

What is yet unclear is the enduring legacy of the networks and connections made within and between stakeholder organisations involved in the Energy Agreement. Some stakeholders considered these networks to be further animated by the move towards a Climate Agreement negotiation process. Others point to the limited engagement of the wider public in the Agreements and their progress. Nevertheless, these networks, created as part of the Energy Agreement process around themed 'tables', demonstrate the potential value of sub-national, sectoral and issue-based deliberation and seem to have made a distinctive contribution, regardless of the overall legacy of the full agreement.

The Dutch experience shows both the potential and limitations of a neo-corporatist deliberative approach where employers and, more recently, industry itself are in dialogue with government and other stakeholders on energy and climate action. Clearly, such a process brings in considerable private finance and the potential to

share some of the responsibility, along with the gaining of environmental NGO support. Other civil society actors and communities have been less engaged to date, despite active networks and connections made within and between stakeholder organisations involved in the Energy Agreement. However, there is increasing recognition in the Netherlands that such wider engagement is also required to further the transition process.

While new mechanisms for monitoring were created, there was little evidence of a process of inquiry and problem-solving in the area of job displacement and reskilling. As a result, the trade unions had a qualified view on the benefits of the Energy Agreement and, for a while, were uncertain about whether to join the negotiation of the climate-change accord.

It is interesting that, despite a fairly encompassing Energy Agreement, Dutch energy policy still faced the opposition of local communities to new wind energy installations. However, the Agreement does seem to have strengthened the ability of the government and the other partners to the Agreement to press the case for increased wind energy. In part, this reflected the large membership base of key environmental NGOs and meant that they both 'delivered peace' and lent their weight to the building of new wind farms in the face of community opposition.

An important feature of the Dutch story is that it demonstrates, in a clear and concrete way, the problems that arise from the dominant forms of policy analysis in the area of climate change. The models and projections of the knowledge institutions, accepted initially by all partners as part of the normal polder process, proved not to be capable of capturing the non-linear dimension of renewable energy diffusion and innovation. This created conflicts of interpretation, and pressure for additional policy measures. As noted earlier, an even starker demonstration of the cognitive problem is the climate-change plan adopted as part of the delayed coalition agreement. The mitigation plan, derived in part from the models of the knowledge institutions, contains as the largest single mitigation action a huge amount of carbon capture and storage (CCS). Not one person interviewed for this research attributed any credibility to such a possibility and the share in the sectoral table was later more than halved in early discussions. Clearly, Dutch climate-change policy, at the level of both government and social dialogue, is now confronting the problem of evidence and analysis.

Another instructive aspect is that discussion among stakeholders in the Netherlands has shifted from narrower energy-related issues in the Energy Agreement to more complex issues, and is increasingly focusing on the problematic questions of the cost of the transition and who pays for it. This is evident, for example, among those who are considering the enormous scale of retrofit investment necessary to make the Dutch housing stock energy-efficient. Some actors are focusing on the 'just transition'—in which jobs, distributional issues, societal support and acceptance figure prominently—while others appear to be seeking to avoid that discussion and focus instead on technological solutions. This points to both the evolving scope and nature of energy transition in the Netherlands but also to how the focus and limits

of what is on the table for discussion have shifted, with agriculture and gas both now included in the Climate Agreement process. What is on the table for discussion will necessarily create the need for more complex negotiations and sophisticated solutions.

As in becoming apparent in the Netherlands, discussion among stakeholders is focusing on the necessary but problematic questions of the cost and who pays for the energy transition. Some actors are seeking just transition (jobs, distributional issues, societal support and acceptance) while others are probably more focused on ways to share the cost of technological solutions.

As illustrated by the Groningen gas fields and seismic activity, disruptive and transformative events act as catalysts for systemic change. This Dutch experience points to the need for both adopting a long-term strategic view of system change and developing more immediate solutions.

4.3 Conclusion

This case study has raised some questions which are posed here in relation to the wider concern of the transition to a low-carbon economy and society.

Four broader questions related to the energy transition are outlined below:

i. What are some key considerations for the use of multistakeholder agreements to progress climate action and the energy transition?

ii. To what extent would more sectoral and sub-sectoral networks and learning processes in key climate-change areas be of value to the development of the Irish energy transition?

iii. In what way could, and should, the existing evidence base and policy analysis for climate-change policy be extended and integrated with Irish climate policy-making and evaluation?

iv. In what ways can the strategic, collaborative and learning role of government be further developed as part of Irish climate governance?

We elaborate briefly on each of these questions.

4.3.1 What are some considerations for the use of multistakeholder agreements as part of the energy transition?

Agreements between government and multiple other stakeholders are varied in their form, function and effectiveness. The Dutch experience of multistakeholder agreements, while shaped by cultural and political factors, has also been a matter of timing and fairly modest expectation. While steeped in the polder tradition, Dutch stakeholders had fairly realistic expectations about what an agreement might achieve. Nevertheless, achieving agreement in 2013 was extremely challenging to do and almost failed. While critics would argue that its lack of ambition renders it fairly weak as an instrument, others point to the momentum it helped to create in energy policy. In this way, such agreements are malleable in terms of their design, their function and scope. They have potential applications for national policy issues, for particular sectors and sub-sectors and for local deliberation over multifaceted challenges. The issue of timing would seem to be central- not just in terms of the development of policy but also of the consensus among stakeholders of the challenge and the capacity for structured dialogue as a means to address it. The value is dependent on many variables, but most significantly, it would seem to be the buy-in of stakeholders and the role of government.

In terms of climate governance at a national level, there are potential benefits in a wide number of stakeholders (and/or political parties) agreeing long term direction and discrete actions for climate and energy transition. They do provide greater policy certainty for business and industry stakeholders and investors- but this requires total government support, even with changes in governments. However, undertaking such a process without achieving agreement also has risks for climate and energy policy development. There are risks in potentially creating an additional layer or structure that has limited impact rather than embedding deliberative processes into existing structures and institutions. As with all deliberative fora, multistakeholder agreements and the processes and structures created to deliver them, may be central to policy progress or may serve to delay or distract from its delivery. There may be issues that are too difficult or politically challenging to include in the agenda for a multistakeholder agreement process, but which would undermine any potential outcome, for example issues around who pays, job losses and social acceptance of renewable energy. In this sense, it is extremely difficult to achieve a participative, inclusive, expert, productive and deliberative policy engagement, particularly on a wicked problem such as climate change. Experimentation at a sectoral or sub-sectoral level would be one approach, given the key role of learning by doing, and this would involve fewer risks.

Of course, multistakeholder agreements are not the only deliberative model to progress policy action in climate and energy matters. For example in Ireland, the work of the Citizens Assembly, and its recommendations on climate are now being deliberated by the Oireachtas Committee on Climate Action.

Key questions arise around the purpose and function of multistakeholder agreements for the particular climate and energy challenges being faced at a

particular time. The pace of transition, along with an appreciation of who shares the burden to act, and an appreciation of the potential losses are some of the critical issues that require consideration. Paying attention to pacing is important in other types of negotiated agreement, where broad societal transitions are required and where "losses" are likely to occur as part of that transition.[41] Acknowledging the 'pain of transition' can be an explicit part of the process. This needs to be done in a considered way, so as to avoid generating unnecessary fear or anxiety among negotiating groups (Day, 2010; Edmondson, 1999). The benefit of this approach—establishing the right pacing and acknowledging losses—is in achieving greater buy-in for the (voluntary) negotiated agreement (Heifetz & Linsky, 2002). Other issues concern the working relationships between and among networks, private and public sectors to undertake deliberation and potentially negotiation over outcomes, and the presence of trust and mutual respect. Finally, there are questions to be considered around the balance between achieving ambitious and realistic and achievable actions.

4.3.2 To what extent would more sectoral and sub-sectoral networks and learning processes in key climate-change areas be of value to the development of the energy transition?

Apart from adding some much-needed momentum to energy policy, arguable one of the most positive effect of the Agreement in the Netherlands was in creating networks of sectoral actors. The Dutch Energy Agreement process involved intensive 'tables' which effectively sought to characterise and agree key actions for particular sectors and sub-sectors. These formed networks of key actors and in a post-Paris context, deliberation and active networks have a more much crucial role in climate governance. This is being increasingly recognised by governments. While it reflects the fact that collaborative governance is a more inclusive and 'just' approach, it goes beyond that. It is a response to the uncertainty about mitigation possibilities and the complexity of delivering them. This includes uncertainty about the costs of mitigation. If both mitigation possibilities and their costs are uncertain, then we do not have a full picture of the trade-off or hard choices involved in the transition. Sectoral and sub-sectoral networks, focused on experimentation and problem-solving, can increase knowledge about the costs and benefits of various possibilities. They would also address the need for a more active process to generate and test mitigation options.

Such sectoral and sub-sectoral problem-solving networks and deliberative processes are different from consultative forums in that they include a process of shared fact-finding and problem-solving, are solution-focused, and aim to converge on definite commitments, and then working to implement them. They usually last longer than

[41] This paragraph draws on notes provided by Council Member Dr Sinead O'Flanagan.

consultations and often require an expert chair, facilitation team and knowledge experts. In an area such as climate change and energy transition, they generally need the support of government and commitment both in terms of providing the mandate for the process but also in following through with monitoring and implementation.

While multistakeholder deliberation has become increasingly used as part of climate governance and climate adaptation in particular (Schenk, 2018), it has been used less often for creative problem-solving with local actors such as those in firms, voluntary organisations, farms, local authorities and households. However, such actors can deliver new evidence and inform policy action with greater accuracy (Cairney, 2016).

4.3.3 In what way could, and should, the existing evidence base and policy analysis for climate-change policy be extended and integrated with climate policy-making and evaluation?

A central theme in our account of the Dutch Energy Agreement, and the characterisation of the climate-change policy challenge, is the emerging recognition of the limitation of the evidence base and kinds of policy analysis commonly used to discuss the energy transition and climate change, at international, EU and member-state level. It is part of a bigger challenge in which the current conceptual and theoretical frameworks available for climate governance and the energy transition may become a hindrance, rather than a help.

If, as is now being recognised, there is huge uncertainty about what mitigation measures are feasible and effective, and how a low-carbon energy, economic and social system can be designed and created, then far more knowledge generation is needed. It is necessary to configure actors to collectively explore the possibilities and to jointly reflect on and learn from their progress. The sectoral and sub-sectoral networks discussed above can be both an important source of evidence and a locus for analytical work. Would a broader approach to evidence, both in terms of what was gathered and how it was examined, be a useful focus for wider deliberation, as outlined in the following section?

International research on the relationship between knowledge, expertise and policy indicates that, as the degree of complexity, uncertainty and ambiguity in a policy domain increases, it becomes less feasible to formulate expert advice in isolation from stakeholders, practitioners and political actors (Bijker *et al.*, 2009).

4.3.4 In what ways can the strategic, collaborative and learning role of government be further developed as part of climate governance?

The question posed here is to what extent the next development of the strategic and learning role of government could lead to lead progress on the directions outlined, in particular in relation to sectoral networks, evidence and analysis? These

require government leadership and structuring. In addition, it is useful to reflect if a number of further lines of action could also be considered to develop the strategic and learning role of government?

Work on building cross-party consensus for the transition to a low-carbon economy and society is required. Politics is increasingly, and necessarily, at the heart of climate governance, both in terms of making hard choices for future energy and climate policy, and in relation to the public and broad stakeholder deliberation needed to deliver it. There is no objective or politically neutral steering of socio-technical systems from the outside (Shove & Walker, 2007; Smith & Kern, 2009). The further development of the strategic role of government should include work to create societal and cross-party consensus for the transition to a low-carbon economy and society.

This points to the critical role of societal involvement and stakeholder engagement in the governance of the transition. The OECD points out that 'the transition will affect everyone, from central and local governments to the private sector, the labour force and citizens, whose divergent interests and influence will come into play. Creating opportunities for workers most affected by the low-carbon transition will be essential' (OECD, 2018).

There is no evidence to suggest that the Dutch Energy Agreement generated public support for the energy transition. It may be an unrealistic expectation that multistakeholder agreements would also serve to foster public engagement and support. It is likely that wider and deeper societal engagement would be needed above and beyond an agreement process.

This raises questions about the economic distribution of resources and growing societal inequality, and the effects of the push to decarbonise. Not just who and how, but when? While broadening the evidence to include qualitative data and wider expertise on the social aspects of transition would be useful, it would be naïve to see this as sufficient to reframe the shape of the policy challenge being discussed since they are shaped by politics, the influence of vested interests and the push for economic growth.

It is worth reflecting what additional collaborative approaches might contribute to existing national and local climate governance arrangements in Ireland. It is also worth routinely reflecting on whether stakeholder engagement and collaboration is sufficiently embedded within governance to support the energy transition for sectors and subsectors, and for particularly challenging issues. Enabling innovation is central to climate governance but solutions require collaboration across sectors within government and between government, business and wider society (OECD, 2015). Are there specific sectors, such as transport, agriculture and energy, in which a wide stakeholder forum that is both problem-solving and solution-focused might be valuable? There are a range of other sectoral inputs and policies that are critical to delivering a transformational approach to emission reductions, where the principles and structures of the Dutch model could potentially be applied.

Focused dialogue that is problem-solving and well-integrated in climate governance and institutions may bring additional value to current climate dialogue structures. It could encourage the sectoral and sub-sectoral approach to develop specific responses to issues across the range of stakeholders and participants who can make a difference. The ongoing challenge with climate policy is connecting the macro-scale reforms needed with relatively small and short/medium-term actions that can be taken within specific sectors or policies that will be an important step in the low-carbon transition but also identify achievable milestones and targets that can pave the way for the economy-wide reforms needed to meet current and future targets.

Building societal reflexivity may be critical in climate governance and its institutions. Reflexivity implies more than the usual 'incremental adjustment' associated with the traditional policy cycle, as it involves deeper reflection on the goals of action and wider societal participation (Voβ *et al.*, 2006).

Appendix A
Swedish and Danish Agreements

Box A.1: Swedish Energy Agreement

The Swedish Energy Agreement was agreed in 2016 following a two-year consultation process through a special parliamentary commission. The agreement consists of a common roadmap for a controlled transition to an entirely renewable electricity system. It was primarily orchestrated to address the issue of nuclear energy.

Energy Context: **Sweden gets more than half its energy from renewables and plans to be carbon-free by 2045. It has reduced emissions while growing the economy, due to its high (83 per cent) use of hydroelectric and nuclear power. Cogeneration from combined heat and power (CHP) plants accounts for 10 per cent of the electricity output in Sweden, and these are mainly powered by biofuels. About seven per cent of the electricity comes from wind power (Swedish Institute, 2018). Swedish emissions fell by 26 per cent between 1990 and 2016 but showed a small increase in the first three quarters of 2017 (2.5 per cent overall) compared with the previous year (SCB, 2018).**

Political Context: **Sweden previously had a nuclear phase-out policy, following a referendum, which aimed to end nuclear power generation by 2010. However, in 2009, an agreement was reached to replace ageing reactors, effectively ending this phase-out policy (Bergenäs, 2009). A parliamentary commission was established in 2014, led by the new minister for energy. The commission lasted nearly two years and focused primarily on nuclear power.**

Process: **An Energy Policy Commission was appointed in March 2015 to prepare a proposal for a broad political agreement on energy policy, focusing on 2025 and beyond. The commission consists of 11 representatives from the parliamentary parties, with Energy Minister Ibrahim Baylan as chair, and three other specially invited stakeholder groups: the directors of Energy Market Inspection, the Swedish Power Network and the Swedish Energy Agency. The terms of reference for the consultation were to find the basis for broad agreement on long-term energy policy, with particular emphasis on the electricity sector for 2025/2030 and beyond, by 1 January 2017.**

The Energy Commission's work was divided into three distinct phases:

***A knowledge-acquisition phase,* in which the Energy Commission took part, which selected scenarios for energy supply up to 2050. Knowledge was reviewed and alternatives formulated. The minister had more than thirty meetings with a range of energy stakeholders, including environmental and trade-union representatives. This approach created a collaborative type of atmosphere among the stakeholders and interested parties, and is deemed to have shaped the overall mandate for the work of the commission.**

An analytical phase **in which the consequences of different scenarios were studied and suggestions for changes to the regulations were made. During the first year of its work, instead of establishing expert groups, the commission organised large, open public conferences and seminars on different themes, with a wide range of researchers and experts from industry, government and civil society in attendance. These public events took place over a full day and were usually broadcast online. Large academic studies by academic and experts (for example, from the nuclear industry) were also commissioned.**

A negotiation phase**, in which the Energy Commission agreed on the main points of an energy policy agreement between five parliamentary parties, in June 2016, and prepared a number of proposals and assessments. The politicians had been involved in the consultations and research for more than a year and were fully aware of the main political problems, the functioning of the electricity market and technical issues. The negotiations were held in private. No civil servants or other stakeholders were involved.**

The overall aim of the 2016 Energy Agreement is to achieve 100 per cent renewable electricity production by 2040; no net emissions of greenhouse gases to the atmosphere by 2045 and negative emissions thereafter, and to develop and approve, no later than 2017, a goal for energy efficiency for the period 2020-2030. Nuclear power can continue but must bear its own costs, and the principle that nuclear power should not be subsidised remains.

Monitoring: **An important part of the Agreement among the five political parties was a commitment to ongoing monitoring and evaluation of the implementation of agreed proposals and that there should be regular meetings of the five political parties who signed up to the Agreement. To this end the five parties meet in advance of every government bill to discuss and agree on it. They also agreed to meet every two years to evaluate progress on the Agreement in general.**

View: **Overall, the process which led to the Swedish Energy Agreement is deemed to have been a success and to have surpassed expectations, which were low at the outset. This success has been attributed to the confluence of a number of factors, including an element of luck and the timing of the new EU legislation on nuclear safety that called for investment without which many of Sweden's nuclear reactors would have to be shut down. The skills of the minister and other politicians who led the negotiations at the outset have also been identified as key to the success of the Agreement, especially in the context of the political risk the minister faced if no agreement had been achieved.**

Since 2016, most of the Agreement and the commission's proposals have been transformed into real parliamentary decisions; for example, with regard to taxation arrangements and radiation safety. Some proposals contained in the commission's report will require longer lead-in times. These have been assigned to various public authorities or public investigators to progress. In January 2017, a roadmap to help Sweden achieve 100 per cent renewable energy production by 2040 was published by the country's Parliamentary Energy Commission, the Climate Roadmap (Naturvårdsverket, 2013).

Sweden also passed a bill to become carbon-neutral by 2045, committing the country to emitting zero net GHG emissions by 2045 (Darby, 2017).

Box A.2: Danish Energy Developments 2012-2018

Since the 1970s, Denmark has managed to readjust its energy model from being highly dependent on imported oil, to being one of the greenest and most energy-efficient countries in the world (Lilleholt, 2015). The Danish Energy Agreement was a party-political agreement to cover the period 2012 to 2018. Agreement was reached in March 2012 by a large majority of political parties, representing 171 seats out of 179 in parliament (Ministry for Climate, Energy and Buildings, 2012).

The negotiations began after a report was prepared by the Danish Energy Agency which drew from an earlier energy plan, the Energy Strategy 2050. This was a political process but followed on from a series of informal stakeholder meetings with government. However, stakeholders were not invited to give their opinion as part of a public hearing process. Information documents were included on the government's website so that stakeholders could keep abreast of what was happening. Although the negotiations were concluded in a matter of months, it was a slower process than had been expected. There was stakeholder pressure on politicians to conclude and reach an ambitious agreement, from both the green energy sector and NGOs.

The agreement contains a wide range of ambitious initiatives to bring Denmark closer to the target of 100 per cent renewable energy in the energy and transport sectors by 2050. The agreement includes the following targets for 2020:

- **more than 35 per cent renewable energy in final energy consumption;**
- **approximately 50 per cent of electricity consumption to be supplied by wind power;**
- **a 7.6 per cent reduction in gross energy consumption in relation to 2010, and**
- **a 34 per cent reduction in GHG emissions in relation to 1990.**

Key elements contained in the Danish Energy Policy Agreement 2012-2020 include measures on: renewable energy in power generation, energy-efficiency measures, green heating measures, renewable energy in buildings, renewable energy in industry, deployment of smart grids, biogas expansion, electricity and biomass in transport, research, development and demonstration, and financing.

The agreement provided a strong instrument which has withstood a change of government despite not having any legal status.

Monitoring: Since the Agreement was reached, the partners involved meet regularly to agree on the way forward and to monitor implementation of initiatives across the various commitments. These meetings are convened by the minister who also chaired the negotiation process.

In 2014, a new political agreement and legislation set out an overall strategic framework for Denmark's climate policy in order to ensure the transition to a low-carbon economy by 2050 and, inter alia, sets a national target of 40 per cent emission reduction in 2050 compared with 1990. Parts of the Agreement are implemented by the Climate Act, passed by parliament in June 2014 (Weihe *et al.*, 2017).

In March 2016 the government launched the Energy Commission, a body intended to prepare recommendations for the objectives and direction of Danish energy policy from 2020 to 2030. The commission comprises nine members from academia and industry with expertise in areas such as energy sector financing, competitive markets and future energy systems. The commission does not include stakeholder representatives but has a more market-based approach. The key task was to draft a proposal for energy policy goals and measures for the period 2020-2030, demonstrating the energy sector's contribution to Denmark's international climate commitments in a cost-efficient, market-based way. The commission published its recommendations on Danish energy policy in 2017.

A new agreement process is under way in Denmark to make commitments for 2020-2030, and providing for reviews every 2-4 years. It is expected this process will conclude by autumn 2018.

There will also be a specific plan on climate action in addition to this energy agreement process which will focus on strategies to reduce emissions, and meet international commitments.

The IEA has argued that the Danish tradition of broad energy agreements has provided predictability and continuity in energy policy (thus creating a good environment for investors) (IEA, 2017). Danish energy policy has been based on a broad consensus in the Danish parliament, which has provided a stable, long-term political framework for the growth of renewable energy and climate action. For the second consecutive year in 2017, the World Energy Council ranked the Danish energy system as the world's best (World Energy Council, 2017).

Appendix B
Dutch Energy Context

Recent data from Statistics Netherlands (CBS) shows a slight decline in GHG emissions in 2017, despite growth in the economy.[42] Emissions were one per cent lower than in 2016 and 13 per cent lower than in 1990. However, there is a projected increase in emissions in the ETS sector between 2020 and 2030, primarily due to an increase in the use of coal power. In the Urgenda Climate Case (a court case against the state) of 24 June 2015, the Dutch court ruled that emissions must be reduced by at least 25 per cent by 2020 relative to 1990.

The output of gas export and production, oil refinery, electricity production and grids contributes approximately €36bn yearly to the Dutch economy.[4] This contributes to the Netherlands being one of the most fossil-fuel and CO2-intensive economies among IEA member countries (IEA, 2014). Fossil-fuel energy consumption (as per cent of total) in the Netherlands was reported at 91.36 per cent in 2015, while 98 per cent of Dutch households use gas for cooking and to heat their homes (Government of the Netherlands, 2018c).

In 2016, the proportion of renewable energy was six per cent, due primarily to wind energy and biomass. This proportion is expected to grow to 12.4 per cent in 2020 and the projected share is 16.7 per cent in 2023 (PBL, 2017). This means that, in just four years, this proportion is projected to rise at a rate greater than it rose between 2000 and 2016, when an increase of 4.4 percentage points was achieved.

Carbon emissions are expected to meet the GHG 2020 target of 16 per cent below 1990 levels, with PBL estimating it to be 23 per cent. This will fall short of a requirement by Dutch law to reduce emissions by 25 per cent since 1990 (as per the Urgenda case).

The current LTA covers the period 2005-2020 and is referred to as the Long-Term Agreement on Energy Efficiency for ETS enterprises. Over 1,000 companies and over 40 sectors have signed the LTAs (NL Agency, 2011; Zhang *et al.*, 2018; Immerzeel-Brand, 2002). The Dutch energy transition is not of interest because of exemplary performance in decarbonisation; the Netherlands has a long way to go in terms of renewable energy and reducing carbon emissions. Rather, it is valuable to see how only in recent years has progress been made through offshore wind developments and biomass, coupled with the Energy Agreement and heightened governmental

[42] In 2017, greenhouse gas emissions in the Netherlands amounted to 193 billion CO_2 equivalents while in the period 1990–2017, the Dutch economy grew by 73 per cent. To meet 2020 targets, Dutch GHG emissions should not exceed 166 billion CO2 equivalents. The limit for 2030 is 113 billion CO2 equivalents. This does not include emissions by international air and maritime transport (CBS, 2018).

ambition. Total renewable energy use was just 1.1 per cent of overall energy use in 1990 and was at six per cent in 2017.[43] Last year the Netherlands generated 10 per cent more energy from renewable sources than in the year before (Pieters, 2018c). The next steps of its energy transition are becoming clearer, although not without challenges, as ambitious targets have been set to reduce emissions by at least 49 per cent by 2030 and to dramatically reduce the use of gas as well as closing coal plants by 2030, combined with ambitious levels of carbon capture and storage. Offshore wind alone is projected to generate over a third of all renewable energy in the country and more than half of all electric power by 2030 (Tijs, 2017). The Dutch government also plans to impose a minimum CO2 price, or carbon floor, starting in 2020. A clear benefit is that the proposed plans will result in substantial job creation, including via the installation of renewables, especially offshore wind, power networks and energy efficiency measures.

As with all transitions, the milestones and disruptions are unique and unpredictable, but there is a momentum in Dutch energy and climate policy that is noteworthy.

[43] https://ec.europa.eu/energy/en/topics/renewable-energy/progress-reports

Table A.1: Dutch Climate and Energy Context

	Netherlands
Population	17m
RE Target 2020	14%
Current RE share (2016)	6%
Projected RE share 2020	12.4%
GHG levels (2016)	196 million tonnes carbon dioxide equivalent (Mt CO2eq)
GHG target 2020 (non ETS) since 2005	16%
GHG (2016) compared with 2005	8% below (214 Mt CO2eq) (Coenen *et al.*, 2017)
GHG (2016) compared with 1990	11% below (223.1Mt CO2eq)
Projected GHG for 2020	170 Mt CO2eq 23% below 1990 level
Projected GHG for 2030 (PBL, 2017b)	154 Mt CO2eq 31% below 1990 level
GHG non ETS Target 2030	36% below 2005 levels
National policy position	At least 40% GHG reduction by 2030 but potential for 49%
Legislative and broader context	Well-established system of environmental laws. Dutch Environmental Management Act (EMA). Climate Law under development in 2018; Dutch Environmental Management Act (EMA); Environment and Planning Act (new) which will combine and simplify the regulations for spatial projects.

Figure A.3: List of Participating Stakeholders in Dutch Energy Agreement

Source: van der Wijst (SER), A witness report of the realization of the Energy Agreement, July 2015.

Table A.2: Indicative Share of GHG Reductions by 2030

Domain	Reduction by 2030 (Mt)	Measures
Industry	1	Recycling
	3	Process efficiency
	18	Carbon capture and storage
Transport	1.5	More fuel-efficient tyres, European standards, electric vehicles
	2	Biofuels and measures by cities
Built environment	3	Optimising energy use of office buildings
	2	Home insulation, district heating and heat pumps
	2	New builds that are more energy-efficient
Electricity	1	Energy-efficient lighting
	12	Shutting down coal-fired power plants
	2	Carbon capture and storage at waste incineration plants
	4	More offshore wind power
	1	More solar power
Land use and agriculture	1.5	Smarter use of available land
	1	Lower methane emissions
	1	Energy-producing greenhouses

Source: Government of the Netherlands, 2017c

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