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Master Thesis

Governing a sustainability transition:

A study of the sustainable development goals in the Norwegian state

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Abstract

This thesis explores the role of the government, ministries, and agencies in sustainable transitions. With a focus on the Norwegian government, the ministries responsible for the SDGs in Norway, as well as three specific agencies, the thesis aims to shed light on the complex role of these incumbent actors in bringing about transitions, and more specifically, implement and use the SDGs in their reporting.

To analyse the topic, I am employing a case-study and document analysis approach, and first looking at key political documents from the Norwegian government, including white paper 40, which anchored sustainability at the highest political level in the country. Subsequently, I am using a simple quantitative analysis to measure several keywords related to sustainability and the SDGs, and their appearance in letters of allocation and annual reports from 18 public agencies and their respective ministries. Lastly, through a documents analysis using NVIVO, I will be looking at the integration and appearance of SDGs in three particular cases: The Norwegian Environment Agency, the Digitalisation Agency, and the Labour and Welfare Administration.

The analysis is built on and accompanied by the multi-level perspective, mission-oriented innovation, transformative innovation policy, transition management, and associated concepts of policy and governance. The study finds that sustainability and the SDGs are being implemented at a high-level of political anchoring, and that expanding coordination across the government and public sector is part of a diffusion of power to enable this implementation. Nonetheless, reporting criteria are not clear nor direct enough, and thus the ministries and agencies lag behind in annual document communications. Nevertheless, the government and public sector exude both top-down and bottom-up management, but the effect of this is still in its early phases.

Acknowledgments

As I am finishing the thesis, I feel grateful for the experience of the process, and everything I have learnt while exploring a very salient and interesting topic. While I am ready to go on to other endeavours, it is with a slightly sad feeling that I am leaving the student life. I will cherish my time with amazing friends and co-students from the TIK Centre for Technology, Innovation and Culture, and I believe our time was only better in such a good group of people. So thank you for that.

I want to express my gratitude to Deloitte consulting, who issued a call for a master student to write on the topic of SDG implementation in the Norwegian public sector and took me in to do this. I had for years wanted to explore and find out more concretely what is being done for sustainability in the country, and this gave me the perfect opportunity. Likewise, thank you to my supervisor Håkon Endresen Normann, for helping me on my way, and providing wise insights and feedback, even when I felt very lost.

I most of all want to thank my family for their full support and motivation, and my partner Vilde for always listening to my ideas, complaints, and otherwise boring monologues, and providing pertinent and key solutions and approaches. You have all been with me through my full higher education, and I would never have made it without you.

Oslo, May 2023

List of Abbreviations

DFØ	the Norwegian Government Agency for Financial Management		
ForUM	Forum for Development and Environment		
IPSASB	International Public Sector Accounting Standards Board		
KDD	the Ministry of Local Government and Regional Development – Previously the Ministry of Local Government and Modernisation (KMD)		
KS	the Norwegian Association of Local and Regional Authorities		
MLP	Multi-level perspective		
MOIP	Mission-oriented innovation & policy		
NAV	the Norwegian Labour and Welfare administration		
R&I	Research and innovation		
SD	Sustainable Development		
SDG(s)	Sustainable Development Goal(s)		
SSB	Statistics Norway		
STI	Science, Technology and Innovation		
TIP	Transformative innovation policy		
ТМ	Transition management		
UN	United Nations		
WP40	white paper on goals with meaning - Norway's action plan to achieve the sustainability goals (Meld. St. 40 (2020–2021)).		

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1. Introduction

1.1 Introduction and background

As we are facing major challenges, from increasing climate change to rising inequality, sustainable development (SD) has come to encompass our approach to these issues. A debated but increasingly salient topic and term, SD can be seen as an open-ended orientation for change. I understand it in correlation to `transitions`; an all-encompassing idea of change, but in this case specific to SD and the promotion of human well-being, meeting basic needs of future generations, preserving environmental resources and respecting global limits of nature (Grin, Rotmans and Schot, 2010a, p. 2). Understood synonymously by O`Brien (2019), 'transitions' and 'transformations' are increasingly embraced in sustainability discourses, as we understand that changes in form and structure of, in this case, the political sphere, are needed to achieve SD and solve issues (O`Brien, 2019). This thesis focuses on this political sphere, as representing systems and structures that may hinder or aid transformative change for SD, politics and policy, and thus governance, are often what transitions are dependent on (O`Brien, 2019, p. 204).

SD requires governance, or the process of orienting socio-political governance towards attaining sustainable development, and it encompasses procedures and processes such as identification of issues, setting policy goals and consequent implementation and monitoring, and negotiations and complex interactions among government entities (Meadowcroft, 2007, p. 299; Biermann, Kanie and Kim, 2017, p. 75). Broadly, governance implies how a country is governed.

To organize SD into concrete and coherent measures and targets, 2015 saw the adoption of the 2030 Agenda, or the United Nations (UN) Sustainable Development Goals (SDGs) (UN, 2015). Containing 17 goals with 169 sub-targets and covering areas from fighting poverty and promoting gender equality to preserving the environment (Appendix 1), the SDGs were meant to mobilize governments and organize collective action towards grand challenges. The SDGs represent a commitment to a sustainable future, and by establishing a framework and concrete objectives for action, the goals provide a common vision and language for goal achievement, in theory enabling us to report on progress and obstacles. An objective of utmost importance is thus translating SDG aspirations into national policy, which requires functioning systems and significant capacities to modify governance at national levels to take account of these new ambitions (Kanie and Biermann, 2017).

1.2 Aims and objectives of the thesis

Since 2015, the SDGs have been followed up in a variety of ways and by various actors. In the corporate world, sustainability reporting has become increasingly regulated as a way to implement SD and the SDGs, and frameworks are adopted ever faster (Deloitte, 2022). Likewise, requirements are being imposed on and in the public sector, with sustainability rising on the political agenda. Nonetheless, there are significant differences in the sustainability reporting of the private versus public sector, with the latter being much less pronounced and studied (Ekins and Usubiaga, 2019; Manes-Rossi, Nicolò and Argento, 2020; Johansson, 2022). There are several barriers to sustainability reporting in the public sector, with the integration still being in its early stages (Hege, Brimont and Pagnon, 2019; Sanderson, 2021). For example, the International Public Sector Accounting Standards Board (IPSASB), which works to improve and create standardised mechanisms for financial reporting in the public sector, has just recently started work to develop guidance on sustainability reporting (IPSASB, 2022).

Furthermore, while national governance is crucial to achieve SDGs, the role of the state has been given arguably too little attention in the sustainability transition literature (Johnstone and Newell, 2018; Borrás and Edler, 2020). The success of the SDGs in a national context largely depends on ways the state formalizes and implements commitments with integration in daily sectoral policies (Biermann, Kanie and Kim, 2017). Several countries have begun to implement and manage SDGs, with incorporation of sustainability into administrative systems rising. However, accomplishments and national goal attainment vary, and most countries lag behind in SDG implementation (Meadowcroft *et al.*, 2019; Monkelbaan, 2019). Despite new modes of governance that promote cross-sectoral integration and increased coordination across levels of government, significant shortcomings exist (Breuer, Leininger and Tosun, 2019).

In Norway it has been proclaimed that the SDGs constitute the main political track for addressing the greatest challenges of our time (Utenriksdepartementet, 2022). As a well-developed country, Norway is at the top of achieving most goals, excluding 2, 12, 13 and 15 (OECD, 2022). Many governance and policy changes indicate that Norway is well on the way, including Norway designating a central coordination entity for the SDGs, sharing responsibility of the goals across ministries, and publishing an action plan for SDGs – the

white paper on goals with meaning - Norway's action plan to achieve the sustainability goals (Meld. St. 40 (2020–2021)) (Kommunal-og moderniseringsdepartementet, 2021). Hereby referred to as WP40, the report to the Storting examines the 17 SDGs in a Norwegian setting, and marks an achievement and progress as the first major government document focused on exclusively SDGs. This high-level anchoring of SDGs at the highest political level should signal a focus and be reflected and cause further sharpening of requirements for goal and performance management of government agencies. Nonetheless, it is not fully clear how far national ambitions are taken, translated, and reflected in other parts and aspects of Norwegian governance. Thus, the goal of this thesis it to examine SD emphasis in the context of the Norwegian public sector and the way SDGs have been, or are, integrated into governance. I therefore pose the thesis question:

"To what extent, and how, are the Norwegian governments' ambitions in sustainable development reflected in the governance of government agencies?"

This thesis examines the role of sustainability in the administration and governance of government agencies, as well as the extent to which sustainability-related requirements are established in government documents. I employ a three-part focus, starting out broadly by studying Norwegian agenda-setting and sustainability implementation through a range of documents, most notably being WP40. A key document, it helps establish a timeline against which I examine governmental entities. The thesis subsequently zooms in on annual allocation letters issued by ministries to underlying governmental agencies. Additionally, analysing corresponding annual reports provides valuable information regarding the governance in and of the public sector, for sustainability. This thesis explores vertical and horizontal intragovernmental organisation and coordination, with the specific focus on governance and reporting mechanisms for sustainability across governmental levels. To realize this and answer the thesis question, I suggest a set of underlying sub-questions to guide the analysis. I will seek to answer what changes of sustainability reporting are visible across all three levels, from the government to ministries and agencies. This can bring forth what sustainability targets and requirements are put to the forefront, and how these criteria and requirements are presented, framed, and set. Lastly, I seek to answer if the implementation and efforts for the SDGs in the Norwegian public sector seem to follow more of a top-down or bottom-up approach. Being guided by these sub-questions eases the task of answering my thesis question and illuminates more concrete ways of seeing SD reflected in practice.

Regarding the use of political terms, this thesis does not have a primary focus on politics and does thus not wish to delve deep into exploration of differences. Nonetheless, in some cases, the "state" is used to reflect a broader encapsulation of both government and public policies, while "government" indicates both collective action through the legislative, executive and judicial powers of governments, but in most cases solely the executive power consisting of the administrative branches of public administration at different levels (Borrás and Edler, 2020, p. 3). However, for simplicities sake and to avoid confusion, I largely use "state", "government", and even "public", synonymously. It should nevertheless be noted that these differences are arguably major, and could shift the focus of the paper depending on which definition one goes by.

1.3 Thesis structure

This thesis consists of six chapters. Starting with a thematic theory review following this introduction, I explore the multi-level perspective (MLP), the missions approach, transformative innovation policy (TIP), transition management (TM), and various associated concepts from policy and governance. This eclectic way of mixing frameworks and concepts allows to build on various strengths and weaknesses, and better answer the proposed questions while reaching the aims and objectives. MLP sets a baseline for the unfolding of socio-technical transitions, and as a middle-range theory, it invites the implementation of complementary elements from other theories to study more substantive mechanisms of transitions (Schot and Geels, 2010, p. 19; Farla et al., 2012). I use the missions approach to comprehend how SDGs and efforts to achieve them are distributed across vertical and horizontal levels of coordination and structures of power, where the overall grand challenge is defined and set by the highest level of government and implemented by ministries and other government agencies. Both TIP and TM build upon concepts of coordination and governance changes for sustainable transitions, while also delving deeper into system transformations through concepts such as directionality and reflexivity, to better explain micro-processes of transitions (Schot and Steinmueller, 2018b; Löhr, Chlebna and Mattes, 2022). As these frameworks are share conceptual ideas and are closely aligned in a focus on governance in and for transitions, their amalgamation provides a stronger explanatory capacity for the case study. This thesis thus adds to the academic literature by combining transitions literature with a focus on governance and reporting of SDGs.

Chapter three presents the methodology, as I utilize a case study approach of the Norwegian public sector. To answer the research question, a practice-oriented approach, and mixed qualitative-quantitative methodology is explored through NVIVO and document analysis. Chapter four consequently moves onto empirical findings, as I first present the governance and management of the Norwegian state, before examining sustainability in the country`s governance and politics closer. This leads us into WP40 and reporting practices, before chapter five attempts to coalesce and discuss results from an NVIVO document analysis of allocation letters and annual reports from three ministries and underlying agencies.

2. Theory and literature review

In this following section, I present an overview of the literature related to my thesis. I am interested in the role of the government and state actors in transitions, and how they figure in steering and implementing of SDGs into practices, routines, and policies. I start by introducing perspectives on sustainability transitions, before briefly placing SDGs within this field.

The chapter explores the role of the government and state sector and how they can and do drive transition processes and visions. Following this overview, I introduce some frameworks which have emerged within transition studies, including mission-oriented innovation & policy (MOIP), the multi-level perspective on socio-technical transitions (MLP), transformative innovation policy (TIP), and transition management (TM). Adjacent literature connected to the study of politics, governance, and coordination is included. All frameworks invoked offer important conceptual terms and understandings that may be extrapolated. This review is necessary to better understand the role of the government, ministries and underlying agencies in implementing transition ideas.

2.1 What are sustainable transitions?

We are today in the middle of several monumental and drastic societal changes, stemming from a variety of elements. Crucially, the world is facing a flux of grand challenges and wicked problems, from climate change and biodiversity loss to social exclusion. Defined as being "complex, tangled, convoluted and almost unsolvable" (Normann *et al.*, 2022, p. 13) due to their inherent characteristics, wicked problems and grand challenges have led to a huge interest in the field of sustainability transitions, which seeks to answers questions related to these challenges, and how to deal with them. Although these various wicked problems and challenges in whole systems. An approach to understand how such transitions, or the system changes, take place is thus necessary, and this thesis thus looks at the topic from a variety of perspectives.

Markard, Raven and Truffer (2012) define sustainable transitions as "long-term, multidimensional, and fundamental transformation processes through which established sociotechnical systems shift to more sustainable modes of production and consumption" (2012, p. 956). Building on this, another definition claims that "transitions involve mutually coherent changes in practices and structures" (Grin, Rotmans and Schot, 2010a, p. 3), and in specific `sustainable` transitions, where the change is shaped towards the specified normative orientation, the "multilayeredness and inevitable entrenchment in society" (ibid.) makes the transformation of practices and structures difficult. Transitions evolve in socio-technical systems and require transformations of these systems. They are therefore fundamentally different than only introducing radical technological solutions, and require multiple changes in all elements of societal configurations (Schot and Steinmueller, 2018b, p. 1562). Thus, to better understand and explain them, we must understand the role of technologies, and also of actors and institutions (Farla *et al.*, 2012; Markard, Suter and Ingold, 2016; Schmid, Knopf and Pechan, 2016; Fuenfschilling, 2019; Löhr, Chlebna and Mattes, 2022, p. 252).

Sustainable transitions involve not only changing processes, activities, and habits, but also the politics, discussions and negotiations surrounding the transition, and this is where we see the multi-dimensionality of transitions (Löhr, Chlebna and Mattes, 2022, p. 255). There are dimensions of actors and organizational structures, as well as politics, institutions and regulations, that need to be taken into account in sustainable transitions (Geels, 2004; Markard, 2018). These dimensions are often prominent in both accelerating transitions, but also slowing them down. Institutional inertia - the resistance of regimes to remain relatively strong and hinder timely adjustments, and political lock-in - mechanisms that create stability and path dependence -, are strong forces met in sustainable transitions (Turnheim and Geels, 2013).

MLP, which is explored in the next section, defines transitions as "co-evolutionary processes that require multiple changes in socio-technical systems or configurations" and multi-actor processes requiring interactions between different groups (Schot and Geels, 2010, p. 11). Transitions are long-term processes which may see breakthroughs quickly, but new socio-technical systems only gradually emerge, and this entails "radical shifts from one system or configuration to another", as understood in scope, rather than speed (Ibid.). Similarly, Rotmans & Loorbach (2010) and Rotmans, Kemp and Van Asselt (2001), writing in the TM framework, present transitions as gradual and continuous processes of change in a long-term timeframe, where whole structural or sub-system characters of systems are transformed through a range of possible paths (ibid., p. 16). In TM, transitions are seen as gradual and continuous processes of change, with a change of the structural character of society over a generation or more (Rotmans, Kemp and Van Asselt, 2001, pp. 15–16). The process seeks to

change the deep structure of systems, called the incumbent regime. This regime is the "dominant set of structure, culture and practices", acting to reinforce and stabilize the cohesion of societal systems through its cognitive, normative, and regulative institutions (Rotmans and Loorbach, 2010, p. 110). In TM, the regime responds to threats from both the niche and landscape levels, and either mobilizes resources and practices from within the regime, or even the niche, to respond to threats.

Ultimately, I understand transitions as both the notion of transformative change leading to more a sustainable society and system, as well as the process of `transition` itself, which the government is an essential part of and contributes to. We can thereby draw the implicit conclusion that transitions happen when there are changes in often-entrenched structures and practices of socio-technical systems.

2.2 Drivers and barriers of transitions

Missions literature represents an approach to tackling grand challenges and achieving transitions. The literature has expanded following increased attention to wicked problems and grand challenges - the intertwined and complex issues only solvable through larger sets of interactions and solutions (Edler and Fagerberg, 2017; Mazzucato, 2018).

The problems have no clear agreement on their scope, nor on the possible solution(s), and there are even differing opinions on the ways to go about solving them, and which solution(s) are good or bad (Head, 2022). Head (2022) also lists three differences of problems. First, the degree of conflict: there will always be multiple understandings, value connections and allegations towards challenges, such as the reason (and even existence) of climate change, as well as different interest being challenges by problems to different extents. Secondly, the degree of complexity: issues are cross-sectoral and multi-dimensional, but accountability is often not taken. Finally, the degree of uncertainty: related to both the risks and consequences of acting or not acting on the issues, exemplified in arguments for and against investing in climate mitigating solutions now for economic stability later, as well as the uncertainty and risk connected to available and feasible solutions, and their costs (Wanzenböck *et al.*, 2020). These dimensions of grand challenges serve to illuminate the difference of issues we face. While we managed to put people on the moon in 1969, a grand sustainability challenge of

today, such as poverty, is not yet solved (Nelson, 2011). The transitions needed to solve the problems of today are thus not the narrow and technical successes of yonder, but challenges that can be reached through missions.

As the name implies, missions are initiatives, activities and tasks set to solve societal challenges, characterized by cross-sectoral learning, investment and collaboration, and most importantly, directionality, as they need to be well-defined to be able to succeed at their respective tasks (Mazzucato, Kattel and Ryan-Collins, 2020). Further, the missions literature envisions solutions and interventions to be both bottom-up and top-down initiated, with a larger portfolio of projects at the bottom, with broader missions in the middle, hopefully solving the grand challenges identified from, and placed, on the top of a multi-layer structure (Kattel and Mazzucato, 2018; Mazzucato, 2018). As stated by Mazzucato (2018, pp. 811–812), the missions must be targeted, time-bound and measurable, and of wide and ambitious relevance, while still being feasible. This mission thinking has been institutionalized at a high level through the European Union Horizon 2030 framework (EC, 2021), but is still somewhat missing in Norway. Nonetheless, reports have shown the applicability of the approach in Norway, and have even been commissioned by government agencies who seek integration (Larrue, 2021; Solberg *et al.*, 2021; Normann *et al.*, 2022).

Similarly to the missions approach, other academics show changing perspectives and ways to look at transitions over the years, with different authors attempting to delineate aspects of innovation and policy (Kuhlmann and Rip, 2018). For example, Schot and Steinmueller (2018b) delineate three framings, or generations of research and innovation (R&I) policy, which are expanded on later. Comparatively, Edler and Fagerberg (2017) show changes from invention-oriented, to system-oriented, and finally mission-oriented policies, through which elements and dynamics of policies for the sake of transitions change. In the mission-oriented policy era they describe, solutions are designed for specific challenges in relation to the political agenda, with clear objectives in terms of furthering state competitiveness. Boiled down, this illustrates how grand challenges have caused rethinking about how we work with innovation and policies for transitions, with missions-oriented policies for example giving directions to existing systems of innovation.

MLP is a prominent framework for describing the effect of broader and more fundamental changes in systems on transitions. For the purpose of this thesis, MLPs processes and

elements are described succinctly. The framework defines "transitions as changes from one sociotechnical regime to another" (Geels and Schot, 2007, p. 399), which happens through the alignment of processes and interactions between and within three levels; the niche, exogenous landscape, and sociotechnical regime (Geels *et al.*, 2017). In practice, this invocation of sociotechnical regime transitions is a specific form of transition, understood as changes to a form of regime built on sustainable principles. Geels with other academics have for long been intrigued by changes in regimes, or the sociotechnical system itself, which is "stabilized by lock-in mechanisms [...] but experiences incremental improvements along path-dependent trajectories" (Geels *et al.*, 2017, p. 1242). As policy and politics are essential parts of regimes and somewhat guide transitions, it is interesting to study them, and so I later go deeper into government and government agencies as regime actors and institutional structures. Nevertheless, MLP also states that transitions occur when niche-innovations build up internal momentum and manage to become aligned and stabilize in a dominant regime, while landscape pressures forces or pushes the regime to change, which is then destabilized to various degrees (Geels and Schot, 2007, pp. 400–401).

Geels and Schot (2007) categorize 4 different ways in which transitions, or regime shifts, can happen, and what these pathways are. Using timing and the nature of multi-level interactions to refine the understanding of MLP away from a strictly niche-driven, bottom-up view, they present pathways of transformation: de-alignment and re-alignment, technological substitution, and reconfiguration. While all pathways have academic virtue, there are primarily two that are applicable in the case of regime changes and transitions involving SDGs and the public sector - the transformation and reconfiguration pathways. In the transformation pathway, the main actors are regime and outside group actors (e.g., social movements), and changes happen early in a disruptive stage as outsiders put pressure on the regime, and due to limited niche developments, the regime can modify the direction of its development path (Ibid., pp. 406-407). Thus, the regime changes from within and "new regimes grow out of old regimes through cumulative adjustments and reorientations" (Ibid., p. 407). An example of this can be the reorientation of established car producers to electric vehicles, a niche development, or how Equinor and Aker solutions are focusing more on renewable solutions. Regime actors are again central to the reconfiguration pathway, as they adopt niche innovations as add-on or component replacements to their own basic, regime architecture (Ibid., p. 411). The major difference between this pathway and the transformation

one, is that the basic architecture of the regime must be further adjusted from the adoption of new components, which in most cases happens if several accumulated changes come together.

TM argues that wicked problems are persistent in modern societies, complex due to deep entrenchment in societal structures, have high uncertainty, and are difficulty to manage (Rotmans and Loorbach, 2010, pp. 107–108). Solving them requires a transition, or restructuring of societal systems, from infrastructures and institutions including rules, regulations and collective organizations, to cultural changes of perspective and paradigms of problem and solution definition, and practices, or the collection of routines and behaviour used to handle problems and implement solutions (Ibid., p. 109). However, such transitions are not uniform, nor is the process deterministic. Transitions involve several paths of development and across different phases (Rotmans, Kemp and Van Asselt, 2001, p. 16). From a "predevelopment phase of dynamic equilibrium" without visible changes to the status quo, to the take-off phase where the state of the system starts shifting, a breakthrough phase with "visible structural changes", and finally to a stabilization phase where "a new dynamic equilibrium is reached", different social processes occur in different domains and gradually introduce new practices and rules (Ibid., p. 17). However, as before, transitions through these phases are slow and hindered by entrenched stability of systems, inertia and lock-in. As we are arguably still early in the slow-moving phases, it could explain why little has been done with sustainability reporting in the public sector. This would rather be a guiding goal of the state, to be found in the ending, stabilization phase.

Transitions additionally occur through different patterns and mechanisms, such as variation and selection, adaptation, transformation, and decay (Rotmans and Loorbach, 2010, pp. 131–135).

While these elements are not controllable, governments and policies can attempt to influence the direction, scale, and speed of them (Ibid., p. 16). Through this approach, transitions happen gradually and "without too much destructive friction in the form of social resistance", but new elements are rather added to the existing system to solve challenges (Ibid., p. 25).

2.3 What is the role of SDGs in sustainable transitions?

The third framing for innovation policy by Schot and Steinmueller (2018b) proposes that policy is vital for transformative change, which aspirations are arguably captured through the SDGs and the associated social, economic, and environmental concerns. This idea is supported by others, who call for deep, deliberate, and long-term structural changes across all societal sectors, for the main purpose of achieving the SDGs (Sachs *et al.*, 2019). By stating that "SDG transformations must be directed to meet time-bound, quantitative targets, such as net-zero carbon emissions by mid-century" (Ibid., p. 811), it provides both a clear role *to* SDGs in transitions, but also gives transitions a clear purpose – SDGs themselves.

The missions literature reflects a similar idea through the conceptualization of transformative types of missions, which are targeted towards more complex issues involving social changes, such as the reduction of food waste (Normann *et al.*, 2022, p. 8). The SDGs, and sustainability in general, are clearly directed towards grand challenges and wicked problems, the main culprits missions aspire and should combat, and could be looked at as mission objectives reachable through transformative or hybrid types of missions.

In view of MLP, SDGs are arguably both a landscape pressure in the form of societal goals and as results of changing cultures, values, and priorities, as well as the backdrop for nicheinnovations and coalitions building on sustainability concepts and attempting to reach the regime.

2.4 What is the role of the government and public sector in transitions?

By virtue of urgent and critical challenges faced in society, and the wide transitions literature previously covered, there have been increasing calls for a bigger role of the state (Mazzucato, 2015). However, scholars have noted that the role of state in transitions is underdeveloped, and it is being reconsidered by several researchers and policy circles (Grin, Rotmans and Schot, 2010b; Johnstone and Newell, 2018, p. 72).

Building on transitions literature, Johnstone and Newell (2018) present a categorization on how and why we conceptualize the changing role of the government in transitions.

First, following MLP, the government has an implicit presence in transitions due to being a part of the focal regime configurations and being studied as part of the internal factors of a socio-technical regime (Geels and Schot, 2007). In this context, the government has traditionally been the central financing motor for sustainable technologies, or for protecting and nurturing niches (Schot and Geels, 2008; Nill and Kemp, 2009; Witkamp, Raven and Royakkers, 2011; Bakker, van Lente and Meeus, 2012; Farla *et al.*, 2012, p. 995; Musiolik,

Markard and Hekkert, 2012; Quitzau, Hoffmann and Elle, 2012; Raven *et al.*, 2016). However, if we seek to challenge incumbent powers in transitions, it is important to move on from an over-emphasis on niche developments, and recognize the way the government is embroiled in networks and structures of "incumbent material and institutional power" (Unruh, 2000; Geels and Kemp, 2007; Smith, Voß and Grin, 2010; Geels, 2011; Turnheim *et al.*, 2015; Raven *et al.*, 2016; Johnstone and Newell, 2018, p. 79).

Related to this is the idea of destabilisation and discontinuation, which sees not only the promotion of niches, but also the weakening of regimes through policy mixes (Turnheim and Geels, 2012, 2013; Kivimaa and Kern, 2016; Johnstone and Kivimaa, 2018). Lastly, it is important to account for the multi-functionality and multiple dimensions of state power - which means that we look not only at a narrow view of legislation and regulations from one homogenous point of control, but also at how the government and state has multiple sites of power and drivers of transitions, including a holistic view of power distribution across for example ministries and agencies (Johnstone and Newell, 2018, p. 75). Thus, we must delve deeper into understanding both the role of the state and government in transitions, while examining the nature of the state in and from different perspectives and contexts, and the "processes which (re)produce the assemblages of the state", such as coordinating processes between entities (Ibid.).

Taking a step back to MOIP, the government has a clear and crucial role to play in innovation and technology development. As Nelson (2011) found in analysis of innovation systems in the sectors of aerospace & electronics, health, and agriculture, the government influenced both rate and direction of technological change. Yet, this role might be slightly more difficult to pinpoint once we stray from specific sectors or technologies to an overarching objective of sustainability and the SDGs. Nonetheless, this seems to be the point of the modern missions approach. The government may still retain a valuable role by establishing strong systems of testing, evaluation, and information dissemination (Ibid.), for example through the intake of new practices or routines in public sector reporting, and the ways in which SDGs are monitored. Further, missions oriented towards less particular objectives, e.g. accomplishing SDGs, could benefit from a governance structure reorientation to something more decentralized, again pointing to the power distribution of the state.

In dealing with cross-sectoral and society spanning issues, it is obvious that all parts of the government must be involved in a variety of roles, showing us the government's multifaceted role. This involves the different ministries and agencies with their own sets of rules and

procedures, shared and divided responsibilities, and daily tasks to be accomplished, as well as more specialized agencies. Nonetheless, the government must still be able to impose top-down objectives and problem definitions, as this is a precondition for missions (Normann *et al.*, 2022). In addition to investing and taking risks for ambitious objectives, the government must also mobilise a wide range of actors across sector and policy areas to give missions legitimacy and better development opportunities (Boon and Edler, 2018). Most importantly, the government must consolidate a higher level and degree of coordination across areas, and the anchoring of missions at the highest political levels (Mazzucato, 2018; Normann *et al.*, 2022, pp. 18–20).

Assembling some aspect of such mission ideas with transformations, is TIP. Schot and Steinmueller (2018b) delineate three framings, or generations of R&I policy, as they believe it is important to "engage in frame reflection for designing and implementing effective policy solutions for complex policy problems"(Ibid., 1554), those being transitions and the goals sought to be achieved. By engaging in frame reflection and providing framings or generations for implementing policy solutions to tackle complex problems, Schot and Steinmueller (2018b) show how each frame defines roles and actions of actors, including the government. The first generation, innovation for growth, comes from the period right after World War 2, and focuses on the government's role to finance science and technological development for the sake of economic growth, national prestige, and ideological competition versus the socialism. The government and policymakers were expected to sponsor and define the pursuit of missions, and much of this focus can still be seen today – with the government mechanisms still funding basic research and R&D.

The next generation of framing, national systems of innovation, was a response to modern consequences to states – globalization, international competition, and the like. Different versions of national systems of innovation were propositioned (Freeman, 1987; Lundvall, 1988), yet the role of the state remained to explore its national capacities to innovate through for example new processes of learning, and support of infrastructures and networks of knowledge sharing. For the sake of global competitive advantage, the state must act decisively in supporting national systems of innovation, and this framing brought a new perspective on the need for better coordination. Better coordination and cooperation across actors of the national systems of innovation could negate systems failures such as capture of government policies by vested interests, and this framing thus called for the broader involvement of

"separate, regulatory ministries or agencies of national governments" (Schot and Steinmueller, 2018b, p. 1559).

Lastly, the third frame of transformative change has many similarities to missions thinking, including the wish to tackle new and complex challenges, like sustainability, head-on using science and technology policies. Although the government's ability to do this may be questioned, the challenge is how unfit the current national systems of innovation and STI policies are. The proposed solution by this framing is thus transformative change through socio-technical system transitions. As will be discussed in the next sub-chapter, frame 3 involves open and tentative missions, and the deliberate exploration of how to embed social and environmental goals and values in transitions, which is what the government is expected to do. Finishing this part, it is necessary to underline that the frames are not necessarily conflicting, nor unconditionally replacing each other. All three frames of policy are needed, and governments as key actors may thus attempt to rethink previous frames towards SDGs, prioritize the third frame, and still embody different roles (Schot and Steinmueller, 2018b, 2018a).

Through MLP, I primarily focus on a specific aspect of sociotechnical regime configurations, namely the institutional structures and actors that are the government and the public sector. MLP is considered a systemic and middle-range theory that is better suited for examining broader transition dynamics rather than specifying substantive mechanisms of interaction and roles, such as those related to politics, policymaking, and governments (Schot and Geels, 2010, p. 19). However, it does offer intriguing perspectives on the role of the government and public sector in these dynamics. As part of the regime, they possess, reinforce, and emphasise some of its key characteristics, including lock-in, path dependence, resistance, phasing out, and responding to both niche and landscape level pressures.

MLP allows actor analysis by looking at the linkages between processes at different levels, and the related contested struggles, negotiations and forming of coalitions (Geels and Schot, 2007, p. 414). Nevertheless, the regime can be a part of change; as seen through both the transformation and reconfiguration pathway, the government takes the role of guiding and setting direction of transformations, and stabilizing trajectories; be they already existing or transition processes in the making (Geels and Schot, 2007). By virtue of being stable, meaning its elements of infrastructures, cultures, markets, etc., have coalesced into stable configurations, the sociotechnical regime and its rules have clear structuring effects (Schot and Geels, 2010, p. 18). Therefore, as part of this configuration, the government's role is to

use its cognitive, regulative, and normative rules to steer regulations and laws, values and norms, and goals, agendas, and problem definitions, towards the sustainability transitions sought for. This could be in the form of phasing out existing systems and technologies, or creating space for niche innovations and removing their barriers (Geels *et al.*, 2017).

Loorbach (2010), in his prescriptive exploration of TM as a framework, presents the approach as a result of the shifting role of the state. As has been argued by some approaches, there has been a "shift from the centralized government-based nation-state", towards liberalized and "decentralized decision-making structures of modernized European democracies" (Ibid., p. 161). Some argue that governments of today have a decreased ability to develop and impose policies in a top-down manner, with resulting diffuse policymaking structures and processes spread across different levels of government (Hooghe and Marks, 2003; Loorbach, 2010). Although this may be unfavourable for the role of the government itself, it opens a larger space of action from ministries and agencies, which this thesis explores more in-depth as part of the government. Furthermore, while top-down government steering and the free-market approach are both seen as outmoded for management, it is impossible to govern society towards sustainability without them. This is where TM comes in to present a framework and prescriptive approach towards governance with sustainable development as its long-term goal, for a government whose role is partly obfuscated.

As has been mentioned, transitions involve multiple possible paths of development and happen in different domains, at different levels, and by different actors – it is therefore much more difficult to pinpoint a specific role for the government. Still, as TM "joins in with ongoing dynamics rather than forcing changes", and "tries to utilize the opportunities for transformation that are present in an existing system" (Rotmans, Kemp and Van Asselt, 2001, p. 25), the approach lends a proactive and anticipatory role to the government, which may find the less destabilizing approach to alleviate pressures and incumbent resistance, making its broader role easier to execute. While this role is still a leading one, it stands in opposition to more traditional top-down enforcing control roles, and becomes that of a guiding actor (Rotmans, Kemp and Van Asselt, 2001, p. 25). Instead of directly controlling the transition process, which governments are key elements of, TM claims it is possible to influence the direction and pace of transitions through processes of searching, learning, and experimenting – all packed into interventions at different levels, using different policy instruments (Rotmans and Loorbach, 2010, pp. 106, 108). This supports the argument that local and regional government also have roles to play in TM, owing to their closeness to citizens and other

actors and implicit tasks in areas without specific political mandates (Ibid.). Arguably, this can be assumed to translate for ministries and specific agencies as well; these parts of government must play their specific tasks and roles, such as the Norwegian Labour and Welfare Administration working for the economic and social security of the unemployed and protecting vulnerable groups. Additionally, the government's role will be different in each phase of the transition process. While the government may act as a catalyst and director in the preparation phase, it would look more towards actor mobilization and the role of a stimulator in the take-off and acceleration phase, while controlling and consolidating changes in the last stabilization phase (Ibid., pp. 25-26). Summarily, this perspective indicates that the government should, in its strive to drive transitions, govern through a more reflexive and fluid approach, and its conceptual idea of directionality is similar to that of other approaches.

Lastly, Borrás and Edler (2020) similarly claim that the transformative turn of innovation policy calls for a "more entrepreneurial and directional role of the state", while different state roles have remained largely unexplored until now (Ibid., p. 1). Conceptualizing how different roles serve to "understand that the transformative agency of the state is leveraged/constrained by the modes of governance" (Ibid., p. 1), they identify 13 different roles of the state: observer, warner, mitigator, opportunist, facilitator, lead-user, enabler of societal engagement, gatekeeper, promoter, moderator, initiator, guarantor and watchdog (Ibid., p. 7). These roles span most, if not all, dimensions of governments, and therefore go beyond the scope of this thesis. Nevertheless, the ideas they offer overlap with a lot of what has already been read and stated about the government. As a result, I pick a few pertinent roles based on how well they apply to the situation of the Norwegian government and the SDG implementation.

The role of the observer sees the government monitoring and reacting to developments and trends in the socio-technical system, similar to what is done in MLPs transformation or reconfiguration pathway. Similarly but more ambitious, the role of the opportunist sees the government becoming an active beneficiary of sociotechnical system changes, by using the opportunities rising. Next, correspondingly to TM and perhaps TIP, the government as the facilitator wants to support dynamics of other agents, and make transition processes easier, while as the lead-user, the government initiates and enables market creation and societal engagement to define directions of change. Stepping back, as a promoter the government "acts as a champion, proponent and exponent of change" and puts forward narratives for this (Ibid.), while using its role as initiator to identify early opportunities and then pro-actively use "its own knowledge and resources" to push for transitions of the system (Ibid.). Lastly, in the

role of the watchdog, the government ensures that system actors comply with collectively defined norms. Although these specific roles may vary widely, it is important to remember that the state and government is not a uniform actor, but rather complex, assuming multiple roles at once. It could thus be interesting to see both how these roles are mixed in different modes of governance and perhaps over time, and how the roles more closely align to ideas promoted by the different theoretical frameworks and approaches.

2.5 Governments and the public sector – governing and driving transitions

Markard, Geels and Raven (2020) present challenges in accelerating sustainable transitions, and thus ways they can be influenced. The first challenge is that of interactions between multiple systems, which may result in conflicting values and institutional logics, or mismatches between competences. This is an especially complex element of policy; usually, policies are compartmentalized instead of integrated (Ibid.), leaving ministries and agencies divided, such as the Ministry of Petroleum and Energy and Ministry of Climate and Environment. However, transitions mean interactions between systems, and thus governments must be able to breach this challenge, by creating increased coordination and cooperation between previously independent actors.

A second challenge is that of decline and resistance, leading to political struggles, which is expected to be met when entrenched and incumbent systems are being replaced. One policy strategy is thus to create "wide societal support for long-term transition targets and to form broad constituencies of actors who are in favour of the transition" (Ibid., p. 3). Lastly, there are broad governance challenges to transitions. One important challenge is related to the need for different levels and forms of coordination, as posited by many authors (Weber and Rohracher, 2012; Grillitsch *et al.*, 2019; Markard, Geels and Raven, 2020; Normann *et al.*, 2022).

Horizontal coordination is what can be seen as coordination between ministries, or agencies, as they are at the same level. The challenge-driven approach of missions for example, requires coordination across agencies and the policy instrument apparatus, wherein good coordination spread across both supporting instruments and actors including agencies and ministries, provides necessary direction and agreement. Horizontal coordination is necessary as policies and changes for transitions require alignments between multiple policy areas (e.g. sustainability in agriculture involving sectors of agriculture, health and food, and climate) and cross-cutting policies (e.g. green energy for climate change). Cross-cutting policy areas need

coordination for goal definition and implementation, as dimensions such as the borders of the challenge, ways of implementation, defining initiatives and more, all need to be defined through acts of politics – i.e., defining missions (Janssen *et al.*, 2023). However, as noted with compartmentalized policies, actors on a same level can conduct "turf battles" to control their own areas of responsibility (Markard, Geels and Raven, 2020, p. 4), thus limiting the acceleration of transitions. On the other hand, it is important to remember vertical coordination, which is challenging as interests and responsibilities vary at different levels, from the international, to national, regional, and local. While this thesis is not particularly focused on differences in governing levels, it does look at aspects of vertical coordination seen through the government, ministries, and agencies, which all wield different levels of power, authority, say, and actions.

Both types of coordination are undoubtedly important, and the government should thus strive to make networks and interactions more efficient, or if none exist, establish partnerships and collaborations where there previously have been none. Furthermore, it has been suggested that what's needed are "substantial governance changes such as overarching missions, policy 'tsars', stronger interaction between departments, or new 'super ministries'" (Markard, Geels and Raven, 2020, p. 5). However, such changes are questionable, as approaching policy coordination failure is often prone to issues of red tape, major transaction costs, and capture by incumbents (Schot and Steinmueller, 2018b, p. 1562). Nonetheless, Markard, Geels, and Raven (2020) also suggest engaging a broad range of actors to help social acceptance, forge coalitions, and stimulate learning-by-using, and applying a broad mix of policies in a stepwise manner – such as continuously increasing sustainability requirements within the public sector.

By using missions, we can further see the spread of efforts and coordination across different levels and power. Due to their need to mobilize and coordinate resources, actors, and efforts across both horizontal and vertical levels, governments must anchor missions at the highest political level (Mazzucato, 2019; Normann *et al.*, 2022). Nonetheless, despite high political anchoring, solutions should come from below to allow for a broader and more detailed spectrum of possibilities (Normann *et al.*, 2022, p. 20). It is thus important to mobilize a broad set of actors from different sectors and policy areas to define, conduct (Mazzucato, 2018; Wanzenböck *et al.*, 2020), and give missions more legitimacy and opportunities for development (Boon and Edler, 2018; Kuhlmann and Rip, 2018) – as the pool of ideas and understandings of missions and challenges may be enriched through broad involvement (Normann *et al.*, 2022, p. 19).

Several other steps to succeed with missions are presented by Normann et al (2022). This includes the need to emphasize goal attainment rather than growth and understand missions as a process and not a policy measure in and of itself. A last important aspect of implementing SDG in annual reporting is the element of financing, budgeting and governance, as both the allocation letters and answering annual report are based on those years budget.

Missions require the government to release and use the resources needed for goal attainment. However, this may be difficult. For example, while the Apollo project spent more than 1% of the US national budget over a ten-year period, the same is unlikely to be happen for a single large mission in modern day Norway (Mazzucato, 2021; Normann et al., 2022, p. 50). This is due to political priorities, and the will to invest in missions. There are still other structural features of financing and budget systems to facilitate for missions, which the government should take care of. For example, governments should introduce long-term and multi-year budgeting as missions may span years and have many milestones and sub-goals (Normann et al., 2022, p. 51), and missions should be financed through mechanisms working across ministries (Larrue, 2021). Moreover, and importantly, is the need for guidance and governance signals accompanying government appropriations, and ministerial allocation and instruction letters to underlying agencies (Normann *et al.*, 2022, p. 51). While this may conflict with more traditional approaches of governing from an arm's length and through unspecified goals and parameters, targeted missions need concrete signals and expectations to provide direction towards the defined goals (Ibid.). Thus, very importantly for the later empirical analysis, is to evaluate the sharpness and directionality given in and through allocation letters. Additionally, missions may place greater demand on the approved initiatives and projects being followed up, monitored and coordinated against the relevant missions (Ibid., p. 52). This should then also be expected to be part of annual reporting, which would provide necessary information for the increased monitoring and coordination, and it would necessitate the government establishing mechanisms or actors capable of administering this.

Moving on, can SDGs be considered missions? Missions are often equated with frame 3 of TIP, transformational change, but they require open and tentative implementation. Schot and Steinmueller (Schot and Steinmueller, 2018a) for example, do not abide by directly translating SDGs into missions through strictly top-down driven mission management, as this would detract from the necessary flexibility, experimentation, mobilization, and acceptance of failure, which defines TIP and missions (Kuhlmann and Rip, 2018; Schot and Steinmueller,

2018a, p. 1583). In contrast to "prevailing agendas of control and short-run accountability which are characteristic of new public management approaches" (Ibid.), the government should rather instil a sense of directionality and openness more than strict control. Directionality is, as repeatedly mentioned, embedded in all change, and thus critical for understanding both missions and transformational change. Directionality in missions involves the previously seen characteristics that are part of political processes, such as mobilization of actors and the definition of issues and solutions (Fagerberg and Mowery, 2006; Weber and Rohracher, 2012; Mazzucato, 2018; Schot and Steinmueller, 2018a). It is essentially the directional focusing of transformational change, or transitions, often defined by identifying societal challenges to be solved, such as SDGs.

As explored by Weber and Rohracher (2012) and Schot and Steinmueller (2018b), directionality is part of four system failures that create rationales and justifications for policy interventions. The other ones are policy coordination, which was discussed above, and demand-articulation and reflexivity failure, which will briefly be discussed within context of TM.

As the first type of failure, directionality failure refers to both a lack of consideration for a diverse set of social and sustainable choices and options over alternative development paths, and the lack of attention provided to unifying SDGs with the aforementioned options (Schot and Steinmueller, 2018b, p. 1562). Associated political process must therefore provide room for appraising and negotiating the development of pathways, as well as close down exploration and focus resources and capabilities on chosen options after a while (Grin, Rotmans and Schot, 2010b, p. 335; Schot and Steinmueller, 2018b, p. 1562). Weber and Rohracher (2012, pp. 1042–1043) provide a couple of options used to tackle directionality failure.

The first option is vision building, which consists of translating and absorbing outside requirements - i.e., what needs to be done –, and then interpreting and negotiating this to provide orientation and direction. This option is something which will be seen more in relation to TM.

Secondly, collective coordination is an option which, through reflexive and participatory processes, helps create consensus about the direction to be taken, and creates shared expectations and a defined joint agenda for action. Lastly, and to implement policies in line with a defined vision, are options such as using both soft (coordination and information) and hard (regulations and standards) policy instruments, and funding for a specific path.

Utilizing these options, the government might first and foremost open the room for exploring options other than the entrenched paths it is on. Subsequently, it could act on a vision by defining a new corridor of acceptable developments paths and thus stabilizing and consolidating subsequent path dependencies built on, hopefully, sustainable principles (Weber and Rohracher, 2012, p. 1043).

Directionality and the other systemic failures are intrinsic elements of the third frame for transformational change within TIP. Nonetheless, governments should not completely abandon previous frames, but draw on a wide range of policy instruments based on different rationales and frames (Schot and Steinmueller, 2018b, p. 1565). Policy evolution, building on all three frames, may take three forms: (1) *layering*, the adding of new goals and instruments to existing ones; (2) *drift*, the adding of new rationales and goals without changing instruments, and; (3) *conversion*, the adding of instruments without changing goals and rationales (Howlett and Rayner, 2007; Kivimaa and Kern, 2016, p. 206; Schot and Steinmueller, 2018b, p. 1565). As I am studying only a small and focused aspect of the third framing, which encourages a deeper set of questions related to a system-wide transformation in all directions, it is interesting to see what policy evolutions are taking place, seen through allocation letters and annual reports.

Furthermore, transitions need not only the development of something new, but also the destruction of the old, or the sociotechnical regime and entrenched systems (Turnheim and Geels, 2012; Kivimaa and Kern, 2016).

However, this is tough for a number of reasons: there is a high level of political lock-in and path dependence as there is mutual dependence between actors; it is difficult to overcome local party politics and short-term interests; the entrenched interests actively resist change, and; the expansion of something new is usually easier than the phase-out of the old, as exemplified by resistance against the petroleum industry in Norway, but more support for green energy technologies. These ideas are evident in MLP, which while it often advocates for the building and development of niche innovations and actors, does see transitions as needing the phasing out of existing systems (Geels *et al.*, 2017). We need policy mixes to overcome the issues mentioned, and these sets of different but complementary policy instruments must include something to phase-out the old.

Lastly, looking more closely at reforms and approaches for a step-by-step structured transition, come the approaches of TM, policy, and governance. Broadly when looking at TM in the public sector, which develops ideas on how governments may bring transitions

gradually forwards, it could be indicative of a trend of each consecutive year bringing more and better implementation of SDGs in reporting, stricter criteria and visions, and in general aligning policy more towards sustainability.

TM can be summarized as a set of characteristics already seen and mentioned (Rotmans, Kemp and Van Asselt, 2001, p. 22), especially TIP, frame three, and directionality failure. These characteristics show us what the government and public sector must aspire to do an accomplish as part of driving and governing sustainable transitions. First is that of long-term visions which should shape short-term policy. Visions act as a framework for the formulation of short-term objectives and based on evaluations of existing policy (Ibid., p. 23). These visions are useful for mobilizing actors. While they must be realistic, visions should also be appealing, imaginative, and supported by many (Ibid.). Nonetheless, adjustment is important in this case, as the transition process is a goal-seeking one, where goals and visions may change. This differs from `blueprint` thinking, which has a fixed notion of final goals and visions (Ibid.). Here we have a barrier, as SDGs can almost in their entirety be characterized as a blueprint and fixed notion of goals. However, TM indicates that the overall idea of sustainability and the goals can and should be implemented more reflexively. The SDGs are ambitious, imaginative, supported by many, and still realistic, and their process of implementation and transition towards them is open-ended and possible to monitor, evaluate, and redirect.

The transition process should have rounds of evaluation, where the interim objectives, the process itself, and its experiments, are all evaluated (Ibid., p. 24). The objectives should first be evaluated for their achievement, or why achievement is lacking. Then, the transition process itself must be evaluated to see how actors are going through it, who dominates the process, what commitments are, and if new things should be implemented and attempted. Lastly, one must evaluate the learning from all previous periods and experiments undertaken and see if these have resulted in new knowledge or circumstances, and how one might go further from here. It is also important to create a wide playing field and public support, by many mobilizing diverse actors. This participatory approach invokes both bottom-up support for new policies and technologies, as well as top-down introduction of education and collective learning opportunities for the sake of a mobilized public. Thus, it is evident that TM emphasises learning and evaluating.

Based on both governance studies and complexity theory, TM extrapolates principles that help us understand how reflexivity and subtle management, rather than top-down control, can

be pursued. Rotmans and Loorbach (2010, pp. 144–146) give a summary of these. First, it is important to create space for innovation in niches or arenas. Through arenas, frontrunners are provided room for long-term learning and experimentation. And, in these niches are new structures or actors emerging within the system, and establishing themselves in the new configuration, often creating new structures and niche-regimes. It is also important to empower niches by providing them with resources, from knowledge to competences and financial assistance, and allow for either niche-regimes to take over the incumbent regime, or for the incumbents to absorb and encapsulate them. Secondly, a focus on frontrunners who have larger capacities to generate new structures, or operate within deviant ones, is needed. Third, there should be a process of guided variation and selection, allowing for diversity to dissipate rigidity within the system, and coherence for interrelatedness amongst system entities. This is part of what has previously been argued – reflexive governance and keeping options open -, as without diversity, new options and innovations are not generated. Guided variation and selection mean that choices are made along the way based on learning experiences, instead of pre-planning. Similarly, anticipation and adaption are important principles for governance through TM. While it is important to both anticipate future trends, needs, and developments, it is equally as important to be able to adapt and adjust the structure of the system while it is changing. It could very well be what the Norwegian government is currently doing, but then it could also add an element of criticism if it takes too long to choose a clear pathway with a structured and organized process, and adaption is too inefficient. Continuing, TM places importance on learning-by-doing and doing-by-learning. This again reflects previous ideas of openness, as it encompasses both developing theory and then testing, as well as first developing empirical knowledge and then applying theory to it. Accompanying this are transition experiments, offering three mechanisms for managing the two previously mentioned concepts. Deepening is learning as much as possible from an experiment, broadening is repeating it in an adjusted form or context, and scaling up is embedding the experiment in existing structures of an incumbent regime (Ibid., p. 146). Lastly, radical change in incremental steps is perhaps initially a seemingly paradoxical principle, but it implies that the system incrementally transitions through many smaller actions, thus mirroring the idea of gradual change, over periods characterized by both drastic and sudden change, but also slower transformations.

To summarize, TM provides a way of governance which is simultaneously "concrete enough for implementation", but "allows enough room for reflection, adaptation and learning"

(Rotmans and Loorbach, 2010, p. 199). It combines the advantages of governance through incrementalism and gradual, doable steps that do not disrupt, as well as those of planning and articulating futures (Ibid., p. 200). In practice, TM must create space for frontrunners, be they niche- or regime-actors, in transition arenas, create networks and coalitions around these arenas, and then drive activities in a desired direction (Ibid., p. 156). All of this happens through cycles, activities, and activity clusters. Simply put, the elements and cycles of TM can be put in activities, seen as following (Kemp and Martens, 2007, p. 10; Loorbach, 2010, pp. 168–172; Rotmans and Loorbach, 2010, pp. 155–156). For strategic activities, the government must structure the problem, establish long-term visions, and organize the transition arena to allow for experimentation, learning, and reflexivity. The tactical activities involve developing a transition agenda of what to do and derive the possible transition pathways. Further, operational activities encompass the actual implementation and practical doing of experiments, as well as mobilizing resulting networks. Lastly, the reflexive activities are monitoring, evaluating, and learning lessons, "and, based on these, make adjustments in the vision, agenda, and coalitions" (Loorbach, 2010, p. 172). While no activities, cycles, nor phases of transitions will be in fixed sequences or patterns, the prescriptive framework does present a long and analytically advantageous list of what governments should focus on to drive and govern transitions.

3. Methodology and operationalization

This chapter presents and explains the methodology and rationale behind choosing a case and mixed qualitative-quantitative method. I describe the process of gathering and analysing data, before reflecting on the practical and ethical considerations, shortcomings and obstacles.

3.1 Research design and the qualitative approach

The thesis is built on different rationales and approaches, using an abductive approach through both deductive reasoning by drawing inferences about the empirics based on existing theories, while trying to inductively observe and identify patterns in theory from the basis of empirical findings. This abductive approach is beneficial as it allows for a more nuanced understanding of an otherwise expansive research topic, and it provides a broader opportunity and more possibilities to utilize all chosen theoretical frameworks (Bratberg, 2017), which are brought together in an eclectic approach of mixed theories and concepts. To some extent, theory selection is thus based on how well the chosen case can be explained through the selection.

This thesis calls for a varied study of qualitative data to evaluate and examine theoretical frameworks in the context of selected empirical instances. The thesis is part descriptive and explanatory. I attempt to describe the characteristics and behaviour of the Norwegian state sector in relation to the SDGs, explain what might have caused or not caused changes in the reporting of the public sector, and look at under what conditions these changes are, or are not, occurring. Although a normative stance is automatically prescribed under the argument and suggested preposition that implementing SDGs in the state is highly desirable and ultimately right to do, I am not deeply elaborating on this normative assumption. Rather, plausibility of the normative argument is established through the central placement of sustainability and the SDGs within the theoretical frameworks, politics, and society. To support my other claims, I make use of both primary and secondary textual analysis, including academic literature, policy documents, and various frameworks.

3.2 Case study

Case studies are used for a variety of research, but are mostly advantageous as they allow us to go into "an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project, policy, institution, programme or system in a "real life" context", to generate "understanding to contribute to cumulative public knowledge of the topic" (Simons, 2009, pp. 20–21). As such, it allows us to look at a phenomenon from different lenses to pinpoint factors or elements that might explain it. Simply put, the case study is an empirical examination of a case, which I want to explore in-depth (Yin, 2018). Additionally, through a qualitative document analysis approach that fits the typology of a theory-guided idiographic case study (Levy, 2007:3), this type of case study is informed by theory and seeks to examine the case through a specific lens, or lenses.

3.2.1 Scope and context: a longitudinal case study of Norway

My thesis seeks to examine, interpret, and explain a particular case, namely that of the Norwegian state implementation and reflection of sustainability through the SDGs. This is done by examining the ministries` letters of allocation to underlying agencies.

The Norwegian context marks an opportunity to analyse SDG transition by examining changes in governmental reporting and documents over time, with the publishing of WP40 (Kommunal-og moderniseringsdepartementet, 2021) representing a significant event, from which we can look at the before and after. Through a longitudinal scope, comparisons can be made, and changes, if any, can be identified. This scope therefore allows us closer explanation of just *how* things changed, which may inform *why* they changed. As it would be natural for there to be annual differences in governance, the broader look of the longitudinal study is a necessity to see how ambitions are reflected over years, when and how sustainability penetrates Norwegian state governance. I also aim to watch for trends and directions of this governance.

The case in question can thus also be looked at as cases within a case, as although the Norwegian sector is the focus, amplified consideration is given to three levels ranging from the government to ministries and agencies, as well as three individual agencies.

3.3 Document selection

The thesis uses both primary and secondary sources, with primary sources and data material consisting of publicly available state documents found online. Primary sources are a key part of case studies, illuminating phenomena from the inside, and allowing for own interpretation. Although many of the chosen documents have a much less public visible role, they are nonetheless highly influential and impact not only governance in the state, but consequently our daily lives (Asdal and Reinertsen, 2022, p. 3).

As the SDGs were introduced in 2015, I mostly use documents from 2016. I also limited the scope of the thesis by choosing allocation letters and annual reports from 13 ministries and 18 agencies (Table 1) that were all analysed quantitatively, as well as the allocation letters and annual reports from three ministries and agencies that were analysed qualitatively, using NVIVO. These are from: **2016** (Arbeids- og inkluderingsdepartmentet, 2016; Klima- og miljødepartementet, 2016; Kommunal- og regionaldepartementet, 2016; Arbeids- og velferdsdirektoratet, 2017; Digitaliseringsdirektoratet, 2017; Miljødirektoratet, 2021; Klima- og miljødepartementet, 2022; Digitaliseringsdirektoratet, 2022; Miljødirektoratet, 2022; Kommunal- og regionaldepartementet, 2022; Kommunal- og regionalde

Agency	Ministry
Norwegian Environment Agency	Ministry of Climate and Environment
Norwegian Labour and Welfare Administration	Ministry of Labour and Social Inclusion
Norwegian Digitalisation Agency	Ministry of Local Government and Regional
	Development
Norwegian Directorate of Public Construction	
and Property	
Norwegian Agency for Development	Ministry of Foreign Affairs
Cooperation (Norad)	
Norwegian Public Roads Administration	Ministry of Transport

Table 1 - List of all agencies included and their respective government ministries

Norwegian Water Resources and Energy	Ministry of Petroleum and Energy
Directorate (NVE)	
Norwegian Petroleum Directorate	
Norwegian Agriculture Agency	Ministry of Agriculture and Food
National Police Directorate	Ministry of Justice and Public Security
Norwegian Directorate for Civil Protection	
Norwegian Directorate of Health	Ministry of Health and Care Services
	-
Norwegian Directorate for Education and	Ministry of Education and Research
Training	
Norwegian Directorate for Children, Youth and	Ministry of Children and Families
Family Affairs (Bufdir)	
Children's Ombudsperson of Norway	
Statistics Norway (SSB)	Ministry of Finance
Norwegian Agency for Public and Financial	
Management (DFØ)	
Norwegian Directorate of Fisheries	Ministry of Trade, Industry and Fisheries
	Ministry of Trace, industry and Tislefies

To ensure that the documents had analytical virtue and relevant content, I conducted a nonrandom, strategic selection. A major criterion for the choice of ministries and agencies was that the ministries needed to cover the spread of SDG responsibility within the Norwegian state, and documents for the underlying agency must be publicly and digitally available for research. This corpus selection of texts, referring to the selection of texts in an analysis compiled from several documents (Grimmer and Stewart, 2013), should be sufficient to answer the research question, especially as sustainability is placed front and centre for the choice of units of analysis. Still, there are methodological considerations to account for with strategic sampling. The researcher is more likely to infer bias, for example. However, bias imposed by the researcher is arguably inevitable in qualitative text analysis (Van Gorp, 2010), and random sampling is not beneficial for small-n research as it risks introducing selection bias that can lead to fraught conclusions and risks selecting a corpus with no analytical virtue, as documents with little relevance may be included (King, Keohane and Verba, 2021).

3.3.1 The allocation letter from ministries

The annual allocation letter from ministries is an essential document for this thesis, and an important tool in the Norwegian public sector, as it is the operationalization of political goals and measures as presented through the budget decisions to the parliament. While instruction letters largely remain static, allocation letters have annual changes, thereby providing opportunity to track change.

Derived and building on Prop 1 S., the Norwegian annual state budget proposal, the allocation letter conveys targets, management parameters, responsibilities and roles of the agencies, and the resources set aside for different sections, goals, and activities (DFØ, 2019, 2023e). The document includes criteria and requirements which the underlying agencies are supposed to adhere to, and this may also include references to sustainability or the SDGs. The hope is that through clear targets and criteria, the ministries ensure that agencies report on sustainability in a consistent and transparent manner. This streamlining would in theory make it easier for ministries, as they would not have to scrutinize and rummage through too much text to identify what is expected. On the other hand, agencies could be confident that what is reported is desired and useful. There should nonetheless be an effort to communicate the connection between the agencies overall strategy and purpose with what is set out in the allocation letter, as clear communication would enhance the focus on long-term strategic plans, in addition to more detailed target formulations and priority signalling (DFØ, 2019).

3.3.2 The annual report from agencies

The annual report from agencies is the only routinely mandated document for all underlying government agencies in Norway, and should represent the answer to all instructions, guidance, and goals set by ministries. By supporting overall policy

administration and governance, the report should present all necessary information for the responsible ministry to fulfil its role as agency manager (DFØ, 2020). Most importantly is the combination of allocation letter with annual report; by using the parameters and goals set out in the allocation letter, the agency connects its resource use, yearly activities and tasks against its societal mission, stated purpose, and expected goals and targets (DFØ, 2020). The annual reports must explain an agency's short- and long-term achievements, as well as describe the status of its routines, processes, challenges and changes. It is thus key to analysing implementation of SDGs in the public sector.

3.4 A practice-oriented method and document analysis

To aid in the study of documents, I employ the practice-oriented method of Asdal and Reinertsen (2022). This approach is valuable for gaining insights into the complex social and organizational practices at national and ministerial levels, shaping our world. At a structural level, the method encourages researchers to identify relevant documents to be studied, before analysing them through a variety of techniques to identify themes and patterns. Starting from the baseline of the 2021 white paper on SDGs (Kommunal-og moderniseringsdepartementet, 2021), I explore the topic of sustainability in the Norwegian state, and thus had to choose other relevant documents to place around the white paper.

Asdal and Reinertsen (2022) describe documents as (1) entailing an action in that they do something, (2) being relation as they attach to something, and (3) material as they have meaning as well as being physical and digital entities (Ibid., p. 3). This shapes the argument for studying documents. Documents are shaped by someone for a purpose, they can intervene and alter their own environment, and they both participate in and shape practices (Ibid., p. 4). When looking for answers to how sustainability is reflected in the state, primary political documents illuminate how sustainability and the SDGs are positioned in governance. We can also be slightly more introspective and examine how the documents themselves have been shaped to intervene in this reflection and how they push forth the idea of sustainability as both material and meaningful entities. The practice-oriented method demonstrates how politics is more than simply a game of power and bureaucracy, also being about "knowledge creation, contested topics and hard work" (Ibid., p. 8). As documents are influential in the process of practically realizing political visions and ideas (Ibid.), their inclusion is thus critical in this case study of the Norwegian state.

3.4.1 Documents as tools

As documents do things, realise ideas, put issues into motion and more, they are important tools in society (Asdal and Reinertsen, 2022, p. 40). This study has been sustained by the idea of paying attention to the functions of documents, and thus choosing what to explicate and explore. This has for example been the reasoning for choosing allocation letters and annual reports as they are the main tools for the state to achieve and carry out policies, as well as guiding documents such as WP40 and others from DFØ, meant to set visions, targets, and provide instructions.

As means to govern society, the chosen documents are tools of governing. They answer questions of how society is governed, how issues are political, and how politics and administration are seen in practice. Simply studying governing via documents entails a downto-earth and "detailed, practice-oriented approach", and helps us answer questions of how society is governed, how issues become political, and how politics and administration are exerted in practice (Ibid., p. 43). The approach also adds elements to the study and helps answers questions including how politics and administration function in practice, how the issue of sustainability is presented and established, and how it changes over time and across actors (Ibid., p. 42). This thesis thus attempts to look at a specific topic and see how the chosen documents move the issue of sustainability in a specific direction (Ibid., p. 44). Further, I employ the approach of document movements as well, to trace documents and see how they build upon each other and in that way move the issue of SDGs further (Ibid., p. 126). By imagining documents as tools and their movement, this thesis suggests that the chosen political documents have a large sway and may show exactly how ambitions on SDGs are reflected throughout the state. This can also illuminate which actors are steering the direction, and which direction it is.

3.5 Quantitative analysis

A simple quantitative document analysis was done prior to analysis using NVIVO. This analysis was based on a set of keywords and terms related to sustainability, either directly or indirectly (Table 2), and finding the frequency of their appearance within my chosen documents. The three direct keywords were chosen to show explicitly if and how sustainability and the SDGs are referenced, while the 24 indirect keywords are terms and

topics central to the different SDGs; by choosing a broad selection of these words and terms, the study ensures increased relevance and applicability to a wider range of agencies and ministries. By mapping the frequency of keywords, I sought to create a measurement guide and broad overview of the prominence of sustainability in allocation letters and annual reports.

As the documents analysed are all written in Norwegian, I searched for the Norwegian translation of keywords using the search function. An excel spreadsheet was used to organize and keep track of all keywords for all agencies and ministries, with an example image in appendix 4.

Direct Reference	Norwegian Translated Search
"Sustainability"	"Bærekraft"
"Sustainable (development)"	"Bærekraftig (utvikling)"
"Sustainable development goals/2030	"Bærekraft(s)mål/2030-agenda"
Agenda"	
Indirect Reference	Norwegian reference
"Climate"	"Klima"
"Circular (economy)"	"Sirkulær (økonomi)»
"Consumption"	"Forbruk"
"CO ₂ "	"CO ₂ /Karbon"
"Discrimination"	"Diskriminering"
"Diversity"	"Mangfold"
"Emissions"	"Utslipp"
"Environment"	"Miljø"
"Equality"	"Likestilling/ulikhet"
"Ethical"	"Etisk/Etikk"
"Green Development / Transition / Shift /	"Grønn(e)(t) Utvikling / Vekst / Skifte / Omstilling /
Growth / Procurement / Governance"	Avtale / Anskaffelser / Forvaltning"
"Health(y)"	"Sunn/sunt/frisk"
"Hunger/Food security"	"Sult/Matsikkerhet"
"Justice/Rights"	"rettferd(dighet) / rettighet(er) "
"Nature"	"Natur"
"Net zero"	"Neto Null"
"Paris Agreement"	"Parisavtalen"

Table 2 - direct and indirect keywords in English and Norwegian in alphabetical order.

"Poverty"	"Fattigdom"
"Renewable"	"Fornybar(t)"
"Safety / Security"	"Trygg/Sikker"
"Social inclusion/safety/security"	"sosial inkludering/trygghet/sikkerhet"
"vulnerable/vulnerability"	"sårbar/het"
"Waste"	"Avfall"
"Working conditions"	"arbeidsvilkår/arbeidsforhold/sosial dumping"

The quantitative analysis allowed me to explore what trends the frequency of keywords could indicate, what specific signals are given through inclusion of different key terms, and if there is an increase or decrease in the use of keywords throughout the documents, and if there are any specific discrepancies between either different years, agencies, or ministries.

3.6 Coding and categorizing

Documents were coded and analysed in NVIVO. NVivo is a program often used in qualitative text analysis. It allows for the systematic coding of the chosen documents and establishes file classifications. This in turn enables me to draw comparisons between agencies and ministries, types of documents, and years. NVIVO was used to code and analyze the allocation letters for, and annual reports from, three agencies and their respective ministries the Labour and Welfare administration (NAV) and the Ministry of Labour and Social Inclusion, the Environment Agency and the Ministry of Climate and Environment, and the Digitalisation Agency and Ministry of Local Government and Regional Development (KDD).

Coding can be deductive or inductive. Deductive coding analyses the text by following predetermined nodes informed by a theoretical framework that guides the information the researcher seeks. In contrast, inductive coding involves establishing nodes simultaneously as analyzing the text (Bratberg, 2017, pp. 88, 91). Deductive coding can strengthen reliability, but it might sacrifice some validity. Yet due to the scope of this thesis, I followed a mostly deductive coding strategy.

To examine prevalence of sustainability in each document, I coded in accordance with each of the 17 SDGs (Appendix 1). Each goal has several sub-targets, which were accounted for and consequently coded as far as possible. In most instances, SDGs were not specifically referenced, but rather I coded wherever the topic or statement seemed in line with an SDG or

a sub-target. Due to the length and number of documents, I had to be critical and avoid unnecessary coding. This I did by attempting to avoid fluff. Although many more possibilities to code exist within the documents, I sought to avoid this and only code what would easily be recognized in alignment to an SDG. This is especially pertinent for documents such as those coming from and to the Environment agency, where matters of our natural environment are constantly referenced. Furthermore, as these documents often repeat the same topics, issues, activities, and projects, I attempted to code only the first few instances of the same issue being brought, or when some new information was present.

I ended up coding more allocation letters than annual reports for two reasons. First, I included an additional supplemental allocation letter from 2022 for the Digitalization agency, as I had quantitatively searched these for instances of sustainability keywords as well, and it was present in this one additional document. Secondly, as this thesis is written in-between allocation letters and responding annual reports, no such reports have yet been published for 2022.

3.7 Research ethics

As I am using publicly and digitally available state documents as my primary source of information and empirics, I have not met many ethical challenges or issues. This also strengthens the internal validity and reliability of the thesis. The sources are accessible and open to all, and I did not have to store or process confidential information.

However, the topic of this thesis came from Deloitte consulting, by whom I was hired to write this paper and a research article, and so I gave careful through to research ethics in relation to financiers and collaborative partners (NESH, 2021). Although it may have been difficult to balance perspectives, considerations of the requirements for a master's thesis were always the guiding factor

3.8 Validity and reliability

3.8.1 Validity

Validity refers to whether an analysis can meaningfully capture what it seeks to observe and analyse, (Adcock and Collier, 2001). There is no agreed definition of internal validity. In its simplest form, it refers to the extent that the conclusions one draws from the

observations are trustworthy and have not been influenced by exogenous factors (Halperin and Heath, 2017). To ensure sufficient internal validity, I established a guide and references (Table 2) which is informed by theory and the various SDGs. For example, SDG 9, "Industry, innovation and infrastructure", invites references such as "Circular (economy)".

Yet this also meant that I had to be creative and group some words in categories, such as everything under "green", to save time. This could also include mentions of the colour green in the frequency of the key term, but I tried correcting such errors manually as far as possible, by looking over the hits. Additionally, keywords were in some cases part of ministry names, e.g., "climate" and "environment. Human error is thus to be expected in this analysis and could also come by in the counting of words, such as "nature" (natur) vs. "signature" (signatur). It is also important to take note that the findings may be limited, as hits on keywords could be found in a context outside of sustainability, or only be frequent due to the bolstering by single terms of words, such as in the Agriculture Agency where the term "natural damage scheme" (naturskadeordningen), was almost 100% of the hits on "nature". Additionally, as annual reports are significantly longer than allocation letters, they are predisposed to higher frequencies of words. Yet, raising awareness around these issues when coding documents, especially non-English documents increase transparency and address reliability for future research.

Furthermore, the internal validity of the research could have been strengthened by using additional data such as interviews. Scoping interviews were planned for the study and would consist of informal and loosely structured interviews to evaluate and refine understandings, assumptions and concepts of my research project (Robertson *et al.*, 2012, p. 517). Scoping interviews could have provided perspectives that go unnoticed from a document analysis. However, this did not pan out due to a lack of time and contact with relevant actors.

External validity refers to the degree to which findings can be generalised beyond this study (Halperin and Heath, 2017, p. 149). While case studies usually have weaker external validity due to their focus on a specific context, event or timeframe, the Norwegian case may be generalised to other countries with similar socioeconomic and socio-political profiles. Furthermore, as is often the goal with case studies, this thesis is using theory as basis for analytical generalization. By using the case as a way to shed light on theory and concepts, I hope to either corroborate, build upon, or even reject concepts from theory, thereby providing

generalisation beyond this study (Yin, 2018, pp. 37–40). And while, for example, the strategic choice of agencies and ministries has led to specific findings, I attempted to negate this by choosing agencies that are mostly broad in terms of scope and work. Additionally, as implementation of SDGs in state reporting is an ongoing process, many contexts could be studied in a similar fashion.

3.8.2 Reliability

Reliability indicates how accurately indicators are measured, and if the study can thus be repeated with the same outcome (Halperin and Heath, 2017, p. 173). This necessitates requirements to help guide the way in which the texts are analysed. Yet, contrary to quantitative analysis which in this study presents clear answers, there are no specific guidelines for qualitative case studies and document analysis (Bryman, 2016). Therefore, the central issues for replicability in the qualitative analysis are transparency and subjectivity. Subjectivity is arguably inevitable in social sciences and qualitative analyses, and is often associated with bias, which makes transparency important. A lack of transparency will make it more difficult for researchers to retrace the steps taken to reach their conclusion (Ibid.). Although the thesis is written in English, both the qualitative and quantitative analysis was conducted in Norwegian due to the documents` language. As phrasing and keywords are important in this analysis, it creates a chance of mistakes being made.

This study has addressed these issues in several ways. First, there are no barriers to acquiring the text material. Secondly, Table 2 shows the reference scheme for quantitatively measuring sustainability references, and even though the documents are in Norwegian, including both Norwegian and English versions of the references enable other non-Norwegian speakers to replicate the analysis. However, while the well-known 17 SDGs are used for coding, I did not adhere to a strict guide and rather went by intuition. This can limit the reliability to a degree.

4. Empirical Findings

This chapter of empirical findings intends to outline and explain how sustainability and SDGs have been seen, used, and developed in the Norwegian public sector. The chapter will first focus on the Norwegian state, with descriptions of the role and interactions between the government, parliament, ministries, and underlying agencies. This sets the stage to look more closely at some of the most important documents and initiatives for sustainability in the Norwegian public sector, including governmental policy platforms, documents calling for the establishment of SDG indicators, and the UN national voluntary reviews. Still, a particular spotlight is put on WP40. This document is the first fully encompassing white paper concerning the SDGs specifically, and provides an indication of the high-level political agenda setting of sustainability. This provides a further perspective to briefly visit the national reporting requirements and guidance for both allocation letters and annual reports, before the thesis delves into the empirical findings of the wordsearch conducted on the aforementioned documents, and a more detailed coding of the prominence and changing uses of specific SDGs in the case of three agencies.

4.1 The Norwegian state: governance, management, and coordination

4.1.1 Overall Political Divisions

The Norwegian political system is divided on three levels – the national of state, and regional and local in the form of counties and municipalities. It is the national level and the state which is of importance and looked at in this thesis. The state is divided into the parliament (Storting), the prime ministers cabinet or government, and the state administrative agencies. The last two are of importance here, acting as the executive power in Norway. Although this thesis has used a multitude of terms to cover this abundance of entities, it can be summarized as the state or government, and some would even categorize both the cabinet and prime minister's office, together with the ministries and agencies, as the state's executive power, or the state administration (Kommunal-og moderniseringsdepartementet, 2022a). This `government`, or the prime minister and their cabinet of ministers with underlying departments and agencies, govern based on powers and decisions by the parliament. As a further subdivision are the more specific state administration entities divided into several councils, committees, ministries, and their underlying agencies.

4.1.2 Ministries and the government

The ministries have a major role in the Norwegian public sector. Excluding the prime minister's office, Norway has 15 ministries. They are led by ministers under the prime ministers cabinet and current government, with assistance from political advisers and state secretaries (Kommunal-og moderniseringsdepartementet, 2022a). The ministries are all specialized bodies and have a multitude of tasks under the guise of governance, including preparing the government or cabinets proposals to the parliament, exercising their authority through primarily regulations, implementing and governing sectoral politics within their politically given borders vis-à-vis businesses, organizations, municipalities, and citizens, and most importantly for us, managing and following-up on underlying agencies. Largely, the government may see the agencies as a way to relieve ministries of practical and routine tasks, and rather give them time and space to work on broader issues with a different, macroperspective. Additionally, by managing agencies that may do their work, ministries are less likely to become too large, and thus unmanageable and inefficient (DIFI, 2013, p. 28).

4.1.3 Norwegian agencies

The underlying governmental agencies focused on in this thesis are those characterized as administrative agencies in the form of directorates, ombudsmen, etc. Of all these administrative agencies, all except one, the Children's Ombudsperson of Norway (Barneombudet), are classical directorates, of which there are 70 in Norway in 2013 (DFØ, 2023d). They are subdivisions of the overall state administration, given responsibility in a particular area, instructed by their responsible ministries, and are unlike state-owned companies, part of the state as a legal person (Kommunal-og moderniseringsdepartementet, 2022b).

The role of the agencies is to independently (to some extent) carry out the policies of the Norwegian Government. Although orders and direction come from the government and ministries, the agencies ought to have freedom in their day-to-day operations - within some limits. This seems to show how the Norwegian public sector to some extent seeks to establish both vertical and horizontal structures, in which the administrative and executive bodies of the government are horizontally structured by the fact that several semi-independent entities and organizations are working with governance and on policy implementation, while at the same time, some of these entities are below others. As exemplified by our cases, the Norwegian Environment Agency is a directorate under the supervision and management of the

Norwegian Ministry of Climate and Environment, which provides yearly instructions and guidance, through for example the allocation letter, and a framework consisting of set priorities, goals and a budget. However, the Environment Agency is nonetheless expected to fulfil and executive these objectives by its own volition and approach. This creates a slightly awkward vertical-horizontal struggle but is nevertheless an approach showing how coordination and power diffusion between and on a level prevents all executive and governing power being centralized within only ministries. Furthermore, this distribution of roles is by the people working in both ministries and agencies seen as creating much more efficient public governance, for a multitude of reasons (DIFI, 2013). One reason is that agencies are a prerequisite for ministries to be able to satisfactory fulfil their functions through outsourcing, while agencies on the other hand require both sufficient management but also leeway, for which the departments must naturally delegate authority and provide tasks to do (DIFI, 2013, p. 29). This symbiotic relationship is key in Norwegian public governance, but also provides a few questions and issues. There is a need for ministries to accept the shared role given to agencies and provide guarantees of leeway for the agencies to execute their own decisionmaking, rather than set down guidelines and decisions that lock-in the practices within narrow frameworks (Ibid.). Instead, the agencies should have the professional and executive power to achieve the scope of action for which they are intended and created.

4.1.4 Norwegian agency management

The Norwegian ministries have a wide area of responsibility, with associated underlying agencies. Generally, these agencies are instructed by a responsible ministry, but may in some cases receive instructions and allocation letters from several ministries. The level of freedom to act, both professionally, financially and administratively, fluctuates between agencies, but are among the chosen ones at the approximately same level. These agencies should exercise their own authority and executive power within guidelines given, or at least approved, by ministries, and most of their day-to-day operations concerns quite concrete on-going, and often technical, matters. And still, due to their insights and expertise on their areas of specialization, the agencies are often involved in broader ministerial work, and may through this a wield a significant influence on steering public policy and governance.

Additionally, these agencies as state administration entities are set to solve and execute politically determined, specific societal tasks and purposes, on behalf of responsible authorities – most notably their leading ministries (DFØ, 2023a). This necessitates a specific

framework for the content and design of strategies for agencies, which ensures that objectives are set and directly guide the agencies strategies and actions for the forthcoming year. This is part of the Norwegian agency management approach, which involves the setting of goals, prioritizing, planning, and budgeting of resources, and subsequent follow-up and reporting of results and the resource use (DFØ, 2023b). Within this, there are overall frameworks and guidelines, including the parliaments decisions and requirements such as the national budget or various white papers, as well as the requirements, guidelines, priorities, goals, and targets given to underlying agencies through different management documents, of which the allocation letter is a prime example (Ibid.). Put simply, to ensure that Norwegian public sector agency management is efficient and does what it sets out to, all elements in all instances and documents, need to be accomplished, with several requirements attached (DFØ, 2023c). First, there needs to be a setting of goals, for which agencies must have set goals and performance requirements within the given frameworks of available resources and expectations from the upper authority, in line with the agency's area of work and responsibility – this should be done for the upcoming year, but there could also be a case for more long-term planning and frameworks. Secondly, prioritizing, planning, and budgeting is essential, and agencies must have sufficient information for the management and decision-making processes, while plans must be made for both one-year and multi-year perspectives, and likewise documented as such. However, Norwegian practices, at least in budgeting, have been a barrier for this; while multi-year budgeting has been considered (Finansdepartementet, 2003, 2015a), Norway still operates with a one-year principle for both the national and state budget (Normann et al., 2022, p. 51). While this system does not necessarily stand in the way of creating long-term plan without budgetary commitments, and there are even multiyear investment plans in areas with extensive investment needs, there should be more openness towards multi-year budgeting (Ibid.) to allow for societal missions targeting SDGs, with the multiple subgoals and milestones included. Third, following-up, learning and reporting is an interactive process between the actors involved, and requires the agency to have enough information and basis to work from and report on. Likewise, the responsible ministry expects the agency to then properly follow-up and report, through the annual report, what has been required of them in the allocation letter and other management documents. In our case, the agency should report back to the ministry, and the ministry reports and provides information up the ladder to the government and parliament itself. And finally, the last aspect of implementing and executing builds on this, as the agency must carry out activities in line with that the parliament, prime ministers office, or departments have laid out, and to reach set goals and priorities.

4.2 Sustainability in the Norwegian state

Through this next part of the empirical chapter, the thesis outlines Norwegian sustainability efforts in more detailed, focusing on documents and initiatives that may help highlight the role of SDGs and their reporting in the state. From a broader perspective of sustainability in Norway, I go on to, through a mix of thematic and chronological structuring, lay out the development of implementing sustainability in Norway.

As stated in the introduction, Norway does put sustainable development and the SDGs high on the political agenda, and although the country is facing some challenges in reaching a couple of SDGs, it is still considered a world leader on sustainable development (O'Brien, 2019, p. 207). The Norwegian public sector and state have gone through several changes related to sustainability throughout the years, including the diffusion of responsibility. Primarily, KDD became the designated lead coordinating unit for the implementation of SDGs nationally in 2020, while the Ministry of Foreign Affairs coordinates the international efforts for sustainability (Norwegian Ministry of Local Government and Modernisation and Norwegian Ministry of Foreign Affairs, 2021; Utenriksdepartementet, 2022). What this means in practice, especially the fact that KDD is the lead coordinating unit nationally amongst ministries, is something which, as far as I have found, has not been clearly laid out anywhere. It has been stated that it was an effort to reorganize the state in a more holistic approach to sustainable development, and fix issues of cross-sectoral cooperation (Norwegian Ministry of Local Government and Modernisation and Norwegian Ministry of Foreign Affairs, 2021, p. 6) - which has already been indicated to be a problem as the state follows the sectoral principle, thereby shutting down many opportunities to cooperate across policy areas. This lack of policy cohesion has even been mentioned by municipalities as being a major impediment for the work of local and regional authorities towards SDGs (Hjorth-Johansen et al., 2021), and something which will later be seen is criticized by others as well, including the digitalisation agency.

Nonetheless, more practical consequences of KDD becoming the national coordinating unit can be seen from the fact that the ministry has led the work to compile information on what is happening with the sustainability goals across ministries, and subsequently present this through a number of key documents, such as the Norwegian Voluntary National Review for 2021 (Norwegian Ministry of Local Government and Modernisation and Norwegian Ministry of Foreign Affairs, 2021), WP40 – the action plan for reaching the SDGs in Norway (Kommunal-og moderniseringsdepartementet, 2021), and the community of ministries

environmental report for 2021 (Kommunal-og distriktsdepartementet, 2022a). Furthermore, the ministry has been the leading initiator for a number of forums, investigations, and missions, including its minister being the leader of the national top-leader forum for the SDGs (Kommunal-og distriktsdepartementet, 2022c), and commissioning various SDG related projects from agencies: Statistics Norway (SSB) has been ordered to develop national benchmarks and indicators for the measurement and reporting of SDGs in Norway, in cooperation with various ministries and agencies (Kommunal- og distriktsdepartementet, 2022, p. 38), and; Nordlandsforskning was commissioned to examine how sustainability targets are used in municipal and regional planning (Kommunal-og moderniseringsdepartementet, 2020). This shows a clear diffusion of power, as the ministry has become the one to submit some of the most important documents for SDGs in the Norwegian state, and it orders various sustainability related projects, all on behalf of the government.

One can thus draw similarities to how ministries and agencies are managed. In this case, KDD becomes an entity for the government through which it can govern and manage SDGs in Norway through practical tasks - simply said, to some extent the government delegates the responsibility of following up and coordinating SDGs to KDD, freeing up their own time and resources for larger tasks. This is thus a classical example of how the vertical and horizontal coordination structures put in place in the Norwegian public sector, and it illustrates that this is a critical element of the Norwegian governing of SDGs nationally. It is a way to create coherence, coordination and cooperation across and between different ministries, sectors, and the overall national, political landscape, which is often fragmented instead of integrated. Additionally and as previously discussed, setting up KDD for the leadership of horizontal coordination across the policy instrument apparatus can provide the necessary directionality and agreement between fragmented sections of the government, and may ultimately help in establishing better goal definitions, initiatives, and ways of implementing this. Furthermore, the vertical power diffusion and coordination aspect from the high-level government to ministry, is a solution initiated to respond to the policy failure of coordination. Instead of establishing a completely new entity or committee to oversee coordination, the state escapes much red tape, resource use, and perhaps even discontent from established and incumbent entities. And, by creating new interactions and a new network of coordination through the already set-up KDD, the government establishes coalitions and acceptance for the SDGs, and subsequently stimulates the collection of information and interactive learning

processes. As TM has shown us, learning and evaluation is critical for the transition process, and through this coordination which stimulates learning and knowledge-sharing, we see that the government has through KDD produced documents that clearly lay out Norwegian achievements, ready to be evaluated. Without this process of evaluating what has been learned, and the experiments undertaken, the optimal way forth for management and governance of SDGs may not be discovered. This increased focus in building up institutional knowledge and competence through learning and evaluating processes on sustainable development is seen as a key transitions towards a better integration of SDGs (Hjorth-Johansen *et al.*, 2021)

Continuing, as previously mentioned the responsibility for all individual SDGs has been distributed across 13 ministries, per the Norwegian sectoral principle. This entails coordinating the follow-up of given goals, and action with other applicable entities and ministers. However, it was emphasized that this follow-up and coordination should not require new and resource-intensive processes, but rather be integrated into ordinary governance practices rather than being given a special pathway (Standing Committee on Scrutiny and Constitutional Affairs, 2021, p. 3). In practice, this means that the ministries and their underlying agencies should focus on a specific SDG, which is most likely already part of their sector and thus established routines, practices, and daily work, which the ministry and agency should manage. This integration of sustainability into the general practices of governance is an essential task of governance for sustainable development, as it uses the already established formal structures for authoritative decisions through which societal steering by the state is performed (Meadowcroft, 2007). This steering logic implies the need to consciously steer the direction of societal movements, and thus requires goal-directed intervention - such as the SDGs. And, backing up the SDGs is this framework and way for the state to shape society, i.e., the governmental formal structures, established through routine work and practice. In essence, it is a positive feedback loop through which sustainability implementation can be strengthened. Such management would arguably be already set up to deliver results on SDGs and initiate the necessary changes and cooperative practices needed for the goals. By TM's rationale that transitions can happen through gradual transformations of existing systems and regimes, SDGs and their reporting are easily inserted as new elements that are added to achieve slow and incremental structural changes. By utilizing "the opportunities for transformation that are present in an existing system" and joining "in with ongoing dynamics" (Rotmans, Kemp and Van Asselt, 2001, p. 25), SDGs can through this

perspective be integrated in the already enacted workings and dynamics of the system, including the government's, ministries' and agencies' daily work and practices.

However, seeing as the SDGs "represent an ambitious agenda for societal change", and would require radical shifts (Meadowcroft, 2007, p. 302), it could also be an indication that perhaps the Norwegian state is not ready for the maximum scale transformational changes necessary to properly implement sustainability and the SDGs, meaning that this transition process perhaps does not have a large-scale end-goal.

Other changes have also been mapped by BDO (Tangen Sunde et al., 2021; Amundsen, Thuve and Mohammad, 2022; Thuve and Harsem, 2022), a network of public accounting, tax and advisory firms. Among some of the most important findings, is that the state administration has been reorganized through for example changes in ministries by the establishment of new, underlying and some merging units, and others changing names or being shut down. Much development can also be seen from a sustainability perspective, with the previous Solberg government stepping up its efforts after the publishing of a report by the National Audit Office, which criticized the lack of addressing sustainability by the Norwegian government. This includes the white paper to achieve the sustainability goals by 2030, and in its wake a number of changing directions of sustainability. This includes for example the establishment of a new National Forum for the 2030 Agenda (Regjeringen, 2023), the establishment of the Climate Investment Fund (Norfund, 2023), and the state has together with The Norwegian Association of Local and Regional Authorities (KS) entered into agreement to increase cooperation on the SDGs and innovation in the public sector. While other changes connected to industry and economy management may improve efficiency and contribute to the SDGs, there are not many large and structural changes in the Norwegian state, indicating a stronger effort for the SDGs. Nevertheless, the rest of this chapter will go slightly more in-depth on some of the most important documents and instances of change towards SDGs during the past years and show how the Norwegian state has approached the area until now.

4.2.1 Understanding sustainability in Norway - a timeline

Before the concept of SDGs, and during the period of Millennium Development Goals, Norway was to some extent quite progressive when it came to sustainability discourse in the state. The idea and importance of sustainability was already articulated in the "Soria Moria" proclamations, the 2005 governmental platform for the 2nd red-green coalition government of Jens Stoltenberg. The proclamations stated that the government sought to build its environmental politics on the principles of sustainable development, with sustainability being mentioned 21 times, and through being cautious of future challenges and developments, and protecting our descendants through the then current politics (Regieringen II, 2005, p. 4). This focus continued in 2007 and 2008, as the government first presented a draft of a new Norwegian strategy for sustainable development for a public hearing ('Utkast til Norges strategi for bærekraftig utvikling', 2007), which was subsequently approved and published as a part of the 2008 National Budget (Finansdepartementet, 2007). At the time, sustainability in the documents was mostly presented through a selection of issues and topics from climate change to cultural monuments. The Norwegian role was presented through a focus on leading international efforts, and taking part in already established international agreements, e.g., the Kyoto protocol. As expected, sustainability reporting only touched upon norms for private companies, and the only mention of specific public sector and state practices for sustainability, was connected to public procurement.

Jumping ahead several years, sustainability has become a mainstay in the annual national budget. In the 2016 national budget, sustainability was mentioned 54 times and appeared in context of several individual issues such as finance, getting nearly 8 full pages dedicated to sustainability (Finansdepartementet, 2015b). This marks the first time the SDGs were mentioned, although no specific ways of reaching them were presented. For the next year, sustainability was mentioned even more, and now the individual chapter is renamed to "the Norwegian follow-up of UNs SDGs" (Finansdepartementet, 2016). In this chapter of the document, a closer examination of the follow-up and status of specific goals was included, with descriptions of Norwegian actions and efforts to reach them. However, while this national budget was also the first to reference the spread of responsibilities for SDGs across ministries, it is also here that the government emphasized that the inclusion of sustainability should not require new and resource-intensive processes.

Subsequent national budgets followed this template, only adding small amendments, such as the statement that the ministries have responsibility to follow-up their assigned SDG(s), and report on their status in their budgetary documents (Finansdepartementet, 2017a, 2018, 2019, 2020, 2021). However, in a confusing turn, the most recent national budget for 2023 drastically cut the mentions and focus on the SDGs (Finansdepartementet, 2022a).

Nonetheless, it has been observed that sustainable development is sometimes used as one of several arguments to justify budget proposals and in financial negotiations (Hege, Brimont and Pagnon, 2019). In the 2021 national budget for example, the concept of sustainability is added to arguments for strengthening industries on the basis of creating `green` jobs for a sustainable future (Finansdepartementet, 2020, p. 6, 13), trying to avoid budgetary deficits as to not weaken the sustainability of the state finances (Ibid., p. 10), and implementing quotas and levies to price greenhouse gas emissions in order to assure emission reductions and encourage climate-friendly investment (Ibid., p. 16). Nonetheless, what has been missing, is the direct financing and budgeting simply based on an SDG. This willingness to invest in ambitious and risky objectives characterize missions, and Norway has shown that it can finance expensive and ambitious projects, such as the carbon capture and storage project "Longship", which is the most expensive, single climate project financed by the government for an estimated 17 billion NOK (Ministry of Petroleum and Energy, 2021). The state should continually show that it can take on such missions and attempt to more closely align projects and missions to SDGs, even if SDGs are not necessarily understood as the mission itself.

Sustainability and the SDGs have also been mentioned in many other documents in the public sector (Utenriksdepartementet, 2015, 2019; Finansdepartementet, 2017b; Nærings-og fiskeridepartementet, 2019b, 2019a; DFØ, 2023f), indicating a strong signalling focus, which could however in practice be mostly discursive, and not tied to specific changes towards the SDGs.

The Hurdal platform is another significant and crucial signalling document for sustainability in Norway. The government platform for the new Labour- and Centre-party government includes many objectives and ambitions that fall under the category of sustainability, such as lowering greenhouse gas emissions, cutting pollution, and enhancing safety and inclusion in Norwegian society (Statsministerens kontor, 2021). The long-term plan identifies objectives in five areas of long-term importance, all of which include sustainability, such as the initiatives to create a Nordic hub for digital communities to work on SDGs, under the guise of innovation and entrepreneurship (Statsministerens kontor, 2021, p. 15). These areas could be considered to be targeted societal missions, or projects under other broader missions, but they lack the elements of being measurable, time limited and concrete – and would thus need to be more specifically picked out, or reformulated (Normann *et al.*, 2022). Unfortunately, while some reporting and follow-up of sustainability issues are mentioned, these can only very indirectly be connected to the SDGs, which are not mentioned specifically.

Two other documents of major importance which are not necessarily signalling nor management documents, are the Norwegian voluntary reviews. The UN National Voluntary Reviews can be regarded as the premier reporting on sustainability for nations. Through these, the country assesses, review, and presents its progress on implementing the 2030 Agenda through the SDGs (ForUM, 2020; OHCHR, 2023). Norway's first review in 2016 presented a working plan for the SDGs, how far Norway have come in their efforts to implement them, and in what areas there is yet more work to be done(Norwegian Ministry of Foreign Affairs, 2016). It was in this review announced that the state would use the SDGs in its budget processes, which has previously been shown. The government also identified possibilities for following-up all 17 SDGs, and other already mentioned elements came forth in the 2016 review, including dividing responsibility for SDGs amongst ministries. From the review, we can see that the ministries were expected to use the SDGs in their annual budget proposals, to establish a process in which the progress and status on SDGs are shared up-and-down between ministries, the government, parliament, and ministry of finance (Norwegian Ministry of Foreign Affairs, 2016, pp. 2–3). However, this process establishment completely left out the work and reporting of underlying agencies, which in retrospect seems strange, seeing as they are the entities to implement and manage policies in practice, including those focused on SDGs.

Between this first and second voluntary review from Norway, the state was reviewed and criticized by other organizations on its progress on implementing SDGs. Among these was ForUM, the forum for development and environment. ForUM was established in 1993 to monitor the follow-up of the 1992 United Nations Conference on Environment and Development (UNCED), known as the Rio Conference. Consisting of, and representing about 60 civil society organizations from Amnesty International to the World Wildlife Foundation, ForUM is a knowledge- and competency-network, and an important advocate for sustainability in relation to the government (ForUM, 2023b, 2023a). Referring to the pathways of MLP, this outsider pressure on the regime is essential for both the transformation and reconfiguration pathway. In response to pressure and present opportunities, the state may just choose to modify the direction of its path by adjusting and reorienting its systems and structures, and even adopting components to add-on to its regime architecture. As we will soon see, the government has improved on many of the points advocated for by outside groups, and sustainability is clearly being followed-up, although perhaps not to its fullest extent. Nonetheless, this development path is indicative of both pathways from MLP, as the

regime has not fully changed in response to criticisms, but rather attempted to utilize its own stable configurations and processes to implement and only partially change, to among other things, satisfy outsiders. In 2020, ForUM reviewed four example strategies for implementing the SDGs, and on basis of this provided recommendations to the Norwegian state (ForUM, 2020). At that time, it was recommended that Norway should coordinate at a high policy level and innovate in the reporting and development of national indicators for sustainable development goals. ForUM concluded that those countries that had both strong national coordination, a functional, consultative, multistakeholder mechanism, and a comprehensive national sustainability strategy, usually had more substance in the voluntary review than other countries that only had a general strategy (FORUM, 2020).

Also in 2020, the Office of the Auditor General of Norway, the state auditor, criticized Norway's national follow-up of the Sustainable Development Goals (Riksrevisjonen, 2020). The state auditor concluded that there was poor coordination on the SDGs in Norway, a lack of comprehensive planning and involvement of Statistics Norway, and major weaknesses in reporting (Riksrevisjonen, 2020). This was evaluated by looking at the management signals in letters of allocation from five ministries with responsibility of at least 1 SDG, to underlying agencies, where major differences from ministry to ministry were discovered. The Ministry Finance had given poor management signals to Statistics Norway, even though it had in its budget proposals between 2016-2019 reported that the agency would work on the sustainability goals (Riksrevisjonen, 2020, p. 32). In response, Statistics Norway highlighted its need for role clarification, as without it, the agency cannot be efficiently managed and properly support the ministry. On the other hand, the Ministry of Climate and Environment and Ministry of Education and Research had given clear management signals, with specific assignments for measurement and reporting (Ibid., p. 33). The Ministry of Climate and Environment specifically mentioned SDGs in their allocation letters to the Environmental agency from 2018-2020, for example stating that the agency must deliver data on indicators of the SDGs which the ministry is responsible for (Ibid.). The Ministry of Education and Research also included signaling for the follow-up of SDGs by its agencies, by for example creating a vision of the ministry by stating that it had put knowledge and expertise for a sustainable Norway as a priority for the education sector (Ibid.). Nevertheless, much work remains to be done with reporting, including the fact that reporting did not address challenges in achieving sustainability goals, there was little to no use of indicators, and no proper systematic methodology and framework for consistent reporting practices had been put in

place (Stave, 2022, p. 18). It can still be interesting for this thesis, as the allocation letters following 2020 are analyzed. We can thereby attempt to detect changes from 2016 to 2022.

For Norway's voluntary review in 2021, the state had significantly expanded its status and progress update, and responded to many of the previous criticisms (Norwegian Ministry of Local Government and Modernisation and Norwegian Ministry of Foreign Affairs, 2021). By designating KDD as the coordinating body for national sustainability work, coordination had been improved. The review also highlighted the white paper and action plan for the SDGs, as well as the future taxonomy of sustainable indicators (SSB, 2023) which KDD ordered from SSB and is constantly updated to provide data on Norwegian progress.

These changes can be seen as a further development of Norwegian efforts, and response to criticism of a lacking national sustainability strategy and coordinating capabilities. The Government also reported that it wanted the SDGs to be incorporated into sectoral policies and the ministries' strategies and programs, for example through the inclusion of SDGs in guidance for underlying agencies, as instructed by allocation letters (Norwegian Ministry of Local Government and Modernisation and Norwegian Ministry of Foreign Affairs, 2021, p. 34). Thus, and perhaps for the first time, the government stated that from 2021, all subordinate agencies were to refer to SDG implementation in their annual reports (Ibid., p. 32). As claimed, most agencies already perform tasks contributing to achieving one or more SDG (Ibid., p. 49). This is an example of how using the already established formal structures that uphold routine activities and practices can be a good way to implement SDGs. The agencies should also thus not find it too difficult to summarize and describe which SDGs, and how, they are working towards, while also exploring challenges identified, and how they could in the future align more towards the goals. This represents a major development, and is key for the thesis, as we should be able to see the consequences of this in practice.

4.2.2 WP40

In June 2021, WP40 was published (Kommunal-og moderniseringsdepartementet, 2021). It signals the strategic ambitions of the government for the SDGs, and the desire to strengthen the implementation power necessary to achieve the goals (Tangen Sunde *et al.*, 2021).

This document is perhaps the most important political management signal, as the document is an accumulation and consolidation of what has been said and done for sustainability in the Norwegian state, and it quite specifically anchors sustainability at the top of the Norwegian political agenda. This is perceptible throughout most of the theory, and thus important on several dimensions.

By anchoring SDGs at the top, it creates a stronger foothold for vertical coordination by aligning the varying interests and responsibilities beneath the government through top-down control (Schot and Steinmueller, 2018b). Without the anchoring, and of course KDD which has become the SDG "tsar", ministries and agencies, who have differing levels of interest, power, and responsibility towards the SDGs, would not necessarily support the same dimensions, problem definitions, and ways of addressing sustainability, if left to their own devices. Furthermore, high-level political anchoring is necessary for being able to implement missions, as missions require strengthened levels of cross-sectoral coordination, and the power to mobilize and coordinate across levels, actors, and resources (Mazzucato, 2019). In this case, the anchoring is done at the highest level of the government itself but may in other instances be done at the prime minister's office, or various committees and commissions organized by the government or on behalf of the prime minister's office. Howbeit, typically in Norway, and more specifically from a research policy governance example, the "21 strategies" mechanism has emerged for coordination for ventures within different sectors (Normann et al., 2022, p. 50). This mechanism, however, has a limited mandate to follow up and realize bigger initiatives, and it is not suitable for mission coordination which does not require R&D (Ibid.). Additionally, the Norwegian "sector principle", which gives each ministry responsibility for funding research in and for its own sector, in practice establishes severe divisions of responsibility and work between ministries and their respective policy areas (Ibid.). Thus, while there are established traditions and mechanisms for coordinating initiatives and strategies within specific and individual sectors, less mechanisms able to anchor missions that cut across ministers and policy areas exist, and so this task must fall on the government to implement.

This government implementation is therefore partly what has been done through first appointing KDD the coordinating lead body for sustainability nationally, and following up with fully realized strategy and action plan as seen through WP40. Nevertheless, there is a possible conflict, or symbiosis, between this high-level anchoring and the Norwegian sector principle. It could be argued that precisely due to the sector principle and prominent divisions

in the Norwegian public sector, the government *had* to implement high-level instructions and anchoring to overcome divisions and a lack of coordination. Still, if that is the case, it should be such that high-level political anchoring, and in our case instructions for the public sector stemming from the government, should precede work and references by ministries and agencies on the SDGs. But even so, the importance of this white paper as a mechanism of high-level political anchoring should not be diminished.

It can be similarly understood regarding the concept of directionality, as high-level political anchoring assists in creating directionality. The white paper helps focus Norwegian development pathways by aligning them to the SDGs, and creates a vision for this, by claiming that the government has decided that "the 2030 Agenda with the Sustainable Development Goals will be the main political track for addressing the greatest challenges of our time" (Kommunal-og moderniseringsdepartementet, 2021, p. 10). This long-term vision helps focus the direction of transitions, shape short-term policies as the country is expected to be governed and policies placed to support the SDGs, and alleviate an issue brought forwards by Schot and Steinmueller (2018b) – namely unifying possible choices and options for paths with the SDGs.

Looking at the actual contents of the document, the white paper is an action plan for how Norway can and will achieve the Sustainable Development Goals, and it therefore reviews all the sustainable development and sub-targets, and describes both governmental policies in all areas, as well as challenges faced (Ministry of Local Government and Modernisation, 2021). Seeing as the country scores quite high on most of the SDGs, the white paper shows all SDGs, and together with all sub-targets and detailed indicators, presents sets of possible and specifically curated Norwegian indicators and target measurements. An overview of each SDG as presented by the white paper is presented in appendix 1.

4.2.2.1 Contents of WP40

I now go back to the more structural and practical aspects of the white paper. While the document does go in-depth on all SDGs and their strategies, it also looks at how and through what mechanisms the targets in Norway might be implemented and subsequently reached, as well as how the Norwegian state might have an overall follow-up of the strategies outlined through the individual SDGs.

The white paper describes that the public budget is adapted to sector classification, and is therefore not well adapted to sustainability work, which requires more coordination and takes place between several actors (Kommunal-og moderniseringsdepartementet, 2021, p. 196). However, the government emphasizes the need for ministries to work together and address complex societal problems, which has been seen as being challenging without a comprehensive political approach where the ministries are not only concentrated on their own sectoral politics and policies but have also instilled a cross-sectoral perspective to address problems across areas SDGs (Ibid., p. 197). Furthermore, the government presents a plan to bring the ministries more closely together through a longer (3-6 year) strategic orientation, and an action plan which will place ministries at the forefront of a network which will reorient, reorganize, and transform the public sector in efforts to ease the coordination and cooperation for overarching goals and societal missions, such as the SDGs (Ibid.). This has already begun with the formation of various "core groups" made up of leaders from other ministries that are focusing on issues like coordinating efforts for vulnerable children and young people (Ibid.). What is apparent is the need for coordination and reflexive governance. The public budget and other management documents, KDD, and the establishment of new networks and groups, only serves to illustrate how the government seeks to enable and develop this, in search for more efficient SDG goal attainment. To show what needs to happen, the government has created an example through the "coordination steps" (Figure 1; Ibid., p. 198). At step one there is the sharing of information, and step two requires the development of common and coherent problem understandings. Step three attempts to combat the weakening of each other's (i.e., ministries) goal attainment in search of their one, and the last step consists of developing common plans or initiatives. Simply expressed, these stages show the many levels of coordination and coherence, and it is believed that climbing these steps is important for a comprehensive governance approach to achieve the SDGs (Ibid., p. 197).

Develop common and coherent problem understandings Minimize the weakening of others goal attainment Develop common plans or initiatives

Figure 1 – Coordination Steps

Sharing information

There are many ways of theoretically conceptualizing what is happening in practice and is performed through the white paper. This emphasis on coordination and the creation of centers of power and responsibility below the government can be viewed from one angle as a policy tactic to construct the support vital to long-term transitions. Ministries and agencies may come to expect and attempt to implement more long-term goals, and the forming of broad constituencies of public sector actors who are all embedded in the transitions, may help the Norwegian state avoid political struggles of decline and resistance typically met when incumbent systems are pushed out (Markard, Geels and Raven, 2020). Embedding the whole public sector policy apparatus and mobilizing actors from different sectors provides the direction and agreement necessary to work on complex issues. As written out in the theory, this mobilization across sectors and areas helps the government define and carry out missions (Mazzucato, 2018; Wanzenböck et al., 2020), which is step two for coordination, and gives the missions more legitimacy and opportunity to actually become established (Boon and Edler, 2018; Kuhlmann and Rip, 2018), which can come from the last and most difficult steps. To see this, we can follow the steps of coordination from figure 1. The most basic form of coordination, information exchange, contributes to a greater overall understanding of goals and difficulties. Mission definition emerges through actor interaction and aids in the creation of concrete plans. Thus, this collective coordination uses reflexive and participatory processes to create consensus on what development pathway to align with, and the ministries may in unison create both a joint agenda for action, and shared expectations (Weber and Rohracher, 2012). The white paper starts this process, and following frame three of TIP, is a viable option to tackle directionality failure.

While "missions" as an individual goal and initiative may not be entirely appropriate in this situation, the concepts of encouraging coordination and creating interaction between actors and across sectors are. We can extrapolate and learn from the necessities of missions and governance, and draw important lessons about what policies, politics, and governance practices are needed to enable combating challenges.

In Norway, many preconditions for missions are already in place, including a challengedriven research policy, and the governmental platform's defined political objectives suitable for missions (Normann et al., 2022, p. 9). The country also has strong ambitions in addressing societal challenges, and many policy entrepreneurs, for example agencies, are advocating for more mission approaches, and are keen on experimenting and learning from new schemes (Larrue, 2021, p. 7). Thus, even if we are not focused on R&I activities or STI policies, we can see how a document such as WP40 helps establish high-level agenda setting to allow for more comprehensive and ambitious initiatives, such as the ones expected to come from the SDGs, and create more holistic and integrated governance structures to approach this (Ibid.). Furthermore, the document does address missions, stating that this way of working is relevant for the SDGs, and uses the vision of zero killed or injured in traffic as an example (Kommunal-og moderniseringsdepartementet, 2021, pp. 194–195).

While this document does serve as an example of how the state endeavors to use its multifunctionality and dimensions, as it uses various sites of power - ministries - to drive transitions, the government remains capable of playing a valuable role by setting up strong systems of testing, evaluation, and information dissemination (Nelson, 2011). This can be done by governments to create a more proactive and anticipatory role for itself following the tenants of TM. First, it creates space for frontrunners and networks of regime-actors ministries and agencies -, in transition arenas, which I, in this case, understand as the framework created by the government for ministries to work towards SDGs. The actors involved are further allowed to have room for reflection, adaptation, learning, and experimentation in the arena (Rotmans and Loorbach, 2010), as expressed and exemplified through the required changing reporting practices and routines to implement and monitor SDG progress and efforts. The reporting practices can be characterized as key mechanisms for enabling and allowing a transition to take place in Norway, as well as supporting a missionapproach and allowing the government to guide and steer developments. The white paper, like the 2021 Voluntary Review, points to improvement and streamlining of reporting on the work on SDGs. A desire to cooperate with the Norwegian Association of Local and Regional

Authorities (KS) on the follow-up of the sustainability agenda and innovation in the public sector is expressed (Kommunal-og moderniseringsdepartementet, 2021, p. 187), as well as requirement to give all government agencies instructions to report on how they contribute to the SDGs, and assess how this contribution may be increased (Ibid., p. 201). This reporting on the SDGs should in practice be cross-sectoral, which I understand as not having to necessarily be limited to the SDGs under the responsibility of the agency`s managing ministries. However, the white paper does not provide any more criteria and information about the reporting process than had already been made clear in the UN voluntary review. It is nonetheless a major indication of the reorganization and further development of sustainability reporting in the Norwegian public sector.

4.2.3 Norwegian reporting practices

Following instructions for reporting from WP40, we can quickly look at what frameworks and guidance are implemented for reporting in the Norwegian public sector. Much of this has already been discussed previously but looking at some more specific documents which are meant to instruct annual allocation letters and reports, we can check to what extent instructions and guidance for SDGs have been embedded.

The Norwegian Government Agency for Financial Management (DFØ) is responsible for the guidance of ministries and agencies in their governing documents and reporting. As the most important annual management document for agencies, the letter of allocation plays a key role for ministerial governance and management of underlying agencies and should contain goals and management parameters such as the Sustainable Development Goals (DFØ, 2022). Through letters of allocation, ministries play a normative role, with clarified expectations, responsibilities, and roles – but it is obvious that the ministries in this sense should and can develop, as exemplified by Statistics Norway asking for role clarifications by its supervising ministry (Riksrevisjonen, 2020, p. 33). Additionally, the agency management guidance for ministries does not mention sustainable development a single time (DFØ, 2022), leaving the onus on ministries to themselves choose, or not, to invoke SDGs.

Published in late March 2022, "Rundskriv R", or the «Main budget letter for 2023" (Finansdepartementet, 2022b), is a document sent out to all ministries. It is an annual document within state financial management from the Ministry of Finance, containing guidelines for the work on the state budget proposal for the next budgetary year, and may include everything from directives to authorizations or just informative material. It stipulates that all ministries must discuss their work with SDGs in the next budget bill proposal and describe the effort for each of the SDGs for which the ministry is responsible for (Ibid., p. 15). It may be assumed that this order to specifically discuss SDGs is expected to trickle down from ministries to underlying agencies, but it is not directly mentioned.

In the guidance document for central government agencies' annual reports, agencies are instructed in the content of their annual reports, and DFØ (2020) points out that ministries must set more detailed requirements for the content of annual reports and establish this in consultation with the agency (Ibid., p. 4). This document does not include SDGs since it precedes the Voluntary Review and WP40, which specifically demand that agencies include SDG reporting in their annual reports.

However, seen in hindsight of several overarching messages that SDGs must be included in annual reporting, this guiding document does create a solid basis for agencies to report on sustainability goals. There are multiple mentions of criteria to include for example descriptions of goal and target attainment, and to refer to topics from both the allocation letter, and main state budget proposal. Nevertheless, it could be argued that updating the guidance to specifically mention the SDGs would facilitate easier and more effective management of agencies, information sharing, and interactive learning. Additionally, if the SDGs are not eventually incorporated into such official and standardized guidance, it would show that sustainability has not yet permeated formalized structures of governance and public sector management, which has been shown to be crucial in transition. As of now, the governmental instructions from WP40, and overall signals given by high-level political anchoring of sustainability and the goals, have not been enhanced in the formal governance structures, compared to the broad guidance already provided.

4.3 Documents from ministries and agencies

In this section, I investigate how, and to what extent, ambitions in sustainable development are reflected in documents from ministries and agencies. For the sake of the analysis of the topic, I conducted a basic quantitative analysis of allocation letters and annual reports for and of 18 agencies, as described in more detail in the methods section of this thesis.

4.3.1 Findings from the word Search

As referenced, BDO (Haugen Strand, Bruntveit and Amundsen, 2020) has already done an examination of SDG implementation in public sector management documents, similar to mine. In 2020 they mapped instructions and allocation letters for 2020, for the underlying agencies of 8 ministries. The results of the allocation letters showed specific SDGs were only mentioned in 4 out of 105 allocation letters, one of them being for the Environment Agency. However, much more general guidance related to sustainability is provided, with the mapping showing that around 48% of all letters mention sustainability directly, while 65% mention it indirectly. Nonetheless, the results also showed the same differences between ministries, as previously mentioned. The 2022 follow-up of this examination (Mohammad and Ekkjestøl Bruntveit, 2022) saw a slight increase in direct references to sustainability, and slight decrease in indirect references. Specific SDGs were however rarely mentioned, and so the final conclusions for BDO were that the government had made little progress in the focus on sustainability in instruction and allocation letters from 2020 – 2022.

My own analysis shows similar conclusions, with results indicating an increase in governance and management signals from 2016 to 2021 and 2022 (Figure 2). The biggest change is in annual reports, with an increase of approximately 65.6% more references from 2016 to 2021. This may show the agency's ability to interpret broad, and in many cases unclear expectations and goals from supervising ministries, or it could otherwise mean that the ministerial guidance became much more direct and clearer from 2016 to 2021. The reference growth in allocation letters is from 2016 to 2021 at approximately 30.5%, perhaps indicating a weaker implementation of management signals by the ministries. However, by virtue of allocation letters being much shorter, less space is given to each topic, and this may thus also explain the difference. Additionally, seeing from previous sections that a part of the Norwegian agency management includes the aspect of balancing direct instructions with broader guidance giving more leeway to agencies, this could also explain that ministries simply did not have to add much more to the guidance already established and given. Nonetheless, most conspicuous is the fall in direct and indirect references in allocation letters from 2021 to 2022. Much progress on SDGs was made during 2020 and 2021, including the 2021 Voluntary National Review and WP40, with all associated governance changes, and we should thus have expected ministries to implement stronger signals on sustainability management – especially after a clear message from the highest political level following the aforementioned documents.

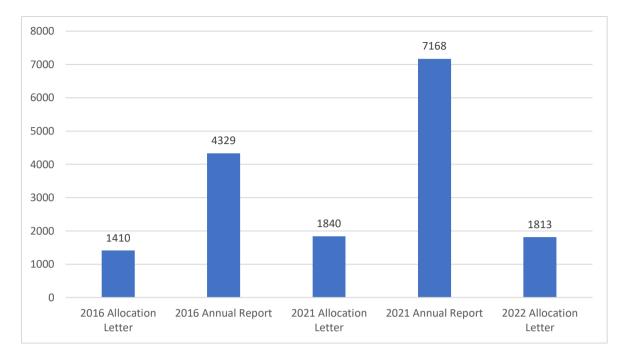


Figure 2 - Direct and indirect references, referrals, and guidelines for sustainability - All Agencies

Comparable results and conclusions can be drawn from findings for direct references and referrals (Figure 3). There is nearly a four times growth in direct references in annual reports, which indicates good implementation of sustainability. However, annual reports are long and detailed, and spread across 18 agencies with varying degrees of sustainability reporting, the four direct keywords to sustainability are referenced on average 25.7 times per annual report. Since majority of the reports that were searched contained these references on the same pages or in the same paragraphs, it still indicates that there is a major lack of sustainability permeating the annual reports as a common thread throughout the documents. Based on this, it seems that the agencies have not yet reached overall policy goals and strategies for implementing sustainability in their daily practices, routines, and activities.

We see almost the same growth of direct references and references to sustainability in allocation letters. This may indicate the ministries' guiding role, as the annual reports follow the allocation letters` increase in direct references. Additionally, we can argue that this therefore emphasizes the greater responsibility of ministries to include direct references to sustainability, as agencies could be closely following their example. Unfortunately, it is disheartening to again see a reduction from 2021 to 2022 (Figure 3), this time for the direct references in allocation letters. This stands in contrast to the important documents of 2021, that clearly put sustainability at the forefront of the political agenda. Nonetheless, seeing as the allocation letters for 2021 were published before all the other important documents of the

year, they still would not have been directly influenced by them. Still, the upcoming white paper to be released was referenced, for example in the national budget for 2021 (Finansdepartementet, 2020, p. 175), and so it is reasonable to assume that knowledge of the upcoming focus on sustainability and the SDGs was known amongst ministries. Thus, it is still possible that this year was an anomaly in context of focusing on sustainability, and a similar analysis of the subsequent allocation letters could help decide this.

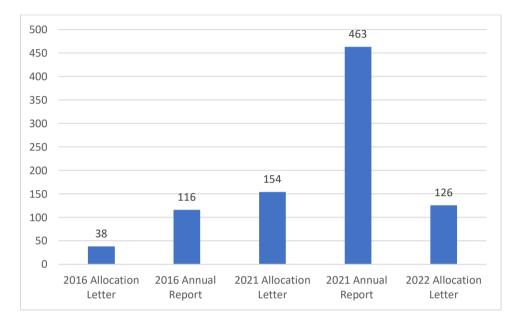


Figure 3 - Direct references, referrals, and guidelines for sustainability - All Agencies

As I soon go into more in-depth on findings from the three agencies specifically picked out, those being the Environment and Digitalisation agencies, and the Labour and Welfare administration (NAV), we can quickly compare these three agencies (Figure 4). As the result below shows, the Environment agency is much more focused on issues of sustainability than the other two agencies – which is to be expected, as its area of focus is much more focused on typically known sustainability issues, such as protecting natural environments and keeping up biodiversity, and reducing pollution and emissions. Nonetheless, this also means that general indirect references through keywords such as "climate", "nature", and "environment", are the bulk of sustainability references in the annual reports by the Environment agency. Nonetheless, the Environment Agency was still the agency with most direct references to sustainability, with the Digitalisation agency in second, and NAV last.

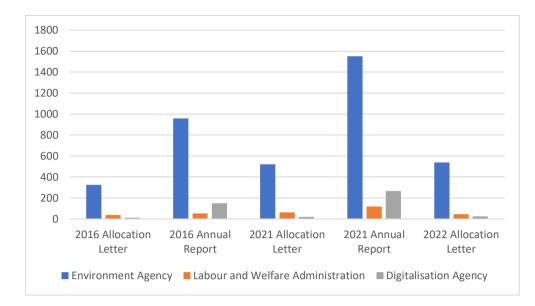


Figure 4 - Direct and Indirect References to Sustainability for three main agencies

To summarize this quantitative analysis, there is a trend from 2016 to 2021 for sustainability references to decrease, and for both direct and indirect references to decrease from 2021 to 2022. Some of the agencies and ministries did not have a single reference to sustainability a couple of years. For example, the Norwegian Petroleum Directorate and Norwegian Ministry of Petroleum and Energy did not have references to sustainability in neither 2016 or 2022, and the Children's Ombudsperson of Norway with its Ministry of Children and Families never referred to sustainability. Nonetheless, the trends indicate that 2021 was a good year for sustainability, with a surprising drop-off in 2022.

The ministries are providing more sustainability signalling in 2021 than 2016, which should convey more criteria and requirements. Still, the empirical result from analysing the documents derives from specific word searches which measure their sustainability references, and likewise, preferences. As many documents heavily referenced a limited number of keywords, it shows that the Norwegian sector divides are nonetheless upheld, and most entities focus on a limited range of sustainability issues.

For the direct sustainability references, there are some interesting trends and uses of the keywords. Primarily, the SDGs and 2030 Agenda were referenced almost as much as "sustainable (development)", while "sustainability" scored the lowest. This can be explained as "sustainability" by itself is perhaps the most limited keyword, but it could also illustrate how the concept itself is mostly just invoked a few times to create future visions, which the ministries and agencies strive towards. On the other hand, SDGs being referenced a lot shows how the focus on the goals as targets and projects to strive towards has changed throughout

the years. And likewise, invoking "sustainable" or "sustainable development" can signify that the term is added to existing issues and topics, such as "sustainable financial management", or "sustainable population growth". This discursive shift is an important change in the public sector and will be looked more into in the next section.

4.3.2 Qualitative document analysis: findings from NVIVO

Following a deep dive into the 2016, 2021, and 2022 allocation letters and annual reports from the Environment and Digitalisation agencies, and the Labour and Welfare administration (NAV), we can see a reflection of rising governmental ambitions for the SDGs. This first part will provide a straightforward description of the documents based on the nodes, with all results added in the appendix.

Starting with the basics, we can first remind ourselves what SDGs the responsible ministries of the three agencies are responsible for, as this could affect the results seen. The Ministry of Labour and Social Inclusion, with underlying agency NAV, is responsible for SDG 1 - End poverty in all its forms everywhere. The Ministry of Climate and Environment, with underlying agency of the Environment agency, is responsible for SDGs: 6 - Ensure availability and sustainable management of water and sanitation for all; 12 - Ensure sustainable consumption and production patterns; 13 - Take urgent action to combat climate change and its impacts, and; 15 - Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss. Lastly, KDD, and its underlying agency the Digitalization agency, is responsible for SDG 11 - Make cities and human settlements inclusive, safe, resilient, and sustainable. Following the Norwegian sector principle, we would expect references to these SDGs to be particularly visible in the documents.

Appendix 3.1 shows coding references for all documents by year. The results indicate that there was a small increase in total references from 2016 versus 2021. The much smaller number of references for 2022 is due to the analytical scope of this thesis looking at allocation letters for that year, and not annual reports. What we can further see is a consistent focus related to specific SDGs (Figure 5).

Understanding the data gathered in levels, we could group the SDGs in three batches based on the number of references. Referenced the least are SDGs 4, 5, 6, and 7. Referenced a middle

amount, approximately averaging 5-10 times each year, are SDGs 1, 3, 10, 11, 12, 13, and 14. Referenced the most on the other hand, those coded over 10 times, are SDGs 8, 9, 15, 16, and 17. This shows us that except for SDG 6, under the responsibility of the Ministry of Climate and Environment, all SDGs under the ministries responsibilities are referenced either a middle or high amount. This indicates that ministries and agencies are following up on SDGs under their responsibility, and they are thus exhibiting efforts in SDG work associated with their sectors. However, and very interestingly, apart from SDG 15, none of the highest referenced SDGs are part of these three ministries area of responsibility. As I see it, the first and most basic, but also most plausible reason for this, is that these management documents are primarily financial documents guiding the overall work of agencies. The government has clearly stated an idea to integrate SDGs in regular governance frameworks, and this would support such actions.

It would also immediately bring a natural connection to SDG 8, concerning decent work and economic growth, as well as SDG 16, from which the sub-target of efficient and trustworthy institutions comes forth as a clear ambition of these ministries and agencies. Likewise, the high number of references for SDG 17 indicates an effort for increased cooperation, which can be linked back to calls for increased coordination across and between actors and levels. The regime level, including the Norwegian state, is developing along path-dependent trajectories as a result of regimes` inherent nature to be stabilized by lock-in mechanism (Schot and Geels, 2010), and this explains both why overall SDG sub-targets as seen under 8, 16 and 17 are so frequent, and why the focus on SDGs does not change from year to year.

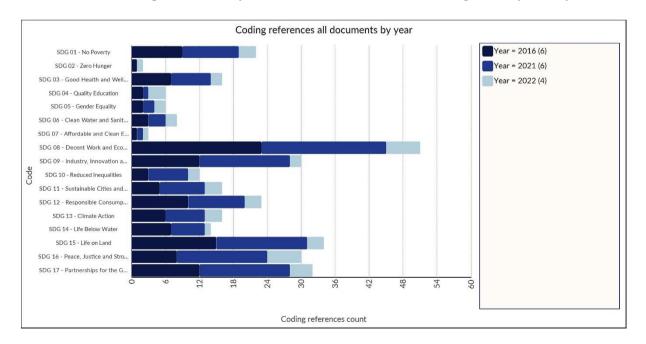


Figure 5 - Coding references all documents by year

Looking at appendix 3.2, we might see differences between agencies and their respective ministries, as the table shows all references in relation to specific agency, with year and document type being grouped together below these. The numbers show interesting, but mostly expected results (Figure 6). The Environment agency and its ministry, which has the most SDGs under its responsibility, has a significantly larger number of references compared to NAV and the Digitalisation agency. Furthermore, the Environment agency and the ministry of Climate and Environment are clearly focused on the SDGs we expect them to, with them often referencing SDGs 11 – 15, and 15 being a clear focus. NAV and the Ministry of Labour and Social Inclusion has two major favourites, those being SDG 1 and 8. Based on the work and mission of the agency and ministry, this is by no means a surprise. However, the Digitalisation agency and KDD show unexpected results when looking at quantitative data alone, as the agency and ministry do not seem to focus on SDG 11, but rather favour SDGs 8, 9, 16 and 17. This discrepancy will be explained later, as we need to delve deeper into the documents to find the answers for why it is so.

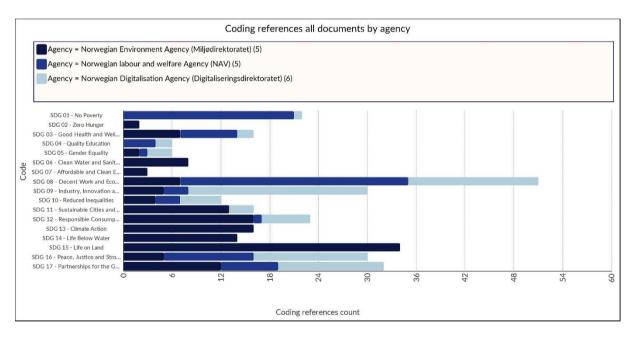


Figure 6 – Coding references all documents by agency

Appendix 3.3 groups year and agency under document type, and thus enables us to see differences between the two levels and entities of ministry versus agency, by looking at allocation letters compared to annual reports. By virtue of being much longer documents, the annual reports have a larger number of references, with 191 compared to 130 in allocation letters. Nonetheless, as allocation letters for 2022 were included, and not annual reports, the total number of allocation letters analysed is larger, and this should have helped compensate

for the length of the documents, which does not happen. Still, the results are not too unexpected, as the allocation letters are broader than the annual report, in which the agencies are expected to lay out their work and efforts in much more detail than what they themselves get instructed on. There is also a consistent and comparable focus on the same SDGs between the ministry and underlying agency (Figure 7), suggesting that the agency does follow the lead of its responsible ministry closely – as it is set up to do. Nonetheless, based just on the number of references, I suggest that the agencies are putting a stronger emphasis on reaching the SDGs than their ministries, and thus the focus on sustainable development is here more bottom-up than top-down.

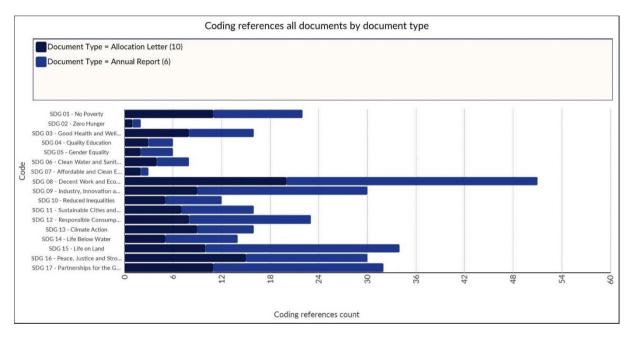


Figure 7 – Coding references all documents by document type

The next two appendices, 3.4 and 3.5, again illustrate similar results to what has already been seen, both in the previous appendices, and the above quantitative word search. Namely, 2021 being the most active year for sustainability and the SDGs, and the Environment Agency and its supervising ministry referencing SDGs the most. We might therefore move over to slightly more specific data gathered by analysing and grouping the agencies and ministries for themselves.

Starting with the Digitalisation agency and KDD (Appendix 3.6), the data is supporting a previous suggestion of mine.

The Digitalisation Agency, through its annual report, is much more focused on referencing SDGs than the allocation letter, and throughout both 2016 and 2021 tends to refer to work on

or mention SDGs not mentioned in the preceding allocation letter, such as SDGs 12 and 17 in 2016, and SDGs 8 and 9 in 2021 (Appendix 3.6). From this, I gather that the agency has either understood its role and assignment broader than specifically given guidance for in the allocation letter, or there are other instances or management documents from which the agency has received extended instructions and guidance. However, neither the allocation letter nor the annual report shows much emphasis for SDG 11, which KDD has responsibility for, suggesting that the role of the agency is not congruent with it, and that perhaps the ministry has other ways and agencies under its management portfolio to focus on it. Instead, SDGs 8, 9, 16, and 17 are referenced much more (Figure 8).

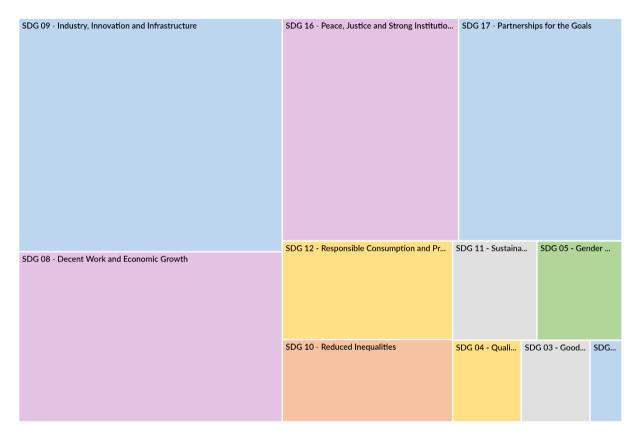


Figure 8 – Coding references for KDD and the Norwegian Digitalisation Agency – all documents and years

The Norwegian Environment Agency and its responsible ministry on the other hand, seem to be slightly more in line with number of references, and focus on the same ones (Appendix 3.7). The agency and ministry are covering their sector areas, namely SDGs 5, 12, 13, and 15, and similar to the Digitalisation agency and KDD, also refer to SDG 17 a few times (Figure 9). As a simple overview, it looks like the agency and ministry are the most diverse and holistic ones, covering the largest number of SDGs throughout all documents. This seems to be in line with expectations, as the ministry has the most SDGs under its belt, and the

Environment agency encompasses many broader areas under its work than the two other agencies.

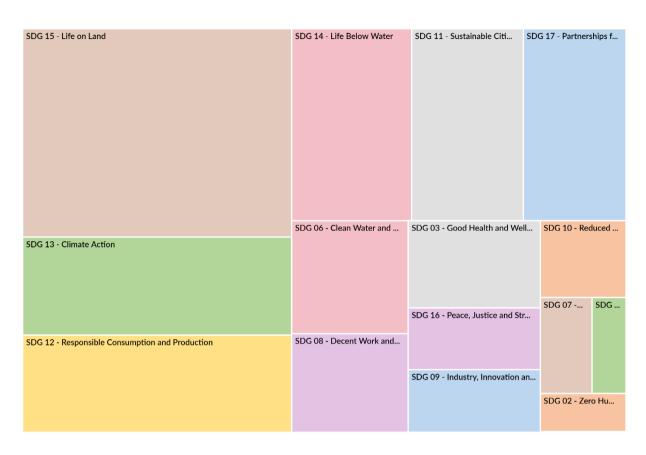


Figure 9 - Coding references for the Ministry of Climate and Environment and the Norwegian Environmental Agency – all documents and years

Lastly, the NAV and the Ministry of Labour and Social Inclusion have, as already indicated, the most narrow and focused attention of all three groups of ministries and agencies (Appendix 3.8). The entities are quite strictly focused on SDGs 1 (which is under the ministry's responsibility), 3, 8, 16 and 17. Many other SDGs are not referenced even once (Figure 10), suggesting a couple of things. First, the agency follows the guidance of the ministry rigorously, and the two have a clear and narrow focus comparable to the sector principle. Nonetheless, this suggests that efforts to coordinate and work across policy areas is less prominent in NAV and the Ministry of Labour and Social Inclusion, who are in this aspect lagging behind on governmental instructions.

SDG 08 - Decent Work and Economic Growth	SDG 16 - Peace, Justice and Strong Inst		artnerships f
SDG 01 - No Poverty	SDG 03 - Good Health and Well-being SDG 04 - Quality Education	SDG 10	SDG 09 - I
		SDG 12	SDG 05

Figure 10 - Coding references for The Ministry of Labour and Social Inclusion and NAV – all documents and years

5. Analysis, discussion and broader reflections

As chapter four has presented an overview and results from the quantitative mapping and reading of documents, this chapter seeks to expand on this. Several more detailed findings from the documents analysed in-depth can be identified and will be expanded on in this section, following a structure shaped by sub-questions presented in the introduction. Starting from WP40 before delving into three specific cases, this section attempts to show exactly how the Digitalisation agency, Environment agency, and NAV possibly reflect what WP40 and overall Norwegian sustainability ambitions as well as reporting guidelines proclaim.

5.1 The Norwegian State and Sustainability – A top-down or bottom-up approach? *Does the implementation and effort for the SDGs in the Norwegian public sector seem to follow more of a top-down or bottom-up approach?*

Looking at the development of sustainability in the Norwegian state, one would easily identify elements of a top-down governance approach. The increased focus on SDGs and sustainability in budgetary documents, each subsequent governmental platform, as well as the most recent WP40, show that the government is anchoring the SDGs at the highest political level in the state. Both the Hurdal platform and WP40 shows us how signalling and prioritizing sustainability issues at the highest political level, can through some work present a good possibility for the state to identify and outline missions, and break down big societal tasks into more manageable sub-goals and smaller activities (Normann *et al.*, 2022).

However, WP40 on SDGs is only mentioned once in all the 16 documents analysed in section 4.3, which may reasonably decrease its importance as a signalling document, and as a direct mechanism for inspiring and leading sustainability work. This seems to indicate less presence of vertical coordination in the state. Nonetheless, the 2021 annual report by the Environment Agency states that it is contributing to the follow-up of the white paper (Miljødirektoratet, 2022, p. 9). This shows that the white paper does contribute to steering sustainability work, and it shows how the underlying ministries are using their more practical and technical expertise and insights to become involved in broad work and issues. Therefore, it exemplifies a more bottom-up approach to steering from agencies, through which they may influence steering of public policy and governance. This again indicates collective coordination through

a reflexive governance, as the agency is given enough support and autonomy to promote change based on its own expertise, and may in the long-term even support the transfer of functions to agencies from the government and ministries, freeing them up from routines and day-to-day political interference (Meadowcroft, 2007). It additionally serves to ascertain how inter-organizational collaboration, which can create the mentioned shared expectations and joint agendas for action (Weber and Rohracher, 2012), may be brought forwards on basis of the white paper, and indicates that both ministries and agencies do have a critical and larger role to play for the political future of the SDGs in Norway.

Although it seems as if ministries and agencies mostly work towards SDGs, the reflexive governance approach which is arguably being implemented in Norway, would in the future call for and include the involvement of lesser entities, such as agencies, to be a part of the imagination, definition, and enactment of policies related to SDGs. By invoking a need for more coordination and creating central leaders for this, as well as calling for more cross-sector policies, I believe that the policy documents from the government, as well as those instructing ministries and agencies in their management and reporting practices, are gradually restructuring the state for a more holistic governance approach for the SDGs.

The analysis shows several instances of holistic governance approach, such as with the Norwegian Digitalisation Agency and KDD. Something which can explain previous data results from the Digitalisation agency, is that instructions from the ministry in the allocation letter were often either very broad, such as financial means allocated towards improving coordination, or on the other hand, ultra-specific, such as digitalisation projects and the development of applications. This can explain the discrepancy of the agency favouring other SDGs instead of 11, the one KDD is responsible for. By providing broad instructions, the ministry is giving the agency leeway to exert its own authority and decision making, which it does by first working more closely with SDGs than what the ministry requests, and secondly, expanding on its role through its understanding of the broad guidance and instructions given.

Likewise, SDGs 8, 9, 16, and 17 do provide broader sub targets, such as that of increasing cooperation and coordination across organisations, which is a common instruction provided to the agency. All of this indicates a top-down, bottom-up mix, such as one partly argued for by missions literature (Mazzucato, 2019; Normann *et al.*, 2022). While directionality comes from above through high-level anchoring and top-down steering, the "solutions", or work to be done, must come from below. The Digitalisation agency is given an overall direction and purpose, but with the capacity to innovate, change, and reorient itself towards its assignments,

as best as it can. The agency thus has a high share of power and responsibility in terms of choosing, evaluating, monitoring, and performing tasks, again indicating the reflexive governance approach, and diffusion of power in governance. Its role to carry out policies of the government independently and with freedom in their day-to-day operations, is exemplified here. As Meadowcroft (2007) asserts, steering is an important logic in this context. As has already been mentioned, sustainable development is not a spontaneous product, but must rather be fought for, and thus requires goal-directed intervention by governmental actors, with the objective of reorienting developmental paths towards the wanted changes. These orientations are under constant review and prone to change, and although part of a larger notion of societal self-steering, in which society as a whole needs to make a conscious effort to change, there is also the important role of public authorities to conduct steering. This necessitates discussions and decisions, as well as ongoing collective definitions, refinement, and re-definitions along lines which development should reorient itself (Meadowcroft, 2007, pp. 302–303).

As authors from TM have argued, long-term and incremental change such as the one seen in Norway, is a sign of reflexive governance, in which a purely top-down manner of managing transitions is replaced by a more subtle way of stimulating and guiding transitions to a more sustainable state through searching, learning, and experimenting (Rotmans and Loorbach, 2010, p. 147). By gradually involving ministries and agencies more and more, in even closer networks and collaborative spaces, the government can be seen as enabling learning and experimenting, as well as the searching for best ways to go forwards. Thus, even as the white paper was not mentioned in most analysed documents, it should not be so harshly judged, as I strongly believe the timing was simply unfortunate. Published in the summer of 2021, the white paper only preceded the 2022 allocation letters by a very short time, thereby giving little time to use the document. Furthermore, all allocation letters and annual reports mention other white papers and action plans, such as the environmental biodiversity white paper (Miljødirektoratet, 2017, p. 48), a trend showing that the ministries and agencies have usually been good at implementing new governance directions, and so a similar course may be expected for later years. The Environment agency even called for further action plans to optimize and simplify efforts and work (Ibid., p. 49), indicating the strong role of guiding documents by the government, and consequently implies that we should expect WP40 to be included in future documents.

In a larger process of gradual and incremental changing regime, the white paper can be seen as an element of learning and evaluating, as it sets objectives and achievements to be evaluated and learnt from, and builds on the resulting circumstances to continue implementing radical change in incremental steps (Rotmans and Loorbach, 2010). This can be exemplified by all sections of the document, but I specifically present the section on SDG 7 (Kommunalog moderniseringsdepartementet, 2021, pp. 72–76). Starting with an overview of where we are in terms of reaching the goal, section 7 subsequently presents both global sub-targets, as well as sub-targets specifically designed for the Norwegian context, thereby setting new objectives and mechanisms for measurement. Lastly, the section presents both what strategies and initiatives are set up for the goal, such as a new hydrogen-strategy, before ending on what the government seeks to do – both globally and nationally. WP40 thereby symbolises a very important element of learning-by-doing, and doing-by-learning, as it creates expectations and visions of new processes and ways for the implementation of SDGs to continue in the Norwegian public sector (Rotmans, Kemp and Van Asselt, 2001; Kemp and Martens, 2007). Conclusively, by combining learning, establishing new visions, supporting increased coordination and mobilizing a broad set of actors, the Norwegian state is exhibiting a case for both top-down and bottom-up governance. However, the top-down approach is here less in terms of direct control, and more in terms of steering and directionality which gives flexibility and place for experimentation. What is in question is the role of leadership and management through guidance, rather than strict and too formalized structures that constrict activities. We thus see a combination of both top-down steering, as well as bottom-up initiatives, power centres, and calls for more action.

Even the middle level of ministries are involved in this process, despite previously being criticized for a variety of reasons, including their overemphasis on micro-management of agencies, instead of providing underlying entities with more leeway and responsibility (DFØ, 2019). A suggested advise is then for the ministries to instead present and emphasise only a few, but very clear, targets and goals in their allocation letters (Kommunal- og distriktsdepartementet, 2018). The following sections show that this is exactly what is happening, and maybe even to a too large extent when it comes to sustainability. Nonetheless, there are major variations in the governance and management practices of different ministries, as governance needs to be adaptable to the individual sectors and circumstances. Still, any differences in agency management are reflected through the management documents provided, including the allocation letters.

5.2 Has sustainability reporting changed?

In relation to SDG reporting, all agencies and ministries had introduced such reporting in and for 2021, before both the 2021 Voluntary National Review and WP40. The instructions came from the "common guidance" (fellesføringer) in 2021. As implied by the name, these are common instructions given to ministries by the government and required to be passed on to all underlying agencies. In the allocation letters, the common guides are given an own section.

In the 2021 allocation letters, this section had been expanded through new instructions for the agencies - they were officially asked to provide an account of how the activities and work of the agency, including what was asked of them in terms of goals and assignments during the 2021 allocation letter, had to also contributed to Norway achieving the SDGs (Arbeids- og inkluderingsdepartmentet, 2021, p. 23; Klima- og miljødepartementet, 2021, pp. 16-17; Kommunal- og regionaldepartementet, 2021, p. 8). The agencies should additionally describe what and how they contributed to the SDGs, and if there were any challenges faced in this work, or in the future (Ibid.). However, the common guidance for all three agencies specifically stated that the agency must report back on SDGs in the 2021 annual reports, instead of creating guidelines and a requirement for this to be included in each subsequent year. This formulation exhibits a very short-term perspective by either the ministries or government, which is unusual compared to all the new focus on sustainability. Ministries have been criticized for their overemphasis on operating parameters, which hinders a more longterm perspective where broader and larger reforms can be considered (DFØ, 2019). By specifically stating a short timeframe, the ministry might restrict transitions involving sustainability and SDGs. Transitions necessitate both a focus on giving space for vast and more destructive changes and would in most cases be accompanied by temporary decreases in target measurements, financial achievements, and other costs. Thus, it is critical that the ministries do not attempt to deflect or bypass all changes and costs of transitions, even at the expense of present target numbers, and for this, a longer time span is necessary.

No similar instructions were found in common guides for 2016 (Kommunal-og moderniseringsdepartementet, 2015), 2020 (Kommunal-og moderniseringsdepartementet, 2019), or 2022 (Kommunal-og distriktsdepartementet, 2022b). This explains why specific SDG reporting was first included in the 2021 allocation letters and annual reports, and why I believe that the white paper came at an unfortunate time, as to not be directly addressed. Looking at the allocation letter from the Ministry of Education and Research to the

Directorate for Education and Training (Kunnskapsdepartementet, 2021, p. 27), the white paper is named and underlined. The formulation and inclusion of this makes it seem like, at least from the perspective of the ministry, the government specifically requested SDGs to be included in the 2021 allocation letters and annual reports to supplement and anticipate the wider relevance and usage of SDGs to be requested in later 2021 documents. And so, this seems to suggest that plans were already in place to implement SDGs in more details, and WP40 was a central element of this, even as it came too late to directly provide instructions for reporting.

What seems like a missed opportunity is the exclusion of a specific Norwegian context for reporting. In WP40, the SDGs were all accompanied by specifically curated indicators and target measurements, to either substitute or boost the already existing SDG sub-targets. As presented, Norway is well-developed and has come far on most targets and must therefore view most SDGs in its own specific context and progress. By providing specific sub-targets that are specific to Norway, the white paper showed an option to ministries and agencies on what target achievement could look like. Thus, as nothing like this is identified during my analysis, it is a wasted opportunity. Additionally, adding Norwegian indicators could build on the expanded role for agencies, as their practical and technical expertise and role in Norwegian society makes them capable of defining borders and goals on smaller targets effectively.

5.3 How did reporting practices change: three cases

How are criteria and requirements presented, framed, and set, and in what terms are SDGs reported back on?

In none of the analysed allocation letter and annual reports was sustainability mentioned in terms of purely budgetary or financial means, but rather as an amendment to what is being done by the different agencies. Although one could say that this might invoke an argument to spend resources on activities and efforts connected to sustainability, there is never a concrete monetary value connected to mentions of sustainability or the SDGs. Instead, the ministries and agencies implemented sustainability in different ways, and to varying degrees.

5.3.1 KDD and the Digitalisation Agency

Looking at changes chronologically and by each agency, there were no references to sustainability in the 2016 allocation letter for the Digitalisation agency (Kommunal- og regionaldepartementet, 2016). Instead, the agency was given guidance to help in public sector coordination, and its role in helping to make governance of the public sector and its institutions more effective, is quite prominent. The agency was at the time said to have a central role in the program for better management and governance in the state, and should thus strive to work towards relevant initiatives (Kommunal- og regionaldepartementet, 2016, pp. 6–7). This directly coincides with SDGs 16 and 17, while additional strategies and tasks given concerning innovation and ICT strategies, correspond to SDGs 8 and 9.

The resulting annual report (Digitaliseringsdirektoratet, 2017) has a fascinating focus on transitions – for both the whole country, its institutions, the public sector, and the agency itself. The agency had three priority areas, those being a more effective public sector, customer usability and trust, and increased coordination and coherence for a more holistic public sector (Ibid., p. 5). By fulfilling these areas, the agency hoped to assist in multiple transitions, although the final conclusions were that changes in the public sector had not yet provided beneficial report, and the state had to hurry up to change, or else it would have to go through an even more powerful transition later (Ibid., p. 87). The agency is seemingly positioning the public sector at the forefront of transitions. Considering its role of digitalization is such an innovative one, it is easy to surmise why the agency in 2016 had such a forward-looking perspective. As part of its societal mission, the agency saw itself as the entity responsible to modernize and help the public sector transition and change, especially through enabling it to solve cross-cutting challenges and improving coordination. Even referencing wicked issues, the annual report referred to grand challenges such as climate change and migration, and thus called for increased cross-sectoral, horizontal coordination, to solve these despite the Norwegian sector principle (Ibid., p. 23).

The Digitalisation agency called for stronger political prioritizing and anchoring of coordination, and a structure through which to follow-up and engage in cross-cutting challenges. As this is something that was indicated in WP40, this call to action to improve the horizontal coordination from below, again shows the power that agencies can hold. To solve some of these challenges, the agency proposed a couple of necessary changes (Ibid., pp. 17-18). First, creating a culture for change by for example learning from best practice cases shows emphasis on learning and evaluation. Second, the ministries should push on, but also

support the work done by their agencies, by first and foremost anchoring the initiatives at the ministerial level. This has in practice not necessarily happened, and more than anything else, it seems like sustainability has partly jumped over the ministries, as we see a bigger involvement of the government, and then agencies. Lastly, the Digitalisation agency also alluded to the fact that the top leadership had to communicate better, as this would create a major difference in transitions.

Many of these issues and topics are recurrent for the Digitalisation agency in 2021, when it also had its first direct reference in the allocation letter (Kommunal- og regionaldepartementet, 2021). Following the common guidance, the instructions for implementing SDGs were broad. Responding, the 2021 annual report did include sustainability, giving it four pages (Digitaliseringsdirektoratet, 2022, pp. 95–98). By first placing sustainability at the forefront of how it solves societal missions, the agency connects existing tasks to sustainability through discursive means, for example stating that the creating of a common digital ecosystem within the public sector is sustainable, as it would create a more efficient and less wasteful state (Ibid., pp. 95, 104). Sustainability and the SDGs are during the four pages allotted to them, described in detail, and the agency illuminates how and to what goals they are contributing. Additionally, the goals highlighted by the agency -8, 9, 910, 12, and 16 – seems to directly coincide with what my own coding found that the agency focuses on. Nonetheless, the SDGs are presented apart from a clear status update on assignments from the previous allocation letter (Ibid., pp. 76-77), posing the question of why a similar system of measurements and providing concrete and measurable information on the progress on SDGs, could not be done. Although the agency specifically sees its roles as being a driving force behind changes, and implementing initiatives, projects and action-plans, it nonetheless states that this is all done based on adopted policy (Ibid. 8). While the agency is a strong contender for one of the most independent ones, this illustrates how the government and ministries still do need to play a strong role in creating and enacting policies, for the agencies to follow in their footsteps. However, the subsequent allocation letter for 2022 (Kommunal- og regionaldepartementet, 2022a) seemingly lets the agency down, as there is no reference to sustainability in this document, but rather only a small section in a supplemental letter (Kommunal- og regionaldepartementet, 2022b) which does not add anything new from the previous year.

5.3.2 The Ministry of Climate and Environment and the Environmental Agency

Moving on to the Environment agency and the Ministry of Climate and Environment, there have been clear changes in overarching priorities for each subsequent year. This involves a greater focus on broad and major challenges such as climate change and environmental issues in 2021 and 2022, versus 2016. Similar to the Digitalisation agency, guidance is broad and gives much leeway to the agency, indicating how we again have topdown directionality, and bottom-up solutions from the agencies themselves. This is especially important for the Environment agency, as it has a huge area of responsibility, from climate change, water and sanitation to the protection of natural environments and biodiversity. Although it is a huge task, all assignments and anticipated goals are clearly presented in the 2016 allocation letter, and often given the indication that they should be followed up as agreed upon with the ministry (Klima- og miljødepartementet, 2016). This shows two things – namely that there are other instructions and directions set in additional documents, writing, or meetings, and secondly, the ministry has a much more leading and guiding role in directionality than previously mentioned. Sustainability was in 2016 only mentioned very briefly in relation to biofuels (Ibid., pp. 14, 108), but topics such as climate change are ever present, indicating why this ministry and agency produced so much data compared to the two other ones. The responding annual report places the agency as the coordinating leader of agencies for climate adaption, and asserts its importance to coordinate and govern vertically, at regional and municipal levels, as well as internationally, as well as cross-sectorally (Miljødirektoratet, 2017, pp. 4, 8). Sustainability is mentioned, but only in passing reference, and there are no SDGs here. However, again like the Digitalisation agency, the Environment agency also refers to cross-sectoral measures and challenges on the basis of environmental issues, and coordination is therefore again placed at the top of the agenda (Ibid., p. 48).

Both the 2021 (Klima- og miljødepartementet, 2021) and 2022 allocation letter (Klima- og miljødepartementet, 2022), as well the 2021 annual report (Miljødirektoratet, 2022), place a stronger emphasis on sustainability, even going as far as stating that the overarching priorities for the agency are to integrate and work towards SDGs during their daily practices and activities (Klima- og miljødepartementet, 2021, p. 3). In this context and because of complex, cross-sectoral challenges, the role of the agency is being changed from above. The agency is required to transform itself to become more effective, as well as develop its sector-wide coordinating role to assist the government in creating a more holistic governance approach and politics (Ibid., p. 4). The focus on both coordination and sustainability quickly and

heavily protrudes in the annual report for 2021, and especially the SDGs get a much more prominent place, being clearly described and connected to the work of the agency (Miljødirektoratet, 2022). The agency also implemented a totally new way to report on SDGs, with each area of priority and achievement, such as cross-sectoral work, biodiversity, and pollution, being provided with relevant SDGs. This shows what SDGs are contributed to through what area of work and activities, and it makes it much simpler to deduce more specifically what SDGs are used throughout the report. This framework would be smart to be looked at more closely, and perhaps implemented at more agencies.

5.3.3 The Ministry of Labour and Social Inclusion and NAV

Lastly, and shortest, NAV and The Ministry of Labour and Social Inclusion have perhaps the most concrete and narrow list of priority areas and tasks to handle, which is reflected in the references to SDGs. In 2016, the allocation letter (Arbeidsog inkluderingsdepartmentet, 2016) did not make specific references to sustainability, while the annual report only mentioned it in passing connected to "sustainable learning" (Arbeidsog velferdsdirektoratet, 2017, p. 27). This was built upon in the 2021 allocation letter with a short paragraph, although NAV was only instructed to provide an overarching and concise assessment (Arbeids- og inkluderingsdepartmentet, 2021, p. 23). As such, the 2021 annual report only provides a short and nondescript overview of what SDGs are seemingly contributed to, without going in detail (Arbeids- og velferdsdirektoratet, 2022, p. 73). The depicted SDGs met are 1, 3, 4, 8, 10, 16, and 17, which coincides quite well with that I found that their work and activities focused on. However, the agency does indicate that the green transition and sustainability are future trends that will impact NAV (Ibid., p. 89), but this makes their indifference to implement more sustainability reporting questionable. Sadly, this trend might continue, as the Ministry of Labour and Social Inclusion did not include sustainability or SDG reporting in their 2022 allocation letter (Arbeids- og inkluderingsdepartmentet, 2022).

5.4 Do sustainability ambitions lead to new phases or roles?

The role of the government, ministries, and agencies have already been mentioned and discussed. In a sustainable transition, they will in most cases transform and evolve significantly through phases and must come to terms with new functions and roles. Apart of

this necessary change has been mentioned as the ministries need to accept a bigger and shared role with their underlying agencies. By 2016, this thesis has shown that agencies were calling for a better understanding and explanation of different roles, and by 2021, the ministries and agencies were mostly all in agreement that the agencies now had bigger roles, especially in tasks of coordination and initiating activities. This has come about through a specific form of policy mix evolution, namely layering and policy drift (Howlett and Rayner, 2007; Kivimaa and Kern, 2016). New goals and mechanisms have periodically been added to governance, as exemplified by new projects undertaken such as the development of common digital ecosystems for the public sector by the Digitalization agency.

Furthermore, with the addition of policy drift which adds new rationales and goals, such as the SDGs, without changing policy instruments, the evolution manages to stay clear of most possible inconsistencies and incohesive policy mixes (Kivimaa and Kern, 2016, p. 206). Nonetheless, what is being initiated by the state, and could be seen as necessary to restructure "both goals and instruments in a conscious, coherent, and consistent manner" (Kivimaa and Kern, 2016, p. 206), is replacement (Kern and Howlett, 2009). By providing direct guidance and instructions to work on the SDGs, as well as giving both instructions but also freedom to adapt and evolve into new roles, the Norwegian state is arguably engaging in an evolution of its policy mixes through replacement.

Referring back to the multi-phase concept and the roles of the government, as catalyst, direction, and further stimulator and actor mobilization, I would argue that Norway is currently in the middle of the take-off and acceleration phases (Rotmans and Loorbach, 2010). Discussions and action on sustainability have been initiated, and actors such as the ministries and agencies are mobilized towards the SDGs. Nonetheless, this is an ongoing process, as seen with the restructuring of the public sector to become more holistic, and so although parts of the acceleration phase, such as stimulating learning, and creating an agenda and common vision (Rotmans and Loorbach, 2010), have already been started and partly done, the state has much more to do. What seems to be indicative of the sustainability transition in Norway, is that to a large extent, ambitions in terms of SDGs are not only reflected in specific SDGs and what is to meet targets, but the ambitions are reflected in the changing directions and roles of the various actors within the government. While the government is encompassing multiple roles to both guide and drive the transition, as well as initiate and monitor changes, the roles of the agencies and ministries, as indicated by allocation letters and annual reports, are changing even more. This comes from the increased focus on cross-cutting challenges as

represented by SDGs, for which the agencies and ministries are all required to become driving forces behind changes, and not only executioners of orders.

6. Conclusion

This thesis has through a three-part focus on governmental documents and especially WP40, allocation letters from ministries, and annual reports from agencies, attempted to answer the research question: "To what extent, and how, are the Norwegian governments' ambitions in sustainable development reflected in the governance of government agencies?". By using additional sub-questions, this thesis finds a slightly complex answer, as the governments` ambitions are reflected to a certain extent, but this varies from ministry to ministry, and agency to agency.

Coordination is a key aspect of governance for the SDGs and is together with diffusion of power a way for SDGs to be reflected across all three levels of government. By increasing the coordinating power of ministries through KDD, sharing SDG responsibility across ministries, and throughout the way alluding to the fact that increased cross-sectoral coordination is needed in meeting large scale challenges, the Norwegian public sector is being set up to deliver increasingly efficient achievements on SDGs. Coordination is also important for the mixed bottom-up and top-down approach happening in the Norwegian public sector. While ministries are using agencies to alleviate responsibility and routine tasks, the agencies show, by being more active and taking initiative on deeper SDG reporting than specifically requested, that bottom-up solutions in vertical governmental structures are key to influence and reflect SDGs. Nonetheless, this is arguably a result of an increased focus on reflexive governance and a holistic approach by the government, which has spread responsibility of SDGs across ministries, appointed KDD the leading coordinator for them, and anchored SDGs at the highest political level through WP40 and the most recent government platform. While the government does seem to implement niche-arenas and opportunities for ministries and agencies to individually work with and towards SDGs, thereby accumulating bottom-up solutions, this nonetheless indicates a top-down steering and directionality. Through new governmental structures, mobilizing the whole political spectrum, and increasing both vertical and horizontal coordination, the government is attempting to more concretely embed SDGs into and through its governance, and give their missions and ambitions for SD a better opportunity to become established. This shows a gradual and incremental guidance and stimulation, which is less likely to upset the status-quo and change the regime. This may be seen as both positive, as it allows for methodical searching for the best pathway forwards, but it may also be found to be detrimental to achieving full sustainable transformations, which often require deep, structural changes.

Nevertheless, by joining existing dynamics, using established structures, and implementing goals in existing routines, practices and activities, SDGs are in Norway reflected through the sectoral principle. The thesis shows that ministries still have much work to do, as they as intermediary actors have an important role to play in achieving and implementing long-term plans and strategies through increased coordination across and between areas, reflecting the governments ambitions, and setting specific guidelines and requirements for agencies. On the other hand, agencies are experiencing both a discursive and practical shift, as they are embedding SDGs into already existing activities and tasks, while policy evolution has led to their increased roles and responsibilities. Building on usually broad requirements with much leeway, the agencies show drive, to different extents, to implement and provide as much information of SDGs as possible. Nonetheless, it would be beneficial for agencies if they had more direct requirements for SDGs, and this could in turn have positive feedback on what and how the ministers can work on sustainability. By being increasingly proactive, the government, its ministries and underlying agencies, can through a seemingly more holistic and reflexive governance approach manage to increase coordination and achieve the ambitions already anchored at the highest political level.

Appendix Appendix 1 – Overview of SDGs

Table of the 17 SDGs – Information synthesized fully from WP40 (Kommunal-og moderniseringsdepartementet, 2021)

SDG 1 - End poverty in all its forms everywhere	Much progress has been made on goal 1, with the percentage of the world population living in extreme poverty dropping from 50% in 1960 to 8% in 2019. In Norway, the Ministry of Labour and Social Inclusion has responsibility and coordinates efforts for this SDG. Norway scores very high on all its indicators but must thus have a more nuanced view on the goal, and in Norway one therefore speaks about relative poverty.
SDG 2 – End hunger, achieve food security and improved nutrition and promote sustainable agriculture	Seeing a continually rising global population, food security and hunger is a priority issue to take hold of, especially as many are still starving, even though food production should cover everyone. In Norway, the Ministry of Agriculture and Food has responsibility and coordinates efforts for this SDG. The priorities are to accomplish food security while also ensuring both enough nutritional intake - since obesity is becoming a problem -, and a sustainable food production system.
SDG 3 – Ensure healthy lives and promote well-being for all at all ages	Although the COVID-19 pandemic led to much death and sickness, there has been much improvement in the work on health globally. In Norway, the Ministry of Health and Care Services has responsibility and coordinates efforts for this SDG. Norway scores very high on indicators in this goal, but still look towards reducing health and death rate inequality between groups of people.
SDG 4 - Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	Globally, many more kids are now in education, but a particular problem still exists in sub-Saharan Africa. In Norway, the Ministry of Education and Research has responsibility and coordinates efforts for this SDG. Norway does well on this SDG, and thus looks towards reducing inequalities in education, and improving results.
SDG 5 - Achieve gender equality and empower all women and girls	Gender equality is heading in the right direction, but women and girls are still more at risk of violence and economic inequality. In Norway, the Ministry of Culture and Equality has responsibility and coordinates efforts for this SDG. Norway does very well in gender equality, being 2 nd out of 153 countries in the World Economic Forums Gender Gap Report 2020 (World Economic Forum, 2019).
SDG 6 - Ensure availability and sustainable management of water and sanitation for all	Many people are lacking access to clean drinking water globally. In Norway, the Ministry of Climate and Environment has responsibility and coordinates efforts for this SDG. Most all people in Norway have access to clean water and sanitation, so the priority is on minimizing vulnerability of water plants, and ensuring efficient maintenance of the water supply and waste systems.
SDG 7 - Ensure access to affordable, reliable, sustainable and modern energy for all	The trilemma of energy – clean, affordable, reliable – are at the forefront of climate and environment efforts the world over. In Norway, the Ministry of Petroleum and Energy has responsibility and coordinates efforts for this SDG. Although a country economically reliable on petroleum, Norway has vast reserves of hydroelectric energy, and thus priorities are towards supporting both international and national competition and development of more renewables.
SDG 8 - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	While the situation is bettering, there are still large GDP differences between countries. In Norway, the Ministry of Finance has responsibility and coordinates efforts for this SDG. While Norway has a high level of GDP, combined with a low level of unemployment, the challenge is keeping an economic growth following the relative conditions of the country, and increasing productivity in new areas such as technology.
SDG 9 - Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	Good infrastructures are a key foundation of creating sustainability, but many challenges are still faced in developing countries. In Norway, the Ministry of Trade, Industry and Fisheries has responsibility and coordinates efforts for this SDG. The country does well within SDG 9, and its focus is on creating more favorable conditions for industrialization and innovation, while also protecting vulnerable infrastructures from for example more extreme weather.
SDG 10 - Reduce inequality within and among countries	Inequalities within and among countries are still prevalent, although the situation has changed drastically. In Norway, the Ministry of Finance has responsibility and coordinates efforts for this SDG. Norway works towards

	SDG 10 by strengthening systems and institutions that help keep levels of
	inequality low, such as the free education system and social security. Improving cities and settlements is a clear way of adapting to rising
	populations. In Norway, the Ministry of Local Government and Regional
SDG 11 - Make cities and human	Development has responsibility and coordinates efforts for this SDG. This
	SDG is particularly relevant in Norway since it is a very urbanized society.
settlements inclusive, safe, resilient and sustainable	The country still attempts to decrease differences between urban and rural
sustamable	areas, and provide essential services such as public transportation and
	health, to everyone.
	A rising population and economic growth globally has led to wasteful
	spending and using of scarce resources. In Norway, has Ministry of
	Climate and Environment responsibility and coordinates efforts for this
SDG 12 - Ensure sustainable	SDG. This is one of the worst scoring goals for Norway, as we produce
consumption and production patterns	much waste and emissions connected to both consumption and production.
	Norway therefore strives to transition to more sustainable systems here,
	such as more environmentally friendly use and storage of chemicals.
	Climate change is perhaps the biggest challenge faced by the whole planet.
	In Norway, the Ministry of Climate and Environment has responsibility
	and coordinates efforts for this SDG. As a well-developed country with a
SDG 13 - Take urgent action to combat	petroleum-based economy, Norway scores low on indicators of greenhouse
climate change and its impacts	gas emissions. The country and its sectors are mostly all well suited for
	climate adaption, but nonetheless, the government attempts to contribute
	to, and take part in all international climate agreements, and attempt to
	mitigate climate change to save our natural environments.
	This SDG is closely connected to many others, including health, food
	security, and climate change, and is therefore highly at risk. In Norway, the
SDG 14 - Conserve and sustainably use	Ministry of Trade, Industry and Fisheries has responsibility and
the oceans, seas and marine resources for	coordinates efforts for this SDG. Norway seeks to control and protect its
sustainable development	seas and marine resources, by creating new agreements, e.g., for illegal
	fishing, and protecting the natural environment of coastal areas and the
	seas.
SDG 15 - Protect, restore and promote	Our nature and environment are highly threatened, and much must be done
sustainable use of terrestrial ecosystems,	to protect it. In Norway, the Ministry of Climate and Environment has
sustainably manage forests, combat	responsibility and coordinates efforts for this SDG. Among other efforts,
desertification, and halt and reverse land	Norway works to fulfill all obligations for agreements on natural- and
degradation and halt biodiversity loss	biodiversity and protect areas of high diversity, and woodlands.
	Although not a usually thought of SDG, nr. 16 still poses many challenges,
SDG 16 - Promote peaceful and inclusive	both within and between countries. In Norway, the Ministry of Justice and
societies for sustainable development,	Public Security has responsibility and coordinates efforts for this SDG.
provide access to justice for all and build	Norway, with high levels of strong institutions and peace, scores high on
effective, accountable and inclusive institutions at all levels	this goal, but nevertheless prioritizes security and decreasing crime and death as well as increasing the publics trust and competence of public
institutions at all levels	death, as well as increasing the publics trust and competence of public
	institutions.
	Finally, SDG 17 focuses on both international efforts to help especially developing national as well as partnerships for suptainability. In Norway
	developing nations, as well as partnerships for sustainability. In Norway, the Ministry of Foreign Affairs has responsibility and coordinates efforts
	for this SDG. Norway does well for this SDG, as it has prominent levels of
SDG 17 - Strengthen the means of	financialization, technological and capacity assistance, coherence, and
implementation and revitalize the Global	coordination. This is still something the country can work on, especially
Partnership for Sustainable Development	coherence and coordination for the implementation of SDGs, but the
	country seems as of now mostly to focus on assisting developing countries,
	instead of creating new networks and cooperation nationally.
	include of croating new networks and cooperation nationally.

Appendix 2 – Codebook

Name	Description	Files	References
SDG 01 - No Poverty	End poverty in all its forms everywhere	6	22

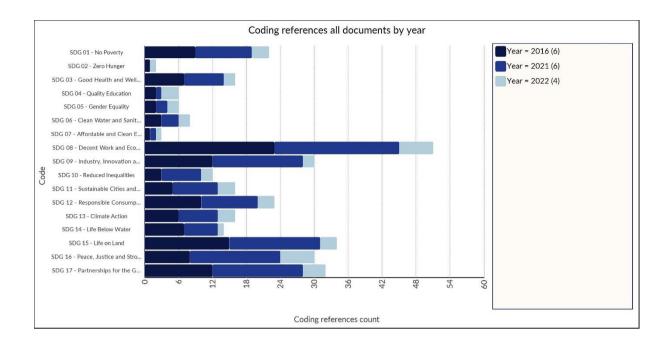
Name	Description	Files	References
SDG 02 - Zero Hunger	End hunger, achieve food security and improved nutrition and promote sustainable agriculture	2	2
SDG 03 - Good Health and Wellbeing	Ensure healthy lives and promote well-being for all at all ages	11	16
SDG 04 - Quality Education	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	3	6
SDG 05 - Gender Equality	Achieve gender equality and empower all women and girls	5	6
SDG 06 - Clean Water and Sanitation	Ensure availability and sustainable management of water and sanitation for all	4	8
SDG 07 - Affordable and Clean Energy	Ensure access to affordable, reliable, sustainable and modern energy for all	3	3
SDG 08 - Decent Work and Economic Growth	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	11	51
SDG 09 - Industry, Innovation and Infrastructure	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	10	30
SDG 10 - Reduced Inequalities	Reduce inequality within and among countries	10	12
SDG 11 - Sustainable Cities and Communities	Make cities and human settlements inclusive, safe, resilient and sustainable	8	16
SDG 12 - Responsible Consumption and Production	Ensure sustainable consumption and production patterns	8	23
SDG 13 - Climate Action	Take urgent action to combat climate change and its impacts	5	16
SDG 14 - Life Below Water	Conserve and sustainably use the oceans, seas and marine resources for sustainable development	5	14
SDG 15 - Life on Land	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	5	34
SDG 16 - Peace, Justice and Strong Institutions	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	13	30
SDG 17 - Partnerships for the Goals	Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	13	32

Appendix 3 – Crosstab Coding References

Appendix 3.1 - All documents by year

This table shows a crosstab of all the documents (allocation letters and annual reports by and for all agencies) by year.

Government Documents	Year = 2016 (6)	Year = 2021 (6)	Year = 2022 (4)	Total (16)
Codes\\SDG 01 - No Poverty	9	10	3	22
Codes\\SDG 02 - Zero Hunger	1	0	1	2
Codes\\SDG 03 - Good Health and Well-being	7	7	2	16
Codes\\SDG 04 - Quality Education	2	1	3	6
Codes\\SDG 05 - Gender Equality	2	2	2	6
Codes\\SDG 06 - Clean Water and Sanitation	3	3	2	8
Codes\\SDG 07 - Affordable and Clean Energy	1	1	1	3
Codes\\SDG 08 - Decent Work and Economic Growth	23	22	6	51
Codes\\SDG 09 - Industry, Innovation and Infrastructure	12	16	2	30
Codes\\SDG 10 - Reduced Inequalities	3	7	2	12
Codes\\SDG 11 - Sustainable Cities and Communities	5	8	3	16
Codes\\SDG 12 - Responsible Consumption and Production	10	10	3	23
Codes\\SDG 13 - Climate Action	6	7	3	16
Codes\\SDG 14 - Life Below Water	7	6	1	14
Codes\\SDG 15 - Life on Land	15	16	3	34
Codes\\SDG 16 - Peace, Justice and Strong Institutions	8	16	6	30
Codes\\SDG 17 - Partnerships for the Goals	12	16	4	32
Total	126	148	47	321

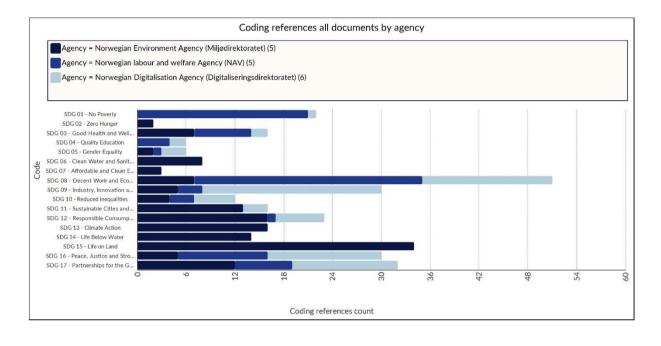


Appendix 3.2 - All documents by agency

This crosstab shows all the codes and documents (allocation letters and annual reports) in relation to agency. This means that year and document type has been grouped together and is therefore not distinguishable here.

Government Documents	Agency = Norwegian Environment Agency (Miljødirektoratet) (5)	Agency = Norwegian labour and welfare Agency (NAV) (5)	Agency = Norwegian Digitalisation Agency (Digitaliseringsdirektoratet) (6)	Tot al (16)
SDG 01 - No Poverty	0	21	1	22
SDG 02 - Zero Hunger	2	0	0	2
SDG 03 - Good Health and Well- being	7	7	2	16
SDG 04 - Quality Education	0	4	2	6
SDG 05 - Gender Equality	2	1	3	6
SDG 06 - Clean Water and Sanitation	8	0	0	8
SDG 07 - Affordable and Clean Energy	3	0	0	3
SDG 08 - Decent Work and Economic Growth	7	28	16	51
SDG 09 - Industry, Innovation and Infrastructure	5	3	22	30
SDG 10 - Reduced Inequalities	4	3	5	12
SDG 11 - Sustainable Cities and Communities	13	0	3	16
SDG 12 - Responsible Consumption and Production	16	1	6	23
SDG 13 - Climate Action	16	0	0	16

SDG 14 - Life Below Water	14	0	0	14
SDG 15 - Life on	34	0	0	34
Land				
SDG 16 - Peace,	5	11	14	30
Justice and Strong				
Institutions				
SDG 17 -	12	7	13	32
Partnerships for the				
Goals				
Total	148	86	87	321

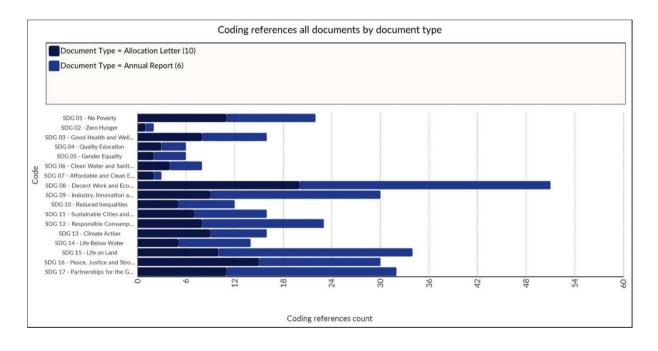


Appendix 3.3 - All documents by document type

This crosstab shows all coding references and the type of documents (allocation letters and annual reports) coded. This means that the crosstab groups year and agency together.

Government Documents	Document Type = Allocation Letter (10)	Document Type = Annual Report (6)	Total (16)
SDG 01 - No Poverty	11	11	22
SDG 02 - Zero Hunger	1	1	2
SDG 03 - Good Health and Well-being	8	8	16
SDG 04 - Quality Education	3	3	6
SDG 05 - Gender Equality	2	4	6
SDG 06 - Clean Water and Sanitation	4	4	8
SDG 07 - Affordable and Clean Energy	2	1	3
SDG 08 - Decent Work and Economic Growth	20	31	51
SDG 09 - Industry, Innovation and Infrastructure	9	21	30

SDG 10 - Reduced Inequalities	5	7	12
SDG 11 - Sustainable Cities and Communities	7	9	16
SDG 12 - Responsible Consumption and Production	8	15	23
SDG 13 - Climate Action	9	7	16
SDG 14 - Life Below Water	5	9	14
SDG 15 - Life on Land	10	24	34
SDG 16 - Peace, Justice and Strong Institutions	15	15	30
SDG 17 - Partnerships for the Goals	11	21	32
Total	130	191	321



Appendix 3.4 - References by year and agency

This crosstab shows all coding references by year and for individual agencies. This means that the table has grouped the type of documents (allocation letter and annual report) together. The table therefore shows the coding references by agencies for all documents per year.

Government	Year = 2016 (6)			Year = 2021 (6)			Year = 2022 (4)			Tota
Documents	Norwegian Environme nt Agency (Miljødirek toratet) (2)	Norwegian labour and welfare Agency (NAV) (2)	Norwegian Digitalisation Agency (Digitaliserin gsdirektoratet) (2)	Norwegian Environme nt Agency (Miljødirek toratet) (2)	Norwegian labour and welfare Agency (NAV) (2)	Norwegian Digitalisation Agency (Digitaliserin gsdirektoratet) (2)	Norwegian Environment Agency (Miljødirektor atet) (1)	Norwegian labour and welfare Agency (NAV) (1)	Norwegian Digitalisation Agency (Digitaliserings direktoratet) (2)	l (16)
SDG 01 - No Poverty	0	8	1	0	10	0	0	3	0	22
SDG 02 - Zero Hunger	1	0	0	0	0	0	1	0	0	2

SDG 03 - Good Health and Well- being	3	4	0	3	2	2	1	1	0	16
SDG 04 - Quality Education	0	0	2	0	1	0	0	3	0	6
SDG 05 - Gender Equality	1	0	1	0	0	2	1	1	0	6
SDG 06 - Clean Water and Sanitation	3	0	0	3	0	0	2	0	0	8
SDG 07 - Affordable and Clean Energy	1	0	0	1	0	0	1	0	0	3
SDG 08 - Decent Work and Economic Growth	0	14	9	6	9	7	1	5	0	51
SDG 09 - Industry, Innovation and Infrastructure	2	2	8	3	1	12	0	0	2	30
SDG 10 - Reduced Inequalities	0	2	1	3	1	3	1	0	1	12
SDG 11 - Sustainable Cities and Communities	4	0	1	7	0	1	2	0	1	16
SDG 12 - Responsible Consumption and Production	6	0	4	7	1	2	3	0	0	23
SDG 13 - Climate Action	6	0	0	7	0	0	3	0	0	16
SDG 14 - Life Below Water	7	0	0	6	0	0	1	0	0	14
SDG 15 - Life on Land	15	0	0	16	0	0	3	0	0	34
SDG 16 - Peace, Justice and Strong Institutions	0	3	5	3	5	8	2	3	1	30
SDG 17 - Partnerships for the Goals	6	3	3	5	2	9	1	2	1	32
Total	55	36	35	70	32	46	23	18	6	321

Appendix 3.5 - References by year and type of document

This crosstab shows all coding references and their occurrence in the different document types - allocation letters and annual reports -, in different years. This means that the table has grouped the agencies together.

Comment Deservation	Document Type = Allocation Letter (10)			Document	Total		
Government Documents	Year =	Year =	Year =	Year =	Year =	Year =	(16)
	2016 (3)	2021 (3)	2022 (4)	2016 (3)	2021 (3)	2022 (0)	
SDG 01 - No Poverty	5	3	3	4	7	0	22
SDG 02 - Zero Hunger	0	0	1	1	0	0	2

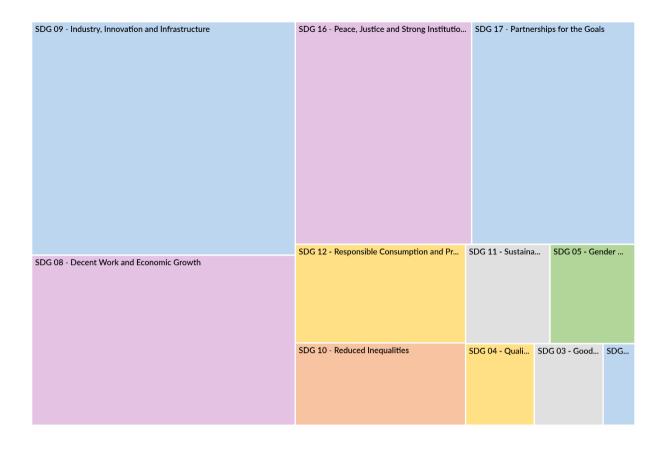
SDG 03 - Good Health and Well-being	4	2	2	3	5	0	16
SDG 04 - Quality Education	0	0	3	2	1	0	6
SDG 05 - Gender Equality	0	0	2	2	2	0	6
SDG 06 - Clean Water and Sanitation	2	0	2	1	3	0	8
SDG 07 - Affordable and Clean Energy	1	0	1	0	1	0	3
SDG 08 - Decent Work and Economic Growth	9	5	6	14	17	0	51
SDG 09 - Industry, Innovation and Infrastructure	6	1	2	6	15	0	30
SDG 10 - Reduced Inequalities	1	2	2	2	5	0	12
SDG 11 - Sustainable Cities and Communities	2	2	3	3	6	0	16
SDG 12 - Responsible Consumption and Production	2	3	3	8	7	0	23
SDG 13 - Climate Action	3	3	3	3	4	0	16
SDG 14 - Life Below Water	3	1	1	4	5	0	14
SDG 15 - Life on Land	4	3	3	11	13	0	34
SDG 16 - Peace, Justice and Strong Institutions	3	6	6	5	10	0	30
SDG 17 - Partnerships for the Goals	5	2	4	7	14	0	32
Total	50	33	47	76	115	0	321

Appendix 3.6 - Norwegian Digitalisation Agency

Crosstab for the Norwegian Digitalisation Agency - Attributes of year and document type as seen against coding references.

	Year = 2016 (2)	2)	Year = 2021 (2)	= 2021 (2) Year = 2022 (2)		2)	
Norwegian Digitalisation Agency	Document Type = Allocation Letter (1)	Document Type = Annual Report (1)	Document Type = Allocation Letter (1)	Document Type = Annual Report (1)	Document Type = Allocation Letter (2)	Document Type = Annual Report (0)	To tal (6)
SDG 01 - No Poverty	1	0	0	0	0	0	1
SDG 02 - Zero Hunger	0	0	0	0	0	0	0
SDG 03 - Good Health and Well- being	0	0	1	1	0	0	2
SDG 04 - Quality Education	0	2	0	0	0	0	2
SDG 05 - Gender Equality	0	1	0	2	0	0	3
SDG 06 - Clean Water and Sanitation	0	0	0	0	0	0	0
SDG 07 - Affordable and Clean Energy	0	0	0	0	0	0	0

SDG 08 - Decent Work and Economic Growth	2	7	0	7	0	0	16
SDG 09 - Industry, Innovation and Infrastructure	3	5	0	12	2	0	22
SDG 10 - Reduced Inequalities	0	1	1	2	1	0	5
SDG 11 - Sustainable Cities and Communities	0	1	0	1	1	0	3
SDG 12 - Responsible Consumption and Production	0	4	0	2	0	0	6
SDG 13 - Climate Action	0	0	0	0	0	0	0
SDG 14 - Life Below Water	0	0	0	0	0	0	0
SDG 15 - Life on Land	0	0	0	0	0	0	0
SDG 16 - Peace, Justice and Strong Institutions	1	4	2	6	1	0	14
SDG 17 - Partnerships for the Goals	0	3	1	8	1	0	13
Total	7	28	5	41	6	0	87



Appendix 3.7 - Norwegian Environment Agency

Crosstab for the Norwegian Environment Agency - Attributes of year and document type as seen against coding references.

	Year = 2016 (2	2)	Year = 2021 (2	2)	Year = 2022 (1)		
Norwegian Environment Agency	Document Type = Allocation Letter (1)	Document Type = Annual Report (1)	Document Type = Allocation Letter (1)	Document Type = Annual Report (1)	Document Type = Allocation Letter (1)	Document Type = Annual Report (0)	To tal (5)
SDG 01 - No Poverty	0	0	0	0	0	0	0
SDG 02 - Zero Hunger	0	1	0	0	1	0	2
SDG 03 - Good Health and Well- being	2	1	1	2	1	0	7
SDG 04 - Quality Education	0	0	0	0	0	0	0
SDG 05 - Gender Equality	0	1	0	0	1	0	2
SDG 06 - Clean Water and Sanitation	2	1	0	3	2	0	8

SDG 07 - Affordable and Clean Energy	1	0	0	1	1	0	3
SDG 08 - Decent Work and Economic Growth	0	0	1	5	1	0	7
SDG 09 - Industry, Innovation and Infrastructure	1	1	1	2	0	0	5
SDG 10 - Reduced Inequalities	0	0	1	2	1	0	4
SDG 11 - Sustainable Cities and Communities	2	2	2	5	2	0	13
SDG 12 - Responsible Consumption and Production	2	4	3	4	3	0	16
SDG 13 - Climate Action	3	3	3	4	3	0	16
SDG 14 - Life Below Water	3	4	1	5	1	0	14
SDG 15 - Life on Land	4	11	3	13	3	0	34
SDG 16 - Peace, Justice and Strong Institutions	0	0	1	2	2	0	5
SDG 17 - Partnerships for the Goals	3	3	1	4	1	0	12
Total	23	32	18	52	23	0	14 8

SDG 15 - Life on Land	SDG 14 - Life Below Water	SDG 11 - Sustainable Citi SI	OG 17 - Partnerships f
SDG 13 - Climate Action	SDG 06 - Clean Water and	SDG 03 - Good Health and Well	SDG 10 - Reduced SDG 07 SDG
SDG 12 - Responsible Consumption and Production	SDG 08 - Decent Work and	SDG 16 - Peace, Justice and Str SDG 09 - Industry, Innovation an	
			SDG 02 - Zero Hu

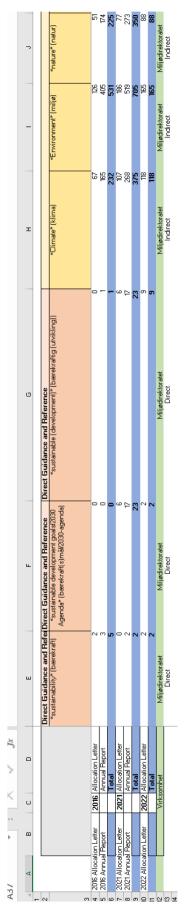
Appendix 3.8 - Norwegian Labour and Welfare Administration

Crosstab for the Norwegian Labour and Welfare Administration - Attributes of year and document type as seen against coding references.

Norwegian	Year = 2016 (2	2)	Year = 2021 (2)	2)	Year = 2022 (1)		
Labour and Welfare Administration	Document Type = Allocation Letter (1)	Document Type = Annual Report (1)	Document Type = Allocation Letter (1)	Document Type = Annual Report (1)	Document Type = Allocation Letter (1)	Document Type = Annual Report (0)	To tal (5)
SDG 01 - No Poverty	4	4	3	7	3	0	21
SDG 02 - Zero Hunger	0	0	0	0	0	0	0
SDG 03 - Good Health and Well- being	2	2	0	2	1	0	7
SDG 04 - Quality Education	0	0	0	1	3	0	4
SDG 05 - Gender Equality	0	0	0	0	1	0	1
SDG 06 - Clean Water and Sanitation	0	0	0	0	0	0	0

SDG 07 - Affordable and Clean Energy	0	0	0	0	0	0	0
SDG 08 - Decent Work and Economic Growth	7	7	4	5	5	0	28
SDG 09 - Industry, Innovation and Infrastructure	2	0	0	1	0	0	3
SDG 10 - Reduced Inequalities	1	1	0	1	0	0	3
SDG 11 - Sustainable Cities and Communities	0	0	0	0	0	0	0
SDG 12 - Responsible Consumption and Production	0	0	0	1	0	0	1
SDG 13 - Climate Action	0	0	0	0	0	0	0
SDG 14 - Life Below Water	0	0	0	0	0	0	0
SDG 15 - Life on Land	0	0	0	0	0	0	0
SDG 16 - Peace, Justice and Strong Institutions	2	1	3	2	3	0	11
SDG 17 - Partnerships for the Goals	2	1	0	2	2	0	7
Total	20	16	10	22	18	0	86

SDG 08 - Decent Work and Economic Growth	SDG 16 - Peace, Justice and Strong Inst	SDG 17 - Pa	rtnerships f
SDG 01 - No Poverty	SDG 03 - Good Health and Well-being SDG 04 - Quality Education	SDG 10	SDG 09 - I
		SDG 12	SDG 05



Appendix 4 – Excel spreadsheet for quantitative analysis

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