

The Institutionalization of the Sustainable Development Goals: The Case of UiO

How do higher education institutions implement UN SDGs, and what organizational and institutional tensions and dilemmas arise in relation to sustainability?

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Preface

This thesis has been written as the final part of the master's program in Political Science and Management, marking the end of my education at the University of Agder. My interest in sustainability and universities was a factor for choosing my research topic. Sustainability is a relevant topic in today's society, and how organizations, institutions, and individuals incorporate and implement the SDGs is of great relevance. The discussion topic revolves around an analytical framework, connected to the university and its areas of interest. Having spent a great amount of time at the university it seemed natural to explore the role of the university. Lastly, my interest in people has been a determining factor in choosing a qualitative study and a social institution. It has been exciting to explore various concepts, theories, assumptions, and ideas, making me realize how critical it is to be curious.

Writing this thesis has been a journey filled with obstacles, and has demanded much time and effort, however, it has been a great learning experience. It is therefore very important for me to show my appreciation.

Firstly, I want to extend my gratitude to my supervisor Romulo Pinheiro for his support and guidance. His expertise and patience have been invaluable and has helped me complete my study. I would like to thank Charlotte Kiland and Gro Kvåle for helping me shape my research through feedback and suggestions. I am grateful to all participants of the study. Their willingness to share experiences and knowledge has been essential for completing my research. Thank you for your time and insight. I would also like to give a special thanks to my girlfriend Susanne, who went above and beyond to help me, and for her love and support. Lastly, I want to thank my family and friends for all their support and encouragement.

Abstract

The thesis investigates the implementation of the 17 UN sustainable development goals (SDGs) in higher education institutions (HEIs), more specifically University i Oslo (UiO). The study aims to uncover tensions and dilemmas linked to sustainability and the related SDGs. The research consists of an analytical framework, supplemented by organizational- and institutional theory as tools to help analyze data material. Semi-structured interviews of five employees at UiO have been conducted. The interview questions were based on pre-existing categories inherent in the analytical model, causing the analytical model to be a sufficient base of our research.

The findings indicate that the implementation of the SDGs cause several tensions and dilemmas. Relative to the analytical mode, the results suggest that practices, legitimacy, strategy, resources, and structure are explanatory factors for understanding the relationship between higher education and the sustainability agenda. The interview questions were based on pre-existing categories inherent in the analytical model, causing the analytical model to be a sufficient base of our research. The research explores how the implementation dynamics of SDGs causes resistance and acceptance to new reforms, and challenges existing structures and work processes. In addition, the study assumes that these individuals that inhabit the university constantly interpret, constrain and embrace the changes and challenges linked to sustainability.

The thesis concludes that the implementation of the SDGs at UiO are done strategically, through initiatives such as interdisciplinary collaboration, annual revisionment plans, membership in university alliances, and internal interpretation of sustainability to contextualize the SDGs to a local level. Further, the study concludes that tensions and dilemmas are found in all parts of the organization, at the micro-, mezzo-, and macro-level. Lastly, the research concludes that a dualism of top-down and bottom-up processes are necessary for a meaningful implementation.

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1. Introduction

1.1 Problem statement

European universities face urgent demand for reform. The environment is rapidly changing, and it is difficult for universities to respond sufficiently. Thus, we must examine organizational aspects of universities and rethink their role in society. A particular phenomenon that is widely discussed is *sustainability*, which has become a controversial topic, especially amongst European universities. The United Nations Sustainable Development Goals (SDGs) have become a broadly used benchmark for measuring and monitoring sustainability development in higher education institutions.

The UN's 17 SDGs are incorporated in the UN 2030 Agenda. It strives to secure a sustainable future for countries, individuals, and civil society (Gupta & Vegelin, 2016; Lim, Jørgensen & Wyborn, 2018). These goals are achieved by creating awareness around the SDGs, and enhancing the sustainable management of resources (Reckien et al., 2017). The recent years have shown considerable progress towards achieving the SDGs. However, the progress is not the same across different countries and fields of application.

This imbalance highlights the importance of delving into the university as an organization and institution, to locate tensions, barriers, dilemmas, and opportunities linked to the implementation of the SDGs. Higher education institutions (HEIs) have taken on a leading role in education, research, and societal power and outreach towards the SDGs. Higher education institutions (HEIs) are recognized as global actors regarding the SDG framework, and it is argued that universities should be measured by the ability to tackle complex challenges, rather than academic and scientific production (Klofsten, Fayolle, Guerrero & Mian, 2019; Leal Fihlo, Shiel, Paço & Mifsud, 2019; Corazza & Saluto, 2021; Findler et al., 2019; Waas, Verbruggen & Wright., 2010; Cottafava, Ascione, Corazza & Dhir, 2022)

1.2 Research objective and research question

The research objective is to look at implementation dynamics of the SDGs in all levels of the University, and the relevant structures, practices, strategies, and other components associated

with higher education institutions. To achieve this, the study aims to investigate the interplay between components inherent in the micro, mezzo, and macro-level of the university, with special focus on the analytical framework in chapter 2. The study will seek to engage with the UN SDG framework, rather than the individual SDGs. This is because the university is composed of highly different thought patterns and logics which may cause the individual SDGs to be more prominent in certain areas of the university. To avoid this, the study seeks to look at the entirety of the SDG framework. Ultimately, the study aims to satisfy the knowledge gap on why many institutions and organizations fail to successfully implement the SDGs. By conducting this research, the thesis contributes to the research gap on tensions and dilemmas linked to sustainability and its related SDGs. To satisfy the research objective, the following question(s) will be answered:

How do higher education institutions implement the UN SDGs, and what organizational and institutional tensions and dilemmas arise in relation to sustainability?

2. Theoretical framework

This chapter is divided into four main parts, where the initial part seeks to give a better understanding of universities, and how they act as organizations. Furthermore, we sought to provide a theoretical framework with theories that allows us to discuss and understand the data that are collected in the interviews. Theories that engage with the data material can provide new angles and nuances to the material. The theories that are presented in the theoretical framework aim to give a better understanding of the study as a whole. The analytical framework is the foundation of this thesis. An analytical model is provided to concretize the abstract idea of the university model. The components of the model are carefully chosen and are considered valuable in relation to the research question. Lastly, the analytical framework engages with all parts of the research, and I chose two supplementing theories (translation theory and institutional logics) for further explaining phenomena and insights, and giving a more meaningful understanding of these.

2.1 Universities as organizations

European universities are pressured to adapt and reform to existing and emerging global challenges. Environments are rapidly changing, and universities have trouble responding accordingly. “It is necessary to rethink and reshape universities' internal order and role in society, simply because European universities do not learn, adapt, and reform themselves fast enough” (Olsen, J., 2007, p. 3). The University as an institution is involved in a set of changes that are transforming their institutional role, meaning that the university and its mission, processes, organization, governance, and their societal, economic, and political role is at stake (Olsen, J., 2007, p. 25).

Modern societies in Europe can be seen somewhat as autonomous institutional spheres, built upon diverse logics, principles, and behavior codes that are occasionally in balance, and sometimes colliding or interfering with each other (Weber 1978; Olsen 2007). As stated by Olsen (2007, p. 18) “Faculty, students, university leaders, and administrators are likely to hold different views”. This speaks to the complexity of the universities as an institution. Universities are federations of different departments or faculties, each one producing different educational and reach output independently from each other with a high degree of

independence. Loose coupling reduces the barriers of change, but also makes it more difficult to change the whole organization in opposition to a tight coupled organization such as a car producer. This is because all parts are related to the same production processes.

Today, Universities become increasingly relevant in the modern economy due to the fact they hold one particularly vital component, technological innovation. Technological innovation is a crucial element for societal and economic development. Thus, universities can aid each other and collaborate to strengthen worldwide economic activities. This interplay can contribute to tackling challenges labeled “wicked problems” (Jongbloed, B, 2015).

Universities are more commonly than ever interacting with government and other institutions to provide new knowledge and research to improve both regional and national development. There are two conflicting logics that represent themselves here; the public good logic is how universities provide an institution for teaching and learning, while the market logic is a result of how modern universities are intertwined with businesses and conduct research based on market-oriented challenges.

Academic research on the university has shown a shift from the traditional university to a university intertwined in business relationships and the trend toward the entrepreneurial university. Multiple stakeholders become involved in the organization, management, and leadership of the university (Jongbloed, 2015). This states the fact that hybrid organizations involve a variety of stakeholders, and it is no doubt that these stakeholders have conflicting interests, preferences, and expectations, causing a pressure to increase the engagement in public-private partnerships, resulting in the universities becoming more entrepreneurial and to interact more with the external environment (Jongbloed, 2015).

2.2 Translation theory

Translation theory in organizational studies stems from the sociology of translation in actor-network theory, developed by Michel Callon (1986) and Bruno Latour (1986, 1987), with further inspiration from Serres (1982) (Czarniawska and Sevón, 1996a, 2005b).

Actor-network theory is divided into three modes of translation theory: ANT-perspective, knowledge-based perspective, and Scandinavian institutionalism. An actual theory to help

understand translation and translation processes is Scandinavian institutionalism. This perspective sees translation as processes where ideas and models adapt to local contexts when traveling through time and space. During these processes, the ideas are “made to fit”, to make them more appropriate in the current organizational contexts (Nielsen et al, 2020, s. 236). This tradition contests the classic neo-institutionalism assumption that actors are passive and puts only focus on structures, with the result being convergence via isomorphic behavior (i.e., all HEIs copy one another and become alike over time) (DiMaggio & Powell, 1983).

Scandinavian institutionalism states that translation leads to variation and change in local practices. Translation consists of processes where actors can influence how the ideas or practices are implemented and focuses on agency and not structure as in classic neo-institutionalism. ANT (actor-network perspective) divides translation processes into four levels; problematization, interest, enrollment, and mobilization. (Wærås & Nielsen, 2016, s. 237-238).

According to (Callon, 1986) the process of translation occurs along four phases. The first phase, *problematization*, is where the actors show their interest and seek to convince others that they have the right solution. The second phase, *interest*, is about legitimizing the problematization by strengthening bonds between the interests of actors. The third phase is about *enrollment* and happens when the second phase has succeeded, and the actors accept their role in the problematization. The fourth and last phase is *mobilization* which aims to maintain the network of actors by ensuring that the translators act according to the best interests (Wærås & Nielsen, 2016, p. 238).

Translation is therefore a process where convergence and homologies are created by relating what was previously unrelated (Callon, 1980, p. 211), which is explained by Waldorff (2013a) who perceive translation as a process where actors mobilize their interests in order to make local versions out of organizational innovations. These translation processes provide a basis for which ideas continue or get institutionalized. Translation depends on the coordination of the translators and does not pursue their own interests. This is because the translators can change the core or the parts of the idea to something completely different (Wærås & Nielsen, 2016, p. 238). It is important to add that the idea or concept can have different interpretations, which leads to the importance of having a precise description/definition of what the idea or concept means.

Scandinavian institutionalism builds upon the idea that active dissemination and interpretation leads to local variation (Wærås & Nielsen, 2016). Typical hegemonic ideas, like sustainability, are subject to translators and how they subtract and add properties to the idea, making it constantly change. Good translation processes increase the probability for a faithful transmission, but Latour (1986) states that this is unlikely to happen.

In the 1980s and 90s many organizations started noticing popular ideas and were seeking to incorporate these ideas into their own formal structures. These waves of techniques and models included total quality management (TQM), supply chain management (SPM), management by objectives (MBO), new public management (NPM) and other management styles. In the 2000s “popular waves of ideas included various forms of evaluations, assessments and rankings, certifications, and evidence-based guidelines” (SAGE p. 219 translation). In the modern era the term sustainability has had a significant impact on organizations and institutions. Sustainability as a concept is not technologically advanced thus making it more complex to translate, especially in HEIs where societal aspect plays a big role. In this study we concretize the concept of sustainability by focusing on the SDGs (Sustainable Development Goals). The SDGs function as a form of evidence-based guidelines like the early 2000s waves of ideas as mentioned, but the degree of evidence in this case is disputed.

2.3 Institutional logics

Alford and Friedland (1985) introduced the term institutional logic, which was used to explain contradictory practices inherent in institutions of western societies. There have been many approaches towards defining the concept over time. Thornton and Ocasio (1999, p.804) defined institutional logics as “the socially constructed, historical patterns, of material practices, assumptions, values, beliefs and rules by which individuals produce and reproduce their material subsistence, organize time and space, and provide meaning to their social reality”. The definition provides a connection between individual agency, structures, and practices.

The institutional logic approach is a key remedy to the theoretical drift away from institutional effects, meaning that institutional theory nowadays is about non-institutional factors as drivers for institutional change, such as political struggles, social movements, environment, and resource dependencies. Institutional logic as an approach can be necessary to dig deeper into the cultural dimension of an institution and how this culture both enables and constrains social action (Lounsbury, Ventresca & Hirsch, 2003; DiMaggio & Powell, 1983). Additionally, historical contingency helps explain how larger environments have an impact on individual and organizational behavior, and how these organizational fields involve diverse and conflicting logics. (Ocasio, Thornton & Lounsbury, 2018, p. 10; D'Aunno et al. 1991; Reay and Hinings 2005).

2.4 Analytical framework

2.4.1 Introducing the analytical framework

In this section, we provide an analytical framework for implementing the sustainable development goals in higher education institutions. To operationalize our framework, it is important to distinguish between the diverse levels within HEIs. In brief, the structure of HE embodies three levels – the macro-, mezzo- and micro level. The macro level consists of external factors such as public policies, infrastructure, laws, and economy. The micro level typically consists of day-to-day operations and includes individuals, groups, and organizations within the organization (Pinheiro, Berg, Iakovleva, Thomas & Benneworth, 2022). Lastly, the mezzo environment includes connections between societal forces (macro) and agents (micro) through structures and institutions, and is characterized by how actors engage with each other, and the processes and mechanisms that exist as a result of such interactions (Pinheiro et al, 2022, p. 12).

The analytical framework focuses on the macro- mezzo- and micro level. The framework seeks to explain the institutionalization of the UN development goals. To institutionalize these development goals, they need to be implemented at all levels, in terms of formal (policies, resources, leadership/incentive) structures and informal (norms, values and identities) structures.

2.4.2 Policy implementation - top-down and bottom-up

The implementation of the UN sustainable development can be seen as a policy implementation process. The two models of policy implementation are the top-down and the bottom-up model (Cerna, L, 2013; Signé, L, 2017). The top-down model has its starting point in the authorities, and the decisions made here implement things through structure, as a logical process to foster efficiency. It is characterized as a hierarchical and structured process, with administrative mechanisms. In opposition, Signé (2017, p. 14) states that “bottom-up theorists tend to believe that centralized decision-making is poorly adapted to local conditions and flexibility is important to reach goals”. Meaning, that top-down processes might not provide enough flexibility to local actors.

Top-down and bottom-up initiatives for institutionalizing the UN development goals are not sufficient alone in explaining the implementation dynamics, and tensions that arise. When the focus is primarily on top-down and bottom-up initiatives this might obscure the middle of the institution. This institutional middle consists of faculty, institutes, staff members, and/or intrapreneurs. These individuals, or groups of individuals should not be taken for granted as leaders of change. However, this branch of the university involves numerous disciplines with conflicting views, values, beliefs, and identities. Therefore, change is dependent on allowing sub-unit/sub-groups some autonomy, which is linked to the loosely coupled nature of university structures (Melby, B, A, 2008).

2.4.3 Instrumental vs. institutional perspective

HEIs of all types are embedded into geographical and socio-cultural contexts surrounding their operations. The activities of HEIs are not only embedded in national and supranational science and research, but also various macro-level societal structures, i.e., academic professions. Academics are socialized through disciplinary fields in which they derive their normative allegiances and professional identities (Pinheiro et al, 2022: Becher & Trowler, 2001). Thus, according to Pinheiro et al. (2022, p. 13), “the way that HEIs recognize opportunities and the activity of agents inside them (individuals or groups of individuals) are strongly influenced by their embeddedness within their context”.

Once we understand the sociocultural context, we need to elaborate the different perspectives of how we perceive HEIs. Olsen (2007) states that universities can be seen as instrumental or

institutional. From an *instrumental* perspective, the university is intertwined in various contracts, plans, and dependencies, and seeks to achieve control through rational operations. The *institutional* perspective sees the university as an assembly of practices, rules, and behaviors that are shaped over time, producing structures of meaning. This perspective sees structure as embedded with identities that legitimize certain behavioral codes, providing common purpose and direction for behavior. “The core assumption is that both maintenance and change of institutions is interlinked with the ongoing activities of actors who populate these institutions” (Elken & Stensaker, 2018, p. 194).

This explains how institutions are constantly changing and how change is intertwined in the sociocultural context. The instrumental perspective assumes that institutions are difficult to change rapidly, because institutions reflect societal values produced over time, and often deeply rooted. (Olsen, 2007, p. 27). The more institutionalized something is, the harder it is to change, but change at the micro- and mezzo levels can be externally motivated by legitimacy.

2.4.4 Legitimacy

Suchman, M. (1995, p. 574), almost 30 years ago, defined legitimacy as “a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate with some socially constructed system of norms, beliefs, and definitions”. Or, as defined more recently “legitimacy may be bestowed on an organization by external stakeholders who endorse the worthiness of its vision or objectives and its competence to efficiently work towards achieving the designated objectives” (Zimmerman & Zeitz, 2002; Drori & Honig, 2013, p. 346). External legitimacy often enhances the acquisition of resources, customers, stakeholders, investors, and clients (Aldrich & Ruef, 2006; Shane & Stuart, 2002; Zucker, 1987).

However, internal legitimacy is dependent upon bottom-up practices caused by individual agency, in opposition to institutional logics that are deemed effective by organizational leaders (Drori & Honig, 2013, p. 347). Internal legitimacy is not to be confused with organizational identity. Identity is built upon ideological reasons, while internal legitimacy incorporates a more conditional approach (Drori & Honig, 2013, p. 347). The differentiation

is that an ideological reason would be to define oneself as a part of something even though one does not agree with everything it stands for, while internal legitimacy is linked to the practices that are relative to accomplishing the goals within the organization.

The institutionalization and implementation of the UN sustainable development goals can be seen as externally driven, as the United Nations acts as a global organization with a key role in the macro environment. The legitimization of the SDGs is morally fixated as it focuses on how the organization is viewed by its macro environment. This emergence of legitimacy influences how individuals or groups of individuals embrace or constrain new institutional practices (Drori & Honig, 2013). For instance, the implementation of the SDGs within formal and informal structures presents new practices, routines, and resources, which may cause individuals to react in unfavorable manners, and be seen as harmful to their current way of doing things. This explains the influence internal legitimacy has in framing organizational identity and shaping decision-making and strategic direction (Drori & Honig, 2013, p. 347).

2.4.5 University dynamics

Olsen (2007) emphasizes that the dynamics of HE in most cases, are a result of external factors, such as change- and transformation processes as a response to the Agenda 2030. In order to understand the dynamics of change and implementation in the various levels of the university, we must look at internal processes, how they interact with each other and which tensions and dilemmas that arise. Our lens will be an institutional perspective on HE with focus on macro- mezzo- and micro level. Additionally, the analytical framework sought to map out connections across the levels of analysis. Actors' behaviors are influenced by the context in which they operate (Pinheiro et al., 2022, p. 11). Context refers to “the circumstances, conditions, situations, or environments that are external to a phenomenon and either enable or constrain it (Pinheiro et al, 2022, p. 11: Welter & Smallbone, 2011).

To understand the groups of individuals and their role within HE, we need to unpack the day-to-day operations consisting of actions that make it possible to implement, change, and adapt new policy, often occurring on a micro level. These operations, actions and practices are related to what we call institutional work. Institutional work is about how individuals and organizations purposely and continuously create, shape, and change institutions (Lawrence &

Suddaby, 2006, p. 215). Rather than analyzing institutions, we analyze the interaction between agency and institution, where institutional spheres, their ideas and beliefs are shaped by institutional rules and behavioral codes (Lawrence, Suddaby & Leca, 2011, p. 55). These actors actively enable, maintain, and constrain the institution in which they operate (Hwang & Colyvas, 2011; Elken & Stensaker, 2018, p. 193-194).

2.4.6 The complexity of the university - A model for analyzing

To understand the interplay between micro (agency) and mezzo- and macro- rules we need to not separate them but find what connects them. The institutional work perspective allows us to study *practices* (mezzo-level), which binds the micro and macro level together.

Furthermore, people that enter the organization have different beliefs, values, and traditions, relative to previous experience and work habits. Moreover, socialization within the organization leads to new values, beliefs and norms that may supplement or result in a reinterpretation of one's previous set of values. This can help explain how practices are continuously shaped by people that inherit various attributes, and how external attributes that originate from the outside can challenge existing practices. This is where the macro environment provides incentives such as legitimacy, resources, and policy through formal and informal structures to secure efficiency towards their goals (Drori & Honig, 2013; Pinheiro et al, 2022; Becher & Trowler, 2001; Olsen, 2007).

To analyze and interpret the utilization of the SDGs we need to look at how the macro level (policy, strategy, resources), micro level (agency and day-to-day operations), and the mezzo level (practices and interaction between macro-micro level) interact with each other and what sets of tensions and opportunities arise from this process. The top-down perspective is an administrative and structured process involving resources, legitimacy, and policy in the process of implementation. However, the bottom-up perspective emphasizes social norms, values, and beliefs as drivers for institutional change. Institutional work can help explain how certain individuals, as part of the institution, enable, maintain, or constrain change. These individual or individual groups can act as change-agents who react to new institutional practices, structures, and processes by using their influence on either embracing or constraining the institutional change, such as the implementation of the SDGs.

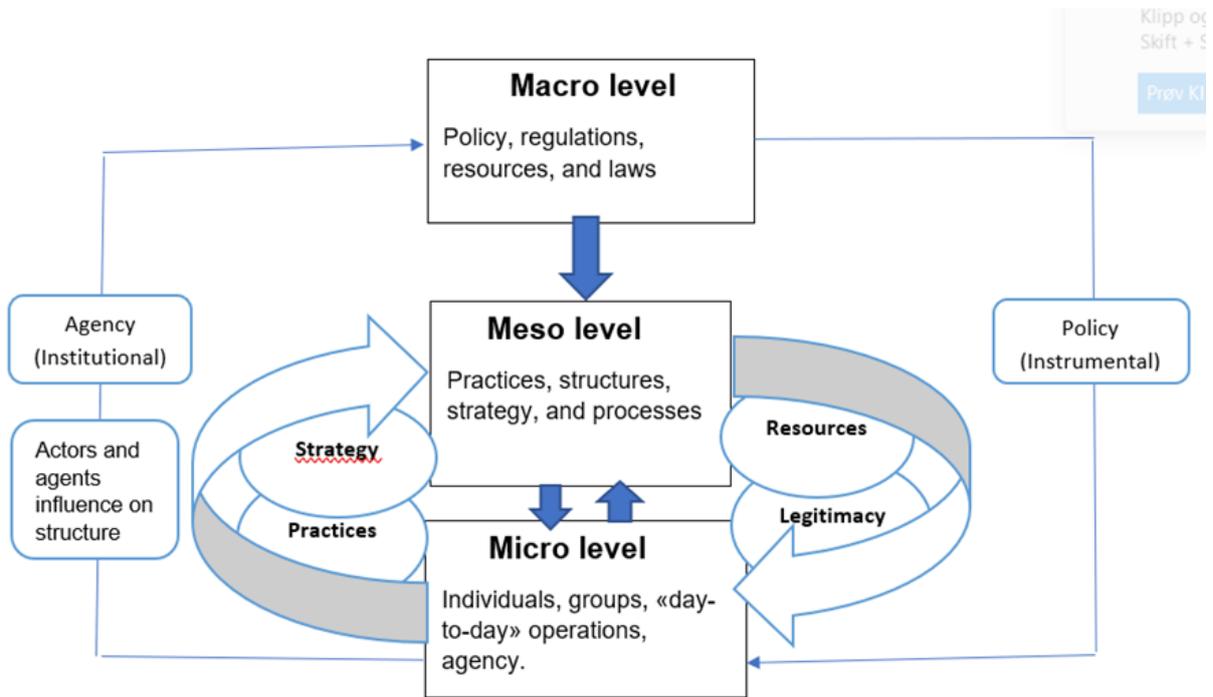


Figure 1: Analytical Model

3. Context and background

3.1 The UN sustainable development goals

Countries today are committed to administer an annual review and implement the 2030 agenda at national and regional levels (United Nations Economic Council 2016). The SDGs are descended from the UN, which respects national laws, human rights and other international phenomena (UN General Assembly 2015). The 17 SDGs have been highly compromised through negotiations and discussion. Furthermore, there has been a comprehensive focus on solidarity and financial support in order to achieve these goals. The SDGs reflect universal challenges and include values that are universally agreed upon. Therefore, it could be important to have measurements that can help countries provide a way to achieve and monitor the progress. According to Elgin-Cossart and Chandran (2016) one can revise the progression of sustainability by constructing a framework that incorporates challenges and limitations that are comparable among countries.

3.2 Higher Education – Competition at a global scale

Higher education institutions are evaluated based on their relation to SDG-related research and scientific production, more specifically research productivity and scientific publications. This is done by The Times Higher Education (THE), which is an international bibliometric ranking system (Times Higher Education, 2021). Similar to this ranking system, the QS World University Rankings evaluate citations per faculty over a period of five years. (QS World University Rankings, 2022). It is believed that this evaluation and analysis can encourage HEIs to produce a greater quantity of SDG-related research, and further help promote higher education research. These assessments can help develop a positive arena for competition among HEIs (Chankseliani & McCowan, 2021).

3.3 Higher Education in the Nordics

Nordic HEIs have been exposed to extensive governmental reforms the past two decades. The reforms aim to strengthen the autonomy of institutions and focus on structural changes within HEIs to stimulate efficiency, excellence, and accountability. An increased focus on

governance structures and performance mechanisms related to teaching and research, has been at the top of the agenda (Geschwind et al, 2019) (Vabø & Aamodt, 2008).

The two traditional missions of the university, teaching and research, are becoming increasingly competitive as the HEIs are steadily moving towards a market-based model which promotes ranking systems and global competition (Geschwind and Pinheiro, 2017).

The governments in the Nordics have ratified various reforms aimed at the accountability of HEIs. As universities have become important societal institutions, demands and expectations surface, and the reforms focus on allowing HEIs to be more responsive to these. A long-term plan was adopted by the Norwegian government for HE research in 2015, which sought to center resources in areas of great strategic importance, such as climate, environment, and healthcare. This was to promote research excellence in the global competition and highlighted the role of the university in relation to local and global problems. (Geschwind and Pinheiro, 2017)

3.4 The University of Oslo

In Norway, one university that is currently striving for enacting the sustainable development goals, is the University of Oslo (UiO). UiO has made a long-term strategy plan that is due by 2030 and is currently ranked number 119 in the world (Times Higher Education, 2022).

Internationally, Norwegian HEIs are considered to have ambitious standards. However, the implementation of sustainability into the educational curriculum is not as established as anticipated (Straume, 2016). Nevertheless, UiO has created a comprehensive strategy with the means to tackle both local and national challenges (Appendix 1).

3.5 Universities and the UN 2030 Agenda

2030 is less than a decade away, it is therefore preeminent to be critical and act out of urgency to achieve the Sustainable Development Goals. HEIs have great influence on social, economic, and environmental challenges, and they are positioned to foster transformations that are necessary for tackling the world's most difficult issues (United Nations Educational, Scientific and Cultural Organization, 2022). The UNESCO report stresses the role of HEIs in contributing to the 2030 Agenda, with focus on the three following interrelated themes: “1.

The need to move towards inter- and transdisciplinary modes of producing and circulating knowledge, 2. The imperative of becoming open institutions, fostering epistemic dialogue and integrating diverse ways of knowing, 3. The demand for a stronger presence in society through proactive engagement and partnering with other societal actors” (UNESCO, 2022, p. 3).

HEIs and the individuals that inhabit the university have responsibilities for societal transformation. Where leaders, faculty, institute, and students all have different roles. There is a need for changing structure and culture, and gradually removing barriers of change. (UNESCO 2022)

Education

In the future, the students will become the future workforce. So, while studying it requires the university to create an ethical grounding towards sustainability. To further tackle the sustainability challenges, there is a need for increasing interdisciplinary solutions and study programmes. Inter or transdisciplinary courses that have relevance to the SDGs should be adopted in the study programs. In addition, education must engage with different approaches for knowledge systems as well as diverse cultures. This is important for giving the students an opportunity to engage in dialog, discussion, and activities within different communities. Involving students and faculty on the topic of sustainability in education can help develop HEIs internal relation to sustainability. (UNESCO, 2022)

Research

According to UNESCO 2022, HEIs should keep protecting academic freedom in times of systemic change. Curiosity-driven research is important, and should not cease, but be kept as a core principle. Nonetheless, HEIs should seek to adapt internal incentives for research projects, centers and programmes that relate to the SDGs. Research centers for climate, environment, and other SDGs that require multiple disciplines, should all include humanities and social sciences. More attention should be put on achievements, research, careers, and curricula that are SDG-related. Lastly, UNESCO states that ranking systems which demoralize collaborative and dedicated research should be reevaluated. (UNESCO, 2022)

Outreach and community engagement

To stimulate HEIs role in sustainability, outreach and community engagement policies must be proactive. “Policy advice, engagement in societal projects for sustainability, and the involvement of different sectors of society to partner in acting towards the SDGs must be strengthened. Awareness raising that explains sustainability problems and favors policies, societal actions and personal behaviors that combat climate change, nature loss and inequality among the different sectors of society clearly needs to be expanded” (UNESCO, 2022, p. 15). Building and taking part in networks of community, economic sectors, and academics that collaborate on SDG-related work should be increased. Furthermore, strengthening existing multilateral networks between HEIs and developing new meaningful networks can help facilitate collaborative research. In addition, partnerships between HEIs in all types of countries should be revised to make room for new relationships that focus on capacity-building regarding sustainability. (UNESCO, 2022)

4. Methodology

This chapter presents the chosen method and research design. According to Bukve, a research design is a plan for how to carry out a project, and this plan consists of two phases (Bukve, 2021, s. 83). The first phase relies on the purpose of the project, while the second phase is based on strategy for data construction – where the study chooses, collects, and analyzes data to answer the research questions in the thesis (Bukve, 2021, s.84).

4.1 Research design

This research is built upon a qualitative method and secondary data analysis. A qualitative method gives a deeper understanding of underlying elements and incentives (Palinkas et al., 2015). For the scope of this thesis, it was decided that a qualitative approach would be more fruitful. By comparing both qualitative and quantitative methods, it became obvious that a qualitative method is more coordinated with the approach towards the research question. Also, it fits well together with a literature study, where the key essence is to code useful data and analyze findings according to the research question.

Based on our thematic approach and research questions this study can be classified as theoretically interpretive, where the main goal is to use theories and subject/professional terms as a framework for analyzing and giving meaning to the phenomenon that are studied (Bukve, 2021, s. 91). This project applies a theoretical framework consisting of organizational and institutional theories. Within this research purpose's frames, there are two different strategies: theory-informed project and interpretive reconstruction. Theory-informed project as a strategy is the most relevant in this study, as it is built upon a structural framework where you gather and analyze data with roots in theories that are specified beforehand (Bukve, 2021, s. 92).

The second part of the design process is the strategy for data construction and the approach towards the study-object. Here Bukve distinguishes between a holistic and a reductionist perspective on data. These approaches towards data can be split into case-oriented and variable-centered research strategies, where the case-oriented strategy is holistic, and the variable-centered strategy is reductionist (Bukve, 2021, s-97). Case-oriented strategies are holistic because data is understood as composite cases that need to be studied in actual context, while

variable-centered research strategies are reductionist as it views data as a population of units which can be described through variable attributes (Bukve, 2021, 2. 98).

In this project a case-oriented design will be applied. This choice is manifested in the thought that universities need to be studied in actual context, where a holistic approach towards data will be used – the focus of the analysis is the terms of observed outcome, and the explanatory strategy revolves around uncovering the interacting factors or mechanisms that results in a given outcome (Bukve, 2021, s. 98). Our purpose is to study with the use of a case approach where the University acts as a case which explains a phenomenon. In our case, we will operate with a single-case study where the University of Oslo (UiO) is the case of study.

It is important to distinguish between studies that focus on the case as a whole, and studies that see the case as a part of a context. If the case is seen as a whole, the relation between the levels is not in center. However, analyzing cases intertwined in a context is about the interaction between context and case in a process perspective, where the goal is to uncover factors that are crucial in some instances which can be the foundation of the generalization (Bukve, 2021, s.1 131-132). This project considers the case as intertwined in a context, where the University is a case in an increasingly globalized world, influenced and affected by international processes, while simultaneously being complex social institutions. It seems less appropriate to focus on the case because the relationship between different levels in our study is important.

The main data collection stems from interviews. Due to the magnitude of the studies, there is a need for significant data from the selected interviewees to get a deeper understanding of tensions and dilemmas in universities. It was decided to use qualitative interviews to collect primary data. Qualitative interviewing is generally much less structured, and more flexible, where the interviewer adjusts and responds to the interviewee (Bryman and Bell, 2007). The interviewer preferably gives rich and detailed answers, and new questions may arise due to the interviewee's replies and the order of question may be revised (Bryman and Bell, 2007).

4.2 Structuration of the interviews

There are three methods to qualitative interviewing: unstructured, semi-structured, and structured interviews. The unstructured interviews are absent from an interview guide, while structured interviews are less flexible than semi-structured interviews. In this study semi-

structured interviews have been chosen. Magaldi and Berler (2020) define semi-structured interviews as explorative and enable the researcher to be more explorative within the framework of themes to be explored (Magaldi and Berler, 2020).

Rubin and Rubin (2005, p. 171) argue that an interview should have some sort of balance among the main questions, the follow-up questions, and probes. It can be useful to have an interview guide when conducting interviews, which is an overview of topics and questions to be asked in separate ways to the interviewees (Lindlof & Taylor, 2002). This approach towards interviews suits well in this study as it enables improvisation and flexibility, which could be necessary to dig deeper into explanatory factors linked to the research question, but also allowing new questions to surface as an outcome of the interviewee's statements.

The study sought to interview 5 to 10 people that hold a position at UiO, preferably in all parts of the organization, including university board, faculty, departments, institutes, and other units. The research ended up with five interview subjects in different levels and positions at UiO, each operating with a timeframe of 30 to 45 minutes. The interview subjects are addressed with less recognizable titles in the empirical section to provide anonymity. The reason for this being that the interviewees provide statements and information that could be linked to their position at the university.

Sequence	Role and internal coding	Organizational level
Interview 1	Senior Manager	Faculty-level
Interview 2	Senior Academic C Senior Academic A	Institute/Faculty-level Institute/Faculty-level
Interview 3	Senior Academic B	Institute-level
Interview 4	Senior Administrator	Top Management

Table 1: Overview of interview subjects

Challenges and insights

In the study, sources are selected based on how they contribute in terms of bringing insight to the posed research question. A variety of sources has been chosen to obtain a diversity in the analysis, which can help lay a foundation of both positive and negative sides. However, there were some challenges linked to the interviews, more specific interview 2. This interview included two participants with different positions which led to most of the questions being answered by one interviewee, where the other interviewee occasionally supplemented minimal, and similar information on top of current information. Another challenge regarding the interviews was the timeframe. Conducting interviews with 8 to 10 questions within 30 to 45 minutes causes time pressure. This led to situations where questions did not reach the desired depth.

The study's interviews revolved around five main explanatory components for uncovering tensions and dilemmas. These components are strategy, practices, structure, legitimacy, and resources. Initially, these components were all considered with equal weight, but the empirical findings have illustrated that these components are more intertwined than anticipated. Thus, a limitation in the research is that some components are more explanatory than others. This can be due to some interviewees having a strong relationship to components linked to an administrative role (Figure. 1). Nevertheless, this limitation is also a strength, because it allows us to dig deeper into certain components that might lead to interesting perspectives.

Reliability and validity

The results from the study are obtained through four interviews, with five interview subjects. Initially, the research sought to do 5-10 interviews, resulting in five interviews, causing the thesis to lose some reliability, and present a lower degree of generalization as it is more difficult to reproduce the same result over time when conducting the same research. However, choosing a qualitative method has assisted the study in collecting valuable insights that may not have been possible with a quantitative method. This is because the formulation of the research questions requires the research to dig deeper into social and structural processes.

The validity of the thesis is based on the correspondence between results, theories, and other established concepts. The study's interviews revolved around five main explanatory

components for uncovering tensions and dilemmas, presented in an analytical model (Figure 1). These components are strategy, practices, structure, legitimacy, and resources, and are intertwined in the theoretical framework, improving the validity of the thesis. The methods chosen for collecting data are purposely chosen to gain insight and valuable results that can be compared to theory and existing research, contributing to the validity of the thesis.

4.3 Coding and analyzing the data

After a complete transcription of the data, the materials were coded and analyzed, utilizing a content analysis. According to Cohen et al. (2007), content analysis is the quest of interpreting and summarizing the collected data, defined in a narrower context as: “a strict and systematic set of procedures for rigorous analysis, examination and verification of the contents of written data” (p. 475). Content analysis reduces written data into smaller categories of information. Cohen et al. (2007), defining Content analysis is defined as “the process of four Cs, that is: Coding, categorizing, comparing and concluding, where goal is to create meaningful *categories* in which words, sentences, and phrases are assigned, and *comparing* these categories to find connections, and drawing theoretical *conclusions* from the text.” (Cohen et al., 2007, p. 476).

According to Mayring (2003) there are three basic forms of interpretation in qualitative content analysis, that is, “summary (the reduction of the data), explication (finding additional material), and structuring (filtering important aspects from the data)”(p.56). Regarding qualitative content analysis, structuring is appropriate for acquiring an overview of the material by operating with formed categories (Mayring, 2002). This is a suitable way of interpreting and analyzing the qualitative data. Thus, by establishing categories one can filter statements from the interviews and put them into categories. The categories are developed deductively, being put together individually for the specific study. There are various strategies for constructing categories. It is possible to establish categories based on parts of the transcription, or the categories can be pre existing (Cohen et al., 2007). In this study the categories previously existed, and the categories incorporated in the interview guide were utilized as fundamental categories in the empirical section. The categories in the interview guide were based on the analytical model and its components and included questions relevant to the categories presented in the next chapter.

5. Results

This chapter presents the data collected from the interviews. It is split into two parts. The initial part is based on existing categories from the interview guide related to the analytical framework: 1) Strategy, 2) Resources, 3) Practices, 4) Legitimacy. The second part consists of new categories resulting from the relationship between the pre-existing categories and new information. The newly developed categories further seek to find tensions, dilemmas, and opportunities linked to the research question and the analytical framework.

This chapter displays the five interviews conducted, presenting information gathered on strategy, resources, practices, legitimacy, structure, as well as the levels of the organization, interaction amongst university levels, strategic maneuvering, translating the SDGs to UiO context. As mentioned in chapter 4, semi-structured interviews enable exploratory research and allow for digging deeper into the information (Magaldi and Berler, 2020).

The interviewees were chosen based on relation to the study, but also who was willing to be interviewed and some being forwarded by others. There was not as much information provided on agency, which would be convenient in this study. However, the interviews produced plentiful amounts of interesting information.

5.1 Findings and empirical data

The empirical findings from the interviews are categorized in relation to the analytical framework. In this chapter the data from the interviews will be presented with a summary of the most important information, and also relevant quotes from the interviewees.

5.1.1 Strategy

There have been many interesting insights on strategy during the interviews- where strategy is more fragmented than anticipated. There is a notable difference between overall strategy and faculty strategy. The overall strategy is often called a target goal rather than daily strategy, whereas the faculty strategy is founded on the overall strategy (UiO Strategy 2030). Nevertheless, the faculty strategy also operates with day-to-day strategy and concrete actions plans for sustainability.

The UiO strategy 2030 sought to drive the course of UiO- “not by revolutionizing, but by turning the organization as a whole in a direction, where all operate more systematic with climate, environment and sustainability in all parts of the organization”. – Senior Administrator.

“The strategy is mostly a target goal rather than a day-to-day relationship with the strategy. When it comes to personal flights, purchase or research and teaching portfolio, in a sustainable manner- this is something that is floating in the air and is not properly implemented or not even made conscious. Faculty management has more awareness when it comes to the sustainable aspect than on institute level, but it also depends on the institute management and their preferences and awareness around this.” – Senior academic B.

UiO also has a comprehensive climate and environmental strategy that carries out a specific action plan. This plan seems to work as a guideline for certain areas of interest throughout the university but is expressed as more limited than the faculty strategy. This is because the faculty uses this strategy in addition to their own strategic investment through faculty positions with focus on sustainability and of projects related to SDGs. This complex composition of different sustainability projects was referred to as a “sustainable umbrella”. – Senior manager.

The UiO strategy 2030 lays the foundation of the faculty strategy and creates a connection between the micro, mezzo- and macro level in the organization. Organizing in this manner secures a line from the top through the faculties and further to the institutes. There are boundaries for what one can do on a faculty level, so it is important that all parts of the organization collaborate. As a supplement to the strategy, there is an annual plan based on the strategy which helps to achieve the goals in practical matters. This action plan is revised annually to look for innovative ideas and solutions, and to secure progress and to keep updated.

According to two Senior Academic A & C, the strategy areas are rooted in the university board. However, the strategy plan is embedded in faculty management, while the annual plan comes from the administrative center. Nonetheless, the strategy, focus areas, annual plans, are all priorities based on Strategy 2030.

“The UN sustainable development goals are not only a part of the strategy, but a useful tool for maneuvering sustainability.” – Senior Administrator.

The interviews have shed light on the importance of interpreting and discussing the meaning of sustainability. This interpretation is necessary because:

“The UN SDGs are broad- the goal for health is not necessarily all about sustainability. Therefore, it is important to narrow it down and steer towards research relevant for sustainability. This can help promote sustainable work and make it more attractive, both for researchers and students. The strategy also embraces competitiveness in relation to knowledge on sustainability- where the battle for external funds is crucial for developing sustainable research” – Senior manager.

5.1.2 Resources

When it comes to resources and sustainability there is no doubt that there is an extensive need for external funds to even tackle the sustainability challenges. The senior administrator states that the green shift is the most expensive challenge UiO has faced, and increased resources are set aside to several types of sustainability projects at UiO. It was pointed out that it is important that competences in all areas of sustainability are cultivated to accumulate research funds.

“Where we allocate these resources is a decisive factor for attracting students. So, we can not only use resources on research, but also generate extra activity towards sustainability, to show students that there is a wide and visible focus on sustainability” – Senior Administrator.

As in all organizations, there is opposition when it comes to the strategic investment regarding resources. All interviewees mention cross disciplinary coordination as a crucial strategic investment relative to solving the sustainability challenges. Nevertheless, the majority and the younger people, maybe more than the older, allow for such investment of resources on sustainability projects. According to the Senior Manager: “Our most important mission is to respond to the global challenge and make it a top priority as it is not only a good cause, but the best cause at this moment. So, by funneling funds and investments into sustainability we also create a priority in this area”.

The faculty level interviewee stressed the fact that UiO can not only rely on new funding but also strategize its current funds and financial models by creating new projects and investing in conferences or seminars. And, that this investment can positively imbue the university with sustainability topics. This is a working project that aims to create a community that allows for research and collaboration across different disciplines, and the central level grants a hundred million kroner annually on this cross disciplinary collaboration. UiO plans to further develop “the sustainability house” which operates as a *Rendez-vous* for all sustainable activity at the university, such as seminars, discussions, and projects that are appointed for sustainable research. This sustainable house will be physical and will also aim to promote individual outstanding research projects that are not necessarily linked to sustainability.

“We need to look at investment in sustainability projects- and excellent research, as two sides of the same coin” – Senior Manager.

“The importance of motivating researchers to be constructive and not make them feel obligated to be a part of sustainability at the cost of their own research agenda. Even so, in the heat of a costly priority, there is a need for allocating resources from existing things- over to new priorities. New study places from the parliament would clear a path for many new things and speed processes. Tensions arise when people need to adjust to new activities, so management, especially institute management, need to motivate workers and coworkers as “the carrot is better than the stick”.” - Senior Academic B

5.1.3 Practices

Practices are continuously shaped over time, and the same goes for the University of Oslo. University practices like teaching, learning and research are located at the micro and mezzo-level and are influenced by the university's active relation to sustainability and the SDGs. One important insight regarding practice is the necessity for interdisciplinary collaboration. To tackle the challenges linked to sustainability, it is required to involve all competences. This requires UiO to work systematically and involve actors, agents in processes and discussions.

“The increase in cross disciplinary cooperation also has its influence on practices and how day-to-day operations are more linked to sustainability challenges. However, on the study side, many courses are quite comprehensive, and there is much to do between faculties, because in many ways they function as silos. Nonetheless, autonomy is important but can also be a barrier for implementation and new practices regarding interdisciplinary cooperation” – Senior Academic B.

When asking the question of what can be done to reduce barriers to interdisciplinary collaboration, the interviewees argue that changing up routines makes it easier to adapt to latest ideas, especially in the study apartment, which is more organized than the research department. UiO has a rigid and comprehensive teaching system and is producing teaching at a big scale.

“It is important to be professional and follow lots of routines, together with faculty. Also, many courses have unique profiles meaning that they have different approaches towards sustainability, for example psychology and political science steers more towards humans and people while other courses that are more hard science look at decision-making processes based on various kinds of information”. – Senior academic C.

“Changing routines may make it easier to adapt to recent changes. However, it is still difficult to change practices on the study side, as cross-disciplinary work can blindly create competences that are a bit of everything. As summed up; Do we create good

competence by people knowing a bit of everything, or do we need to put together different types of disciplinary depths.” . - Senior Manager.

“An ambitious strategy leads to change in structure by having to adjust to new things and changing routines to make it easier to adapt to new things” - Senior Manager.

As stated by a Senior Academic C: “practices are not about creating something new that highlights the importance of sustainability work, but also about making new models for solving problems, and how we manage competences together on all levels”.

An interesting insight is the idea of UiO’s own interpretation of sustainability. The interviewees mentioned that to facilitate interdisciplinarity, no one can get a monopoly on the definition of sustainability. Because, when sustainability is defined in small profiles such as climate, it favors courses like mathematics and natural sciences.

“In psychology as a course, there is more interest in societal transformation, and the need for a society that can transform together with its people. If such factors are non-existent, technology will not function alone. This results in the need for an extensive discussion that everybody needs to be a part of. Thus, when making practices it is important that institutes, faculties, and people in all parts of the organization are a part of it” – Senior academic C.

But how do we involve everybody in the process? When working inwards on the micro, mezzo- and macro levels it leaves a mark on the organization, making it simpler to include actors, students, employees, researchers, and others. According to the senior administrator: “New and good routines are necessary and are best created by working systematically through processes where we can implement things in the administrative lines and through the structure”.

“The implementation of the UN SDGs is a complex task, but here again it is necessary to interpret the meaning of sustainability. This is because SDGs are not only an indicator for what to accomplish, but also a useful tool for maneuvering.” – Senior Administrator.

“UiO has a broad strategy on one hand, but on the other hand there are concrete measures that are not holistically based on sustainability. An example of this is that all students should have a chance to obtain research-based teaching about climate, environment, and sustainability in their study”. “This has no specific hold in any of the SDG-s, but suits well in our strategy, and that’s how we make practices”. – Senior Administrator.

5.1.4 Legitimacy

Regarding legitimacy, it would be wise to distinguish between internal and external legitimacy to give a better understanding of the complexity revolving around separate roles the university has.

“Firstly, the university as a social institution holds a high degree of societal influence and must behave in accordance with both internal and external demands. UiO needs to use its power and influence to take lead in societal issues- be conscious about teaching and our societal contracts and be a driving force in the green shift. This can teach new generations about important questions and challenges, but it is of immense value that we as a university reflect this in our own actions”. – Senior Administrator.

Furthermore, collaboration with other institutions such as the Stockholm resilience center and gathering inspiration from others that are ahead in key areas is of excellent value. This helps legitimize the sustainability agenda and states our willingness to cooperate, something that is crucial for tackling sustainability challenges. Having membership in university alliances and collaborating with leading European universities helps display legitimacy and further develop the quality of research and educational activities.

“UiO needs to collaborate and cooperate with other institutions and organizations to become a spearhead as a knowledge institution in the international community” – Senior Administrator.

According to multiple interviewees at various levels, when speaking of legitimacy, it is better to measure the degree of relevance to sustainability, rather than measuring degree of

greenness. The employees and researchers can assess their own research in relation to the SDGs, rather than feeling monitored or judged by how sustainable the research is. Another idea to increase legitimacy is to tag courses and employees with sustainability tags on the educational website. This shows the environment that UiO is working with sustainability but can also help monitor different faculties and projects and their relevance to sustainability and the individual SDGs.

“Externally, we need to attract new students and interest in sustainability. This can be done by tagging courses and programs with connection to sustainability so that students can make their own decisions on what future and competences they want considering sustainability. This is a competitive element that helps show the environment that we are committed” – Senior academic C.

5.1.5 Structure and the levels of the organization

Firstly, the macro-level of the university oversees policy, laws, regulations, and resources at the university. Secondly, the meso-level is the organizational level of the university, which embodies practices, strategy, structures, and processes. And lastly, the micro-level, which is the bottom level of the university and consists of individuals, groups, agency, and day-to-day operations. Universities are loosely coupled, as highlighted in the theory section. There are many traditional structural barriers that unintentionally act as barriers to change.

“Autonomy on institute level is something that allows UiO to think new and be radical. Historically, UiO is presented as a free institution that is to think new and radical, and this is a role we must take on today” – Senior Academic B.

“Flat university structure and a great deal of autonomy at all levels is good and sparks a bottom-up process where groups and people need to be willing to be a part of the change. There is opposition against mass reporting and bureaucracy, and the feeling of threading the strategy top-down. Therefore, it is crucial that researchers find the strategy and research important and relevant for the university, but also make the bottom-level feel included and relevant to the bigger questions.” - Senior Academic B

“You need both top-down and bottom-up” – Senior Administrator and Senior Manager.

5.1.6 Interaction amongst university levels

The macro-level consisting of the university board oversees policy, resource-management, regulations, and plays a visible role in strategy. The mezzo-level is the institutional level of the university and is made up of faculty, support staff and institute. This level sought to bind the macro and micro level together through practices, strategy, structures, and processes. The micro-level are departments, research groups and individuals. At the department level, there are many research groups and projects linked to the three main interdisciplinary initiatives. For example, UiO: Democracy operates with four research groups all conducting their own research with their own disciplinary composition.

“We have organized in such a way that we ensure that there is a line from the top through the faculties which takes it further down to the institutes. Also, we have initiatives coming from the central that are to spread all over the organization, aiming actively towards administrative units, research department, innovative department, property department, and the study department” – Senior Administrator.

“I think that maybe the most important thing a university can do is to be aware when it comes to teaching and social contract, we have an ambition to be a driving force in the green shift, but this is done by teaching new generations about questions linked to sustainability, and further facilitate these generations to make own decisions and thoughts. This, for me, is the most essential. To have a social contract, so that you are a *change agent*, if I am to use such a word.” – Senior Academic B.

So, bottom-up processes occur at the micro level of the organization, more specifically at the institute level and department level. At this level there is both opposition and agreement regarding changes within the university.

“Opposition regarding the autonomy and freedom of academic researchers. A misunderstanding that everybody must work with something that is relevant to sustainability. In addition, there is opposition against mass reporting and bureaucracy, the feeling of threading the strategy top-down. It is important that researchers find it important and relevant for the university, but also at the bottom level that they feel relevant for the big questions.” - Senior academic B.

“When making practices and strategy it is important that people feel a part of it, and not excluded”. - Senior Academic C

“To achieve change within the university in practical matters, we have an action with eight concrete plans. Most of these plans are in action, and furthermore we are revising this plan to look for innovative ideas and solutions. This is to secure progress and keep updated yearly.” - Senior Administrator.

5.1.7 Strategic maneuvering

UiO has set up three interdisciplinary strategic research initiatives to help tackle global challenges. These research initiatives include UiO: Life sciences (2015), UiO: Energy and Environment (2023), and UiO: Democracy (2023), which is an independent successor of UiO: Nordic (2015). UiO: Nordic was a world leading research initiative that seeks to promote new and relevant knowledge about the Nordic Region and the Nordic in an international context. Primarily, this initiative sought to use interdisciplinary approaches to achieve UiO’s strategic plan in the period until 2020.

UiO: Life sciences: At this moment, this is the most comprehensive priority at UiO.

Researchers in this interdisciplinary initiative aim to study living organisms. For example, what living organisms are made of, and how different parts interfere with another, by doing this, UiO will gain new insights that will serve a purpose in the future, contributing to the sustainable development. This includes finding and creating new knowledge on how to treat various diseases. This enables UiO to gather new information and competence. This knowledge is valuable and seeks to further develop sustainable measures to protect natural resources (UiO: Life Sciences, 2022).

At UiO there is a national responsibility to cultivate a leading international life sciences community in Oslo. By combining competences, knowledge, and excellent research from different academic disciplines (i.e., medicine and natural sciences) UiO will develop new expertise. Thus, including other disciplines such as social sciences, mathematics, physics, information technology, robotics, and others UiO can create new cross-cutting knowledge (UiO: Life Sciences, 2022).

UiO: Energy and Environment has targeted measures towards research, education, outreach and innovation within energy, climate, and environment. This approach, similar to the others, is also interdisciplinary. By bringing together expertise from different faculties, institutes, and departments UiO researchers search for new solutions for obtaining clean and sustainable energy. The initiative has four main research areas that are based on society's needs. (UiO: Energy and Environment, 2023)

UiO: Democracy is an initiative that contributes towards interdisciplinary research in the period 2023 to 2030. This initiative builds upon outreach, cooperation with non-academic institutions, and further develops interdisciplinary education and research. UiO: Democracy currently has four research groups that aim to explore tensions, dilemmas, and challenges linked to democracy. (UiO: Democracy, 2023).

The interview participants all emphasized the necessity of interdisciplinarity and cross-faculty collaboration. These three initiatives are good examples of initiatives that use the SDGs for strategic maneuvering.

“The challenges are so complex that an increasing number of issues demand interdisciplinary research environments and a certain interdisciplinarity in education. This is because we get exposed to several types of disciplines to further establish competence that is relevant for tackling the sustainability challenges. We need to involve all the faculties, such as social sciences, human sciences, law, and others, where all have a relevance in relation to sustainability.” – Senior Manager.

“It is important to establish competences and be in front of the global sustainable research”

- Senior Manager.

5.1.8 Translating the SDGs to UiO context

UiO have divided the SDGs into four focus areas: innovation, biosphere, welfare, and good governance. These four categories of the SDGs are retrieved from the UiO webpage, and demonstrates how this particular university has categorized the SDGs.

Categories	Target Sustainable Development Goals	
Innovation	SDG 4	Quality education
	SDG 8	Decent work and economic growth
	SDG 9	Industry, innovation, and infrastructure
	SDG 11	Sustainable cities and communities
Biosphere	SDG 7	Affordable clean energy
	SDG 13	Climate action
	SDG 14	Life below water
	SDG 15	Life on land
Welfare	SDG 1	No poverty
	SDG 2	Zero hunger
	SDG 3	Good health and well-being
	SDG 5	Gender equality
	SDG 6	Clean water and sanitation
	SDG 10	Reduced inequalities
	SDG 12	Responsible consumption and production
Good Governance	SDG 16	Peace, justice, and strong institutions
	SDG 17	Partnerships for the goals

Table 2: Categorization of the SDGs at UiO (University of Oslo, n.d.)

“The 17 SDGs are broad – the goal for health is not necessarily all about sustainability so it is important to narrow it down. Therefore, you are not doing research on all SDGs at a time, but

we are trying to motivate towards choosing research that is most relevant to sustainability” – Senior Manager.

“UiO uses the sustainable development goals to pinpoint the relevance and sustainability of the activities. But it is important to map the activities already important for sustainability, and further- on the research side, try to find a solution for registering the activities that can clarify the relevance for different research projects... Collaborating between soft sciences and hard sciences are important to create cross-disciplinary cooperation” – Senior Academic A

Therefore, translating the SDGs into divisions or categories could be an effective way of incentivizing interdisciplinary work and contextualizing into a UiO environment. As previously mentioned, the interviewees argued that it is more effective to measure the degree of relevance to sustainability, rather than measuring greenness. This is because if there was too much focus on the idea of greenness, it could be more difficult to involve people in the process, as they would not feel a part of it.

The complexity of the university as an organization, in addition to UiO as a research-intensive institution, it is crucial to translate the SDGs into UiO context and different groups. The senior manager states: “There is some opposition regarding the dualism between academic freedom and strategic investment into sustainability. Academic freedom is valuable, and it is important to be autonomous, and not just being governed from the outside”. This highlights the university’s need for distinguishing their own operations that are their own, and this is exactly what UiO does when translating the SDGs to UiO context.

6. Discussion

In the previous chapters data have been gathered and presented to form a foundation for answering the research question: How do HEIs implement the UN SDGs, and what organizational and institutional tensions and dilemmas arise in relation to sustainability? The first part of the research question seeks to analyze implementation dynamics of the UN SDGs. While the second part dives deeper into SDGs and explores and uncovering organizational and institutional tensions and dilemmas that are linked to sustainability.

The research presented in the thesis has provided insight into the complexity of sustainability as a normative concept, and how social, economic, and environmental aspects imbue the concept with different meanings. Universities are complex organizations/institutions, consisting of distinct levels, partly autonomous spheres, and an increasingly societal, economical, and environmental responsibility in modern society. To accomplish this study, it was necessary to develop an analytical framework with a multi-level perspective, including internal components and factors within the university to locate tensions and opportunities.

6.1 Routines vs. daily practices

The micro and mezzo interplay are reflected in routines and daily practices. One of the interview participants at faculty level (mezzo) states that: “An ambitious strategy leads to change in structure by having to adjust to new things and changing routines to make it easier to adapt to new things..” This can be linked to the change and structuralist view of organizations by Anthony Giddens. Giddens (1984) mentions that daily routines become embodied in practices over time and these practices get institutionalized over time and lead to new structures- and shaping new practices.

Thornton and Ocasio (1999) argue that institutional logics are something that is socially constructed, and historical patterns of practices, values, beliefs, and rules, where individuals provide meaning to their social reality, through producing, reproducing, and organizing. This highlights the connection between individual agency and socially constructed institutional practices. So, agency has a relation to practical consciousness, meaning everything we as social actors know, and therefore must know how to make social life happen. Therefore,

Giddens (1984) sees the connection that structure and agency has as the duality of structure, where people reflexively create and then reproduce their own social life. However, routines are often done subconsciously, meaning that daily practice is a product of occasionally unintended human activity over time. This supports the idea that daily practices, along with routines, to some extent are historically rooted. This means that routines and daily practices are difficult to change, because the characteristics of routines and daily practices are enforced every day and become institutionalized.

This raises a question about the life cycle of tensions and dilemmas. Where our social life, values, norms and beliefs are constantly shaped by the society we live in. Therefore, changes in our society that lead to personal changes can be the starting point of a tension that is not necessarily recognized within HEIs. So, when trying to explain the relationship between structure and agency, we need to look at the context. On one hand, if the universities aim to replicate the society in which it operates it will possibly minimize challenges that are a result of social processes. On the other hand, if a university does not reflect the societal norms and values of the society in which it is embedded, it may cause tensions and dilemmas within the university. This is because the dissimilarities between the civil society and HE society might cause individuals to change the attributes of the university. This could also be a matter of interpretation of sustainability, where individuals have differentiated opinions on the matter of sustainability. Therefore, it could be critical to interpret sustainability in a way that makes it understandable to the majority. This can be linked to routines and daily practices within HEIs, where routines and daily practices are influenced by the sustainable agenda, such as personal flights. An interviewee at institute level states that, in a sustainable manner such things as personal flights are not made conscious, nor properly implemented. Personal flights, recycling, and food-consumption are also important factors for sustainable development. These activities occur frequently as routines or in daily practice, and it could be necessary to create awareness around these sustainable factors to facilitate change processes. This is because the micro-level most likely does not interfere in sustainable matters as much as the mezzo-level.

Institutional theory emphasizes that broad societal and cultural processes form organizational action, instead of instrumental calculations with the intent of merely reaching the maximal profit or utility. This is further acknowledged in the institutional logics approach which underlines non-institutional factors as drivers for institutional change, such as political

struggles, social movements, environment, and resource dependencies. In the case of UiO there is no doubt that sustainability is a political, environmental, societal, and resource dependent non-institutional driver for change.

So, how does change affect the interplay between structure and agency? Universities as institutions are rewarded for using acceptable structures and practices, not the quantity, quality, and efficacy of their output. Thus, when facing change, new practices, structures, and routines are adopted, and the university will most likely engage in new activities that either constrain or enable change. Institutional theory suggests that how much agents' need to be perceived as legitimate in their institutional environment decides their behavior (Battilana & D'ahunno, 2009). Therefore, change will put much pressure on existing structures, by causing individuals to render structures as legitimate or not legitimate in the current context of change. Here, tension arises as these change agents can either enable or constrain change. Nevertheless, opportunities also surface, where agency sparks bottom-up processes that might involve a broader range of individuals, producing a broader arena for reflection.

Sustainability and the SDGs greatly influence the relation between structure-agency at the micro and mezzo level at UiO. The overall strategy, influenced by the 2030 Agenda, is threaded instrumentally down to the mezzo level where the strategy is deeply rooted in sustainability on an institutional level. The faculty has their own strategic investment with focus on the SDGs, managing complex interdisciplinary projects and research groups related to the SDGs, referred to as the sustainable umbrella. Beckert (1999) suggests that such strategic action has a higher likelihood of occurring in a highly institutionalized organizational field, due to the fact that the need for stability, predictability, and security is reduced, in relation to institutionalized rules and norms, that provides actors with a higher degree of freedom in which they can take part in strategic behavior. This relates to the faculty-level which operates with strategic initiatives, and is characterized by being partly autonomous, but with administrative attributes.

6.2 Translating the SDGs

The results from the study indicate that UiO faces several challenges linked to adopting the SDGs and translating them into its local (organizational) context. The SDGs are not solely

linked to sustainability, for example, SDG3- the goal for health – is not all about sustainability. Nonetheless, the data suggests that an active interpretation of sustainability could be necessary to avoid certain SDGs becoming more significant than others. The study demonstrates a link between the individual SDGs and how they fit into certain disciplines more than others. In addition, the interviewees at top-level and faculty level indicate that UiO is not particularly interested in the individual SDGs, but more the composition of the SDGs in relation to sustainability as the overall goal. This data insight could suggest that UiO facilitate cross-disciplinary collaborations that can promote new and meaningful research by assembling different SDGs together.

There are tensions and dilemmas linked to interdisciplinarity and cross-faculty collaboration. Firstly, the dualism between academic freedom and strategic investment into sustainability, where researchers and academics may feel overwhelmed by the comprehensive sustainability investment. There are several causes for such tensions, such as the opposition against mass-reporting and bureaucracy which can feel threatening to the autonomous structure within UiO. Furthermore, academic diversity can be a factor for tensions and dilemmas, but also opportunities. UiO as a research-intensive institution with academic diversity causes necessity for operationalizing and translating the SDGs into local context. A broad spectrum of disciplines with different institutional logics have differentiated relations to sustainability.

On one hand there are soft sciences that focus more on people and societal issues regarding sustainability. While, on the other hand, hard sciences are more interested in decision-making processes and calculations. Therefore, it is crucial to interpret and discuss sustainability in plenum to avoid letting certain disciplines get monopoly on the definition of sustainability. The interviewees argue that measuring the SDGs in relation to *sustainability* is more effective than measuring the degree of *greenness*. This is because greenness as a variable favors hard sciences, and SDGs closely linked to climate and environment, which may create imbalances between faculty logics, creating tensions in the academic fields.

However, translating the SDGs to local context is no easy task. The Senior Administrator argues that an active interpretation of sustainability is necessary because the SDGs is not a mission to accomplish, but a tool for strategic maneuvering, and Wærås & Nielsen (2016) suggest that active dissemination and interpretation leads to local variation, where typical hegemonic ideas like sustainability, are subject to translators and how they subtract and add

properties to the idea, making it constantly change. This underlines the importance of translating sustainability and the SDGs to local context, and not relying on external interpretations of the concepts. These external translations of the concept may seem less meaningful which could be a barrier for motivation regarding sustainable work.

One reason for this active interpretation could be to use the SDGs as a strategic tool for maneuvering. Meaning, that people in the organization have different beliefs, values, and traditions relative to previous experience and habits. Thus, by introducing sustainability as a latent interpretation, the university is reinterpreting one's set of values, and creating an arena for socialization through sustainability, for example interdisciplinarity. However, these practices (mezzo-level) bind the micro and macro level together, and this is where the macro environment provide incentives such as legitimacy, policy, and resources through formal and informal structures to secure efficiency towards their goals.

6.3 Top-down or bottom-up?

Statements from interviewees at administrative, faculty and institute level emphasize the dualism between top-down and bottom-up processes. Firstly, the top-down process (instrumental) is about organizing the university in such a way that there is a line from the top- all the way through the organization. This line is where policy is threaded downwards, and tools are used for increasing organizational effectiveness. These tools are not only policy, but strategic maneuvering tools such as the SDGs. Secondly, bottom-up processes are often characterized by agency, and actors and agents influence on structure.

Anyhow, as discussed, creating research groups and collaboration across the different levels of the organization, UiO fosters and enables both top-down and bottom-up processes. The bottom-up processes help generate activity, discussions, and further revise and develop the strategy and action plans. These bottom-up processes are mostly influenced by the interaction between the micro- and mezzo level and can be a result of a centralized decision-making unit that provides too little flexibility for the local actors to achieve goals (Cerna, 2013; Sabatier & Mazmanian, 1980). Nonetheless, in the case of UiO, central initiatives that aim towards administrative units, research, innovation, property, and the study department. Aiming to

involve as many people as possible, at different levels. These central initiatives could seek to further activate the institutional middle, consisting of faculties, institutes, staff members.

In addition, a strong institutional middle, which can be partly translated to the mezzo-level, enables a stronger connection between the micro and macro level. It is important that all levels of the university collaborate to tackle complex challenges linked to sustainability. The interviews mention that UiO does not seek to revolutionize the university, but by slowly turning the organization in a direction, where all operate more systematically with sustainability. However, a big part of the university involves numerous disciplines with conflicting views, values, and identities. Therefore, change is dependent on allowing individuals, sub-units, and groups some autonomy. This shows that there is a need for both top-down and bottom-up processes.

6.4 Implementing or utilizing the SDGs?

The SDGs are implemented through the sustainable framework developed by the UN. This framework initiates and facilitates new tensions, dilemmas, and opportunities relative to the analytical model. To optimize the efficacy of the analytical model, there are critical factors that strengthen the implementation of the SDGs; the coordination of the strategy, developing a monitoring framework, and collaboration with other universities, are three important factors that have come to light.

Firstly, the coordination of the UiO Strategy 2030 is a mandatory factor for ensuring a positive implementation of the SDGs. The UiO strategy 2030 is the overall strategy which operates within and outside the SDG framework, whereas the part of the strategy that focuses solely on the SDGs seems to be partly extended down to faculty-level (mezzo-level).

Interviewees state that UiO is a research-intensive institution, with a wide focus on producing research and teaching. Meaning, that the academics and the institutional middle have a significant and essential role in the organization. Therefore, extending the strategy further down to the faculty could be a strategic investment in adopting and fostering innovative organizational forms, as presented in UiO strategy 2030, such as facilitating interdisciplinary and cross-faculty collaboration. Which, in the interviews, is deemed necessary for tackling the complex challenges linked to the 2030 Agenda.

From an instrumental perspective, the extension of the overall strategy could be an attempt to not replace an inefficient part of the organization but making it more efficient by increasing the outreach the strategy has on the organizational environment. Furthermore, as presented in chapter 2, Olsen (2007) poses the institutional question about whether reformers enforce existing attributes or impose alternative values and characteristics on the university. This is interesting because an example of such reform is the worldwide implementation of the sustainable development goals . Therefore, from an institutional perspective, an extension of the strategy challenges the current institutional spheres, logics, beliefs, and norms, by creating new common purpose and new directions for behavior. This causes tensions to arise as people need to adjust to new activities, resulting in a dilemma between the sustainability agenda and their own research agenda. This may cause the habitants of the organization to feel obligated to be a part of the sustainability agenda, resulting in some people speaking highly of the sustainability processes while others might enforce the traditional attributes and activities.

Secondly, developing a monitoring framework and the establishment of an annual action plan can help monitor progress and achieve development in practical matters. It is hard to determine the entirety of the monitoring framework as it may not be fully developed. Nevertheless, UiO has assembled the different SDGs into four groups; biosphere, good governance, innovation, and welfare, unlike the Agenda 2030 where it is categorized by economics, social, and biosphere. UiO may have chosen to categorize the SDGs in such a way to translate them into local context, while also allowing for monitoring the SDGs more effectively in their own organizational context. Furthermore, the monitoring framework seems to involve tagging courses, employees, and activities in the educational website to show the environment that UiO is concerned with sustainability. However, this can help monitor institutes, faculties, projects, seminars, and their relevance to sustainability and the individual SDGs.

Nonetheless, there is one dilemma linked to the degree of monitoring. In sustainable development monitoring is necessary for portraying both internal and external legitimacy. How the university appears is important for attracting new students, and for showing the external environment that you are dedicated to the sustainable agenda. However, the interrelation between monitoring and legitimacy may prove costly for autonomy, and cause

tensions regarding the dualism between excellent research and sustainable research.

The establishment of an annual action plan with eight concrete plans sought to achieve progress in practical matters. The interviewee at faculty level seemed to not be directly involved in the construction of this action plan, giving some reasonable idea that it is not very integrated on faculty-level. This plan is described as a guideline, which aims at fostering innovative solutions and revising and further developing the plan annually.

Lastly, collaboration with other universities is pivotal regarding the implementation of the SDGs. UiO interviewees state that there are universities that are ahead in key areas, and it is necessary to gather inspiration and collaborate with these. Through membership with university alliances UiO can display legitimacy in relation to the sustainable agenda, by showing their willingness to cooperate and by being curious, but also by learning and looking at what other universities are doing. Meaning, that universities can adopt effective and legitimate parts of other universities to enhance their own legitimacy. This explains how legitimacy has a central role in constraining change and enforcing isomorphism, where HEIs copy one another and become alike over time.

However, interviewees argue that UiO sought to be a spearhead knowledge institution but is also presented as a free institution that is to think new and radical. The ambition to be a spearhead knowledge institution requires resources, which again requires a great amount of competitiveness. Tension arise when allocating resources to important research fields or activities, where research and activities not directly linked to the sustainable competitive arena could not be prioritized. This could lead to certain areas of the universities feeling less important. However, focusing on being innovative, new, and radical enforces autonomy and enables UiO to create new and groundbreaking research by putting together different competences.

Furthermore, this observation is parallel to the key points presented by Clark's *entrepreneurial university* and how the continued proliferation of interdisciplinary or transdisciplinary research centers, an entrepreneurial academic heartland and an organizational culture which was self-confident, competitive, and assertively ambitious, are prominent factors for transformation. Nonetheless, Clark's earlier research has shown that less academic participation in governance and institutional strategy can be a consequence for not upholding an entrepreneurial academic heartland and an organizational entrepreneurial

culture (Clark, 2004). So, in relation to Clark's research, UiO seems to emphasize the academic culture and creating an arena in which the academic environment is interconnected with institutional strategy and development.

Nonetheless, interviewees state that the sustainability challenges are the most expensive challenge UiO has faced, and there is an immense need for external funds to tackle these challenges. Where these funds are allocated is relative to the strategy and the goals that are set, but also a product of their external legitimacy. Where external legitimacy displays the practices, structures, management, and values within the university as highly effective or attractive to others. Thus, giving UiO (and HEIs in general) the opportunity to obtain more resources. Therefore, being competitive, innovative, and collaborating with university alliances can secure external legitimacy, resulting in more partnerships, students, researchers, and an increased flow of funds and investments.

However, in opposition, internal legitimacy is reliant on bottom-up practices achieved through individual agency. Internal legitimacy is linked to the practices that are relative to accomplishing the goals within the organization. Internal legitimacy may play a determining role in shaping organizational identity, strategic path and decision-making processes. Moreover, by legitimizing the SDGs internally and externally, the SDGs can be used as an opportunity to change and re-position in the marketplace. Hence, there is a connection between utilizing and implementing the SDGs. In the case of UiO one could argue that the SDGs are utilized as a strategic maneuvering tool, to increase productivity and legitimacy towards the main strategy which involves the implementation of the SDGs into practices, structure, and in the different levels of the university.

7. Conclusion

This study aimed to identify how HEIs implement the UN SDGs and what organizational and institutional tensions and dilemmas that arise in relation to sustainability.

Based on the qualitative study, the SDGs require complex implementation processes. The results indicate that the implementation dynamics are a product of strategy, practices, resources, legitimacy, structure, and interplay between the micro, mezzo-, and macro-level. These factors produce tensions and dilemmas as a result. This is because the sustainability challenges initiate change and require adaptation, forcing different parts of the organization to adjust. Thus, when the organization changes, the people have to change with it. Tensions and dilemmas arise when change affects how individuals conduct their own work, threatening their way of doing things. Nonetheless, change can also happen in the opposite direction, where change is dependent on agency and bottom-up processes. These processes can either enforce or constrain change, and the research underlines the importance of how individuals play a big role in enabling implementation. The study therefore concludes that both top-down and bottom-up approaches are necessary for a meaningful implementation of the SDGs.

The thesis concludes that the implementation of the SDGs at UiO is not only done as a structural and logical process, but as a collection of initiatives from the micro-, mezzo-, and macro-level combined with annual revision plans that seek to monitor yearly progression. Also, the UiO 2030 strategy is passed down to the mezzo-level where it can more easily intervene with the micro- and macro-level and involve more people in the process. The focus on interdisciplinary, cross-faculty collaboration and membership in university alliances seems to be an important factor in strengthening the implementation of the SDGs, but also in eliminating institutional and academic logics in relation to sustainability by fostering the idea of unity and cooperation. Thus, the research also concludes that tensions and dilemmas are located in all parts of the university. Whereas sustainability as a normative concept, challenge existing practices and structures whilst escalating the demand for resources and legitimacy.

There were new insights and questions that arose in the process of the study, mainly the interpretation of sustainability. The interviews emphasized the need for interpreting sustainability, and it became an explanatory factor for uncovering tensions and dilemmas. However, one limitation of the research is that five interviewees may not be sufficient in unraveling all tensions and dilemmas but has positively led to understanding the ones already discovered.

Finally, the conducted research has located tension and dilemmas through organizational and institutional theory, founded on an analytical framework. The operationalization has helped explore the research question, but also kept us from deviating the matter at hand. Sustainability is a complex concept, and social institutions like UiO are becoming more and more influential regarding the social discourse on sustainability. Therefore, uncovering tensions and dilemmas related to the interplay between universities and sustainability has provided insightful information in this field, and may further help tackle the knowledge gap linked to sustainability and the implementation of the SDGs. In addition, findings confirm existing theoretical assumptions that institutional change is related to the people that inhabit the institution, and that sustainability is most definitely a driver for change. Lastly, it is important to mention that in light of tensions and dilemmas, new opportunities may present themselves.

7.1 Future research

Based on these conclusions further research is needed to understand the relationship between sustainability and universities. Universities have great societal power and are important messengers in society. Therefore, to better understand the implications of the results in this study, future studies could look at the third mission of the university, and how it is coupled with sustainability and the 17 SDGs. In light of this study, future research should consider comparative case studies with several universities to try and generalize common tensions and dilemmas. To end, it would be interesting to dig deeper into university alliances, and how certain universities perform better in relation to the SDGs.

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Appendix

Appendix A: University of Oslo - Strategy 2030

Strategy 2030

Knowledge – responsibility – commitment: For a sustainable world



The University of Oslo will:

Promote independent, ground-breaking, long-term research

Educate students with the knowledge, ability and willingness to create a better world

Strengthen the dialogue with the outside world and work to ensure that knowledge is put to use

Be an innovative organization and an attractive place of work and study

For more than two centuries, UiO has critically studied, challenged and shaped Norwegian society and developed knowledge of value for the entire world. The quality and breadth of research and education places UiO in a unique national position and forms the basis of UiO's status as a leading European research-intensive comprehensive university.

UiO's strong position is the result of goal-oriented and systematic work over many years. In the period leading up to 2030, we will further develop the quality of research and education in order to strengthen UiO's position in the upper echelon of European universities. UiO will continue to build on its academic qualities, collegial values and organizational strengths and be an open and inclusive community for students and staff.

The world is facing challenges that require efforts from the entire global community. The climate crisis is emerging as the greatest challenge of our time. UiO will take responsibility for contributing to solutions through our societal mission: educating highly qualified students, conducting long-term basic research and working to ensure that knowledge is put to use.

Loss of natural diversity, challenges in health and welfare, polarization, migration and war are examples of areas that require interdisciplinary and innovative solutions. As an internationally oriented comprehensive university, UiO has exceptional prerequisites for successfully developing strong interdisciplinary and innovative academic environments. By cooperating across academic, institutional and national boundaries, we will develop knowledge that contributes to a sustainable world.

Academic freedom, underpinned by institutional autonomy, is a fundamental premise for UiO's ability to deliver its societal mission. This freedom gives room for universities to challenge and criticize established thinking and prepare the ground for new perspectives, new knowledge and new solutions. UiO will exercise and defend academic freedom in dialogue with society, nationally and internationally.

UiO will be an important steward of scientific tradition, culture and methodology. UiO will both shape the present and work towards long term goals. UiO's activities will be characterized by high ethical standards, high quality and a willingness to make bold and innovative choices.

The University plays an important role in preserving Norway's cultural history and has a special responsibility for the renewal and dissemination of knowledge about Norwegian society, language, history and nature. UiO will be a conscious bearer and steward of culture at the intersection between tradition and renewal.

Strategy 2030 builds on [Strategy 2020](#) in emphasising UiO's position as a knowledge organization with a clear and binding integration of research, education and outreach. Strategy 2030 is based on four interdependent ambitions with objectives that outline the direction of UiO's development during the strategy period.

Ambitions

UiO aims to promote independent, ground-breaking, long-term research

Objectives:

- UiO will develop outstanding research environments across the breadth of the institution.
- UiO will further develop disciplinary depth and interdisciplinary cooperation and lead the way in the development towards a sustainable society.
- UiO will work systematically for the development and sharing of research infrastructure and data resources.
- Through strategic recruitment and systematic career development, UiO will develop research talent for academia, civil society, trade and industry.
- UiO will intensify its efforts to sustain and enhance research ethics and research integrity.

UiO's advantage is high quality throughout the organization and long-term basic research across the breadth of disciplines and activities. Our academic breadth and depth give us a unique starting point for contributing to sustainable solutions that require both new technology and a better understanding of the interactions between people, nature, society and technological solutions. We intend to move the boundaries of knowledge within the disciplines and design interdisciplinary solutions for complex societal challenges.

Advanced physical and digital infrastructures play an increasingly important role in research and education. UiO will work systematically to achieve more sharing and better accessibility to infrastructure and data resources. There is great need for long-term investment, and a roadmap of priorities has been set out. Based on the roadmap UiO will invest in, develop and maintain infrastructure that helps to strengthen our international position as a research-intensive university.

It's important to be successful in the competition for talent. UiO will conduct strategic recruitment and develop outstanding researchers and research environments. The process of recruitment and assessment will be open and transparent with an emphasis on quality and academic assessments. Young researchers will be offered predictable frameworks for the development of their careers.

A positive and strong research culture based on high scientific standards and ideals must form the premise for all research activities. Knowledge and awareness of research ethical norms is something all academic environments and all levels of the organization must safeguard through systematic training and continuous awareness.

UiO aims to educate students with the knowledge, ability and willingness to create a better world

Objectives:

- UiO will be an outstanding educational institution that provides research-based teaching of a high international calibre.

- UiO will educate students who see their learning in a wider social perspective and lead the way in the green shift.
- UiO will bring education closer to research, strengthen its relevance to working life and increase the students' awareness of their own competence.
- UiO will develop and renew its education for all student groups and respond to society's need for interdisciplinary knowledge.
- UiO will promote exploratory and innovative modes of learning that motivate students and help them become a resource to each other.
- UiO will employ learning methods and forms of assessment that activate the students' knowledge and experience.
- UiO will provide research-based and flexible continuing- and further education.

The societal challenges of our times require global solutions, and UiO will renew its international educational cooperation. Through strengthened European cooperation, UiO will reach out globally in new ways and with a greater collective power than today. Together with other research-intensive universities, UiO will facilitate integrated courses of study across languages, national borders and subjects.

Based on a stronger link between research and education, UiO will continue to develop as an ambitious educational institution. Professional and general education will be linked more closely to research activities and working life to motivate students for increased effort and completion. In order to meet students' social engagement, educational expectations and ambitions, the programme offerings will be made more flexible, and more interdisciplinary study options will be offered. UiO will become a hub for student innovation in the Oslo region.

UiO will continue to develop teaching and learning methods that stimulate ethical reflection, critical thinking, creativity and problem-solving. The programmes of study will develop students' social responsibility and awareness of values and choices. Digitalization will be integrated in learning processes and disciplines. Students will be part of an academic and social community where they are a resource in the development of teaching and learning.

An education from UiO lays the foundation for lifelong learning, and students should be able to return for academic updating. UiO will respond to society's need for continuing- and further education in disciplines where we have a particular advantage.

UiO will strengthen its dialogue with the outside world and work to ensure that knowledge is put to use

Objectives:

- UiO will contribute to sustainable social development and the green shift.
- UiO will contribute to value creation and new jobs through innovation and entrepreneurship.
- UiO will contribute to knowledge-based dialogue and opinion formations and be present where important discussions take place.
- UiO will have socially relevant dissemination arenas that are visible and accessible.
- UiO will exploit the opportunities that the new life science building provides in responding to society's expectations.
- UiO will pursue a comprehensive campus development that safeguards the breadth of our activities and strengthens important collaborative relationships in the Oslo region.

Knowledge should be used to the benefit of society, support a liberal democracy and contribute to a sustainable global development. By working to ensure that knowledge is put to use, UiO will stimulate the development of new ideas, technologies and initiatives to improve services, solve social needs and contribute to the green shift. UiO will promote innovation and entrepreneurship.

Society's confidence in research and scientific knowledge is reinforced through openness and transparency. To sustain UiO's high level of legitimacy as a knowledge organization, we must open ourselves to the world to an even greater extent. The communication of the role, methodology, uncertainty and integrity of science must be part of our dialogue with society. Through open science, the basis is established for a knowledge-based democratic society and knowledge-informed decisions.

UiO will support dissemination arenas and activities across the breadth of the organization. An important part of UiO's dissemination is carried out by the university museums and the university library. These parts of the organization will be linked more closely to the other university-units.

Source: Universitetet i Oslo (n.d.). Strategy 2030. *Knowledge - responsibility - commitment: For a sustainable world*. Retrieved from <https://www.uio.no/english/about/strategy/strategy-2030/>

Appendix B: Interview consent form

THE INSTITUTIONALIZATION OF SUSTAINABLE DEVELOPMENT GOALS: THE CASE OF UiO

Dette er et spørsmål til deg om å delta i et forskningsprosjekt hvor formålet er å forklare hvordan institusjoner for høyere utdanning implementerer FNs bærekraftsmål, og hvilke organisatoriske og institusjonelle spenninger og dilemmaer oppstår i forhold til bærekraft?

I dette skrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

Formål

Formålet med prosjektet er å bruke organisasjonsteori og institusjonell teori for å få en forståelse av dynamikken rundt implementeringen av bærekraftsmålene ved UiO. Det brukes to fakulteter, hvor to institutter sees i lys av hverandre for å kunne finne forskjellige dynamikker og institusjonelle logikker for å få en forståelse av implementering av FNs bærekraftsmål. Dette er en masterstudie i statsvitenskap og ledelse, fordypning i organisasjon og ledelse

Problemstilling er som følger: *“How do higher education institutions implement the United Nations Sustainable Development Goals, and what organizational and institutional tensions and dilemmas arise in relation to sustainability?”*

Hvem er ansvarlig for forskningsprosjektet?

Dette er en masterstudie i statsvitenskap og ledelse, fordypning i organisasjon og ledelse. Jeg heter Julian Storm Johansen, og min veileder er Romulo Pinheiro. Universitetet i Agder er ansvarlig for prosjektet.

Hvorfor får du spørsmål om å delta?

Utvalget er basert på ansatte ved UiO. Det er ønskelig å ha mellom 5-10 intervjuer med personer i forskjellige posisjoner og nivåer ved universitetet. Dette for å få et mer helhetlig bilde av informasjonen vi ønsker å bruke.

Hva innebærer det for deg å delta?

Metoden for å innhente data er intervju, som inneholder en intervjuguide med om lag 5-10 hovedspørsmål. Opplysningene registreres ved hjelp av notater. Siden vi har 5-10 spørsmål så estimeres omtrent 30-45 minutt for å kunne svare utdypende på forskningsspørsmålene. Spørsmålene stilles over telefon eller zoom hvor informantene svarer på spørsmål og jeg tar opptak av intervjuet.

Det er frivillig å delta

Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykket tilbake uten å oppgi noen grunn. Alle dine personopplysninger vil da bli slettet. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg.

Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrivet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket.

- *Navnet og kontaktopplysningene dine vil jeg erstatte med en kode som lagres på egen navneliste adskilt fra øvrige data, og det er kun meg som student og veileder som har tilgang på opplysningene*

- *Det er meg, Julian Storm Johansen, som har laget spørsmålene til undersøkelsen og transkriberingen av intervjuene vil gjøres av meg ved å skrive sammendrag av intervjuene uten bruk av opplysninger som kan spores tilbake til deltakeren/informanten.*

Hva skjer med personopplysningene dine når forskningsprosjektet avsluttes?

Prosjektet vil etter planen avsluttes når oppgaven blir godkjent, og leveringsdato er 9. juni 2023. Etter prosjektslutt vil datamaterialet med dine personopplysninger anonymiseres. Navn og andre personopplysninger gjøres om til en kode og opplysningene kan ikke knyttes til informantene.

Hva gir oss rett til å behandle personopplysninger om deg?

Vi behandler opplysninger om deg basert på ditt samtykke. På oppdrag fra *Universitetet i Agder* har Personverntjenester vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Dine rettigheter

Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke opplysninger vi behandler om deg, og å få utlevert en kopi av opplysningene
- å få rettet opplysninger om deg som er feil eller misvisende
- å få slettet personopplysninger om deg
- å sende klage til Datatilsynet om behandlingen av dine personopplysninger

Hvis du har spørsmål til studien, eller ønsker å vite mer om eller benytte deg av dine rettigheter, ta kontakt med:

- Universitetet i Agder ved Romulo Pinheiro, romulo.m.pinheiro@uia.no, tlf: 45460794
- Student: Julian Storm Johansen, juliansjohansen@gmail.com, tlf: 97478582
- Vårt personvernombud: Trond Hauso, Personvernombud@uia.no
- Hvis du har spørsmål knyttet til Personverntjenester sin vurdering av prosjektet, kan du ta kontakt med:
- Personverntjenester på epost (personverntjenester@sikt.no) eller på telefon: 53 21 15 00.

Med vennlig hilsen

Romulo Pinheiro

Julian Storm Johansen

(Forsker/veileder)

Ved å svare på denne henvendelsen og avtale et intervju med meg, samtykker du til behandlingen av dine personopplysninger frem til prosjektslutt

Appendix C: Interview Guide

Introduksjon	<ul style="list-style-type: none">• Hvordan påvirker et økt fokus på bærekraftsmålene deres hverdag?• Har det vært et tydelig skifte i måten å operere på de siste årene?• Hvilke komponenter ved Universitetet anser dere som de viktigste for å iverksette bærekraftsmålene?
Strategi	<ul style="list-style-type: none">• I hvilken grad er Strategi 2030 en del av det daglige arbeidslivet, eller fungerer det mer som et mål i seg selv?• Hvorvidt er implementeringen av bærekraftsmålene i tråd med UiO sin strategi?• Hvordan arbeider du med strategien i din posisjon ved UiO?• Blir strategien fulgt opp i alle deler av universitetet? (Fakultet, institutt, departementer, etc.)
Ressurser	<ul style="list-style-type: none">• Hvordan oppleves ressursfordelingen for å møte FN's bærekraftsmål?• Hvordan forvaltes ressursene, og er det noe som prioriteres? (strukturer, praksis, forskning, etc.)• Hvilke tiltak er de viktigste for å akkumulere ressurser i henhold til bærekraft og den grønne omstillingen? (Internasjonalt samarbeid vs. Campus-utvikling)
Legitimitet	<ul style="list-style-type: none">• Hvordan legitimerer UiO bærekraftsmålene og «the sustainable agenda».• Hvordan kan UiO motivere personer ved UiO i forhold til bærekraftssatsingen?• På hvilken måte involveres mennesker i endringsprosesser og hva gjøres for at disse skal føle at de er en del av forandringen?

Praksis	<ul style="list-style-type: none"> • Hvordan tilrettelegges det for omstilling til ny praksis og nye rutiner? • I hvilken grad påvirkes forskning og undervisning, og påvirkes disse ulikt i forhold til implementeringen av bærekraftsmålene?
Struktur/praksis	<ul style="list-style-type: none"> • Er struktureringen av universitetet (løst-koblede) en utfordring for å gjennomføre forandring i hele organisasjonen? • Hvor viktig er grad av autonomi for å få en vellykket implementering?
Avsluttende	<ul style="list-style-type: none"> • Er økt samarbeid på tvers av disipliner nødvendig for å sikre seg en god implementering av bærekraftsmålene? • Er det noen barrierer for implementering eller forandring? • Er det noe du vil tilføye eller som du mener jeg burde ha spurt om?