



Lifting the fog of oil? Exploring the framing of ambitious local climate politics in an oil city

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ABSTRACT

How can an oil city pursue ambitious local climate politics and policies? Through a critical discussion of the process and debates over the making of an ambitious climate and energy action plan (CAP) in Norway's oil capital, Stavanger, this paper dissects the paradoxes evident in pursuing local climate policy and politics in a city with high dependence on oil revenue and an identity closely tied to the oil industry. With an analysis of how different actors frame place, scale and knowledge, the paper explores politicians' arguments, understandings and contestations, revealing how such a plan came into being. The analysis shows a discrepancy in how the actors understand climate change in terms of scale, whether it is an issue suitable for local governance and politics or not, and how they regard the city's potential role in climate transformation. By mobilizing Stavanger's past transformation from a poor fishery city into an oil capital to a future as a low-carbon sustainable city, the idea of the city's transformative capacity became clear. This made space for politicians and parties to change their view on climate change as a matter for local governance and politics, culminating in the passing of a very ambitious CAP.

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Introduction

The story of Stavanger and the oil is also the story about the modern Norway. It is in Stavanger that our national oil history begins. (Gjerde 2002, 11, my translation)

In December 1969, when the Norwegian government was informed about what turned out to be one of the largest oil reserves to be discovered at sea, Stavanger politicians and businessmen knew that this could be the beginning of the new industrial fairy tale that they had been searching and working for. After decades in an economic recession, Stavanger established itself as the country's oil capital. Over the years, it became known nationally and internationally as the country's oil city and gained significant wealth from the industry. Which is why it was both surprising and controversial, when in November 2018, the Stavanger city council passed a climate and energy action plan (CAP) with a main goal of reducing greenhouse gases (GHG) emissions with 80% (compared to 1991 levels), by 2030. This highly ambitious goal was in line with the goals of the other very ambitious largest cities in Norway and double what the national authorities are aiming at. In other words, the Norwegian paradox of wanting to become a world leader in the fight to combat climate change whilst maintaining its most important export, became local. Stavanger's role as an oil city is profound; it is a matter of history, culture and wealth, involves political craftsmanship and concerns

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numerous workplaces. Hence, the first words by the politician who opened the two-hour long debate in the Stavanger city council over the CAP were:

When the fog of oil occasionally lifts over our region, even we, the inhabitants in Stavanger, see the large and clear picture of the climate challenge.

This development in Stavanger points to some broader questions of interest beyond the specifics of the case, concerning how such oil-dependent cities and regions adopt ambitious policies and plans. The point of departure for the discussions and analysis in this paper is the passing of a highly ambitious CAP in a fossil-dependent city with poor previous results on climate mitigation. The key question in this paper is, therefore: How can different framings open up, or close, different levels of ambition in municipal climate planning? The research question leads the way to explorations of (1) how actors framed their arguments in support of the highly ambitious climate goals in Stavanger and (2) how the contestation of the most ambitious climate goals was framed.

Research on planning insists that planning is a dynamic exercise (Liao, Warner, and Homsy 2020; Kaza 2019; Tang et al. 2010). Hence, making and revising plans is in itself a way of revitalizing the presented topics. Making sense of climate change, a global phenomenon with local consequences and causes, will hence be interwoven with place itself, and actor's understandings of their place. A central feature of climate planning is the setting of goals. This is most often a political act and sometimes criticized for being a game of 'think of a number' (in other words, the target is considered somewhat random and potentially unrealistically ambitious). Hulme (2015, 902) argues that these goals matter and that they 'need clear articulation, drawing upon the range of cultural beliefs and political values that are held'.

In this paper, a theoretical perspective on framing is central to the analysis: how actors frame their understanding of problems, possible solutions and contestation, is shaped by the local contexts within which politics and policies are developed. The paper holds that a focus on political and policy frames reveals important insights on the possibilities of local, rapid and profound transformation. The urban is continuously brought forward as a key level to both mitigation and adaptation efforts and cities are stepping up and taking a lead whilst national states appear to have tied hands (Grandin and Haarstad 2021; Castán Broto and Bulkeley 2013). Hence, understanding how actors in cities frame the problem and possible solutions can give new insights into possible transformation pathways. In this contribution to the literature on local climate transformation, I argue that there is a need for research to pay close attention to how actors frame their reasoning, in understanding a city's abilities and willingness to plan and act in line with a low-carbon future. Framing is here understood in line with Romsdahl, Blue, and Kirilenko (2018, 279) as 'the ways in which problems are defined, causes diagnosed, judgments made, and remedies suggested'. To understand the political will to act and the possibilities of local policy-making in light of the need for rapid and profound transformation, it is, therefore, relevant to examine how the discussions on these issues are framed, because 'it is necessary to reveal the underlying reasons for disagreement about how to act in response to climate change *before* it is possible to find constructive ways of acting politically in the world' (Hulme 2015, 894).

In the following, I will first give a brief introduction to climate planning in Norway, before I present the theoretical framework. First by discussing the concept of framing and then operationalizing it through context and knowledge.

Climate planning and discourses on climate change in Norway

Climate planning in Norway is compulsory, according to the 2009 Planning and Building Act, and municipalities can comply either by making a separate climate plan, a municipal subplan, or by integrating the topic into the municipal master plan. However, there are no sanctions if a municipality chooses not to do this; thus, the Act is regarded as a soft regulation (Kasa, Westskog, and Rose 2018). The plans are supposed to be revised every four years; however, few municipalities have done so.

In the national Norwegian context, two nationally dominant discourses on climate change are often pointed out: ‘national action’ and ‘thinking globally’. National action refers to a focus on restraining national GHG emissions and ‘leading by example’ (Hornmoen 2018, 234), and appeared in the early 1990s aftermath of the Brundtland report. This discourse is dominant amongst environmental and non-governmental organizations and parties such as the Socialist Left Party, the Liberal Party and the Christian Democratic Party. The discourse on thinking globally has dominated amongst the two largest Norwegian parties, Labour and the Conservatives, and the oil industry, labour movement and the business community. This discourse emphasizes global aspects and has a focus on cost-efficiency in mitigation measures. Hence, both discourses have a global focus; however, in very different ways: e.g. national action refers to the moral obligation and Norway as a responsible actor, while the thinking globally discourse focuses on how an international system can bring forth the most cost-effective reductions.

Linked to the thinking globally discourse is the idea of a ‘sustainable’ oil production (Hovden and Lindseth 2004; Ihlen 2009), which has become prominent in Norway. The oil industry and several political parties use this narrative with the Norwegian role as a climate change advocate, for example,

The Norwegian petroleum and gas industry are part of this leadership story because it is more environmentally friendly than its counterparts elsewhere, and gas sold into the Nordic or European electricity market replaces dirtier sources such as coal. Norwegian gas and CCS can also serve as *bridges* towards a low-carbon future. (Eckersley 2016, 193)

Eckersley (2016) shows how this bridging of the Norwegian self-image as a climate pioneer and the economic position as a leading oil and gas producer has been a key discursive position of the national governments since 2008. She further shows how the term *pioneer* is particularly relevant because of its long history from the Norwegian pioneers, Nansen and Amundsen, to pioneering the first CO₂ taxes on oil and gas. In addition, it was the ‘pioneering generation’ who built up the wealth of Norway, as consolidated by finding oil and gas, which brought the country out of poverty. The Norwegian experience of oil as what brought the country out of poverty has its local version in Stavanger: nowhere in Norway is the role and presence of oil and gas as visible and culturally determining as in Stavanger.

Theoretical framework: understanding local climate politics through framing

In the following, I will discuss literature on framing to explore possibilities and constraints in local climate debates. By operationalizing the concept of framing, I will break it down into context, including place, scale and temporality, and the use and role of knowledge.

The need to solve policy issues related to global climate change is often referred to as a wicked problem (Urry 2016). Rein and Schön (1993, 145) claim that ‘stubborn controversies tend to be enduring, relatively immune to resolution by reference or evidence, and seldom finally resolved’. They continue to argue that a separation of values from facts is not possible because the actors frame the problem by integrating ‘facts, values and interests [...] Given the multiple social realities created by conflicting frames, the participants disagree both with one another and also about the nature of their disagreements’. Romsdahl, Blue, and Kirilenko (2018) refer to cognitive psychology in saying that actors’ opinions and solutions are not stable when presented with uncertain issues but are strongly influenced by how the matter is framed. Showing how discourse analysis is a useful approach to understanding and dissecting complexity, Dryzek (2013, 9) states that the ‘more complex a situation, the larger the number of plausible perspectives upon it – because the harder it is to prove any of them wrong’. Hajer and Versteeg (2005) show how this affects and plays out in policy-making because the judgement of facts and scalar positioning of a problem limits ‘what can and cannot be thought, delimit the range of policy options and thereby serve as precursors to policy outcomes’ (Hajer and Versteeg 2005, 178).

Øksenholt and Tennøy (2018) used Rein and Schön's discussion of framing to further outline a theoretical framework in which framing is affected by objectives, context and knowledge. The objectives (goals, interests and values), the context (scale, perceptions, discourses) and knowledge (scholarly, lay and personal experiences and understandings) are interlinked. Therefore, the framings, i.e. the understandings and contextualization of the problems, differ from actor to actor. This complexity shows why these issues are so difficult to resolve. Rein and Schön (1993, 145) ask: 'what can possibly be the basis for resolving conflicts of frames when the frames themselves determine what counts as evidence and how evidence is interpreted?'. What is relevant information to solve or create a common understanding is determined by how the issue is framed, both scalarly and temporally, and through what kinds of knowledges. In searching for a common ground of how to solve an issue or, as in the case of climate planning, making a plan and setting goals, in reference to Innes (2004), Rydin (2007, 56) observed that 'consensus-building does not proceed through the force of better argument but rather by collective story-telling'.

Inspired by Øksenholt and Tennøy (2018), when building a framework for analysis, I make use of two interlinked concepts: *context*, including perceptions of place and scale, and *knowledge*, i.e. what information, data and assumptions are relevant and valid for the actors. Central to the analysis and theoretical discussion in this paper is the acknowledgement of place, including historical, social, economic and cultural features, as part of what shapes actors' positions and judgement of facts. Hence, a sensitivity to how actors understand the context, their place's role in scale, and similarly, how they place wicked problems such as climate change in terms of scale will influence how they judge and acknowledge facts and data as being valid or not.

Understanding the role of place and actors' scalar and temporal boundary drawing

Both place, scale and time are of importance when analysing how actors frame problems or situations to shape their context (Øksenholt and Tennøy 2018; Hulme 2015, 2009). Climate planning at the local level must always relate to other scales because climate change is a global matter per se and also because of the many interrelations between both the mechanisms of climate change and of responsibilities in the governance hierarchy. To understand the actors' responses to situations and the arguments and discourses in local climate governance, it is necessary to grasp the contexts in which the politicians and planners frame the issue at stake:

Normally, politicians will have to see a problem in local, regional and global contexts, and in long-term and short-term perspectives. They will have multiple objectives that sometimes conflict and they will have to place them in order of priority. (Øksenholt and Tennøy 2018, 7)

The context, i.e. the cultural, economic, political, historical, social contexts, of a policy process shape and influence what is possible, realistic and desirable. Place is 'a way of seeing, knowing and understanding the world' (Creswell 2003, 11); hence, the place in question in local climate policy-making will be relevant as both the object to transform and as the point of departure, in addition to potential common grounds for defining the problem and seeking solutions. Actors 'attempt to strike chords of existing cultural experiences, narratives, and knowledge within the cognitive landscape of targeted audiences' (Lindekilde 2014, 196).

Haarstad (2014) shows how scale is particularly central to understand willingness and ability to deal with cross-scalar and cross-sectorial problems. A relational view on scale 'as produced and constructed by action and thought' brings forth 'a critical edge in assessing the implications of how problems and solutions are constructed' (Haarstad 2014, 94). Both place-making and planning require boundaries to be drawn, e.g. what are the limits to the plan, goals and measures, both geographically and in terms of scale? Kenis and Lievens (2017) argue that 'it is inherent to carbon neutrality projects to disregard certain types of emissions, and to draw the boundaries in a way that is always somewhat arbitrary' and that these processes are, therefore, 'contingent and contestable' (2017, 1769).

The local level, e.g. a city, is both the scenery for policy-making and politics but also the unit of transformation. That is, this is the level where climate changes will be felt and where our daily lives are lived, including generating emissions. At the local level, i.e. the level where everything is connected to everything else (Pasquini and Shearing 2014), policies and planning will have the potential to directly affect individuals and their everyday lives. Of course, this is a sensitive issue for politicians who think of being re-elected in the next election, and forms part of the political framings and negotiations, and how the actors use and judge facts.

The role of knowledge and differing judgement of facts in planning and local politics

Hulme (2015) showed how our understandings of climate change, i.e. how climate facts are judged by actors, shapes what actions and goals are preferred. These goals and actions all have ‘credibility since they emerge from different readings of what climate change is about, inspired by different cosmologies and ethical and political values. They emerge from different judgments being passed on the facts’ (Hulme 2015, 900). Using this line of thought, the actors’ understanding of their own place and its role within a climate change narrative, combined with their judgement of facts, will determine what and how they see their city’s possibilities and responsibilities in acting and planning for climate change.

Rydin (2007) discusses the role of knowledge in planning and what she calls *knowledge claims*. She differentiates between data or information and knowledge by referring to the causal relationship implicit to knowledge. In light of Rein and Schön (1993, 145) and their argument that ‘the frames themselves determine what counts as evidence and how evidence is interpreted’, this becomes even more complicated. The causal relationship between data/information and preferred action or expected outcome will depend on the actors’ understanding. In processes of local climate policies or climate planning, there is often a lack of knowledge as to what the different potential measures can lead to in terms of reduction of GHGs. Hence, data may be available and some individuals may have some relevant experience, but as Bulkeley and Broto (Castán Broto and Bulkeley 2013; Castán Broto 2017) have discussed, in many cases, local climate action can be seen as experiments.

Different knowledges or claims of knowledge can be given different values or acceptance at different stages of planning and in different planning realms. How the issue at stake is placed and understood scalarly will also affect what kinds of knowledge or within what kinds of causal relationships the data will be situated and accepted. In summary, contributions in the literature show how actors understand climate change from their contextual point of departure. This understanding will shape what is regarded as possible, and at what scale what kind of action is relevant, and even which knowledges and facts that are accepted in debates and planning. These theoretical insights are used when I present, analyse and discuss the case of Stavanger. Before that, I present some methodological considerations.

Methods

To describe and understand the framing of local climate politics and policymaking, I draw on some insights from situational analysis. Following the process of making and passing the CAP in Stavanger, over a period of approximately 1.5 years, gave insights into the development of knowledge, experience and also shifting frames. Through coding and mapping of the data, certain elements stood out, such as the different understanding of the role and possibilities in *place* and of scalar relations in light of transformation; therefore, they became central features of analysis and focal points for the theoretical discussion. The analysed *situation* is the passing of a CAP; i.e. the city council debates, and also includes the meetings, media coverage and opinions expressed in media and documents. A broad range of types of data were used to understand and get a grasp of how the actors frame their understandings and arguments. This level of description and

understanding becomes particularly relevant in planning and policy processes. How the actors both discuss and pragmatically work with the plan together, but also how they reflect on the topic in one-to-one interview, and how they present their views and argue in public debate, gives insight into their different levels of understanding and relationships.

The empirical data for this article were gathered from various sources, including observation, document analysis and interviews. The city council's political debate was streamed; I transcribed and analysed the two-hour session. In the city council debates, the frames can be traced: how do the politicians build their arguments in front of the other politicians? I was also present as an observer at a day-long hearing meeting with the regional business sector. Additionally, I also transcribed a public debate on the topic of local climate change responses, organized by the regional newspaper, Stavanger Aftenblad. I performed a document analysis of relevant documents, including the approved CAP and previous versions of it, the former CAP, and its evaluation, newspaper articles with commentary sections, and the municipality website, including information about the plan and the process. An institutional ethnography was also conducted, as I was an observer in several of the working group meetings, meetings between the project leader and relevant regional groupings, authorities and interest groups, in addition to several field conversations.

Nine interviews were conducted with six politicians from different political parties in two rounds in June 2018 and January 2019. In other words, both before the plan had been passed, and afterwards. In the interviews, there was a focus on letting the interviewed explain and talk freely on the subject of local climate policymaking. By asking the politician to explain what happened at the different stages, who participated in the debates, and what was most important, the interviews became an important source of data. The interviews after the plan had been passed also touched upon the arguments made during the political debates, both in the city council and in the media. The project leader of the revision of the CAP was also interviewed in addition to several field conversations with the informant alongside several project group members, the head of the climate section, and planners in the municipality.

Background – situating Stavanger

Stavanger is the fourth largest Norwegian city, and a little over 130 000 people live in Stavanger, with another 111 000 in the greater region around Stavanger. An industrial district, Forus, which is shared between Stavanger and the neighbouring municipalities, Sandnes and Sola, is often put forward as a core area of Norway because about one-fifth of the Norwegian gross domestic product stems from companies and production with their main base there and about 40 000 people have their workplaces in this area. However, the urban design of this area, as in most of this region, relies heavily on car-based transportation (Haarstad and Oseland 2017).

Analysing Stavanger – A city under 'a fog of oil'

To discuss the framing and political decision-making on climate policy and politics in an oil- and gas-dependent city, I will break down the following discussion and analysis into three parts. First, I will look at the context – to understand the cultural, social, economic and political framing of *Stavanger as an oil capital* in both the section with that title, in the subsequent section. Following that, I show how the politicians' arguments can be broadly divided into two categories based on the understanding of climate change as an issue for Stavanger in terms of scale and time. The actors' understanding of Stavanger and climate change in terms of scale, influence what they regard as relevant and realistic in terms of emission reduction targets, which is discussed in the next section. Finally, I discuss the role of target setting and the targets in this context and their role in local climate transformation.

In the political debates and the processes following, two main strands of framing are found: Stavanger is a suitable size and scale to transform into a low-carbon society, versus this is a global and

national matter and must be solved at those scales. As presented in the previous section on Norwegian discourses on climate change, the typical political divide is similar, and the two largest parties, Labour and the Conservatives have been prominent in thinking of climate as a global issue. In Stavanger, this line-up has been similar, but as I will discuss, a central reason why the plan was passed with a very ambitious goal is that the Labour party and parts of the Conservative party, turned, and argued for a framing in which Stavanger is both able to and particularly suited for major transformation.

The historical narrative of Stavanger as the Norwegian oil capital

From herring, sails and sardines to oil

Stavanger's history is characterized by one-sidedness in trade and industry. The oil business is for the time being, the last chapter in the long story of trades with far away markets based on partially precarious resources. In 1125, the episcopal residency and the cathedral laid grounds for the city development by the harbour. The sea has always been the communication vein for outside trade and impulses. (Gjerde 2002, 9, my translation)

In the decades before the first oil discoveries, Stavanger was in an economic recession. The city was reliant on resources from the sea, with shipbuilding at the wharf and sardines and herring for the canning industry. The downturn in the herring industry affected Stavanger greatly. During the 1960s, the city was described as being poor, the canning industry did not offer high-paid employment, many people lost their jobs, and several canning factories were closed.

On the 23 December 1969, Philips Petroleum informed the Norwegian government that they had found oil, i.e. Ekofisk, one of the largest oil fields ever discovered at sea. Politicians and actors from the business sector in Stavanger worked hard to secure the city as the Norwegian capital of the new oil industry during the searching phase. However, securing Stavanger's permanent role as Norway's oil capital involved the placement of the national oil directorate and the main offices of the newly established national, state-owned oil company. Other cities were also interested in hosting the new industry and the workplaces it entailed. Both Trondheim and Bergen were also in the running; however, they did not pursue the oil industry with the same eagerness as Stavanger. This process has been called the first lobbying campaign in Norway (Gjerde 2002; Roalkvam and Gjerde 2012). In their favour, both Bergen and Trondheim had existing and highly relevant research environments, while Trondheim had a key geographical location in regards to the full Norwegian continental shelf. However, Stavanger had already started accommodating the new industry, both the infrastructural needs of the companies and the industry and of the foreign workers. Some key actors were identified in the processes: two mayors, Arne Rettedal and Leif Larsen, and local businessmen, in particular wharf owner Thorolf Smedvig.

One of the politicians identified as the protagonist for Stavanger's success, Arne Rettedal, was sometimes the city's mayor or opposition politician, but he was always *de facto* running things in Stavanger. His role and way of running operations across political parties and differences is still a term used in local politics in referring to certain ways of solving problems as '*rettedalian (rettedalsk)*'. The city's political and economic workings, as spearheaded by Rettedal, were successful and the city experienced a real boom and a major transformation both economically, socially and culturally.

An author, public figure and former politician from Stavanger, Aslak Sira Myhre described the differences between the significance of oil to Stavanger and to the rest of the country in his book chapter, *Oil Child*:

The actual life with the actual oil, which even was integrated into our everyday at school in Stavanger, hardly exist in the Norwegian national public debate. Drillers, petro-chemists, oil geologists, cleaning ladies or sheet metal workers do not exist, just as the petrol itself does not exist. This lack of knowledge about the actual oil has given space for a different kind of oil. An abstract oil, a purely theoretical size which has nothing to do with the carbon-based raw material my whole city was accommodated to extract from the ocean floor. This oil only exists in the debate and only has two attributes; it destroys the environment and creates a repulsive wealth. (Myhre 2010, 15, my translation)

In Myhre's text, we see the contours of how the major transformation experienced turned into culture in Stavanger. By referring to oil being integrated into everyday at school and naming some of the many work titles of the industry, it shows how this is everyday life in Stavanger. The division between *actual* oil and *abstract* oil, does the same. It creates a division between *us*, the people of Stavanger with an 'actual life with the actual oil' and *them*, everyone else in Norway, with their version of an 'abstract oil'. In this division we can trace some roots of city identity, referring both to the actual oil of Stavanger, and to the transformation the city went through.

An oil-dependent, wealthy city

How does this framing of the city's status and history as an oil capital influence the political landscape, particularly when the matter at hand is the passing of a CAP? When asked why the question of what percentage the goal should become such a sensitive issue, one politician answered, 'because there is a fog of oil hanging over here. It might not smell as much as it used to, but it is definitely there.' The local business sector in Stavanger is dominated by the oil sector, both the larger companies and different companies delivering services to the industry. Even though oil and gas production are not a part of the climate scenario for municipalities (but a part of the national scenery), declaring a vision of a low-carbon future is a strong signal to send from a city so dependent on the fossil industry and employment. In Stavanger, politicians across the spectre of parties express a need for an internationally agreed-upon treaty to slow down the global oil production before the city can start discussing and making a future not reliant on fossil fuel production. Even politicians from typically greener parties say this and express how the local Stavanger politicians do not agree with the idea or rhetoric of their own party at the national level:

The consequences of shutting down the oil industry are enormous here. How can we defend that 20–30 000 work places in oil disappear here, just to reappear somewhere else in the world? [...] To me, that perspective is almost impossible to even get my [party colleagues] to understand. (Local politician from the liberal party)

Politicians from both sides of the debate emphasize that the downscaling of oil and gas production will have huge effects on the local economy through the loss of jobs and tax revenues: the question of oil production or phasing that sector out is placed within a frame of workplaces and employment. The importance of oil for the Norwegian welfare state is often particularly emphasized in debates over whether a closing date for the industry should be set. At the national level, this leads to a debate over what else the country can base its future incomes on, and locally, this is scaled down to a debate over what the oil workers in Stavanger should do for a living if the oil industry disappears.

After the oil downturn in 2014 and the following years, Stavanger saw major changes and experienced what could happen in a life with less oil production. A politician (from the socialist party) said in an interview that 'regularly meeting people who have lost their jobs makes it very difficult to argue for even more reductions in the sector'.

Understanding Stavanger in scale and time

The limits to a municipal plan are central: i.e. both geographic, scalar and temporal boundaries form part of the plan's workings and dynamics (Kenis and Lievens 2017; Heynen, Kaika, and Swynedouw 2006). At the core is a seemingly simple question: *is Stavanger a suitable size for a climate and energy action plan?* In other words: does it matter what Stavanger does? If climate change is a global entity and a global problem, with local implications, does it matter what this in an international scale, small, Norwegian city, does to reduce its climate gas emissions? Two main understandings can be drawn out of the political debate about the CAP's main goal. They both relate to the national climate discourses of national action and thinking globally, and of Norwegian oil as being 'clean' (Hornmoen 2018; Hovden and Lindseth 2004; Tellmann 2012; Eckersley 2016). The parties arguing for local action and ambitious targets are the Socialist party, the Liberal

party, the Green party and the Christian Democrats, whilst the Conservative party, the Labour party and the Progress party have been advocates for keeping the same reduction targets as the national level. However, as I will show in the next section, a change happened when the story of Stavanger's transformation from a poor fishery city, into an international oil hub, was mobilized, and the two largest parties, Labour and (parts of the) Conservative party, shifted from the thinking globally discourse, to a narrative of local transformation. But first, an analysis of how scale was used in the framings.

On the one hand, the politicians arguing that Stavanger indeed is a suitable size for climate transformation, frame their arguments in terms of *action* and *responsibility*. First, they frame Stavanger as a forward-leaning innovative city that has experienced great transformation and is therefore particularly suited for profound change. Second, that the municipality has certain tools and particular emissions that are local. In the case of Stavanger, transportation comprises approximately 60% of the emissions. The opening statement and presentation by the politician from the Liberal party and also the leader of the city development committee in city council was referred to earlier in the article. He also placed and assumed responsibility:

We have to do something. We must take responsibility for what we are responsible for. Primarily the transportation sector [...] and secondly heating. If we set high targets, there will be larger chance that we achieve them. Think globally, act locally, said Gro Harlem Brundtland in 1992.

On the other hand, there are the politicians who see Stavanger as being a too-small unit, both in terms of place and scale: i.e. Stavanger is *too small* to make a difference for climate action. They place this argument both in terms of global and regional issues: e.g. that Stavanger has no impact on global climate change emissions. In addition, the climate change policy should be an inter-city plan. The *smallness* discourse is a topic and trace that is found in arguments at the individual level as well (Tvinnereim et al. 2017; Langaas, Fløttum, and Gjerstad 2019; Fløttum 2017). In Stavanger, the smallness is, interestingly, coupled with the argument that Stavanger is already *top of the class*. For example, emissions per capita in Stavanger are low, compared to the other largest Norwegian cities:

Stavanger is the city that is without a doubt best [...]. We can thank ambitious politicians for this, but we can also thank the oil industry, which has put pressure on the industry onshore to achieve a better total climate foot print. (Representative from the Progress party)

The low emissions per capita are mainly caused by the fact that Stavanger does not have any significant industry nor airport within its city limits and most high-emitting infrastructure is placed in the neighbouring municipalities. However, this fact is used both *against* the need for an ambitious local plan and *for* the need for a regional plan.

The following sequence from the city council debate illustrates these ideas (my italics):

- What can and should we do locally? A bit of the challenge which surprised me is that Stavanger's emissions per capita is *actually quite low*. And that is poorly communicated. (Mayoral candidate from the Conservative party)
- It is made into a big point to point out that we have low emissions per capita, but that is to *compare apples to pears*, all the while the cities mentioned, they have more industry and a huge airport within their municipal boundaries. (Representative from the Green party)
- I want to invite the representative and mayoral candidate to a world record attempt! Do you want to join the Liberals in becoming the leading oil city in the world which reduces its GHG emissions the most? (Representative from the Liberal party)
- *Shows the graph of emissions per capita in the four largest cities*

Measuring in percentage is a strange way of measuring. I would gladly join a world record attempt in becoming the city in Norway with the lowest emissions per capita. That is relevant. How can that be less ambitious than having a really high number as a starting point, and cutting it down to where we are today? (Mayoral candidate from the Conservatives)

This round of questions and political disputes, showcases the very different and competing judgement of facts by the two groups. Is Stavanger already leading a national competition in low emission

levels? Or are these numbers deceiving, as the emissions in other cities include other sources, which in are placed outside the municipal boundaries in Stavanger's case?

The debate over the CAP divided both the governing coalition and created an internal divide in the Conservative party. The mayor sided with the most ambitious goal, while the mayoral candidate for the upcoming elections, argued against those goals. How the framing of action won this debate is in many ways anchored in how the then-mayor and the mayoral candidate framed their arguments. A key point here is that the side arguing for an ambitious 80% emissions reduction also actively uses the identity of oil capital, which brings us into the next section, of how this was framed.

Stavanger as a transformative city

Many politicians fronted the action-frame, but two politicians were particularly important for the fact that this side 'won'; the then-mayor from the conservative party, and the mayoral candidate, today mayor, from the Labour party. They both showcase the understanding of Stavanger as an active and a suitable scale and place for climate transformation.

As practically everyone has commented, the fact that the then-mayor from the Conservative party backed the 80% proposal was very important:

My pride concerns our mayor [...] It is uniquely politically important that the mayor in what is still called the oil capital, wish to set local, ambitious goals of reductions in CO₂ emissions. (Head of the city development committee during city council meeting)

The head of the city development committee refers to Stavanger as oil capital and directly links this to ambitious targets of mitigation. The mayor explained why she voted for the most ambitious goal in an interview with a local newspaper:

My point of departure has been that the mayor of Stavanger shall be very ambitious when it comes to climate and environmental goals. I want to be someone who participates and leads way in this topic. I think it is possible to achieve the goal. (Jupskås 2018)

The visions and core values of the Stavanger municipality are that it 'is present, wants to lead the way and creates the future'. In other words, the mayor used the exact same phrases to frame her reasoning. These words and visions of Stavanger, and the mayor, also draw on an idea of transformative capacity, *creating the future* paints a picture of a municipality actively addressing and steering future development in the desired direction.

In interviews and public debates, the mayoral candidate from the Labour party repeated the importance of being ambitious, of not lagging behind the other major cities, and of showing that Stavanger is the *energy capital*, not the oil capital:

It should be easier in Stavanger than in other places! If we are to rightfully label ourselves the energy capital, this should be the place. We should be in the lead!

However, the importance of oil and gas versus climate ambitions is particularly prominent in the rhetoric of the Labour party, and the local branch in Stavanger is, of course, no exception. Discussing the potential role of the industry for Stavanger's economy in a 50- to 100-year perspective, she answers:

There are possibilities of making that industry even greener, and hence world leading. We will ensure good terms for the industry, but we have to help them with the transformation. But the climate and environmental plan is just about the emissions from the inhabitants, the oil and gas industry is not a part of it, of the climate accounting in it. That plan is about tools at the municipality's disposal.

In her narrative, we see a bridge being formed; stepping across the impossible paradox of Stavanger and Norway wanting to maintain the national oil industry while simultaneously attempting to position the city as a municipality with great ambitions to quickly become a low-carbon society. This is a narrative in which the oil capital is transformed into an energy capital by combining the

hope of a low-carbon society with the fear of the unknown, of the void left by the oil sector if it is to be shut down.

The knowledge claims

The two fractions debate how to draw the lines and delimit the plan, what emissions are relevant to include in such a plan, and what figures are relevant and how to understand them. The *judgement of the facts* differs greatly, and hence, what is possible, desirable and apprehensible differs. The questions concerning facts and knowledge are linked to the questions of scale; one argument is that Stavanger is a small city with low emissions. On the other side, we find arguments of Stavanger's great potential to transform, based on historical experience of doing so, and hence the city has the potential to take the lead. Both amongst cities in Norway and perhaps even amongst oil cities in the world.

In an op-ed, a politician from the Conservative party wrote:

We have to take greater action if we are to affect the global climate, not puzzle with measures such as denying people to park on their own property or create pipe dreams where 70% of all work and shopping related transportation is done by foot or on bike – in the rain and wind. (Folgerø 2018)

In this sentence, she makes reference both to her own framing and understanding of the problem and of how the boundaries of the plan are wrong, and she proposes Stavanger's major source of emissions, that of transportation, as a small piece in the puzzle. Using words and phrases such as puzzle with, denying people, and pipe dreams, she judges the facts, reasoning and arguments of the other side as tiny efforts, as not at all ambitious, because the plan and its scope will not deal with the real issues at hand.

Answering in another op-ed, three politicians from the Green party insisted on Stavanger as a proper scale to deal with climate change:

we want Stavanger to join the *klimadugnad*¹ – and at the same time become a better city to live in, to do business in and a better city to visit. Those are two sides of the same coin. Green cities are good cities. (Johnsen, Ingeborgrud, and Fossmark 2018)

These politicians frame climate change as a problem that the local scale can deal with, and in doing so link low-carbon development to the overarching, commonly agreed-upon idea of a green city, which is a desirable city. When the conservative and progress politicians talk about issues of cross-municipal nature, of indirect emissions, emissions pertaining to aviation, cruise tourism, the politicians arguing for the most ambitious goals respond that these are all matters that can be solved.

The two main fronts both argue to be ambitious, but with completely different sets of scalar interpretation, boundary drawing and judgement of facts, and these two different framings become the central feature of how they each argue to set the main target.

Setting a target: what is realistic and what does it mean to be ambitious?

'The discussion was ferocious. I have never seen anything like it!' The prominent and highly experienced local politician's reaction to one of the eight rounds of political discussions in different the city council committees shows the temperature of the city council's debates about the proposed CAP. However, the same politician argued that the final decision was tremendous:

If we'd decided on 40, we'd be happy achieving 39, had we gone for 50, we'd be happy with 45. Now, with 80, we can be pleased achieving 70. [...] This is almost a paradigm shift! (Local politician from the liberal party)

Some of the politicians describe the situation as one where 'the wheel is turning', i.e. things are happening whether the politicians are aboard or not. The electrification of transportation is progressing, there are several projects developing fossil-free building and construction sites in other cities, and the plan's measures are strongly linked to the policy package on transportation made

with the national government. However, there is quite a distance from the ongoing process to the changes needed to accomplish an 80% decrease in emissions.

Does it matter that Stavanger decided on 80% instead of a 40% or 50% reduction? Are there signs that this can lead to substantive changes? Targets, just as planning, play different roles (Haarstad 2020; Kaza 2019), both during the process of making and passing a plan, and in the aftermaths. The goals made can be an expression of the frames in which the problem and development at hand are placed. The debates, discourses and dynamic evolving of making plans and passing goals are important steps in the incremental changes needed to transform cities into low-carbon societies.

In the analysis of the political debates which led to the CAP being passed in the Stavanger city council, different understandings of place and scale, and differing judgements of facts were traced. The political constellation who proposed the 80% goal and worked together to arrive at this common target mobilized the story of how Stavanger transformed into an oil capital: 'we have done it before, we can do it again'. They frame the CAP and its target as being specifically local, i.e. to be achieved within Stavanger. They argue that climate change is a global problem and Stavanger must take its share of the responsibility. The contestation to the very ambitious line bases its understanding on climate change as being global, both in terms of problems and solutions. Therefore, it is not necessary for Stavanger's population to go to such extreme lengths transforming their everyday lives, because 'more efficient solutions can and should be found elsewhere'. The plan was passed with an 80% reduction as its main goal, but it also included a list of 51 detailed changes to be made to the plan, and a particularly important note: 'the plan is to be updated as soon as possible, and at the latest during the spring of 2021, after the municipal merger between Finnøy, Rennesøy and Stavanger'. In other words – the story of Stavanger's highly ambitious CAP is to return for yet another round.

Conclusion

How can an oil city pursue ambitious local climate politics and policies? The literature on local climate transformation and policy-making brings forth an understanding of the importance of framing to understand the possibilities and constraints on actually achieving profound changes. 'The science of urban climate transformation must be coupled with a narrative of fundamental change that can be embedded in all cultures and communities' (Rosenzweig and Solecki 2018, 756). Opening up to a narrative of a sustainable, low-carbon future in Stavanger leads to debates, discussions, understandings that both involve and exclude the fossil industry that the city is so dependent upon. In this article, I have discussed how we must understand a city's social, political, economic and cultural contexts, to understand how it can deal with producing substantial and ambitious climate policies.

The story of how Stavanger passed ambitious climate goals shows how context; i.e. history, economy, culture, social aspects, plays an important part in shaping the possibilities and constraints for local climate policy and politics. Importantly, it demonstrates how actors' scalar understanding of climate change will entail very different understandings of the scope and space of opportunities for transformation at the city level. The debates concerning the CAP often brought in the status and implications of being an oil city, however, the fact the oil industry does not form part of the local emissions and hence was not a part of the CAP was very important to make an ambitious climate goal possible. Hence, oil became a part of the context, but not what was to be transformed. The *actual* oil of Stavanger is not a part of the *actual* climate transformation but explains and becomes a protagonist in the story of Stavanger's transformative capacity.

Literature on framing highlight context's role in actors' understanding of problems and possible solutions (Øksenholt and Tennøy 2018; Rein and Schön 1993; Hulme 2009). The contribution of this paper is to show how contextual factors can also be mobilized by actors to bridge paradoxes and reframe visions of climate transformation as both possible and probable. By doing so, the

paper brings the classical geographical concepts of place and scale into the academic debates of transformation. In particular, I make use of insights from relational views on scale (Haarstad 2014) and what Kenis and Lievens (2017) describe as the contingent and contestable drawing of boundaries. With these insights, I show how actors' understanding of scale and of the possibilities of their place, shape what is perceived as possible, realistic and ideal, but also how local context can be mobilized to shift discourses and possibilities. Place and scale are key components in the framing of local low carbon transformations, as this paper shows, and should be reflected in future research on transformation processes.

Bridging paradoxes through contextual framing can create space for new political constellations and expand the view of what is regarded as possible, desirable and realistic. Because actors' understanding of problems are based on their contextualization of the matter (interlinking knowledges, experiences, identities, values), it is necessary to explore these frames to find grounds and ways of reaching solutions. Climate change is a global problem, but efforts, solutions and possibilities are to be found at all scales.

Note

1. Dugnad is a Norwegian word, meaning help or voluntary work. It is a very much used word and concept, for example the government called for a national *dugnad* to combat covid 19.

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