

# Aspects of strategic climate work in Nordic municipalities

NordLead Project Final Report









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*Editor Kirsi-Marja Lonkila,  
(Union of the Baltic Cities – Commission on Environment)*





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# Preface

Nordic countries are working to mitigate and adapt to climate change at all levels. Counteracting and coping with climate change is a guiding principle for a wide range of Nordic initiatives.

Local authorities are key actors in delivering the EU2020 and national climate targets. This is especially true in the Nordic countries where the responsibilities of the municipalities are quite broad, e.g. in energy production, land use, waste management and procurement. Also for this reason, Nordic municipalities play a key role in the creation of a sustainable and climate-friendly Nordic region.

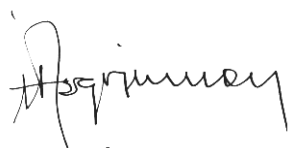
This study gives a general view over local climate work in Finland, Iceland, Norway and Sweden. The study is part of the NordLead project, aiming at recognising the success factors and needs for support in Nordic local climate change work. The project is led by Union of the Baltic Cities – Commission on Environment, and is partly funded by the Nordic Council of Ministers. Other partners in the project are Nordregio and associations of local authorities in respective countries.

The report is based on a web survey made in Finland, Iceland, Norway and Sweden between October 2011 and February 2012. Recognising the different models used in the municipalities and comparing the local climate work done in Nordic countries helps to support municipalities further and making the Nordic region a green climate leader.

I would like to thank the authors Christian Dymén and Lisa Van Well at Nordregio, Lotta Mattsson at the Association of Finnish Local and Regional Authorities, and the editor Kirsi-Marja Lonkila at Union of the Baltic Cities - Commission on Environment Secretariat for their excellent work.

The analysis and conclusions in the report are those of the authors and do not necessarily reflect the views of the Nordic Council of Ministers. However, I am convinced that the report will be a useful tool for the Nordic municipalities in their work for keeping the Nordic region as a frontrunner on green climate solutions.

Copenhagen, 15 November 2012



*Halldór Ásgrímsson*  
Secretary General  
Nordic Council of Ministers



# Introduction

Local authorities have been recognised as key actors when it comes to responding to the challenges of climate change, regarding both mitigation and adaptation measures. Nordic municipalities are among the leading local authorities in sustainable development and climate change work in the world. Climate change still remains a very challenging task for municipalities to handle. Along with requiring long-term decision-making and cooperation across all municipal sectors, new ways to work need to be adopted. What makes it easier to grasp is that reducing greenhouse gas emissions, when thoughtfully executed, often has positive side effects, such as monetary savings or improvements in local air quality.

Nordic municipalities have been working with sustainable development for two decades already, and in recent years have compiled ambitious climate strategies and action plans. Until recently, this has been voluntary in all countries. On the other hand, many Nordic cities still need support and more cooperation in turning their sustainable development and climate change work into a track of success. Gathering information on the successes in this work and the need for support that still remain would greatly benefit the Nordic cities and create a basis for creating new support structures.

Nordic societies are relatively small and similar to one another. Internationally compared, the competencies and responsibilities of municipalities are quite broad, e.g. in energy production, land use, waste management and procurement. For these reasons, Nordic cities and regions truly have a significant impact on creating a more sustainable and climate-friendly Nordic region. Highlighting the success factors in this work can be beneficial for all: both the frontrunners and those lagging behind. Many of the success factors and support needs are also thus similar and could be addressed through a common project.

This study gathers valuable information about climate management in Nordic municipalities and gives a general view to how local climate work is being done in Finland, Iceland, Norway and Sweden. The framework conditions are different from country to country, and this has a huge effect on what form the local activities concerning climate change take.



# Summary

Local authorities have been recognised as key actors when it comes to responding to the challenges of climate change. Nordic municipalities have been working with sustainable development for two decades already, and have, in recent years, compiled ambitious climate strategies and action plans. This study gathers valuable information about climate change management in Nordic municipalities and gives a general view to how local climate work is being handled in Finland, Iceland, Norway and Sweden.

This study is part of the NordLead project, aiming at recognising the success factors and needs for support in Nordic local climate change work. The project is led by Union of the Baltic Cities, Commission on Environment, and it is partly funded by the Nordic Council of Ministers. The report is based on a web survey conducted between October 2011 and February 2012. An invitation to the survey was sent to all municipalities in the participating countries. The response rates were 54% in Finland, 41% in Sweden, 38% in Iceland and 21% in Norway, making the overall response rate 37%.

The study shows that Nordic municipalities in all participating countries are working for climate change mitigation and adaptation. However, Norwegian and Swedish municipalities have been much more active in developing local climate strategies than Finnish and Icelandic municipalities. This comes down to differences in national-level support for municipalities that has been weaker in Finland and Iceland. Commonalities in the success factors and challenges are found in the study; however, there is no “one size fits all” solution because the countries differ in many respects – the national framework conditions being the most crucial difference.

Norway is the only country requiring municipalities to develop a climate strategy. Based on the study, it seems clear that this kind of requirement is an effective way to start the work but should come with resources to plan, implement and monitor climate work. In all cases, the most important factor to improve the local climate work by Nordic municipalities is state-level economic support to implement climate mitigation and adaptation measures, as well as for hiring climate coordinators or other staff.

Municipalities in all participating countries are challenged by the need for cross-sectoral climate work, and capacity building to support local authorities to help them in this task is needed. It seems that the Swedish combination of municipalities acting on their own initiative, being still supported by the state, and municipal central administration

taking a strong role gives the best results in successful climate strategies. In addition to capacity building in cross-sectoral cooperation, municipalities would also need guidance in systematic strategy work and in how to plan measures on climate change mitigation adaptation. This applies especially to the smaller municipalities.

Internationally compared, the competencies and responsibilities of Nordic municipalities are quite broad in fields that are relevant for mitigating and adapting to climate change. For this reason, Nordic municipalities can have a significant impact on creating a more sustainable and climate-friendly Nordic region.



# Conclusions and recommendations

In general, Nordic municipalities in Finland, Iceland, Norway and Sweden are working actively and mostly voluntarily for climate change mitigation and adaptation. However, there is no “one size fits all” solution but the countries differ in many respects – the national framework conditions being the most crucial difference. This became very clear already when starting this study; as in some countries, this was the first survey on the topic among municipalities, and in others, it was feared that the excess supply of questionnaires on climate issues would result in low response rates. In Finland, and especially in Sweden some similar surveys have been made before on local climate change work; but in Norway and Iceland, less information was available. The success factors and challenges that we found are very similar in all countries, but this is also affected by the activities taken at the national level and what kinds of needs for support the municipalities have.

Municipalities in different Nordic countries frame the climate question in quite different ways. What is common among all countries is that municipalities have clearly not started the strategic work on climate change because of visible changes in their local climate, although many address adaptation issues in their strategies. In Sweden, climate work is very strongly connected with energy issues in the municipal work, probably because of the emphasis on renewable energies in national policy. Swedish municipalities have received national support for hiring energy counsellors and preparing energy-efficiency plans. This is also visible in the question regarding their needs for support – Swedish respondents don’t value the option *stronger emphasis on renewable energy in national energy policy* as high as respondents in other countries. Swedish municipalities also often link their strategic climate work to the long tradition of sustainable development work.

Norwegian municipalities, on the other hand, focus more on adaptation to climate change, and this is probably because many effects of the changing climate can be more directly seen in many Norwegian municipalities in heavy rainfalls and other extreme weather events. In Norway, municipalities are also more likely, than elsewhere in the Nordic countries, to involve local business interests in the process. Also, in Iceland, the few municipalities with a climate strategy link the climate issue quite strongly with adaptation. As Finnish municipalities are often acting on their own initiative, they have, especially some years ago, connected

their climate strategy work with the branding of the municipality as “climate friendly”. As local climate work has become increasingly more common in Finland, municipalities developing climate strategies are no longer necessarily in the forefront. In Finland, it is still possible for municipalities to build an image of a forerunner in being “carbon neutral” or otherwise active in mitigating climate change.

When it comes to the frequency of strategic climate work, Norwegian and Swedish municipalities have been much more active in developing local climate strategies than Finnish and Icelandic municipalities. This comes down to what triggered the municipal climate work to begin with. Sweden, and especially Norway, are strongly encouraged by national activities, meaning support and regulation, and thus triggered by *top down* initiatives. Finnish municipalities are acting strongly on their own initiative, *bottom up*. In Iceland, only a few municipalities have prepared climate strategies, and based on the survey results, it seems clear that they’d need more guidance to act on climate change. There has been a national climate strategy in place since 2007 in Iceland, but municipalities are not specifically addressed by it or other national initiatives.

The role of municipal central administration in developing, coordinating and implementing climate strategies is the strongest in Sweden and weakest in Finland, where it is mostly the environmental administration taking over issues related to development, coordination and implementation of climate strategies. Norwegian and Icelandic municipalities are in between these two extremes; and in Finland, the respondents are the most unhappy when it comes to cross-sectoral cooperation in implementing the municipal climate strategy – this might be because the role of central administration is often vague, and climate work is seen as a task solely for the environmental sector. The most content respondents with cross-sectoral cooperation come from Sweden, where the central administration takes a bigger responsibility in coordinating climate strategies.

Swedes are also the most optimistic about reaching the goals of their climate strategies. It seems that the Swedish combination of municipalities acting on their own initiative, being still supported by the state and municipal central administration taking a strong role gives the best results in successful climate strategies. Norwegian municipalities have been strongly directed with a national requirement to develop climate and energy plans. Still, almost 30% of the Norwegian respondents say that the goals of their climate strategy will not be reached at all.

## Recommendations for more successful municipal climate work to enable Nordic countries to become climate leaders

Based on this study, the most important factor to enable Nordic municipalities in becoming climate leaders, and to improve local climate work, is state-level economic support for implementation of climate mitigation and adaptation measures. Another crucial factor is state-level support for hiring climate coordinators and other staff. A stronger national policy emphasis on renewable energy and energy efficiency are also among the factors that are most beneficial to municipalities.

Legal requirements for having a municipal climate strategy are an effective way to start work and to produce plans but might not bring the best results. Requirements should come with resources to plan, implement and monitor climate work with a suitable set of stakeholders. Municipalities in all countries are having trouble with cross-sectoral climate work, and capacity building to support local authorities in this task is definitely needed. It seems that the most efficient way of organizing the climate work locally is to have central administration coordinating the implementation of the climate strategy. For effectively implementing the climate strategy, it is essential to have a clear link to municipal budgets.

In addition to capacity building in cross-sectoral cooperation, municipalities would also need guidance in systematic strategy work and in how to plan measures on climate change mitigation adaptation. More information on which measures are the most effective and cost-beneficial is needed to trigger the climate work. In those local governments not yet actively working for climate change mitigation, picking the low-hanging fruits could help start more strategic climate change work. There is a need for guidance especially in the smaller municipalities. It should be taken into account that, overall, metropolitan and smaller municipalities have very different capacities to mitigate the greenhouse gas emissions.

Arenas to exchange experiences among colleagues from other municipalities, external cooperation with municipalities nationally and transnationally, as well as national programmes are other beneficial factors that need to be enhanced to support local climate work. Municipalities would also need support in finding the existing external funding sources for implementing measures to mitigate climate or to adapt to the changes.

Engaged and inspiring local politicians are essential for action on climate change, as they are often the engines for getting local climate work started. It seems that though municipal elected officials are fairly positive in their attitudes about climate change, it is not very high on the agenda in many cases. More information and guidance about positive aspects and financial savings of climate change measures, as well as concrete activities, such as city council climate change training days, could

be one way to encourage this, along with clearer national policy. Exchanging good practices between municipalities, also across borders, could help interpret positive results to politicians.

# 1. About the survey and how the study was conducted

This study is part of the NordLead project, aiming at recognising the success factors and needs for support in Nordic local climate change work. The project and this study focus on Finnish, Icelandic, Norwegian and Swedish municipalities. The NordLead project is led by Union of the Baltic Cities, Commission on Environment, and it is partly funded by the Nordic Council of Ministers. Other project partners are Nordregio, the Association of Finnish Local and Regional Association, the Icelandic Association of Local Authorities, the Norwegian Association of Local and Regional Authorities and the Swedish Association of Local Authorities and Regions.

Between October 2011 and February 2012, a survey was sent to municipalities in the focus countries, using a web survey tool, Webropol. Invitations to the survey were sent to all Icelandic (74), Norwegian (430), Swedish (290) and 285 Finnish municipalities (part of them co-operation districts, the amount of municipalities altogether is 336). The response rates were 54% in Finland, 41% in Sweden, 38% in Iceland and 21% Norway, which makes the overall response rate 37%. The survey was conducted during October 2011 – January 2012. The respondents in Finland and Sweden are mainly environmental, climate and energy officials in municipalities, although some heads of department, mainly environment, technical or planning, also responded. In Iceland, the respondents are mostly mayors and heads of departments. Also, in Norway, heads of departments outnumbered environmental officials.

This study has been compiled mainly based on the survey. In addition, a workshop with NordLead partners from all participating countries was organized in June 2012 to further evaluate the survey results. This helped us take into account the framework conditions in different countries and to ensure that the analysis gives the correct general view of the situation, as it might be that the municipalities active in climate issues have answered more often than those that haven't acted on the issue yet.

When starting the NordLead project, the situation in different focus countries varied. In some of the countries, a lot of research on local climate work has been done; whereas in Iceland, this was the first survey to be done.

The NordLead project involves the Nordic local authorities concretely through the national associations of local and regional authorities and disseminates the project results and actions to the entire Nordic and

Baltic Sea region. Recommendations for further action and support have also been drafted in the project workshop in June 2012.

The analysis in this paper is partly qualitative and partly quantitative. Primarily, we use meaning categorisation as a method for analysis.<sup>1</sup> This implies that answers are categorised into different themes. Answers within the same theme have a similar meaning. Through this categorisation, we can furthermore quantify the amount of answers belonging to the different themes.

We have chosen to focus on 5 clusters of answers in this paper. These are:

- *Triggering factors*, identifying factors that have a major role in leading the municipalities to develop climate change response, both on adaptation and mitigation. The triggering factors reported by the municipalities are categorised as being either initiated by a top down approach or a bottom up approach. A *bottom up approach* signals that the major driving forces are within the municipality. This could be proactive politicians, key stakeholders or sectors within the municipality. Driving forces can also be citizen participation or major local climate threats. A *top down approach* signifies that the main triggering factors have been national and regional authorities through legislation, programmes, different incentives, as well as networks, but also external factors, such as media or events
- *Governance structure*, identifying which organisations (within the municipal organisation) that are responsible for developing, coordinating and implementing the climate change strategy and how cooperation across sectors and between administrative levels is developing
- *Success factors*, identifying factors on municipal level that contribute to implementation of climate change strategies
- *Challenges*, identifying factors on municipal level that hinder implementation of climate change strategies
- *Attitudes, needs and gaps*, identifying factors that could support municipalities in their local climate change work

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<sup>1</sup> Steinar Kvale & Svend Brinkmann, Interviews, Learning the Craft of Qualitative Research Interviewing (2009).

## 2. Climate strategies in Swedish municipalities

*Christian Dymén, Lisa Van Well*

A rather high proportion of Swedish municipalities have voluntary climate change strategies in place. Political support from the national level already exists. In the past years, financial support and programmes have been used by the state to encourage municipalities to tackle the issue of climate change. These range from local investment programmes to grants for wind power planning, hiring an energy counsellor and energy-efficiency support. According to our survey, one of the most important forms of support has been the ongoing energy efficiency support from the Swedish Energy Agency.

125 out of 290 Swedish municipalities responded to the survey through a web survey tool, Webropol.

### 2.1 Triggering Factors in Sweden

Of our respondents (125 municipalities in total), 81% reported that the municipality has developed a climate change strategy or is preparing one. A survey made in 2007 showed that 52% of Swedish municipalities had cross-sectoral action plans for reducing emissions, and 28% were in the pipeline.<sup>2</sup> However, in our survey, we see that almost 61% of all strategies were completed during the years 2010–2012. Most strategies relate to climate change mitigation (44% of the respondents) or a combination of mitigation and adaptation (21%). Only 2% of the municipalities have adopted a strategy only for adaptation. 14% are developing a climate change strategy, and 18% do not have one.

From a qualitative perspective, 90 municipalities have reported factors that have triggered the development of a strategy. The responses by the municipalities are categorised as being either initiated by a top down approach or a bottom up approach. Our analysis reveals that the top down approaches count for approximately 65% of the responses. Bot-

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<sup>2</sup> Klimatarbetet i kommuner, landsting och regioner, Sveriges Kommuner och Landsting (2007).



tom up approaches stand for approximately 48% of the responses. A few municipalities employed both top-down and bottom-up approaches, which is why the responses equal more than 100%.

A more thorough categorisation reveals seven major categories of triggering factors. Municipalities can belong to several of the themes:

- *Sustainability-driven municipalities* triggered by top down incentives (approximately 34% responded in this theme) are those who are driven by a broader engagement in environmental and climate change issues (not only energy issues), but where the triggering factor is from the regional or national level, such as Agenda 21 networks and national incentives
- *Sustainability-driven municipalities* triggered by bottom up incentives (approximately 36% responded in this theme) are those who are driven by a broader engagement in environmental and climate change issues (not only energy issues), where triggering factors are local, such as dedicated local politicians
- *Energy driven municipalities* triggered by top down incentives (approximately 29% responded in this theme), are those who, in their answers, have specifically mentioned energy as a triggering factor, mostly through national regulations that each municipality should have an energy plan
- *Energy driven municipalities* triggered by bottom up incentives (approximately 6% responded in this theme), are those who, in their answers, have specifically mentioned energy as a triggering factor, but where the triggering factor is local. This could be a local wish to develop the availability of bio gas or a local wish to reduce the use of energy in buildings and street lighting
- *Response driven municipalities* triggered by top down incentives (approximately 10% responded in this theme) are triggered by changes that are out of the municipality's control, such as the political debate in general and media focus
- *Response driven municipalities* triggered by bottom up incentives (approximately 7% responded in this theme) are triggered by changes that are out of the municipality's control, but still of local character, such as local risks of flooding)
- *Economy driven municipalities* (approximately 3% responded in this theme) are mainly driven by a wish to reduce costs. The triggering factor could be either top down through increased oil and energy prices in general, or bottom up through a local wish to reduce costs

In Sweden, climate change strategies were mostly developed without help from an externally funded project. Of the 101 respondents, 55% said that the climate strategy was not part of an externally funded project. On the other hand, 36% responded that they did receive help from an externally funded project; and 9% couldn't say. National support for

energy efficiency activities was mentioned most often (18 respondents). Energy efficiency support from the Swedish Energy Agency is equivalent to a six-month work period and may be used to strategically work with energy efficiency. Of 36 respondents, 67% said that human resources were allocated to climate work after the externally funded project.

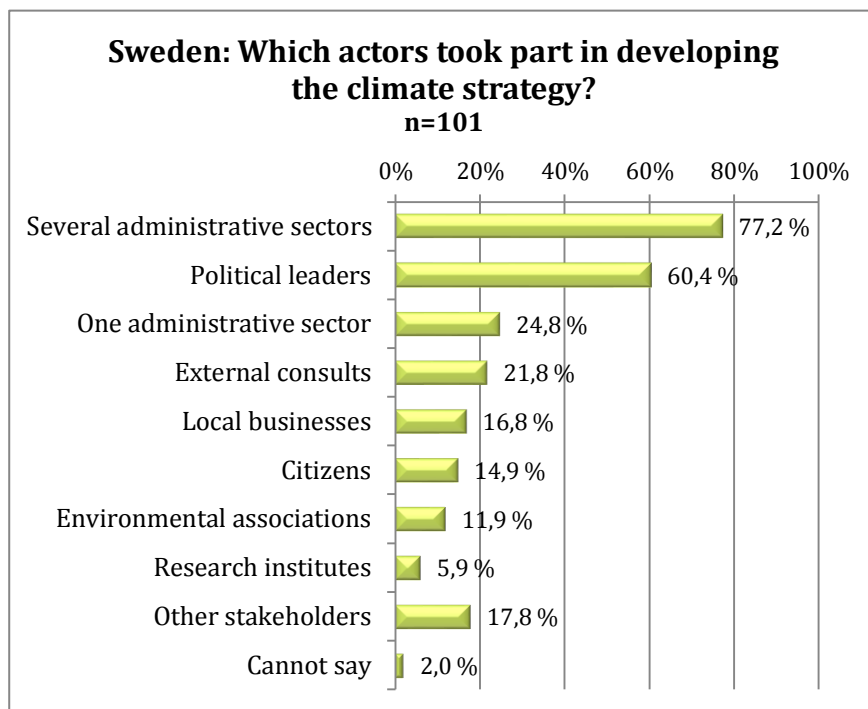
When asked in which other municipal strategies or plans climate change was present, most respondents said energy programmes or energy efficiency strategy (81% of the respondents), master plans, incl. land use and building strategies (73% of the respondents), and municipal strategy and/or vision (58% of the respondents). Only 1% of the respondents state that climate issues are not present in other strategies. 46% of the respondents state that climate goals are very well or well in line with other relevant municipal strategies or plans. A further 17% said that the goals are moderately in line with other relevant municipal strategies or plans.

## 2.2 Governance structure in Sweden

Regarding the question about which institutions in the municipality are the main initiators in climate change issues, 125 municipalities responded. 22% of the municipalities have said the executive board to be the main initiator, and 20% say it is the head of environment / environmental auditor / environmental secretary.

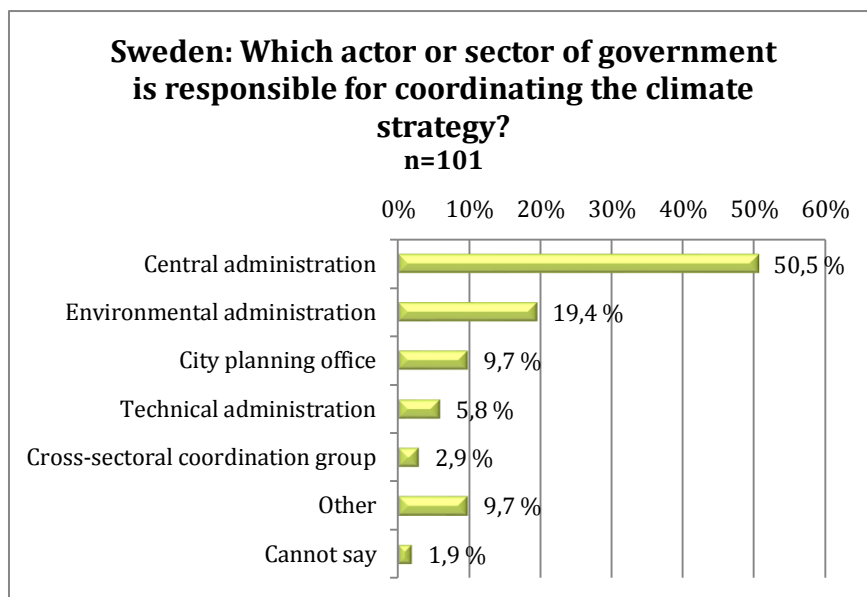
With regard to *developing a strategy* (101 municipalities responded to the question, which of the following actors participated in developing a climate strategy), 77% stated that several different administrative units were responsible, as compared to almost 25% who noted that only one administrative unit was operative, usually the planning office or the environmental unit. Of the respondents, 60% replied that political leaders were involved, although this could be in cooperation with the responsible units. In the over three-fourths of the municipalities where the climate strategy was an integrated effort, this was generally a cooperation between technical service, central administration and the municipal council. Additional actors in developing the climate strategies included municipal companies (energy companies), local businesses, consultants, environmental organisations and research institutes.

**Diagram 1. Actors taking part in developing the climate strategies in Sweden**



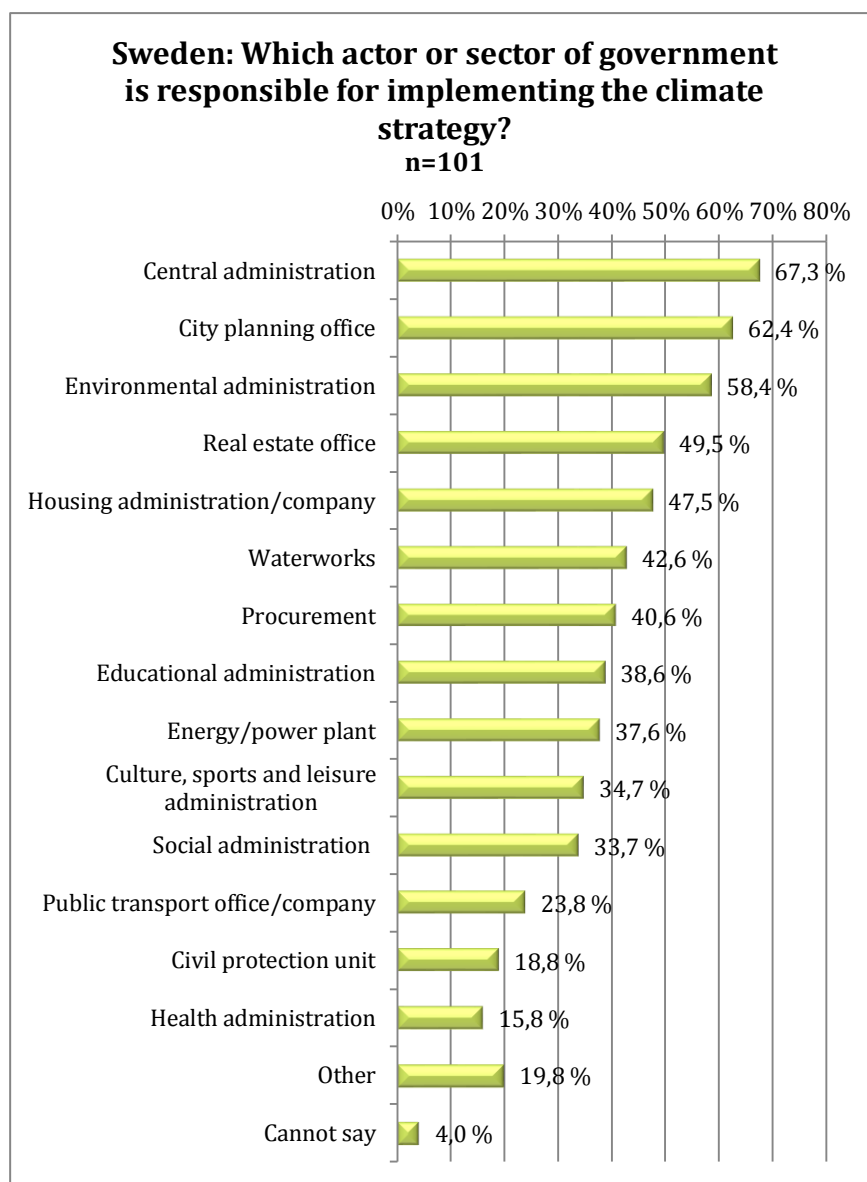
Among the municipalities that responded (101 municipalities responded to the questions: Which municipal sector is responsible for coordinating the climate change strategy and, which municipal sector(s) is/are responsible for implementing the climate change strategy), about 51% responded that central administration is responsible for *coordinating the climate change strategy*, 19% responded the environmental sector and 10% the city planning department.

**Diagram 2. Actors or sectors of government responsible for coordinating climate strategies in Sweden**



The *implementation*, on the other hand, is spread among several sectors, including, for instance, central administration, the urban and regional planning sector and the environmental sector.

**Diagram 3. Actors or sectors of government responsible for implementing climate strategies in Sweden**



In addition to the municipal organisation, municipalities were asked what other actors/stakeholders have been involved in the local climate work. Of the 125 municipalities that responded to this question, 50% of the respondents named businesses, 42% associations and non-governmental organisations, 38% individual citizens. Also, 22% of the respondents stated that no stakeholders outside city administration were involved.

In general, cooperation between the different sectors in the municipal organisation is very good, good or quite good (73% of 99 responding municipalities). Fifty of the responding municipalities have commented on factors that influence the cooperation, either positively or negatively.

We have categorised factors that contribute to good cooperation into four themes:

- Good routines for cross-sectoral work
- Political interest and will
- Cooperation forums
- Sufficient resources

Factors that prohibit or hinder cross-sectoral cooperation can be categorised into 8 themes:

- Insufficient political will
- No routines for working cross-sectorally
- Climate change is not an organisational priority/ differing level of priority among sectors. Some reasons being:
  - Budget constraints/ economic goals
  - Too expensive
  - Conflict with other environmental goals (Noise, pollution, air quality)
  - Cultural heritage (Energy modernisation not allowed)
- No ownership of the question
- Lack of knowledge or information
- Lack of resources
- Climate change as too broad a question
- Too early in the process

## 2.3 Success factors in Sweden

One hundred municipalities responded to the question regarding the implementation of the strategy being defined in the climate strategy or a separate climate action plan. Of the respondents, 51% chose the option “yes, it has been defined measure by measure in the climate strategy or a separate action plan on how the strategy will be implemented”. A further 29% responded that “implementation has partly been defined but not thoroughly”. In the question about the time frame for implementing the climate strategy, only 5% stated that there is no time frame defined for implementing the climate strategy.

The same applies for monitoring and follow up. Of the 101 respondents, 48% answered that responsibilities, time frame and indicators for the measures to be monitored have been defined, and a further 33% said that monitoring of the measures has been considered in the climate strategy, but responsibilities, time frame and indicators have not been completely defined.

When asking if measures defined in the climate strategy have been considered in the municipality budget, 40,6% of the 101 responding municipalities said yes, 34,7% said no and 24,8% couldn't say.

Regarding the question on whether the goals that are stated in the climate change strategy will be reached as planned, 101 municipalities responded. Approximately 30% of the municipalities expect the goals to be reached, and a further 62% noted that the goals may be partly reached. The municipalities that have answered that they expect the goals to be reached have specified factors that contribute to the achievement of the goals. Twenty-nine municipalities have provided answers, and we have categorised them into four themes. Municipalities can belong to one or more of these categories:

- *Political Engagement* (approximately 38% responded in this theme). This implies that there is a strong interest among politicians and management teams
- *Goals are followed up and decisions are taken across sectors* (approximately 34% responded in this theme). The importance is, for instance, that goals are mainstreamed into core activities of different sectors; and that all relevant actors have been able to participate in setting their own goals
- *The projects are sufficiently budgeted and there are enough resources* (approximately 21% responded in this theme). In this category, we also find those municipalities that have found climate change work to be successful especially if the work also is economically profitable
- *Networks or national programmes* (approximately 10% responded in this theme). These municipalities have reported that national incentives have been important, such as KLIMP, LIP, European Regional Funds, but also national networks of municipalities

Municipalities were also asked to evaluate certain factors on a scale of 1–5 about how important they are for successful local climate change work. According to 125 respondents, the three most important factors were, in descending order:

- positive attitude of political and administrative leaders
- reaching mutual understanding of the importance of the climate change work within the local government and
- active political and administrative leaders



## 2.4 Challenges in Sweden

To the question regarding whether or not the goals that are stated in the climate change strategy will be reached as planned, 101 municipalities responded. Approximately 67% of the municipalities have answered that the goals will be reached only partially or not at all. Fifty-five municipalities have provided valuable input on factors that have hindered full implementation of the climate change strategy. We have categorised the answers into six themes. The municipalities can belong to one or more of these categories:

- *Lack of resources* (approximately 58% responded in this theme). This relates to personnel resources, economic resources and time allocation. A reason can furthermore be the choice between climate change benefit and economic profit
- *Lack of political engagement* (approximately 15% responded in this theme). This relates not only to lack of engagement but also to a slow political process
- *Lack of responsibility and organisational structure* (approximately 29% responded in this theme). Getting all sectors involved requires clear leadership within each sector. In some municipalities, this is lacking
- *Lack of national incentives* (approximately 5% responded in this theme). Such examples are, on one hand, lack of economic support from the national level, and, on the other hand, a situation where a municipality finds it inefficient to invest in renewable energy and alternative transport solutions when the national level is weak
- *Changes in behaviour and attitudes take time* (approximately 5% responded in this theme). Two municipalities reported that involving citizens takes time and that behaviour questions are long-term objectives
- *Climate change not a priority* (approximately 4% responded in this theme). This theme is closely related to lack of resources since it is a question of prioritising climate change over other issues, such as social and economic dimensions of sustainability. However, two municipalities explicitly stated that climate change was not a prioritised issue

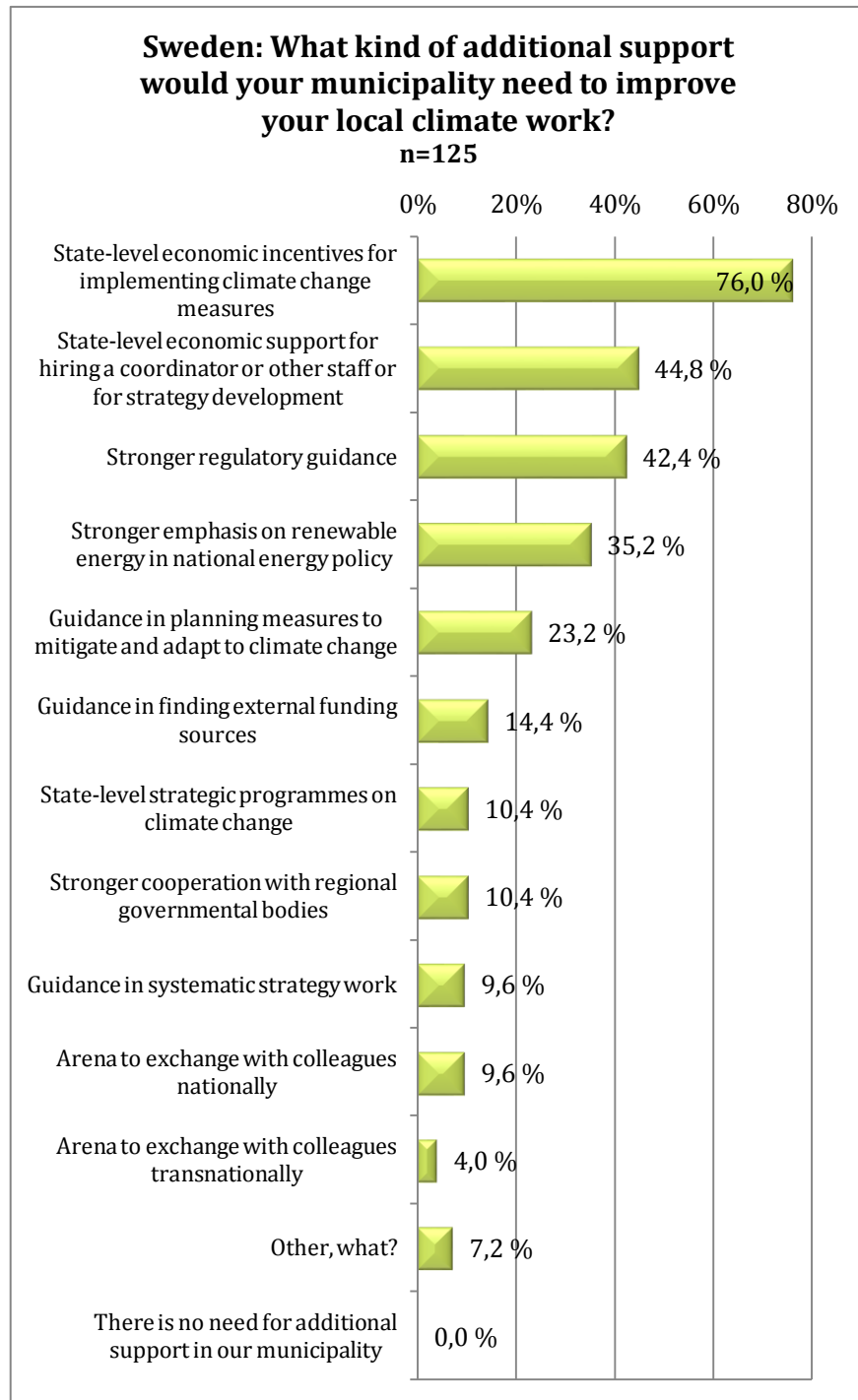
## 2.5 Attitudes, needs and gaps in Sweden

While over two-thirds of Swedish municipal leaders have very positive or positive attitudes towards local climate work, with a further 26% being neutral (124 municipalities responded to the question), one-quarter of the comments to the question about attitudes (30 municipalities provided comments) remarked that economic realities were often a factor in how climate was considered. Several municipal leaders were positive to local climate work, as long as it did not divert the municipal budget from other core daily operations.

In the same vein, nearly 75% of the political leadership in the municipalities have very positive or positive views towards local climate work, again with the caveat that more could have been done with greater resources (123 municipalities responded to the question). Thus, the lack of financial resources or difficulty in freeing-up funding in a tight municipal budget appears to be important in forming the attitudes for local climate work. This is in contrast to the seemingly strong local consensus among political parties, where two-thirds of the 125 respondents answered that there were no large differences among attitudes between the largest political parties with regard to climate change work. Only 4% answered that there were big differences.

125 municipalities answered the question about support needs and gaps, and a big majority reported that national economic incentives are lacking. This could seem surprising since this factor is not strongly emphasised in the analysis of the challenges above, although it does factor into the attitudes of both the local administrative and political leaders. However, many municipalities have answered those questions from a local point of view, whereas, in this question, the multiple choices mostly relate to factors that are external to the municipality.

**Diagram 4. Support needs in Sweden**





### 3. Climate strategies in Norwegian municipalities

*Christian Dymén, Lisa Van Well*

Differing from other countries in this study, Norwegian municipalities have been required by regulation to have energy and climate plans since 2010; currently, 410 out of some 430 municipalities have climate and energy plans in place. They have been able to receive financial support for climate and energy projects from the public enterprise Enova, contributing to environmentally sound and rational use and production of energy. In its programme called Climate Municipalities, Enova supports municipal energy and climate plans given that the plan adhered to a given set of criteria. Enova can provide up to 50% of the project costs for the measures, up to NOK 100,000.

The Norwegian Association of Local and Regional Authorities (KS) has recommended a model to the government as a new way of financing climate activities, called KLOKT – Cutting Climate Emissions Through Local Initiatives. In this model, the local government sells emission reductions to the state after a negotiation process. All measures reported in the negotiation with the state are part of a democratic climate and energy plan adopted by the municipality.

Of the Norwegian municipalities, 89 out of 430 responded to the survey through a web survey tool, Webropol.

#### 3.1 Triggering Factors in Norway

Of our 89 responding municipalities, 99% reported that the municipality has developed a climate change strategy or is currently preparing one.<sup>3</sup> In this respect, the sample seems to represent the Norwegian municipalities well, as according to the Norwegian Climate Municipalities, 95% of all Norwegian municipalities have a climate and energy plan in place, and 4% have decided to start preparing one. Most strategies relate to a combination of mitigation and adaptation (58,4% of the respondents) or

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<sup>3</sup> Norwegian Climate Municipalities.

climate change mitigation (29,2%). Only 9% of the municipalities have adopted a strategy only for adaptation. At this time, 2% are developing a climate change strategy.

From a qualitative perspective, 76 municipalities have reported factors that have triggered the development of a strategy. The responses by the municipalities are categorised as being either initiated by a *top down approach* or a *bottom up approach*. Our analysis reveals that the *top down* category counts for approximately 72% of the responses, whereas the *bottom up* approach stands for 49% of the responses. Some municipalities have reported both categories as triggering factors, which is why the total responses add up to more than 100%.

A more thorough categorisation reveals seven major categories of triggering factors. Municipalities can belong to several of the categories and the approach can be either *top down* or *bottom up*.

- *Municipalities driven by national regulations* (approximately 66% responded in this theme) are those who are driven by national regulations, laws and economic incentives. The national government states that all municipalities should have local climate and energy strategies. Furthermore, the government, through ENOVA, contributes economically to the development of these strategies. This theme is purely *top down*
- *Municipalities driven by strong local politicians, local leaders or management as well as a local wish to reduce emissions* (approximately 24% responded in this theme). This theme is purely *bottom up*
- *Municipalities driven by inter municipal and regional cooperation* (approximately 18% responded in this theme). These municipalities are driven by development of regional climate change plans but also by cooperation across municipalities, such as *Livskraftige kommuner*. This theme is purely *top down*. Although being classified top down and established by the state, the programme *Livskraftige kommuner* gave sufficient autonomy to municipalities in defining their themes, goals and methods for their climate change plans
- *Local business and economy-driven municipalities* (approximately 14% responded in this theme), are triggered by economic development and possibilities to cut costs related to the use of energy. This theme is purely *bottom up*
- *Municipalities with a tradition in local sustainability work as well as with an ambition to become leading in sustainability work* (approximately 5% responded in this theme). This theme is purely *bottom up*
- *Municipalities triggered by general development in society* (approximately 3% responded in this theme). This theme is purely *top down*

- *Municipalities driven by local climate threats* (approximately 1% responded in this theme). This theme is purely *bottom up*

Of the 88 Norwegian responding municipalities, 57% stated that their local climate change strategy was developed with help from an externally funded project; 35% said that the climate strategy was not part of an externally funded project; and 8% couldn't say. Of 50 respondents, 70% said that no human resources were allocated to climate work after the externally funded project.

When asking in which other municipal strategies or plans climate change was present, most respondents said municipal strategy and/or vision (71% of the respondents), master plan, incl. land use and building strategies (51% of the respondents) and municipal budget (44% of the respondents). Only 1% of the responses state that climate issues are not present in other strategies. Of the 42 respondents, 24% state that climate goals are very well or well in line with other relevant municipal strategies or plans. A further 48% said that the goals are moderately in line with other relevant municipal strategies or plans.

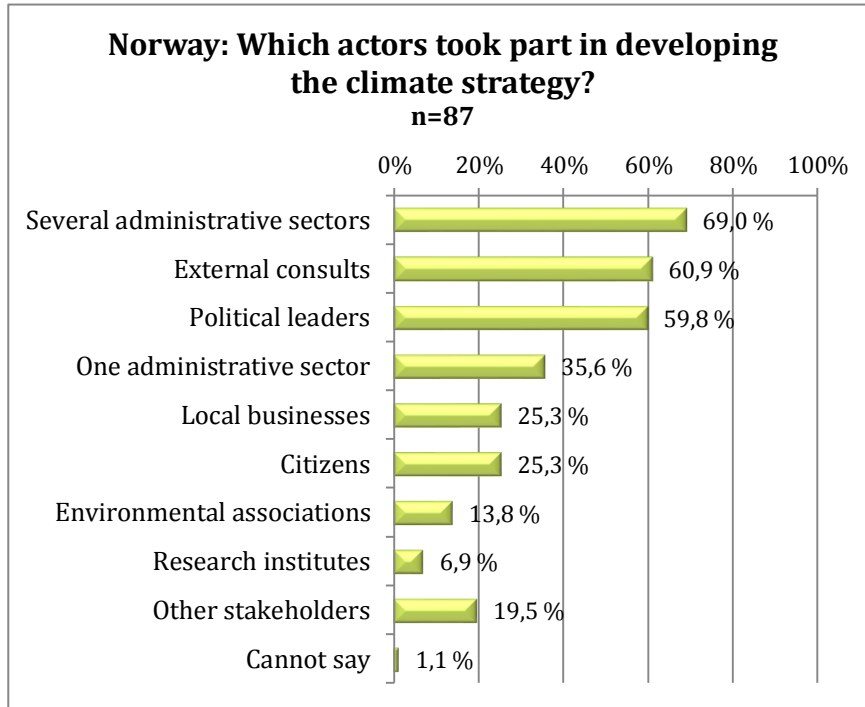
## 3.2 Governance structure in Norway

Eighty-eight municipalities have responded to the question about which institutions in the municipality are the main initiators in climate change issues. Of these municipalities, 20% said the head of environment is the main initiator, and 15% say it is the technical manager.

With regard to *developing a strategy* (87 municipalities responded to the question, which of the following actors participated in developing a climate strategy), 69% stated that several different administrative units were responsible, as compared to 36% who noted that only one administrative unit was operative. 61% of the respondents replied that external consultants were involved and 60% said that political leaders were involved, although this could be in cooperation with the responsible units. In nearly two-thirds of the municipalities, where the climate strategy was an integrated effort, the most common sectors are, in descending order: Urban and regional planning sector, technical sector, housing and construction sector, forestry and farming sector, central administration.

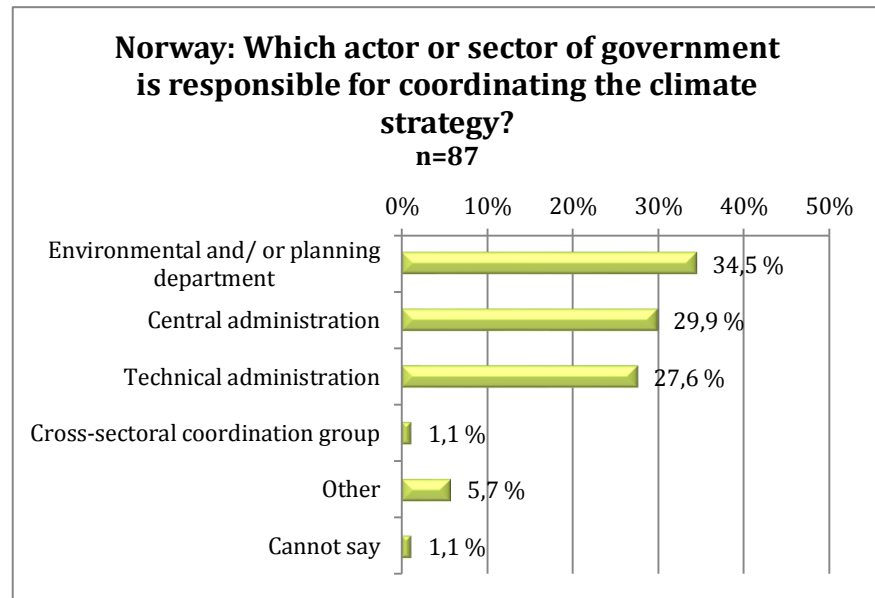


**Diagram 5. Actors taking part in developing the climate strategies in Norway**



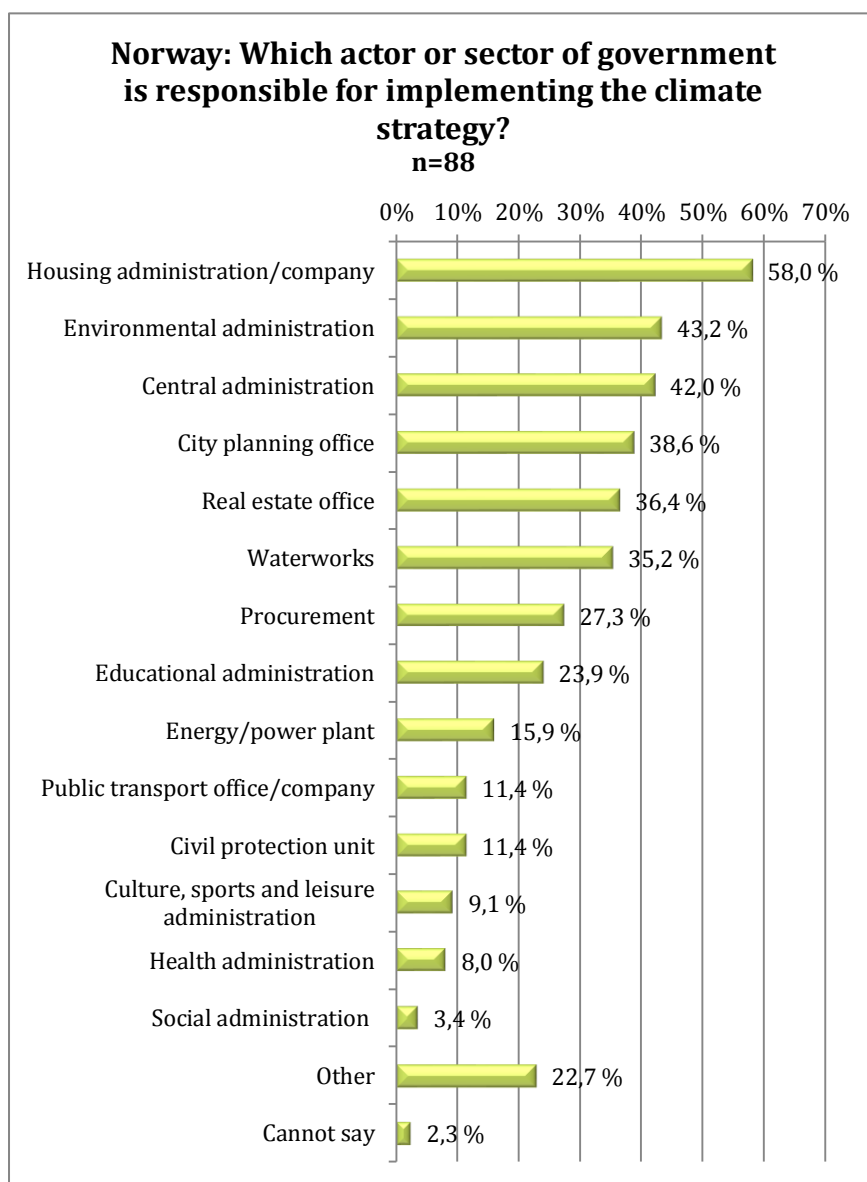
Among the municipalities that responded (87 municipalities responded to the questions: Which municipal sector is responsible for coordinating the climate change strategy; and 88 municipalities responded to the question: Which municipal sector(s) is/are responsible for implementing the climate change strategy), about 35% responded that the environmental and/or planning department is responsible for *coordinating the climate change strategy*, 30% responded the central administration and 28% the technical sector.

**Diagram 6. Actors or sectors of government responsible for coordinating climate strategies in Norway**



The responsibility for *implementation* on the other hand is spread among several sectors, including, for instance, housing administration/ housing company, environmental administration, central administration, city planning office, real estate office and waterworks. Please be aware that the questions are of multiple choice characters, implying that municipalities can report several sectors. In this analysis, we only focus on the most common sectors and not on the amount of shared responsibility between different sectors.

**Diagram 7. Actors or sectors of government responsible for implementing climate strategies in Norway**



In addition to the municipal organisation, municipalities were asked what other actors/stakeholders have been involved in the local climate work. Eighty-nine municipalities responded to this question and 45% of the respondents said associations and non-governmental organisations, 40% businesses, and 28% for individual citizens. Of the responses, 19% stated that no stakeholders outside city administration were involved.

In general, cooperation between the different sectors in the municipal organisation is very good, good or quite good (67% of 87 responding municipalities). Forty-five of the responding municipalities have commented on factors that influence the cooperation, either positively or

negatively. We have categorised factors that contribute to good cooperation into five themes:

- Good routines for cross-sectoral work, such as working groups, political steering groups
- Leadership
- Concrete projects to work on
- The national programme *Framtidens Byer*
- Individual engagement

Factors that prohibit or hinder cross-sectoral cooperation can be categorised into five themes:

- Lack of time and money particularly related to follow up
- Lack of prioritisation or different priorities in different sectors
- Lack of routines for daily work
- Lack of political engagement and ownership
- Lack of understanding or communication

### 3.3 Success factors in Norway

Eighty-eight municipalities responded to the question regarding whether the implementation of the strategy is defined in the climate strategy or a separate climate action plan. Of the respondents, 77% chose the option “yes, it has been defined measure by measure in the climate strategy or a separate action plan on how the strategy will be implemented”. A further 21% responded that “implementation has partly been defined but not thoroughly”. In the question about the time frame for implementing the climate strategy, only 5% stated that there is no time frame defined for implementing the climate strategy.

The same applies for monitoring and follow up. Of the 101 respondents, 48% answered that responsibilities, time frame and indicators for the measures to be monitored have been defined; a further 33% said that monitoring of the measures has been considered in the climate strategy, but responsibilities, time frame and indicators have not been completely defined.

When asking if measures defined in the climate strategy have been considered in the municipality budget, 35% of the 88 responding municipalities said yes, 51% said no, and 14% couldn’t say.

Eighty-eight municipalities responded to the question asking if the goals that are stated in the climate change strategy will be reached as planned. Approximately 10% of the municipalities expect the goals to be reached, and a further 49% noted that the goals may be partly reached. The municipalities that have answered that they expect the goals to be reached have specified factors that contribute to the achievement of the

goals. Nine municipalities have provided answers, and we have categorised them into 5 themes. Municipalities can belong to several of these:

- *Economic profit* (approximately 44% responded in this theme)
- *Desirable effects on the environment* (approximately 11% responded in this theme)
- *Political leadership and engaged management* (approximately 22% responded in this theme)
- *Organisation, follow up and cooperation* (approximately 33% responded in this theme)
- *Individual enthusiasts* (approximately 11% responded in this theme)

Municipalities were also asked in to evaluate certain factors on a scale of 1–5 about how important they are for successful local climate change work. According to 88 respondents, the four most important factors were in descending order:

- financial resources for climate change investments
- positive attitude of political and administrative leaders
- reaching mutual understanding of the importance of the climate change work within the local government and
- human resources for climate change work

### 3.4 Challenges in Norway

Eighty-eight Norwegian municipalities responded to the question regarding whether the goals that are stated in the climate change strategy will be reached as planned. Approximately 79% of the municipalities have answered that the goals will be reached only partially or not at all. Seventy municipalities have provided valuable input on factors that have hindered full implementation of the climate change strategy. We have categorised the answers into 6 main themes. The municipalities can belong to several of these:

- *Lack of resources for implementation of climate measures* (approximately 30% responded in this theme). This relates mainly to economic resources for concrete climate adaptation measures and energy-savings investments
- *Lack of political interest and priorities* (approximately 20% responded in this theme). This relates not only to lack of engagement, but unwillingness on the part of politicians to make climate change a priority
- *Lack of responsibility and organisational structure* (approximately 17% responded in this theme). Respondents discussed how many of the climate change goals were too ambitious, and the municipality lacked the organisational structure to deal with such a wide-ranging plan.

They also mentioned the responsibilities for climate work were so far quite unclear regarding responsibilities and ownership of the question

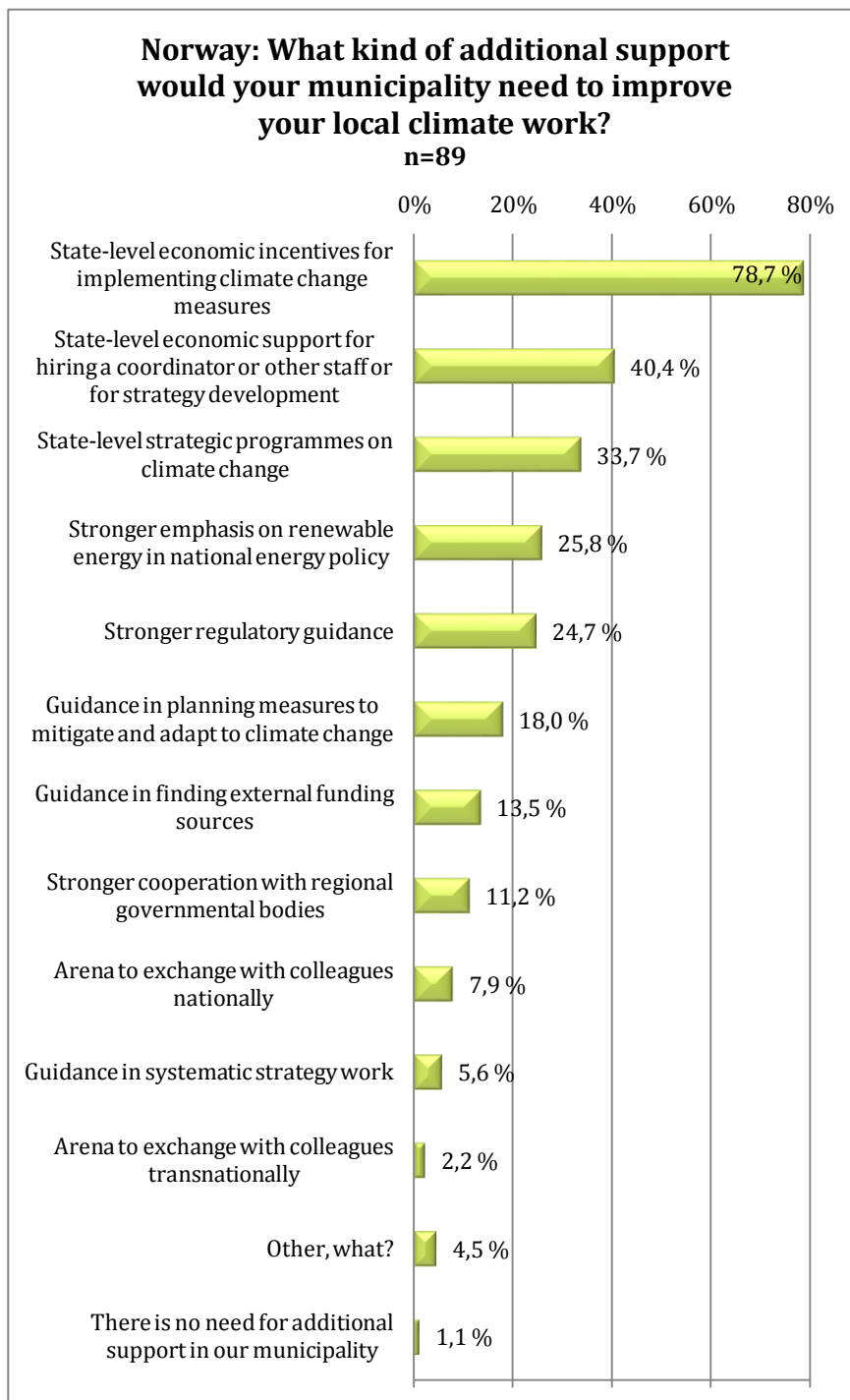
- *Lack of experience in climate work* (approximately 11% responded in this theme). Several municipalities mentioned that their climate work was not proceeding as planned due to both the short time frame (many projects have only just begun) and lack of previous experience to fall back on
- *Lack of clear signals from national authorities* (approximately 7% responded in this theme). The lack of clear signals from national authorities and regulations made it difficult for some municipalities to make priorities regarding energy use, adaptation etc. Many felt that trade-offs between sectors would need to be made, but wanted more guidance on how to do this
- *Lack of knowledge/ human capacity* (approximately 6% responded in this theme). Four municipalities mentioned that they currently did not have sufficient knowledge yet to deal with climate change implementation or that there was not proper human resources within the municipality to take up such challenges

### 3.5 Attitudes, needs and gaps in Norway

The question about attitudes (23 municipalities provided comments) remarked that economic realities were often a factor in how climate was considered. Also, lack of knowledge and interest was mentioned. In the same vein, nearly 59% of the political leadership in the municipalities have very positive or positive views towards local climate work (87 municipalities responded to the question). Again, lack of resources is a hindering factor, as well as diverting interests among different parties. The issue of diverting interests also appears in the question: Are diverting political interests between the bigger parties large or not (88 respondents). As many as 30% answered that diverting political interests were large.

Eighty-nine municipalities answered the question about support needs and gaps, and a big majority reported that national economic incentives are lacking. This corresponds with the answers to what triggered climate change work. Often, the municipalities reported that national incentives and laws were strong driving forces.

**Diagram 8. Support needs in Norway**



## 4. Climate strategies in Finnish municipalities

*Lotta Mattsson and Kirsi-Marja Lonkila*

In 2012, the proportion of all Finnish municipalities that have a climate change strategy in place or are preparing one is 34%. This means that Finnish municipalities have less climate change strategies in place than municipalities in Sweden and Norway. One reason for the relatively low proportion is that municipalities haven't received similar amounts of financial support from the state to prepare local climate strategies. Still, the amount of municipal climate change strategies has been increasing in recent years. A survey similar to this was made in 2009, and it was discovered that only 11% of Finnish municipalities had a climate change strategy in place.<sup>4</sup>

Bilateral energy efficiency agreements between state and municipalities have been an essential form of national support for municipalities in their climate work. The Ministry of Employment and the Economy grants discretionary energy subsidies to local authorities for investment and projects. External funding and support from other sources, such as EU Life+ and the Baltic Sea Region Programme, have also been helping cities in starting local climate work or taking further steps in this process.

Currently, the Association for Finnish Local and Regional Authorities is developing a suggestion for a partnership model to reduce greenhouse gas emissions. Among other things, the "Norwegian model" of trading emissions between state and municipalities will be considered. Furthermore, in June 2012, a report of Finnish climate law, ordered by the Finnish Ministry of the Environment, was published. The report recommends national climate law as a way to make national climate policy more systematic and predictable.

Out of 336 Finnish municipalities, 154 responded to the survey through a web survey tool, Webropol.

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<sup>4</sup> Savikko, Riitta (2009): Ilmastopolitiikasta Suomen kunnissa. Kuntaliiton kysely ilmastopolitiikasta Suomen kunnissa kesällä ja syksyllä 2009.



## 4.1 Triggering factors in Finland

Of our respondents (154 municipalities in total), 43% reported that the municipality has developed a climate change strategy or is preparing one. This figure is somewhat higher than in an earlier mapping, based on which 34% of all 336 Finnish municipalities have developed a climate change strategy or are preparing one. In addition, it can be said that 145 Finnish municipalities (43%) systematically work with climate change (figure in 2009: 32%).<sup>5</sup> According to this survey, 85% of the strategies relate to both climate change mitigation and adaptation.

From a qualitative perspective, 50 municipalities have reported factors that have triggered the development of a strategy. The responses by the municipalities are categorised as being either initiated by a *top down* approach or a *bottom up* approach. Our analysis reveals that the *top down* category counts for approximately 14% of the responses, whereas the *bottom up* approach stands for 86% of the responses. Some municipalities have reported both categories as triggering factors.

A more thorough categorisation reveals five major categories of triggering factors. Municipalities can belong to several of the themes, and the approach can be either *top down* or *bottom up*.

- *Municipalities driven by regional cooperation* (approximately 44% responded in this theme). These municipalities are driven most often by development of regional climate change plans but also other factors. This theme is *bottom-up*, as cooperation is initiated by municipal leaders themselves
- *Municipalities driven by strong local politicians, local leaders or management* (approximately 36% responded in this theme). One-fifth of respondents who are classified in this category answered that many actors (instead of one clear “initiator”) were involved in initiating the local climate work. Here, proactive civil servants, politicians and citizens were mentioned. This theme is purely *bottom up*
- *Municipalities driven by national or regional initiatives* (approximately 14% responded in this theme). In this category, respondents said that the local climate work had been initiated because of participation in cooperation across municipalities, namely in the national Kuntien ilmastokampanja (Cities for Climate Protection campaign) initiated by AFLRA and proactive regional councils. This theme is purely *top down*

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<sup>5</sup> Savikko 2009. Systematic local climate change work is being done if the municipality has set a target to decrease their greenhouse gas emissions, and/or has calculated their greenhouse gas emissions, and/or has developed a climate strategy, or is preparing a climate strategy.

- *Municipalities driven by projects receiving external funding* (approximately 6% responded in this theme). Of all Finnish respondents, 49% have developed the strategy as a project receiving external funding, whereas 43% of the responding municipalities developed the climate strategy as municipal work. Of 31 respondents, 58% said that no human resources were allocated to climate work after the externally funded project. This theme is mainly *bottom up* since Finnish municipalities have mostly been initiating the projects themselves and seeking funding for their ideas. In some cases, projects like CHAMP have sought out interested “pilot cities”, being more top down<sup>6</sup>

When asking in which other municipal strategies or plans climate change was present, most respondents said municipal strategy and/or vision (56% of the 66 respondents), municipal budget and action plan (24% of the respondents) and sustainable development programmes (24% of the respondents). 9% of the respondents state that climate issues are not present in other strategies. Of the 51 respondents, 59% state that climate goals are very well or well in line with other relevant municipal strategies or plans. A further 27% said that the goals are moderately in line with other relevant municipal strategies or plans.

## 4.2 Governance structure in Finland

With regard to *developing a strategy* (66 municipalities responded to the question regarding which of the following actors participated in developing a climate strategy), 82% stated that several different administrative units were responsible, as compared to 14% who noted that only one administrative unit was operative, usually the environmental department. Of the respondents, 44% replied that political leaders were involved, although this could be in cooperation with the responsible units. In over half of the municipalities, where the climate strategy was an integrated effort, this was generally a cooperation between environmental, technical and central administration. Additional actors in developing the climate strategies included local businesses (33%), external consultants (20%), research institutes (12%), environmental organisations (11%) as well as citizens (11%).

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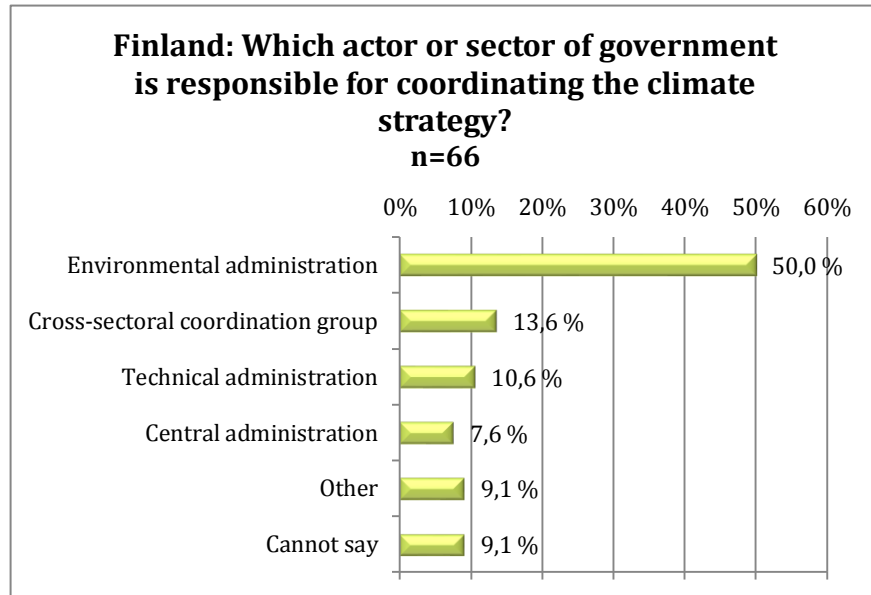
<sup>6</sup> CHAMP project.

**Diagram 9. Actors taking part in developing the climate strategies in Finland**



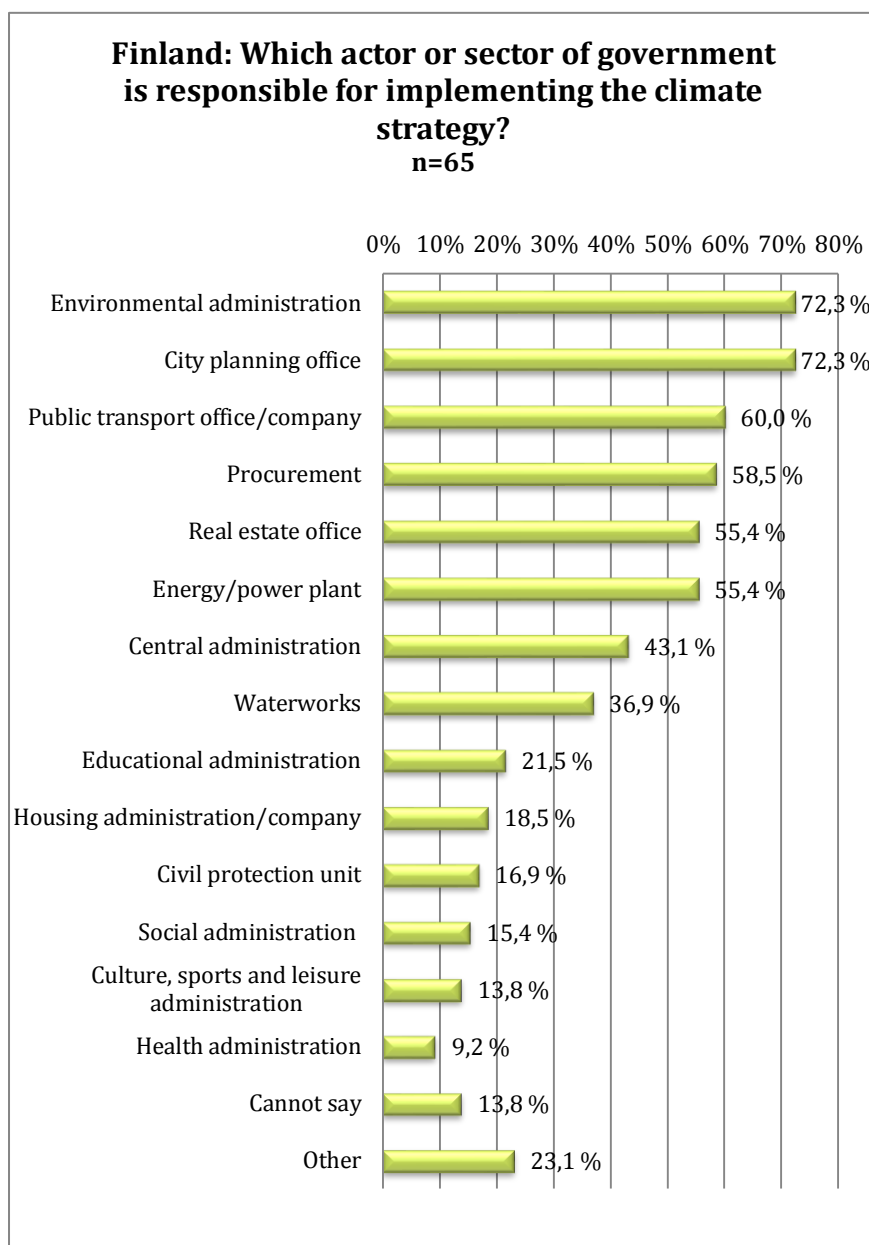
Among the municipalities that responded (54 municipalities responded to the questions: Which municipal sector is responsible for coordinating the climate change strategy; Which municipal sector(s) is/are responsible for implementing the climate change strategy), 50% responded that the environmental sector is responsible for *coordinating the climate change strategy*. A cross-sectoral working group got 14%, the technical sector 11%, and the central administration 8% of the answers.

**Diagram 10. Actors or sectors of government responsible for coordinating climate strategies in Finland**



The responsibility for *implementation* on the other hand is spread among several sectors, including environment (72%), urban planning (72%), transport (60%), procurement (59%), energy companies (55%), real estate offices (55%) and in 7<sup>th</sup> place, central administration (43%). Please be aware that the questions are of multiple choice characters, implying that municipalities can report several sectors. In this analysis, we only focus on the most common sectors and not on the amount of shared responsibility between different sectors.

**Diagram 11. Actors or sectors of government responsible for implementing climate strategies in Finland**



In general, cooperation between the different sectors in the municipal organisation is good or quite good (46% of 65 responding municipalities). Twenty of the responding municipalities have commented on factors that influence the cooperation, either positively or negatively. Half of these 20 respondents were only starting to implement the climate strategy and couldn't evaluate organisation of the work yet. Of the 154 municipalities responding to the question about which institutions in the municipality have the leadership in climate change issues, 24% an-

swer that the municipal executive board has the leadership. The head of environment gets 19% of the responses.

In addition to the municipal organisation, municipalities were asked if other actors/stakeholders have been involved in the local climate work. Of the 154 municipalities responding to this question, 32% said yes, 54% no and 14% couldn't say.

### 4.3 Success factors in Finland

Sixty-six municipalities responded to the question regarding whether the actions that are stated in the climate change strategy will be implemented as planned. Approximately 15% of the municipalities expect to implement these activities as planned, and a further 61% noted that they will be partly implemented. The municipalities that have answered that they expect to implement these activities as planned have specified factors that contribute to the achievement of the goals. Nine municipalities have provided answers, and we have categorised them into three themes. Municipalities can belong to several of these:

- *Organisation, follow up and cooperation* (approximately 70% responded in this theme). This implies that climate work is organised in a cross-sectoral way with clear responsibilities and monitoring routines. It also includes those who thought climate goals are well integrated into other strategies and plans
- *Political leadership and engaged management* (approximately 40% responded in this theme). This implies that there is a strong interest among politicians and management teams
- *Sufficient budget and resources for climate work* (approximately 30% responded in this theme). In this category, we find those municipalities who have received "extra" resources for climate work and they find climate change work to be successful, especially if the work is also economically profitable

Sixty-six municipalities responded to question regarding whether the implementation of the strategy is defined in the climate strategy or a separate climate action plan. Of the respondents, 49% chose the option "yes, it has been defined measure by measure in the climate strategy or a separate action plan on how the strategy will be implemented". A further 24% responded that "implementation has partly been defined but not thoroughly". Then, 3% responded that implementation has not been defined, and 24% answered that they couldn't say. In the question about the time frame for implementing the climate strategy, 9% stated that there is no time frame defined for implementing the climate strategy.

The same applies for monitoring and follow up. Of the 66 respondents, 32% answered that responsibilities, time frame and indicators for the

measures to be monitored have been defined, and a further 49% said that monitoring of the measures has been considered in the climate strategy, but responsibilities, time frame and indicators have not been completely defined. In the question regarding whether measures defined in the climate strategy have been considered in the municipality budget, 26% of the 68 responding municipalities said yes, 34% said no, and 40% couldn't say.

Municipalities were also asked to evaluate certain factors on a scale of 1–5 about how important they are for successful local climate change work. According to 128 respondents, the four most important factors were, in descending order:

- positive attitude of political and administrative leaders
- awareness and knowledge of what activities needed to mitigate and adapt to climate change and
- financial resources for climate change investments
- reaching a mutual understanding of the importance of the climate change work within the local government

#### 4.4 Challenges in Finland

Sixty-six municipalities responded to the question regarding whether the actions stated in the climate change strategy will be implemented as planned: 15% answered that the goals stated in the climate change strategy will be reached as planned, 61% of the municipalities have answered that the goals will be reached only partially, and only 1% thought the activities will not be implemented at all.

Twenty-eight municipalities have provided valuable input on factors that have hindered full implementation of the climate change strategy. We have categorised the answers into five main themes. The municipalities can belong to several of these:

- *Lack of political interest and priorities* (approximately 43% responded in this theme). This relates not only to lack of engagement, but unwillingness on the part of politicians to make climate change a priority
- *Lack of experience in climate work* (approximately 25% responded in this theme). Several municipalities mentioned that their climate work was not proceeding as planned due to both the short time frame (many projects have only just begun) and lack of previous experience to fall back on
- *Lack of resources for implementation of climate measures* (approximately 18% responded in this theme). This relates mainly to economic resources for concrete climate adaptation measures and energy-savings investments

- *Lack of responsibility and organisational structure* (approximately 18% responded in this theme). Respondents discussed how the municipality lacked the organisational structure to deal with such a wide-ranging plan. They also mentioned the responsibilities for climate work were so far quite unclear regarding responsibilities and ownership of the question
- *Lack of monitoring routines* (approximately 11% responded in this theme). Systematic monitoring routines of climate activities have been set up in approximately every third responding municipality

## 4.5 Attitudes, needs and gaps in Finland

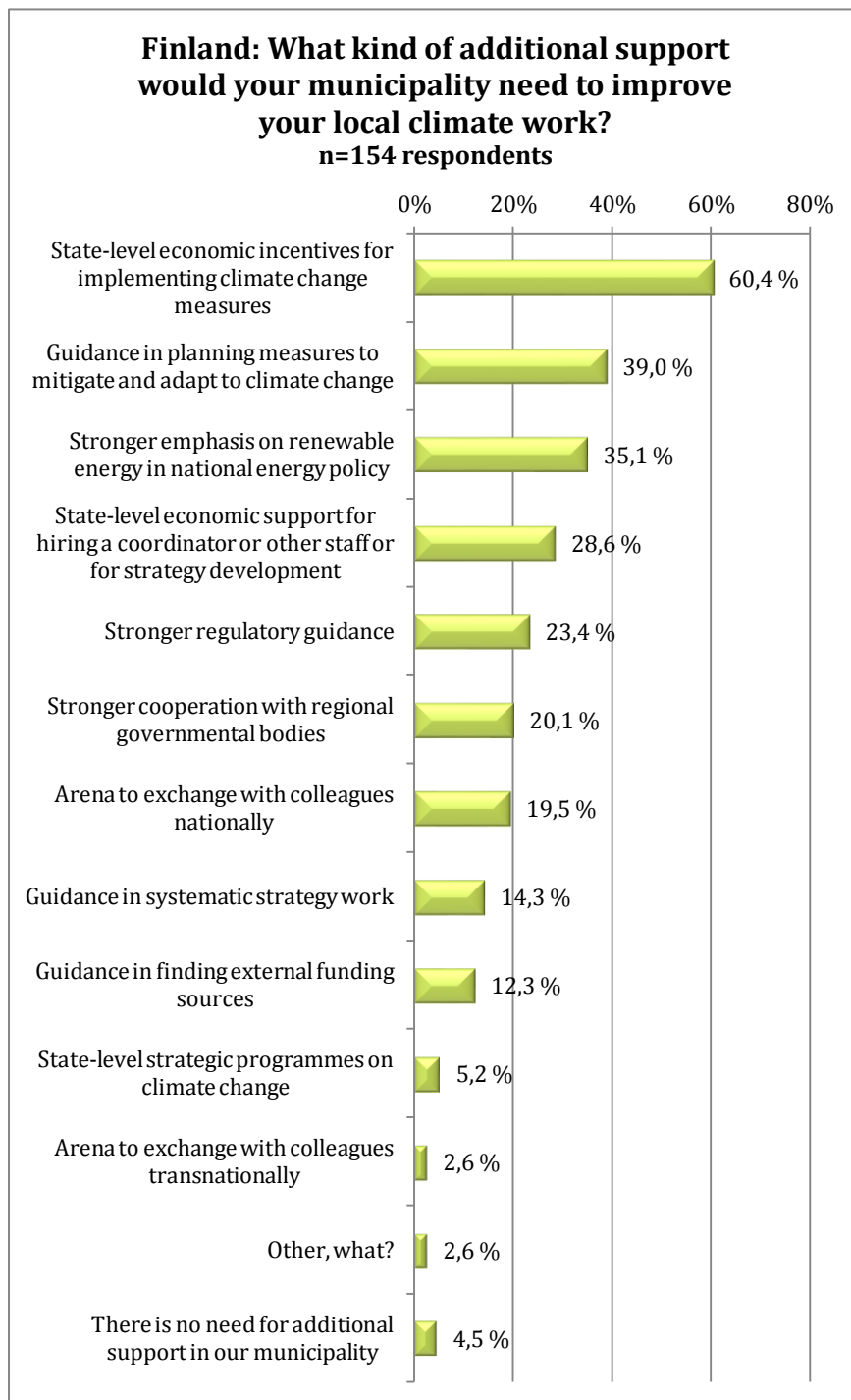
While 56% of municipal leaders have very positive or positive attitudes towards local climate work (with a further 31% being neutral), the comments to the question about attitudes remarked that attitudes towards climate issues are in general quite positive, but distant (153 municipalities responded to the question). Quite often they get displaced by “more important” issues on the agenda. However, there weren’t any responding municipalities where the attitude of the administrative leadership was seen to be clearly negative.

In the same vein, almost 52% of the political leadership in the municipalities has very positive or positive views towards local climate work (with a further 31% being neutral). Here, the municipalities differ greatly – in some municipalities namely, some active politicians have initiated the climate work, whereas in many municipalities, climate change appears to be a very distant, global issue that they cannot grasp at the local level.

In the question about the needs and the gaps, the 154 responding municipalities mostly reported needs related to national-level activities.



**Diagram 12. Support needs in Finland**



## 5. Climate strategies in Icelandic municipalities

*Kirsi-Marja Lonkila*

Iceland has 74 municipalities, of which the capital Reykjavík has some 37% of the total Icelandic population. Reykjavík outnumbers other Icelandic municipalities and is one of the three municipalities having a climate change strategy in place in Iceland. In Iceland, the local work addressing climate change is only beginning in many municipalities. In general, climate change is not seen as a threat by the local politicians or citizens, rather as a benefit. In smaller municipalities, acting on this issue is solely depending on enthusiastic individuals.

The state has not directed any support actions for Icelandic municipalities to start their work with climate change issues, and the municipalities would also need guidance in how to prepare a climate strategy. Iceland has a national climate change strategy for 2007–2050 aiming at reduction of net emissions of greenhouse gases by 50–75% until the year 2050, compared to 1990, but municipalities are not specifically addressed by the strategy.

The survey for Icelandic municipalities was divided into two versions. Reykjavik, knowing to have a climate change strategy in place, answered the “full version” and the other 28 municipalities responded to a shorter version with 12 questions. This was because it was expected that the vast majority of Icelandic municipalities haven’t developed a climate change strategy yet. In many questions, multiple choices differ in these two versions. This has been taken into account when writing this report.

Out of 74 Icelandic municipalities, 29 responded to the survey through a web survey tool, Webropol.

## 5.1 Triggering factors in Iceland

Of our respondents, 11% (three municipalities in total) reported that the municipality has developed a climate change strategy or is preparing one. Three out of four strategies are strategies for one municipality, and only one is a joint effort within several municipalities.

From a qualitative perspective, only one municipality (Reykjavik, which responded to a longer questionnaire than the others) has reported factors that have triggered the development of a strategy. In a different setting (multiple choice question), three other municipalities responded to the question. The responses by the municipalities are categorised as being either initiated by a *top down approach* or a *bottom up approach*. In the Icelandic case, our analysis reveals that in Reykjavik both categories can be seen as triggering factors.

When categorised according to other Nordic countries, Icelandic municipalities are part of

- *Municipalities driven by strong local politicians, local leaders or management.* (Three out of four respondents chose this theme.) Both political and administrative leaders were interested in developing a climate strategy. This theme is purely *bottom up*
- *Municipalities driven by national or regional initiatives.* (One municipality responded in this theme.) The local climate work can also be initiated by the development of national or regional initiatives, in this case, a report about the possibilities of decreasing greenhouse gases in different economic sectors. This theme is purely *top down*
- *Municipalities driven by regional cooperation.* (One municipality responded in this theme.) These municipalities are driven most often by development of regional climate change plans but also others. In the Icelandic case, the regional Fire Brigade was mentioned. This theme is partly *bottom up*, partly *top down*

When asked in which other municipal strategies or plans climate change was present, master plan, incl. land use and building strategies, and waste management plan got the most responses from the nine respondents (both 22%). Of the responses, 11% state that climate issues are not present in other strategies. Based on one Icelandic municipality responding to the questions about how climate goals are in line with other relevant municipal strategies and plans, the answer is moderately.

## 5.2 Governance structure in Iceland

In the question “Which of the following actors participated in *developing* a climate strategy”, the municipality that responded to the longer version answered that all administrative sectors participated in preparing the climate strategy. The other three municipalities all mentioned that the mayor or elected officials had participated in the preparation of the strategy. Two municipalities also mentioned government leaders/officials.

Of all Icelandic municipalities, additional actors mentioned in developing the climate strategies were external consultants (three municipalities). Also, citizens participated (two municipalities). One municipality also mentions NGOs and all other interested parties being able to take part through the city website.

Among the municipalities that responded to the question about coordinating and implementing the climate strategy (four municipalities responded to the question: Which municipal sector is responsible for coordinating the climate change strategy; and one municipality responded to the question: Which municipal sector(s) is/are responsible for implementing the climate change strategy), about 50% responded that the environmental sector is responsible for coordinating the climate change strategy. The other 50% said the technical sector is responsible. Based on one municipality, the responsibility for implementation of the climate change strategy also lies only on the environmental sector.

## 5.3 Success factors and challenges in Iceland

Based on one Icelandic municipality responding to the questions about the implementation of climate change strategies, the implementation has been partly defined in the climate strategy, but not thoroughly. The time frame for implementation is 5–10 years (strategy in place since 2009). (Three other municipalities, responding to the shorter questionnaire version, say there is no defined time frame for the implementation of their climate change strategies.) The municipality expects to implement these activities to some extent as planned. However, the activities defined in the strategy have been considered in the municipal budget by reserving funds for consultancy.

This way the municipality belongs to the following themes:

- Success factor theme: *Sufficient budget and resources for climate work*. In this category, we find those municipalities who have received “extra” resources for climate work and those find climate change work to be successful especially if the work also is economically profitable

One reason mentioned for not being able to implement activities wholly as planned is that the CO<sub>2</sub> emissions are only measured every other year.

- Challenge theme: *Lack of knowledge/ data*. Municipalities mentioned that they currently did not have sufficient knowledge or data to deal with climate change implementation or that there was not proper human resources within the municipality to take up such challenges

The municipality responding to the longer version was also asked to evaluate certain factors on a scale of 1–5 about how important they are for successful local climate change work. Five factors were evaluated as being very important:

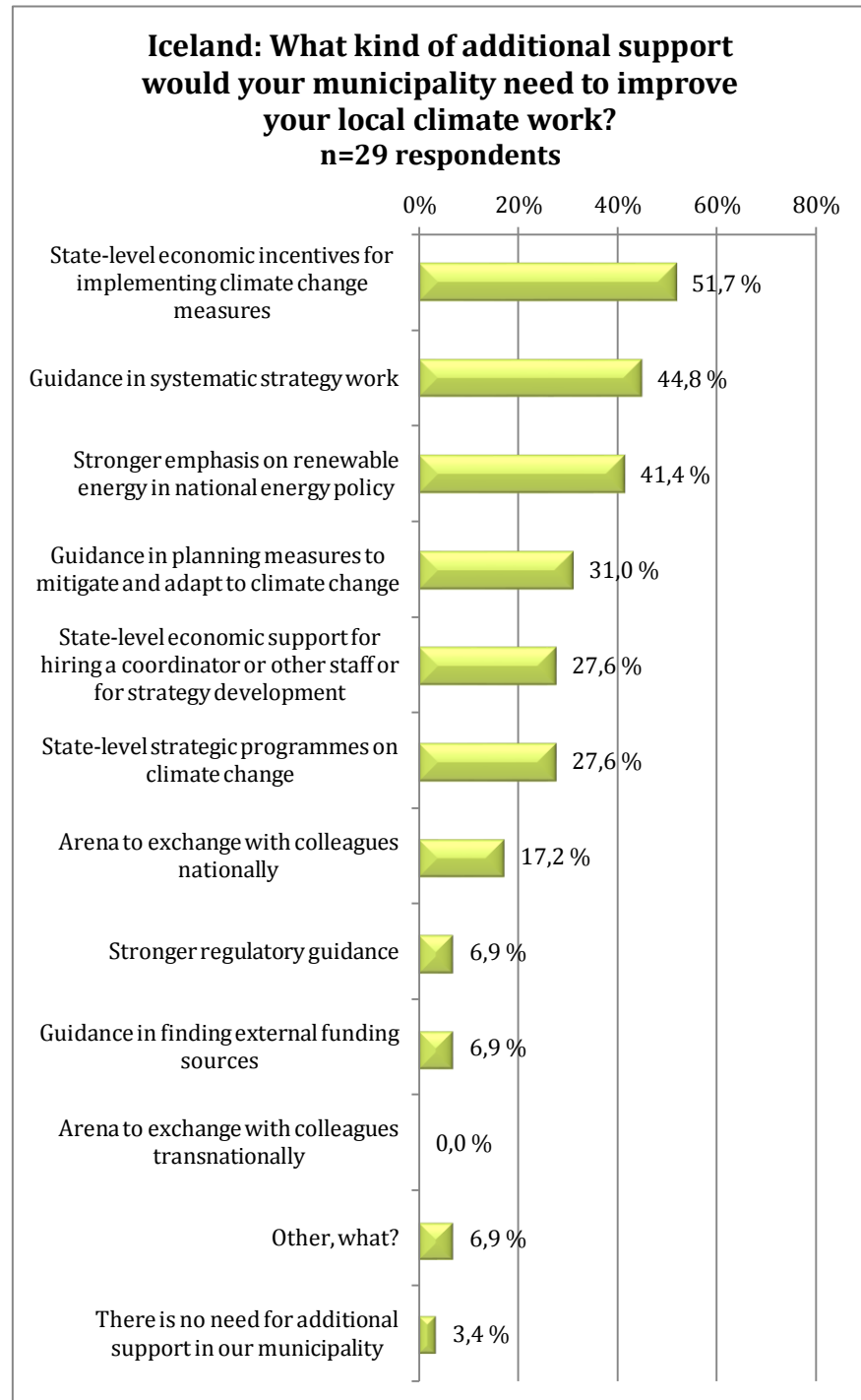
- financial resources for climate change investments
- positive attitude of political and administrative leaders
- reaching a mutual understanding of the importance of the climate change work within the local government
- human resources for climate change work and
- greenhouse gas emission data available and of good quality

## 5.4 Attitudes, needs and gaps in Iceland

While most of the 28 respondents couldn't evaluate if there was a large political division between the major parties in municipal climate change policy (71%), 25% said there was no large division on the issue.

Twenty-nine municipalities answered the question about support needs and gaps, and the most common answers were related to national-level economic incentives and policy emphasis on renewable energy and guidance, both in strategy work and planning the concrete measures in local climate work. One other issue suggested by municipalities was to establish a cooperation platform for plans and actions.

**Diagram 13. Support needs in Iceland**



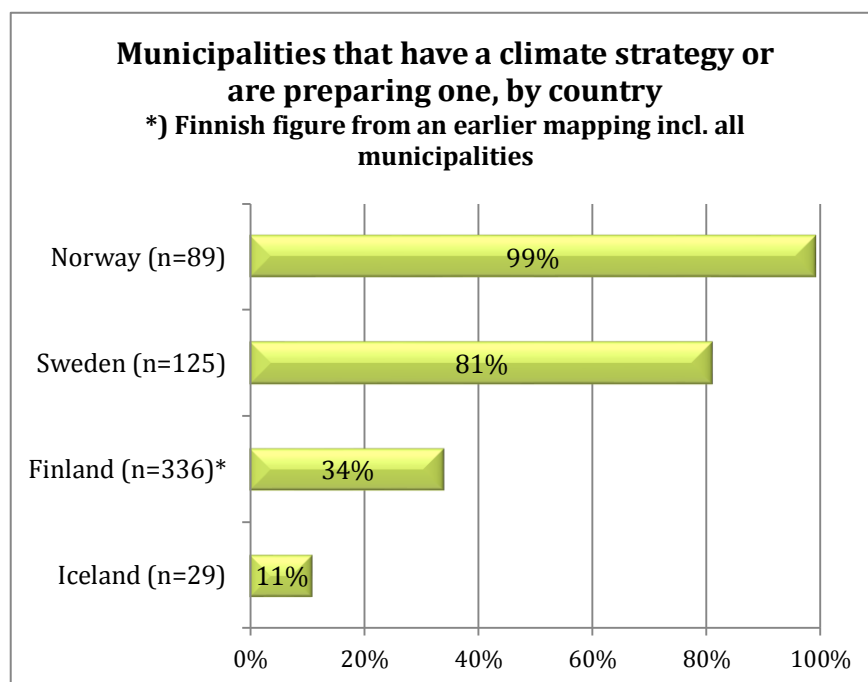


## 6. Comparison between countries

### 6.1 Triggering factors

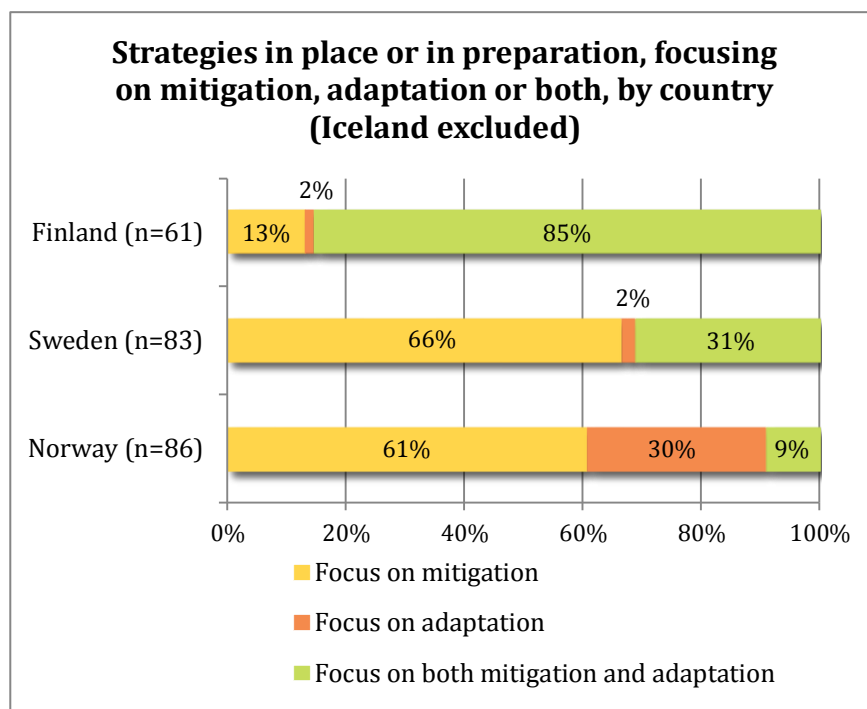
One of the main tasks of the survey is to identify factors that have a major role in leading the municipalities to develop climate change responses. As seen from the survey results, there are big differences in how municipalities in different Nordic countries work with climate change issues. In Iceland, 11% of municipalities have a climate strategy or they are preparing one. In Finland, the proportion is 34%, in Sweden 81% and in Norway 99%. Mostly, these strategies are focused on climate change mitigation or a combination of mitigation and adaptation to climate change.

**Diagram 14. Municipalities that have a climate strategy or are preparing one, by country**





**Diagram 15. Strategies in place focusing on mitigation, adaptation or both, by country (Iceland excluded)**



On a global scale, Nordic countries are “quite well off” when it comes to impacts of the changing climate. Nevertheless, Nordic local authorities are actively working to mitigate and adapt to climate change. The reasons for this differ a lot in Nordic countries. In this survey, municipalities could report as open text answers on which driving forces they felt started the climate work in the municipality. The answers were divided into different themes and approaches, according to if they were initiated *bottom up* or *top down*. Municipalities from all countries reported the following themes to be important triggering factors for local climate work:

- strong local politicians, local leaders or management
- national regulation, national and regional initiatives
- inter-municipal and regional cooperation
- local business and economy
- tradition in sustainability work

Finnish municipalities work with climate issues almost purely *bottom up* without strong guidance or support from the national level. The strongest themes were all *bottom up* and related to regional cooperation or inter-municipal cooperation (44% responded in this theme) and strong local politicians, local leaders or management (36% responded in this theme).

Norway, on the other hand, is strongly *top-down* regulated, and almost all Norwegian municipalities have climate strategy in place, whereas the

figure in Finland is only 34%. The themes identified in the Norwegian responses suggest that national pressure and regulation has been an essential trigger for their local climate work. The strongest theme was *top down* and related to national regulations (66% responded in this theme). Norwegian municipalities also reported the highest proportion of municipalities that received external funding for developing their climate strategy.

In Iceland, the only municipality responding to this question mentioned triggering factors from both *bottom up* and *top down* approaches.

Swedish municipalities were more inclined to *top down* than *bottom up*. The strongest themes were related to climate work as part of general sustainability work in the municipality, both *bottom up* (35% responded in this theme) and *top down* (35% responded in this theme). Another strong theme was the connection to energy plans and energy efficiency work (30% responded in this theme).

## 6.2 Governance structure

Governance structure was analysed by dividing it into three elements – who are the actors responsible for *developing*, *coordinating* or *implementing* a climate change strategy in the municipalities.

In all Nordic municipalities, it is more common to *develop* a climate strategy as cooperation between several municipal administrative sectors than as an independent effort of one administrative sector. In 10–14% of Finnish, Norwegian and Swedish municipalities, only one administrative sector developed their climate strategy. In these cases, the administrative sector in Sweden and Finland was the environmental department, whereas in Norway, technical, environmental and planning departments were all mentioned.

With the small sample we have from Iceland, it seems that using planning consultants in preparing climate strategies might be more common in Iceland than elsewhere in the Nordic countries. All of the three responding municipalities had used external consultants to develop their strategies. The figure is 20% in Finland and 22% in Sweden. Of the responding Norwegian municipalities, 61% have used external consultants in developing their strategies.

*Coordinating* climate change strategies is mostly the responsibility of central administration and the environmental department. In Sweden, 51% responded that central administration coordinates the strategy, and almost 19% said it is the environmental sector. Of the Norwegian municipalities, almost 35% say that environmental sector has the coordinating responsibility, 30% central administration and 28% technical sector and almost 35% environmental sector. Icelandic municipalities say it is either the technical or environmental sector (both got 50% of the responses). In Finland, 50% say the environmental department is responsible for coordinating the climate strategy, giving 14% a cross-sectoral working group, 11% to technical sector, and 8% to central administration.

*Implementing* climate strategies is spread among several sectors in all of the countries, except in the one responding Icelandic municipality where only the environmental department is responsible for the implementation of the climate strategy. The most common sectors include, in descending order:

- Finland: environment, urban planning, transport, procurement, energy company, real estate office, central administration
- Norway: housing company, environmental, central administration, urban and regional planning
- Sweden: central administration, urban and regional planning, environmental, real estate offices, housing companies

Compared to Norway and Sweden, the role of the central administration is less emphasised in Iceland and Finland – both in coordinating and implementing the local climate strategies. The countries can be divided in two groups by their approach – in Finland and Iceland, municipal climate strategies are strongly led by the environmental administration; whereas Norwegian and Swedish municipal climate strategies are distinctively coordinated by central administration.

In connection with this, the cooperation between different sectors to implement the climate strategy is better in Norway and Sweden. In Finland, 46% of the municipalities evaluate that cooperation between different sectors is good or quite good. The respondents saying that the cooperation is very good, good or quite good is 67% in Norway and 73% in Sweden. (In the Finnish question the scale didn't include the option "very good".) According to the survey, the most important reasons for good cross-sectoral cooperation are good routines for cross-sectoral work, such as working groups or political steering groups, and political leadership, interest and will.

### 6.3 Success factors

There has been some earlier research on the success factors for local climate work. This survey was based on the assumption that the most important success factors for local climate work are often

- enthusiastic politicians or individuals
- competencies and responsibilities of local government in international comparison
- financial and human resources allocated for the work as well as
- the priority that climate change is given in the urban political economy<sup>7</sup>

Nordic municipalities can be seen as quite a consistent group, as their competencies and responsibilities are quite large in all of the countries studied. This, however, is not the main focus of this study.

In this part, we compare the expectations of the municipalities in reaching the goals of the climate strategy, if municipalities have defined how to implement and monitor the strategies they've made, and if there is a link between the municipal budget and the climate strategy. Furthermore, we identify some success factors that municipalities brought up in their open text answers.

In the survey, the municipalities were asked if the goals stated in the climate strategy will be reached as planned. Differences between countries were surprisingly big. Swedish respondents are the most optimistic, as 30% of them believe the goals will be reached as planned, and a further 62% say that goals may partly be reached. In Finland, 15% expect to implement the activities as planned, and a further 61% believe that they will be partly implemented. Norwegian municipalities are the most pessimistic, as only 10% of the respondents believe that the goals will be reached as planned, and a further 49% say that goals may partly be reached. The only Icelandic municipality answering this question says the goals will be reached to some extent.

Besides being pessimistic about reaching the goals stated in their climate strategies, 77% of Norwegian municipalities say that implementation has been defined measure by measure, and 48% say that monitoring has been defined. Of the Swedish municipalities, 51% say that implementation has been defined measure by measure, and monitoring has been defined in 48% of the responding municipalities. In Finland, the respective figures are 49% for implementation and 32% for monitoring. The only Icelandic municipality answering these questions says that both implementation and monitoring have been partly defined but not thoroughly.

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<sup>7</sup> Bulkeley, Harriet et al. (2009): Cities and Climate Change. The role of institutions, governance and urban planning. Report prepared for the World Bank Urban Symposium on Climate Change.

Linking climate strategies to municipal budgets is essential for the strategies to succeed. We asked municipalities if their climate strategy has been considered in the municipal budget, and it was surprising that many respondents couldn't say. In Sweden, 41% of the municipalities said yes, climate strategy has been considered in the municipal budget. Of Norwegian municipalities 35% and of Finnish municipalities 26% said yes. In Iceland, the only municipality answering this question said that there is a link, as some funds for planning consultants have been reserved for the climate strategy.

Municipalities that answered that they expect the goals of the climate strategy to be reached were asked to further elaborate on the factors contributing to the achievement of the goals. Some differences can be found, although mostly the same issues come up in the answers from municipalities in all of the countries:

- Organisation, follow-up and cooperation (FIN, NOR, SWE)
- Political leadership and engaged management (FIN, NOR, SWE)
- Sufficient budgeting and resourcing (FIN, NOR, SWE, ICE)
- Economic profit (NOR)
- Desirable effect on the environment (NOR)
- Individual enthusiasts (NOR)
- Networks or national programmes (SWE)

## 6.4 Challenges

Of the respondents, 62% of the Finnish, 67% of the Swedish and 79% of the Norwegians believe that the goals stated in the climate strategy will be reached partially or not at all. As many as almost 30% of the Norwegians say that the goals will not be reached at all.

Municipalities were asked to further elaborate on the factors hindering the achievement of the goals and the most important reasons can be categorised into following themes:

- Lack of political interest and priorities (FIN, NOR, SWE)
- Lack of experience in climate work (FIN, NOR)
- Lack of resources for implementation of climate measures (FIN, NOR)
- Lack of responsibility and organisational structure (FIN, NOR, SWE)
- Lack of monitoring routines (FIN)
- Lack of national incentives /clear signals (NOR, SWE)
- Lack of knowledge and human capacity (ICE, NOR)

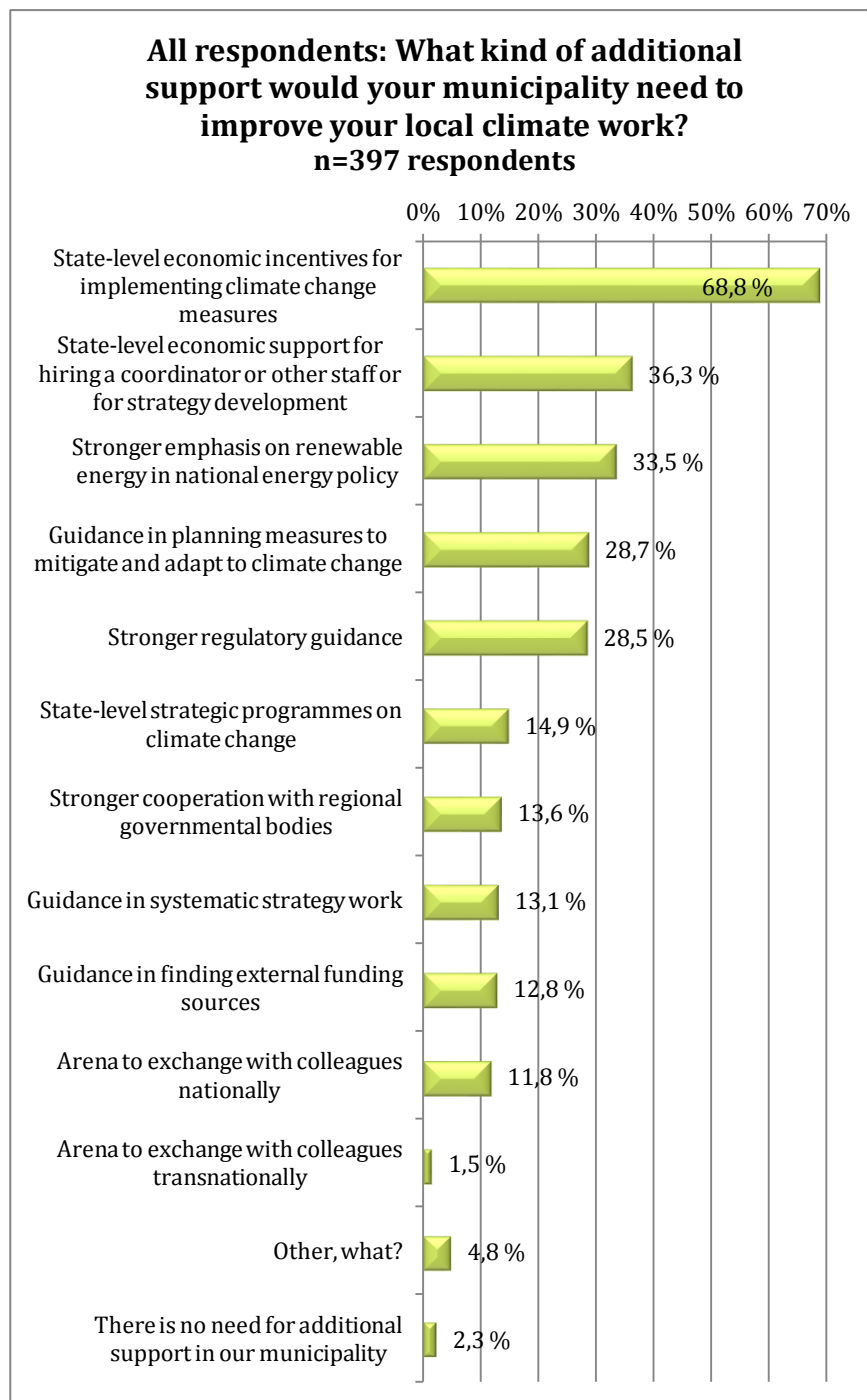
## 6.5 Attitudes, needs and gaps

The attitudes, needs and gaps of the municipalities point towards how climate change can more effectively be addressed in the future. We asked the municipalities about the attitudes of their municipal leaders and the political leadership. Of the Swedish municipalities, 69% say that their administrative management have very positive or positive attitudes towards climate change work, and 72% say the same about elected officials. Of Norwegian municipalities, 60% say that administrative management and 59% that elected officials have very positive or positive attitudes towards climate change work. Of the Norwegian respondents, 30% said that there are big diverting interests between political parties. The least positive attitudes come from Finland: 56% of the municipalities say that their administrative management has very positive or positive attitudes towards climate change work, and 52% say the same about elected officials. However, in Finland, municipalities differ in this case a great deal, as in some municipalities it is namely active local politicians who initiated climate work to begin with. The Icelandic respondent couldn't say about the attitudes; 25% said there is no political interest clash between parties about this issue.

Despite quite positive attitudes among administrative and political leaders, municipalities say, in their open text answers, that there is a lack of knowledge and interest and also "financial realities" often hinder local climate work, meaning that "climate work is a good thing as long as it doesn't cost anything".

As seen in Diagram 16, the most common needs for support relate strongly to national-level activities. However, in Iceland, municipalities differed in their wish to receive more guidance in systematic strategy work.

**Diagram 16. Needs for support (all respondents)**



# References

- Bulkeley, Harriet, Schroeder, Heike, Janda, Katy, Zhao, Jimin, Armstrong, Andrea, Chu Shu Yi & Ghosh, Shibani (2009): Cities and Climate Change. The role of institutions, governance and urban planning. Report prepared for the World Bank Urban Symposium on Climate Change.
- Savikko, Riitta (2009): Ilmastopolitiikasta Suomen kunnissa. Kuntaliiton kysely ilmastopolitiikasta Suomen kunnissa kesällä ja syksyllä 2009.  
[http://www.kunnat.net/fi/asiantuntijapalvelut/tyty/ilmastonmuutos/Documents/Ilmastopolitiikasta\\_Suomen\\_kunnissa\\_loppuraportti\\_100114.pdf](http://www.kunnat.net/fi/asiantuntijapalvelut/tyty/ilmastonmuutos/Documents/Ilmastopolitiikasta_Suomen_kunnissa_loppuraportti_100114.pdf)
- Steinar Kvale & Svend Brinkmann (2009): Interviews, Learning the Craft of Qualitative Research Interviewing.
- Norwegian Climate Municipalities. <http://www.klimakommune.enova.no/>
- CHAMP project. <http://www.localmanagement.eu/index.php/champ:home?language=en>
- Klimatarbetet i kommuner, landsting och regioner, Sveriges Kommuner och Landsting (2007). [http://www.skl.se/vi\\_arbetar\\_med/tillvaxt\\_och\\_samhallsbyggnad/klimat-och-energi/klimat](http://www.skl.se/vi_arbetar_med/tillvaxt_och_samhallsbyggnad/klimat-och-energi/klimat)





# Sammanfattning

Lokala myndigheter betraktas som centrala aktörer när det gäller att svara på klimatförändringens utmaningar. Nordiska kommuner har arbetat med hållbar utveckling sedan ett par decennier och har på senare år utarbetat ambitiösa klimatstrategier och åtgärdsplaner. I denna studie har det samlats värdefull information om hantering av klimatförändringarna i nordiska kommuner, och rapporten ger en allmän överblick över hur klimatarbetet sköts i Finland, Island, Norge och Sverige.

Studien ingår i NordLead-projektet, vars mål är att identifiera framgångsfaktorer och stödbehovet i det lokala klimatförändringsarbetet i Norden. Projektet leds av Östersjö Städernas Förbunds Miljökommission (Union of the Baltic Cities, Commission on Environment) och är delfinansierat av Nordiska ministerrådet. Rapporten baseras på en webbenkät som gjordes mellan oktober 2011 och februari 2012. Inbjudan att medverka i enkäten skickades till alla kommuner i de deltagande länderna. Svarsfrekvensen var 54 % i Finland, 41 % i Sverige, 38 % i Island och 21 % i Norge, vilket gav en total svarsfrekvens på 37 %.

Studien visar att de nordiska kommunerna i alla deltagande länder arbetar för begränsning av och anpassning till klimatförändringar. Norska och svenska kommuner har dock varit mycket mera aktiva med att utveckla lokala klimatstrategier än finländska och isländska kommuner. Detta torde bero på att det nationella stödet till kommunerna har varit svagare i Finland och Island än i de övriga länderna. Studien visar att det finns likheter vad gäller framgångsfaktorer och utmaningar, men det finns ingen "universallösning" som passar alla. Länderna skiljer sig på många sätt, och det nationella ramverket är den mest avgörande skillnaden.

Norge är det enda landet som kräver att kommunerna ska utarbeta en klimatstrategi. Av studien att döma verkar den typen av krav vara ett effektivt sätt att få igång arbetet, men detta bör åtföljas av resurser för planering, genomförande och uppföljning av klimatarbetet. Den viktigaste faktorn för att förbättra det lokala klimatarbetet i de nordiska kommunerna är i samtliga fall ekonomiskt stöd från statlig nivå för att genomföra begränsnings- och anpassningsåtgärder samt att därtill anställa klimatsamordnare och annan personal.

Kommunerna i alla medverkande länder står inför behovet av tvärsektorielt klimatarbete, och det krävs kapacitetssuppleering för att stödja de lokala myndigheterna i detta arbete. Det effektivaste sättet att organisera klimatarbetet lokalt verkar vara att låta kommunernas centrala administration samordna genomförandet av klimatstrategin. Utö-

ver kapacitetsuppbyggnad och tvärsektoriellt samarbete skulle kommunerna också behöva vägledning i systematiskt strategiarbete samt hur man planerar åtgärder för begränsning av och anpassning till klimatiförändringar. Detta gäller speciellt de mindre kommunerna.

I en internationell jämförelse har nordiska kommuner ganska bred kompetens och stort ansvar på områden som är av betydelse för begränsning av och anpassning till klimatiförändringar. Detta innebär att de nordiska kommunerna kan utöva betydande påverkan i skapandet av ett hållbarare och mer klimatvänligt Norden.

## Aspects of strategic climate work in Nordic municipalities

### NordLead Project Final Report

Nordic municipalities can have a significant impact on creating a more climate-friendly Nordic region. This study gathers valuable information about climate change management in Nordic municipalities and gives a general view to the local climate work in Finland, Iceland, Norway and Sweden.

The study aims at recognising the success factors and needs for support in Nordic local climate change work. It is based on a web survey conducted between October 2011 and February 2012, with an overall response rate of 37%.

The study shows that Nordic municipalities are actively working for climate change mitigation and adaptation. Commonalities in the success factors and challenges are found in the study; however, there is no “one size fits all” solution, because the countries differ in many respects – the national framework conditions being the most crucial difference.

