Guide to cost-effective climate work for municipalities

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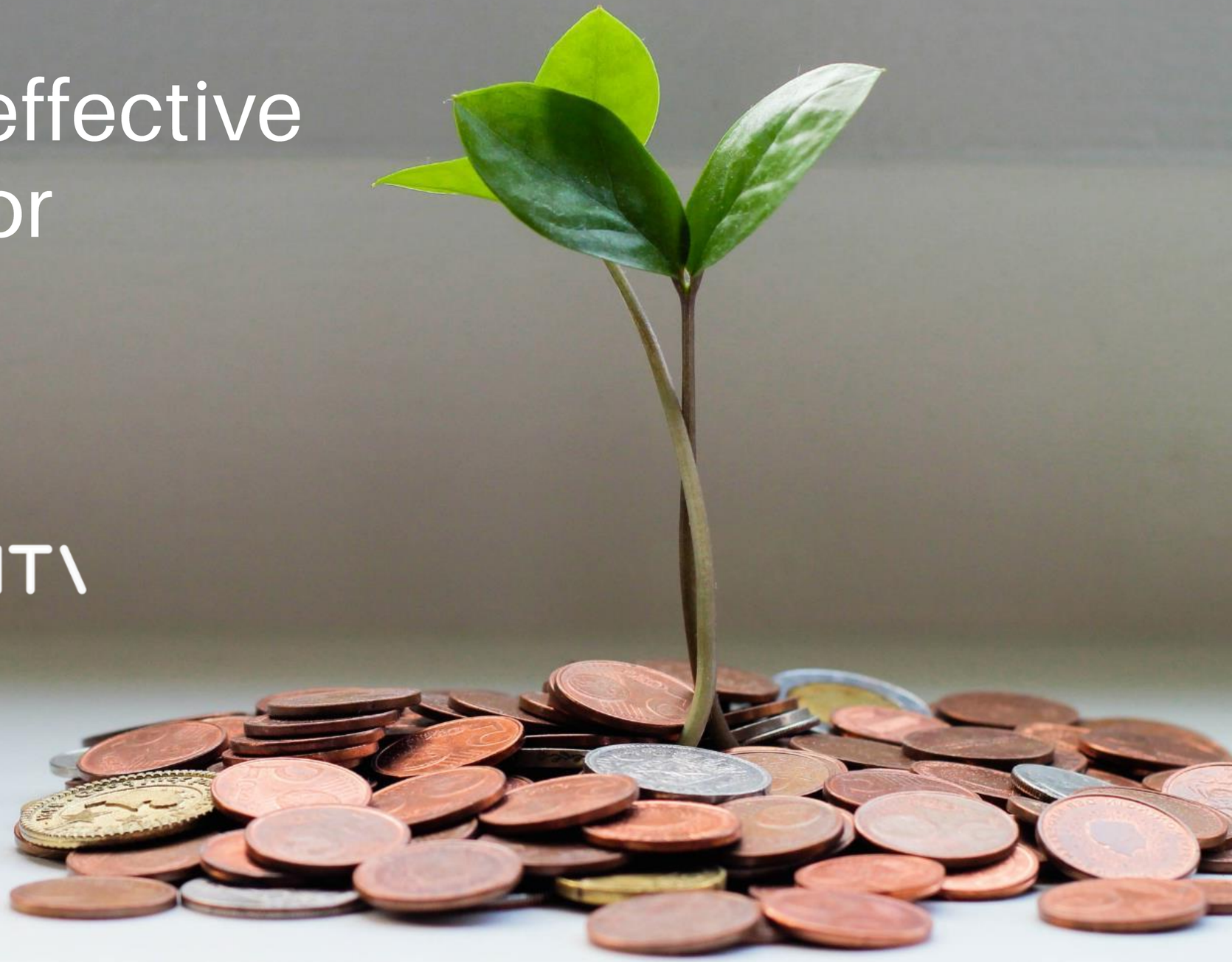
KIRKKONUMMI
KYRKSLÄTT

VIHTI



BACKGROUND

Municipalities play a key role in the implementation of Finland's national carbon neutrality target. They can build a more sustainable society and take concrete climate actions. However, climate change mitigation work may need to compete for resources, attention and actors with all the other changes that municipalities are undertaking. As such, it is vital for municipal climate work to not only focus on reducing emissions but also support the municipality's finances and vitality.

This guide for cost-effective climate work provides one perspective on how to lay the foundations for the work. These instructions were created as part of the joint project "Pienen ja keskisuuren kunnan kustannustehokkaan ilmastotyön malli (Cost-effective climate work model for small and medium-sized municipalities) between the municipalities of Kirkkonummi and Vihti, and it is funded by the Finnish Ministry of the Environment. The blueprint is based on the observations, identified bottlenecks as well as successes and failures of the two project municipalities.

These instructions are especially well-suited for small and medium-sized municipalities that are just getting started on their climate work, but municipalities that are further along on that path can also improve their climate efforts with individual tips and ideas. Each municipality is unique, and methods of climate work need to be tailored to the operations of each municipality – with a bold and innovative attitude.

This guide was created with the upcoming changes to the Climate Act in mind, and these instructions can provide support when municipal obligations of the Act are implemented.

The guide consists of five stages that lead towards a cost-effective climate work model. Although the stages are presented linearly, the steps will often overlap in the everyday operations of municipalities. Alongside the stages, the guide also presents sections on commitment, communication and cooperation that support cost-effective climate work. Success stories of the project municipalities and their identified development needs have been included to provide a concrete example of using the guide.

"Climate work has been carried out in both Vihti and Kirkkonummi for several years, however, we have had our fair share of bumps in the road.
The purpose of our cost-effective climate work guide is to share what we have learned so that the road to becoming a thriving and climate-resilient municipality would be shorter and more straightforward for other municipalities."
– Climate Coordinator for the municipalities of Vihti and Kirkkonummi Vera Järvenreuna

GUIDANCE FOR COST-EFFECTIVE CLIMATE WORK

1

DEFINING THE TARGET

Adding the concrete climate work target to the municipal strategy

2

CREATING A PLAN

Creating a climate plan in a crosscutting cooperation within the municipal organisation

3

MONITORING

Regular monitoring of the progress of the measures defined in the climate plan

4

IMPACT ASSESSMENT

Assessing the significance of each measure and prioritizing them based onto their effectiveness

5

INTEGRATION WITH BUDGETING

Integrating climate work goals and measures into the municipal budget and financial statement

6

COST-EFFECTIVE CLIMATE WORK

Climate work mitigates emissions and risks, supports municipal economy and strengthens its vitality

+ COMMITMENT, COMMUNICATION AND COOPERATION

1 DEFINING THE TARGET

Defining a target for climate work is a good starting point if it has not already been done in the municipality. In Finland, the Climate Act also requires municipalities to define a climate target. It should be concrete, such as an emission reduction, carbon neutrality or resource wisdom target that the municipality aims to achieve within a specific timeframe. A binding and clear target facilitates the implementation of work and monitoring of progress.

It is important to include the climate target in the municipal strategy. Adding it to the municipal strategy strengthens commitment to climate work as it communicates that there is a common ambition. Doing so also supports decision-making and adequate resourcing in climate work and justifies integrating climate work with the financial planning of the municipality.

The operational environment for municipal climate work is in a constant state of flux, and municipalities need to continually respond to changes. Some municipalities wrote down their climate targets several years ago, and as such, they might need to be reassessed and updated.

Checklist for this thematic area

- Has the municipality included its concrete climate target in the municipal strategy as is?
- Is every municipal employee and decision-maker able to tell what the municipality’s goal for climate work is?
- Is the target ambitious enough or would a slightly more ambitious goal accelerate the implementation of climate work? Does the target support the national climate targets, such as carbon neutrality and/or climate change adaptation?
- Could the previously set target be stricter/more ambitious now that there is a better understanding of the possibilities of climate work?
- Has the municipalityconsidered joining climate action networks, which would set a predetermined emission reduction/adaptation targets for the municipality?

2 CREATING A PLAN

Creating a climate plan and keeping it up to date is necessary to achieve the climate target. A climate plan should include a climate target, measures to reach the target, information on the municipality's emission trend and how the plan will be monitored.

The measures listed in the climate plan should seek to reduce the direct and indirect emissions caused by the municipal organisation, households, and companies. In other words, a comprehensive climate plan includes measures that reduce emissions directly as well as those that both steer towards climate-resilient life and enable it. The plan should also assess how each measure impacts emissions and finances (see the Impact Assessment section). Each measure should be designated its own responsible body, appropriate measuring tool for monitoring progress and timeframe specific to that measure.

The climate plan should also cover climate change adaptation measures. Extreme weather events are becoming increasingly common and by reacting to these events in time, the municipality will be in a better position when it comes to preparing for economic, ecological, and social damages.

Checklist

- Are the measures written clearly in the climate plan?
- Do the measures cover:
  - Energy use in the municipality's properties
  - Energy-efficiency and low-carbon emissions of the municipality's operations
  - Sustainable procurements in the municipality (incl. construction projects)
  - Contribution of land use to climate change
  - Measures that impact emissions from transport
  - Climate measures that are targeted for and engage with residents and companies (incl. agriculture)?
- Which entity is responsible for promoting each measure?
- Does the plan have political support, e.g., has it been approved by the municipal council?
- How will the remaining emissions be compensated for?
- How is the progress for each measure monitored?
- Have the climate risks in the municipality been identified, and has the municipality prepared for them with adaptation measures?

3 FOLLOW-UP

The municipality's emission trend and the progress of its climate plan need to be monitored regularly. This increases the transparency of climate work and helps form a better overall picture of it, while also strengthening knowledge-based management and decision-making related to climate work. Monitoring produces data that helps the municipality assess whether its measures are adequate for reaching the emission target.

The climate plan should be monitored at least once during every council term. However, many municipalities carry out monitoring annually. A decision on the monitoring cycle should be made already during the planning stage. Municipalities can also use various climate monitoring services to produce real-time data on the progress of the climate work for their residents.

The results of the monitoring must be reported to municipal decision-making bodies. This ensures that climate work remains topical in the agendas of the council and municipal committees, and it also provides regular opportunities for decision-makers to discuss climate work. Based on the results, the adequacy of climate measures can be reassessed where necessary.

Checklist

- What available data on emissions does the municipality utilise? Is it comparable to the emission reduction target that has been set?
- To what extent has the municipality's emission reduction target been achieved?
- How are adaptation goals monitored?
- What is the status of each measure (e.g., using the traffic light model)?
- What is the proportion of completed measures listed in the climate plan? How about the proportion of incomplete or delayed measures?
- Which area of responsibility has initiated or completed the most measures? And which one has initiated/completed the least?
- Do the measures have intermediate targets? Have they been achieved?
- What actions (e.g., energy monitoring for properties) should be taken to improve the monitoring of climate work?
- Which entity is responsible for monitoring each measure?

4 IMPACT ASSESSMENT

Municipalities have limited resources, and every measure on the roadmap cannot be implemented at once. Thus, it is important to assess the significance of each measure in the big picture of the municipality's climate work as it facilitates the prioritization of effective measures in practice.

Impact assessment can be carried out already when drafting the climate plan, but it should be conducted during the monitoring stage at the latest. The assessed impacts should include emission reductions and financial effects. The assessment can also cover other topics such as the effect of measures on the municipality's image and influence on others.

The municipality's climate plan can include dozens of measures that support climate change mitigation to varying degrees. The assessment can be used to create annual plans for climate work, climate programmes specific to different municipal areas of responsibility, and highlight the most critical measures for budgeting.

Checklist

- Which measures can reduce emissions directly and quickly? Which measures can reduce emissions the most? Which measures reduce emissions indirectly in the long term?
- Which measures are cost-effective, i.e., which ones generate savings? What is the timescale for generating savings?
- Which adaptation measures are easiest and/or most urgent to implement? Which measures bring most ecosystem benefits? Which measures require additional funding?
- Which measure, if not completed, will cause hidden costs to the municipality?
- Does completing the measure improve the positive image of the municipality in the eyes of residents and businesses?
- Are there any significant measures that are overshadowed by less effective ones in the everyday climate work of the municipality organization?
- What should be done to accelerate the completion of incomplete or delayed measures?
- Which entity is responsible for assessing each measure's impact?

5 INTEGRATION WITH BUDGETING

Climate work should be connected to the municipality's budgetary planning and its annual cycle as early as possible. This ensures that climate work becomes an integral part of the municipality's basic operations instead being detached from them.

Some municipalities are carrying out climate budgeting. A climate budget is tied to the municipality's budgetary planning, and it includes the appropriations, estimated savings and emission budget of the climate work. Municipalities can start small when constructing their climate budget and add new elements each year. Even municipalities with low resources can report their emission data in the municipal budget along with the selected climate measures and their annual targets and investment needs. Climate budgeting is phenomenon-based budgeting that aims to improve the knowledge-base and overall picture of decision-making.

Once annual climate measures have been added to the municipal budget, their implementation will be monitored through financial statements. It is a binding and effective means of monitoring the necessary costs and achieved savings of climate measures.

Checklist

- How have the climate targets in the municipal strategy been implemented in the municipality's budget?
- What is the emission budget of the municipality, i.e., how much emissions can be produced annually while also reaching the climate target?
- What are the largest climate work investments in the municipality?
- What are the estimated savings of the measures?
- What would it cost to not complete the measures?
- What financial risks are associated with not completing the measures (e.g., rise in energy costs, maintenance costs after flooding)?
- What low-carbon criteria are included in the municipality's procurement criteria?
- Which entity is responsible for implementing the measures into budget and assessing their financial impact?

6 COST-EFFECTIVE CLIMATE WORK

All of the steps that have been covered so far lay the foundation for cost-effective climate work. But what does it actually mean?

Firstly, it refers to climate measures that can lead to financial savings. The most significant of these involve energy efficiency investments in the municipality's properties. In general, these investments are always profitable. As they say, unused energy is the cheapest kind of energy. Transitioning to renewable energy in the municipality's properties is also a profitable investment for its finances, as it reduces dependence on unpredictable energy markets and increases self-sufficiency. When making energy investments, it should be kept in mind that delaying measures can cause hidden costs to the municipality.

This guide does not delve into the cost-effectiveness of energy projects. This topic was already covered by a project on cost-effective climate work, in which a separate information package on the profitability of municipal energy efficiency work was created.

Cost-effective climate measures may also involve reorganising the municipality's operations to be more climate-resilient. For example, the municipality can reduce emissions and generate savings through promoting electronic services, flexible practices for teleworking and enabling the use of shared electric cars and bikes for making official journeys. Municipalities can also achieve savings through resource-wise decisions, such as using circular economy solutions in construction.

Cost-effective climate work also refers to actions that cannot necessarily be measured in monetary terms. It is important to keep in mind that climate work supports municipal finances by strengthening the municipality's vitality. Companies and residents are more aware of the effects of the climate crisis and expect municipalities to act in a climate responsible way. Climate work helps municipalities distinguish themselves and attract new residents and business operations. Moreover, climate-wise municipalities can give birth to sustainable business ecosystems that benefit everyone.

COMMITMENT

The implementation of the climate plan requires municipalities to integrate climate targets into all their operations and commit their personnel, leadership, and decision-makers to climate work. Climate work requires reshaping mindsets and reassessing traditional operating models. This in turn calls for bold action, especially from the municipal leadership: personnel are able to implement emission reduction measures when decision-makers and leadership are committed to promoting climate work, and they convey this determination clearly.

Climate work is not a task for just one specific climate expert or team. The general practice in municipalities for climate work management is to have an internal climate work steering group that represents all the different municipal areas of responsibility. It is vital to engage with the steering group intensively during all the stages of building cost-effective climate work. The steering group should be provided with clear tasks and practices so that the functioning of the group does not depend on the intent of individuals. If the municipality has a separate climate expert, their positioning in the municipal organization should be determined based on the work's objectives.

Other engagement tools include climate info events for work units, steering groups and committees, regular internal communication and involving personnel in the different climate work processes. The members of the climate work steering group can also be helpful as messengers of climate work within the municipal organization.

Checklist

- How is the cross-cutting nature of climate work been implemented in the climate work steering group?
- Can the cooperation between the different areas of responsibility be improved?
- Is the municipality's leadership represented in the climate work steering group? How about its finances?
- What climate work information is communicated within the municipal areas of responsibility?
- What kind of skill demands does the municipality's personnel have with regard to climate work?

COOPERATION

Majority of the municipality's emissions stem from outside the municipal organisation and can be traced back to its residents and companies. The same environmental and societal changes that urge municipalities to take a more active role in promoting climate work also influence business operators and residents. The solutions to these challenges are also almost the same for the municipality and its residents and entrepreneurs. Thus, cooperation pays off in climate work, and it can be seen as the key to achieving municipal goals.

A climate-smart municipality serves as a positive example to its residents. The municipality may also set a negative example by hesitating to implement climate measures. On the other hand, companies are often a few steps ahead of municipalities in climate work. Thus, municipalities should try to learn from these responsible pioneers of climate work and consider how to cooperate with them in a mutually beneficial way. Additionally, organisations and communities also possess extensive and beneficial climate know-how, and many of their interests align with the municipality's climate measures.

The municipality should consider what its role is in relation to its companies and residents. People learn about climate-resilient actions through different sources, and it might be more beneficial for the municipality to embrace the role of a climate cooperation coordinator, rather than solely act as an information channel or source.

Checklist

- Does the municipality encourage its residents to reduce emissions through its own example?
- Do the residents have opportunities to participate in the municipality's climate work or decision-making concerning it? How about young people and children?
- Have sustainability issues been taken into account in business counselling?
- Do the municipality's business services possess adequate climate know-how?
- Does the municipality welcome sustainable business projects?

COMMUNICATION

Municipalities should use their communication channels to openly share information on implemented climate measures, results of annual monitoring, emissions data and savings achieved through climate work. The integration of climate communications with other municipal communications and annual communications plan should be considered right at the start of the climate work. In truth, there is a lot of climate-positive work going in every municipality. These actions should be shared – even the smallest climate acts are worth talking about.

Aside from the typical communications channels, municipalities can utilise climate newsletters, blogs and podcasts. The interest in municipal climate work keeps growing, and municipalities should make information on the climate work easily available to their residents. The interest naturally leads to more questions and even critical thoughts on climate measures for which municipalities should prepare.

Internal communications are just as important as external communications (see the Commitment section). Inter-municipal communication is also valuable, and municipalities should share their successes and failures with one another via climate networks or other channels. After all, municipal climate work is not a competition between municipalities – it's about working together towards a common goal!

Checklist

- Does the municipality have a climate communication plan?
- Has climate communication been integrated with other municipal communications?
- Do all the municipal areas of responsibility communicate on climate?
- Does the municipality share information on its climate work transparently and regularly to its residents?
- Does the municipality actively participate in climate-themed campaigns?

STORY OF SUCCESSES AND IDENTIFYING AREAS FOR IMPROVEMENT

Climate objectives

Both Vihti and Kirkkonummi have been doing climate work for several years. The first climate strategy in Vihti was drafted in 2009, and Kirkkonummi made the decision to join the Hinku network in 2017.

Both Vihti and Kirkkonummi have set climate targets in their municipal strategies. Kirkkonummi is part of the Hinku network, which means that the municipality is committed to aim for an 80% reduction in total emissions by 2030 compared to the 2007 level. However, Kirkkonummi has not taken a decision to pursue carbon neutrality. As such, the municipality has not defined how the remaining 20% of its emissions will be compensated for. Kirkkonummi is not alone in this regard, as many other municipalities in the Hinku network have yet to make policies on compensation. There are conflicting views on compensation both on the national level and in the municipal sector, especially when it comes to forests as carbon sinks.

Vihti aims to reduce its per capita emissions by half from 1990 base year levels by 2030. The reduction will be around a quarter of the total emissions, which should be achievable without the municipality's climate measures. This target is not as ambitious as those of Hinku municipalities. However, Vihti's municipal strategy acknowledges the municipality's role in achieving the national emissions reduction target, which compensates for the less ambitious goal.

Climate plans

The climate plans of Vihti and Kirkkonummi have been implemented according to the SECAP (Sustainable Energy and Climate Action Plan) model of the EU Covenant of Mayors for Climate and Energy. These plans set out a wide-range of measures to all emissions sectors. They also take regional climate risks into account and list climate change adaptation measures.

A clear weakness of the municipalities' SECAP plans is that their adaption sections do not include clear objectives. These plans will be updated with regard to the adaptation measures and in accordance with the obligations imposed by the Climate Act.

Climate work monitoring and impact assessment

The climate work steering groups in Vihti and Kirkkonummi have decided that the implementation of the SECAP plans shall be monitored annually, which is more frequently than the Covenant of Mayors and Climate Act require. The first monitoring reports of Kirkkonummi and Vihti were made in 2021. The municipalities also developed their methods of measuring climate work, targets and impact assessment as part of the monitoring.

The accuracy of climate work monitoring needs to be improved. Half-hearted phrasing (such as “where possible” and “as necessary”) used in the original SECAP plans complicates the measuring of climate actions and setting targets. Impact assessments (especially when it comes to savings) will also be specified in the future.

Integrating climate work with budgeting and annual planning of the municipality

Vihti has drawn up its first climate budget as part of the municipal budget for 2023. The climate budget includes emissions budget and operational objectives of the climate work. The emissions budget sets an upper limit for emissions that the municipality needs to adhere to in order to reach its climate target. The operational objectives include climate actions that have significant emission and economic impacts, and the objectives will be monitored through financial statements. Vihti’s first climate budget was drawn up in a way that allows for future improvements and updates.

In Kirkkonummi, the annual climate work planning is carried out by the Hinku steering group. The climate budget is scheduled to be made in the coming year.

Cost-effective climate work

Various energy efficiency projects have been carried out in Vihti and Kirkkonummi, which have been beneficial for the municipal finances. The municipalities have made investments into heating pumps and solar photovoltaic systems, and this has reduced the costs of delivered energy. Appropriations have been granted to energy investments for the coming years as well.

Kirkkonummi has joined the Energy Efficiency Agreement for Municipalities (KETS). Monitoring the energy consumption of properties has proven challenging. However, development projects on automation and control systems will facilitate monitoring and KETS reporting. Vihti has taken the political decision to join the KETS agreement, which remains to be implemented.

Becoming fossil-free and improving the energy-efficiency of properties are both cost-effective climate acts. Yet, some of the properties in Vihti and Kirkkonummi continue to use oil for heating. The municipalities' property stocks have untapped energy-efficiency potential. The challenges of energy efficiency work and their solutions have been discussed in the joint network of municipalities (see the Cooperation section).

Vihti and Kirkkonummi have also carried out indirectly cost-effective climate measures by promoting business operations that support their climate targets. Both municipalities have begun the preparatory work for Microsoft's datacentre projects. These datacentres will utilise waste heat, which has a significant impact on the municipalities' emissions. Vihti has also launched an investigation into building a biogas plant.

Commitment

Project municipalities have acknowledged the need to commit the personnel, administration and decision-makers to the climate work targets. The identification of the best engagement efforts is one the objectives of the municipalities' joint climate project. During the project, climate information events have been organised for the committees as well as climate work situation reviews for the steering groups of the municipalities and areas of responsibility.

Both municipalities have steering groups for climate work, and Vihti has a separate climate strategy group made up of elected officials. The goal is to have the steering groups share information to the personnel, so that information on the implementation of climate work would reach every part of the municipal organisation with ease. Internal communications have been recognised as an important tool for engagement.

Communication

Vihti and Kirkkonummi communicate on climate to their residents, companies and communities. They utilise typical communication channels including social media, websites, blogs, newsletters and local papers. Annual climate communication plans have been created for both municipalities. The climate communication themes include the municipalities' climate measures and projects, emissions data as well as theme days and campaigns related to climate work.

Vihti has created various instructions, including how to phase out oil heating, whereas Kirkkonummi has focused on highlighting the excellent climate work of its education services. The municipalities are developing the climate communication practices of their areas of responsibility, so that even the smallest climate actions are reported on.

Cooperation

Vihti and Kirkkonummi have build their climate work through cooperation, which has been a cost-effective decision. They have already received funding from the Ministry of the Environment twice for their climate projects, which has financially enabled the coordination of climate work. As a result of the long-term project work, the municipalities will most likely be able to establish a permanent climate resource that operates in both municipalities.

The cooperation between the municipalities has also allowed for the climate coordinator to share knowledge and practices across municipal borders and do practical work for both municipalities simultaneously, which has produced plenty of synergies. The municipalities have also formed a positive rivalry through their cooperation, in which they spur each other on.

An energy efficiency network has been set up for the municipalities. Their facility management experts have been able to utilise this framework to discuss the acceleration of energy efficiency work and learn from one another.

In Vihti, the climate coordinator has worked with vitality services, while in Kirkkonummi, they have engaged in shared services and the service area of community development. Thus, it made sense to develop internal cooperation between service areas as well. Vihti and Kirkkonummi have also networked with other municipalities and the Regional Council.

A webinar series has been used to extend the cooperation to local companies. The municipalities have recognised the importance of companies, communities and residents in reducing emissions. The goal has been to learn from one another and identify win-win situations. Kirkkonummi and Vihti have not cooperated with academic or research institutions.

Final thoughts

Vihti and Kirkkonummi have done goal-oriented climate work and cooperated in carrying out climate work projects for many years. The two municipalities may not be trailblazers of climate work, but they seek to set a positive example for others and show that it is possible to create cost-effective climate work practices without the resources of big cities.

The most important take away is that the systematic implementation of cost-effective climate work requires a strong foundation. This foundation is based on targets, climate plan, committed actors as well as an overall picture of the state of the municipality’s climate work and a prioritised list of measures established through climate work monitoring.

SUMMARY

1. A concrete emissions reduction target that has been integrated with the municipal strategy engages actors and supports decision-making.
2. A clear and thorough climate plan facilitates the promotion of cost-effective solutions.
3. Systematic and regular monitoring supports knowledge-based decision-making, transparency and progress.
4. The assessment of the measures' emission and economic impacts helps prioritise cost-effective solutions.
5. The integration of climate work with the municipal budget helps identify potential savings.
6. Cost-effective climate work includes climate measures that produce both direct savings and indirect financial benefits.

COMMITMENT

Climate work is an uphill battle without a municipal organisation that is committed to the climate targets.

COOPERATION

Cooperation with the residents, companies and communities is the key to reducing emissions.

COMMUNICATION

The emission reduction effects of climate acts accumulate when municipalities share their stories and set a positive example.