

Finnish municipalities' climate targets and measures

Deloitte 2018



Published in Finnish on 12.10.2018



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SUMMARY



Municipalities' climate targets and measures - summary

- Many of Finland's **largest municipalities have more ambitious climate targets than those set by the Finnish government** – Municipalities currently act as trendsetters in national climate policy.
- The climate targets of Finnish **local authorities have grown significantly more ambitious in recent years** – More than a quarter of Finns currently live in municipalities that are aiming to be carbon neutral by 2030.
 - In order to attain the targets they have set, local authorities need **comparable emission data** and information on the **emission effects, costs and benefits** of different measures.
 - The transport and agricultural sectors especially are in need of **measures at the national level** to achieve emission reductions.
- How challenging it is to tackle climate change varies between municipalities, and local authorities possess **much untapped potential regarding the means they have to make an impact through their climate efforts.**
 - In large municipalities, the emission reductions needed to attain the climate targets require **large investments in heating and transport**, while smaller municipalities face challenges in allocating resources to organising climate efforts
 - The climate criteria for zoning and public procurement are underused means of realising emission reductions.
- **Various support networks, strategic and communicative support, and funding** are all available to local authorities for implementing their climate efforts.
 - The **roles and division of labour** of the parties tackling climate change **should be clarified** in order to make national climate efforts and their co-ordination more effective.





BACKGROUND AND DATA SOURCES OF THE ANALYSIS

Background and data sources of the analysis



Background

In 2018, Sitra launched a group of projects under the Climate solutions focus area in order to mitigate climate change and support international, national and municipal climate policies.

This analysis carried out by Deloitte presents the status of emissions, climate targets and climate measures in Finnish municipalities, the measures available to local authorities for tackling climate change, and the challenges and enablers for local authorities in their climate efforts. Interviews with 20 specialists, including people who carry out climate efforts for local authorities and work as experts for bodies who support the local authorities, make this a very comprehensive analysis.

Work stage

Examining the GHG emissions of municipalities

Municipalities' climate measures and targets

Identifying the available climate measures

Challenges and enablers for climate efforts

Support mechanisms

Data sources

Public GHG emission data

- National emissions: Statistics Finland
- Benvioco Oy's CO₂ reports obtained from the municipalities
- HINKU calculation data from the Finnish Environment Institute

Public materials, press releases and newsletters from local authorities

- Local authority strategies and action plans
- Joint municipal authorities' strategies and action plans
- Local authority press releases and decision agendas
- Local authorities' co-ordinators and environmental managers for climate efforts

Interviews with specialists and previous studies

- Interviews with specialists
- Previous studies and publications on the climate efforts of municipalities
- Local authorities' action plans

Interviews with specialists and previous studies

- Interviews with specialists representing municipal decision-makers, regional councils and other public bodies
- Previous studies and publications on the climate efforts of municipalities

Interviews with specialists

- Local authorities' co-ordinators and environmental managers for climate efforts
- Specialists from regional councils and other public bodies

Deliverables

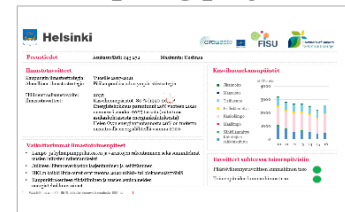
Final report



Appendix 1: Climate measures



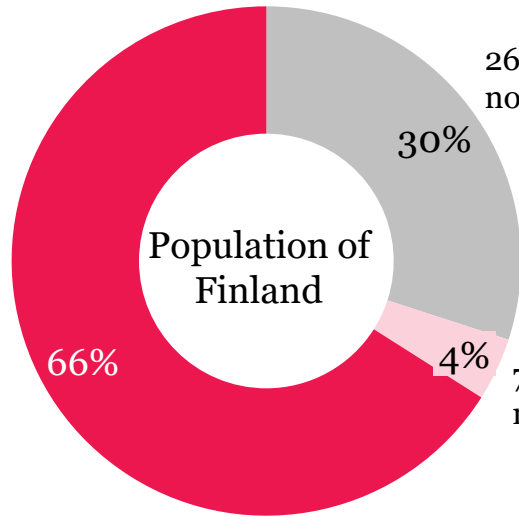
Appendix 2: Municipality profiles





GHG EMISSIONS OF THE 50 LARGEST MUNICIPALITIES OF FINLAND

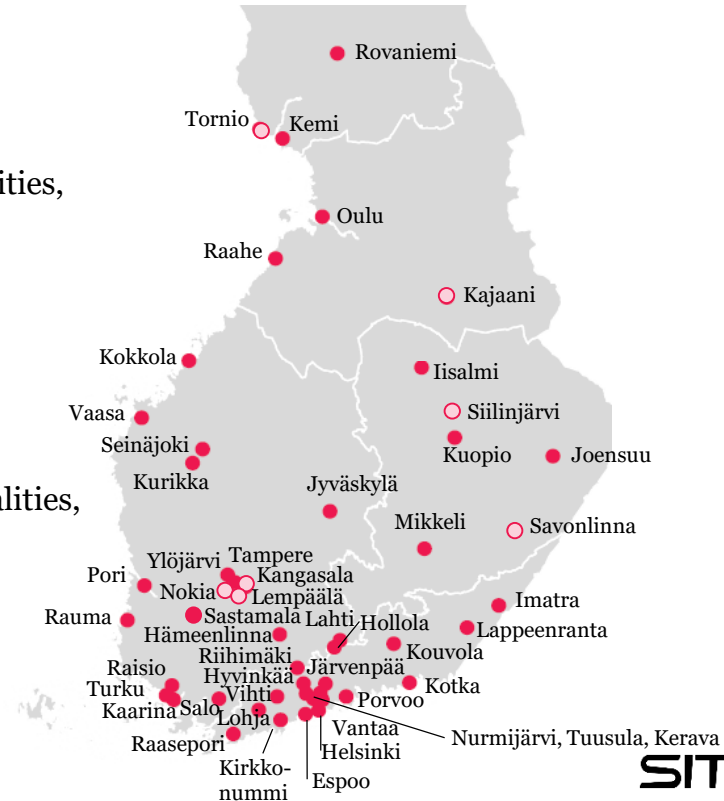
The analysis covered 50 of the largest municipalities, which are home to 70% of the population of Finland



43 of the 50 largest municipalities, emissions data available

261 of the smallest municipalities, not included in the analysis

7 of the 50 largest municipalities, no emissions data available



The emission comparisons are based on public data collected from various sources



Data for the emission comparison

- The emission comparison in this analysis was mainly carried out using **Benviroc Oy's CO₂ reports**, which were obtained directly from the municipalities.
- In addition, **the data on five municipalities was collected from HINKU calculations**. These municipalities are Pori, Lohja, Raasepori, Porvoo and Iisalmi (Iisalmi is not a HINKU municipality, the data for Iisalmi was specifically calculated through a separate project).
- For seven of the municipalities, comparable emission data was **not available** for this analysis.
 - These municipalities are Kajaani, Savonlinna, Nokia, Kangasala, Lempäälä, Siilinjärvi and Tornio.
- The data from the HINKU calculations are **not directly comparable** with the CO₂ reports.
 - Fully consistent comparability is only achieved with transport, where the data from both the Benviroc and HINKU calculations come from calculations made by VTT Technical Research Centre of Finland.
- Although emission monitoring can be carried out in Finland up to a weekly level and there is a large amount of calculation data available, there are significant differences in the municipal emission calculation models and there is **no uniform calculation that would cover all municipalities in Finland (October 2018)**.

Included municipalities that belong to climate networks



10 HINKU municipalities



9 FISU municipalities



12 Covenant of Mayors municipalities



9 Circwaste municipalities

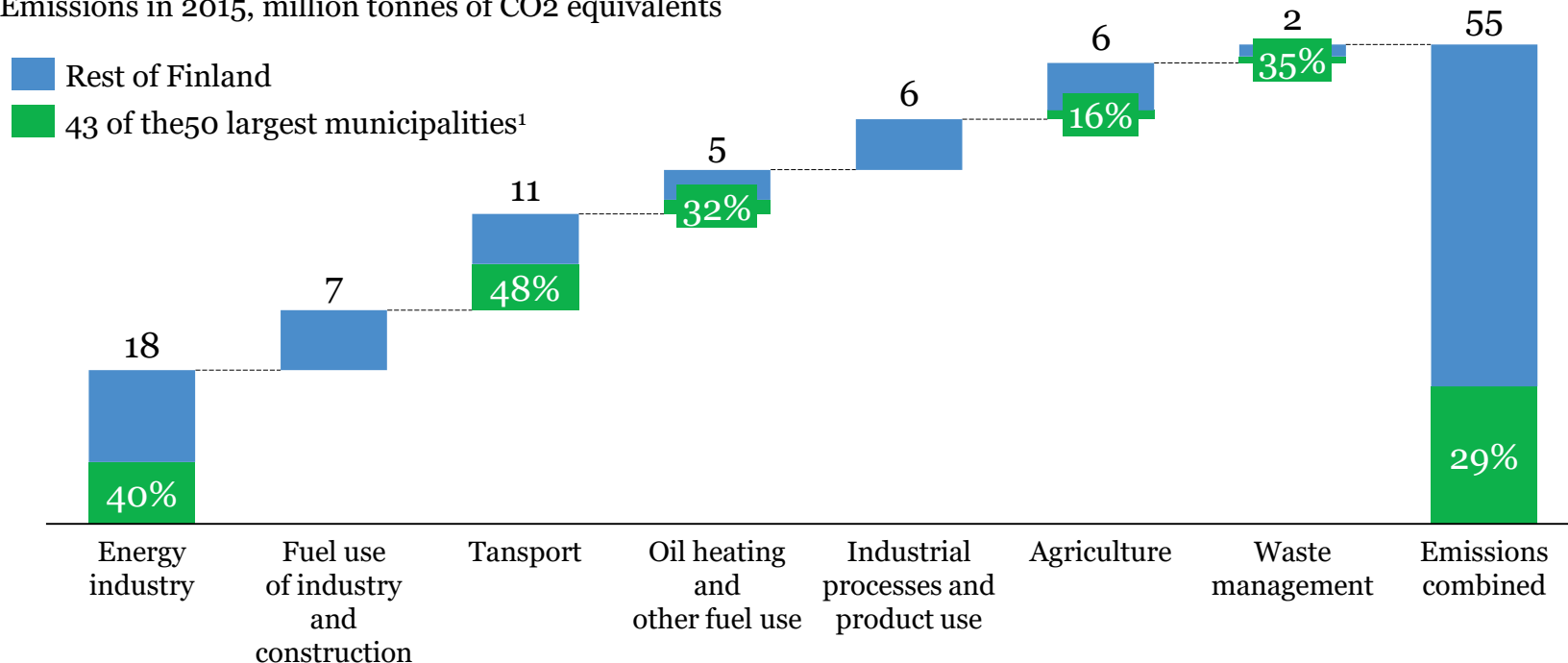


7 KUUMA municipalities



The 50 largest municipalities account for one third of Finland's emissions and half of emissions from transport

Emissions in 2015, million tonnes of CO₂ equivalents



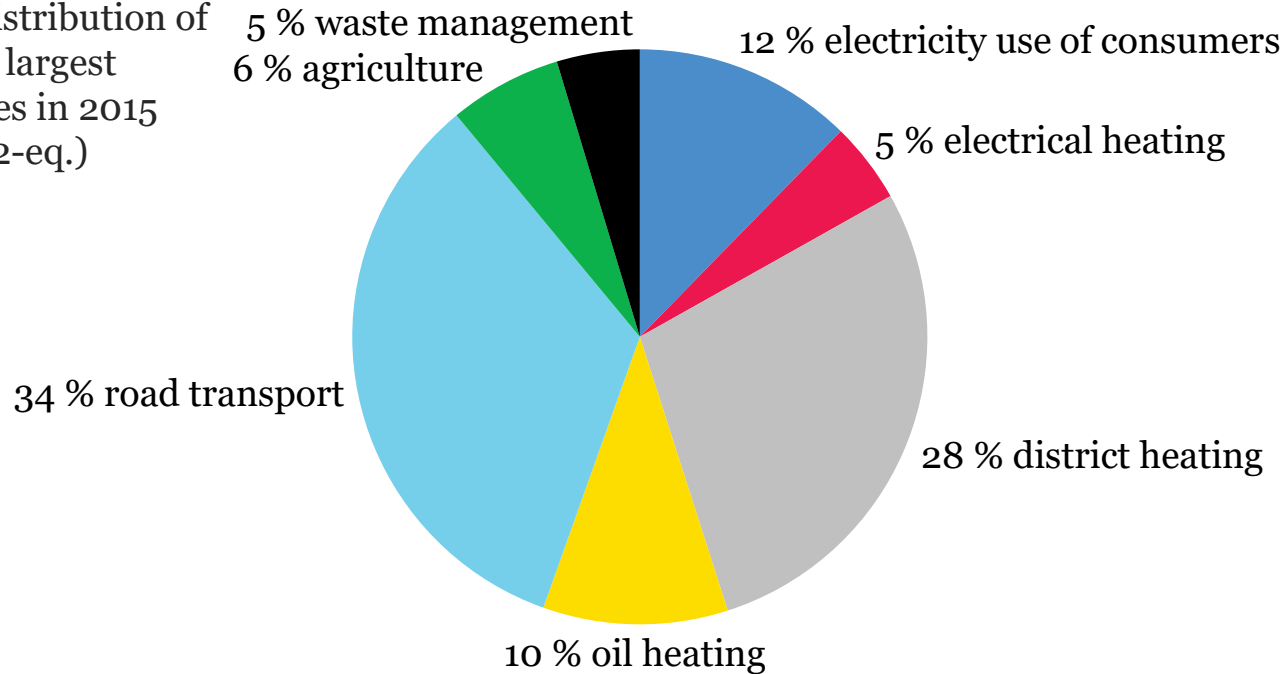
1) From among the 50 largest municipalities in Finland, Kajaani, Savonlinna, Nokia, Kangasala, Lempäälä, Siilinjärvi and Tornio were not reviewed as a result of a lack of emissions data. No emissions from industry, work machines, ports or airports have been allocated to the municipalities.

Sources: CO₂ reports of municipalities (Benviroc Oy), HINKU emissions accounting (Finnish Environment Institute), Statistics Finland

Transport and heating account for three quarters of the emissions of municipalities



Emissions distribution of Finland's 50 largest municipalities in 2015 (15.9 Mt CO₂-eq.)



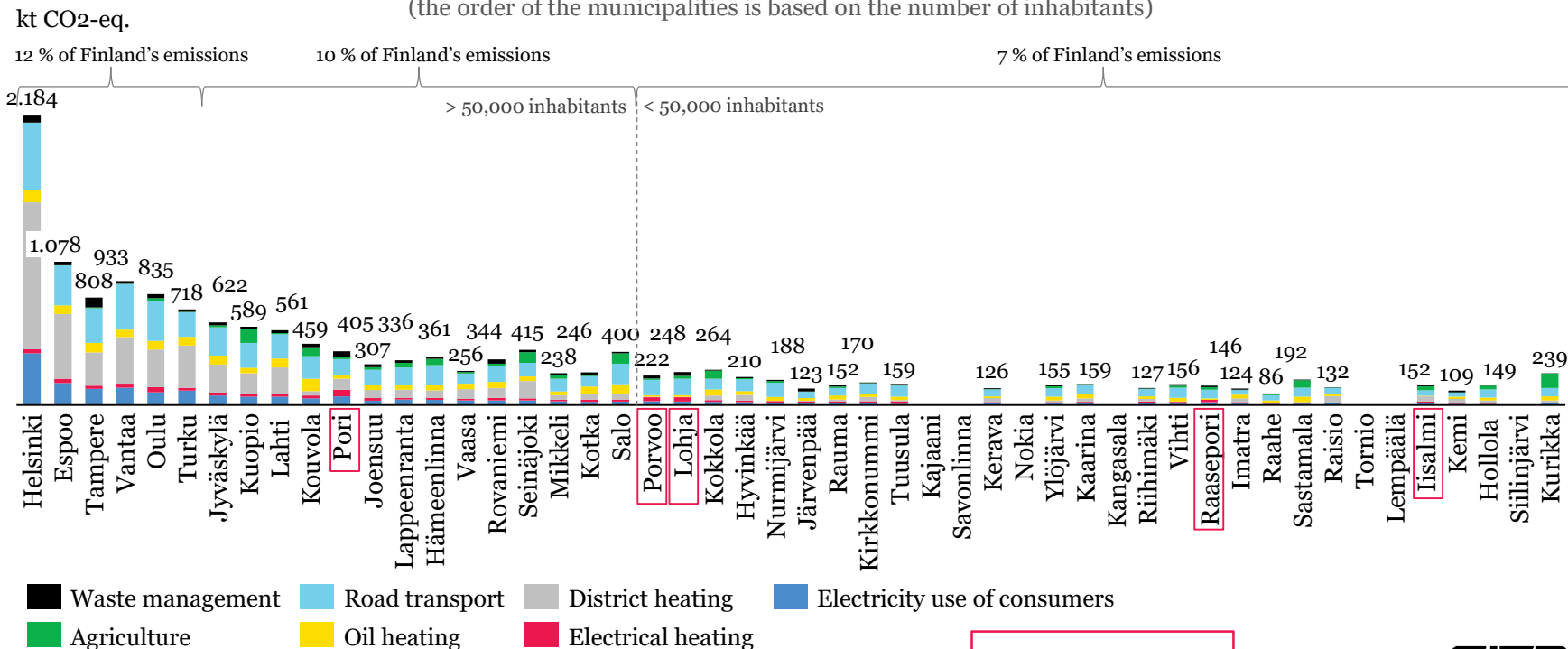
1) From among the 50 largest municipalities in Finland, Kajaani, Savonlinna, Nokia, Kangasala, Lempäälä, Siilinjärvi and Tornio were not reviewed as a result of a lack of emissions data. No emissions from industry, work machines, ports or airports have been allocated to the municipalities.

Sources: CO₂ reports of municipalities (Benviroc Oy), HINKU emissions accounting (Finnish Environment Institute), Statistics Finland



20 cities with 50,000 or more inhabitants account for 22% of Finland's emissions

The GHG emissions of Finland's 50 largest municipalities, by sector, in 2015
(the order of the municipalities is based on the number of inhabitants)



Sources: CO₂ reports of municipalities (Benviroc Oy), HINKU emissions accounting (Finnish Environment Institute), inhabitant count 31.12.2014 (Local Finland)

HINKU accounting

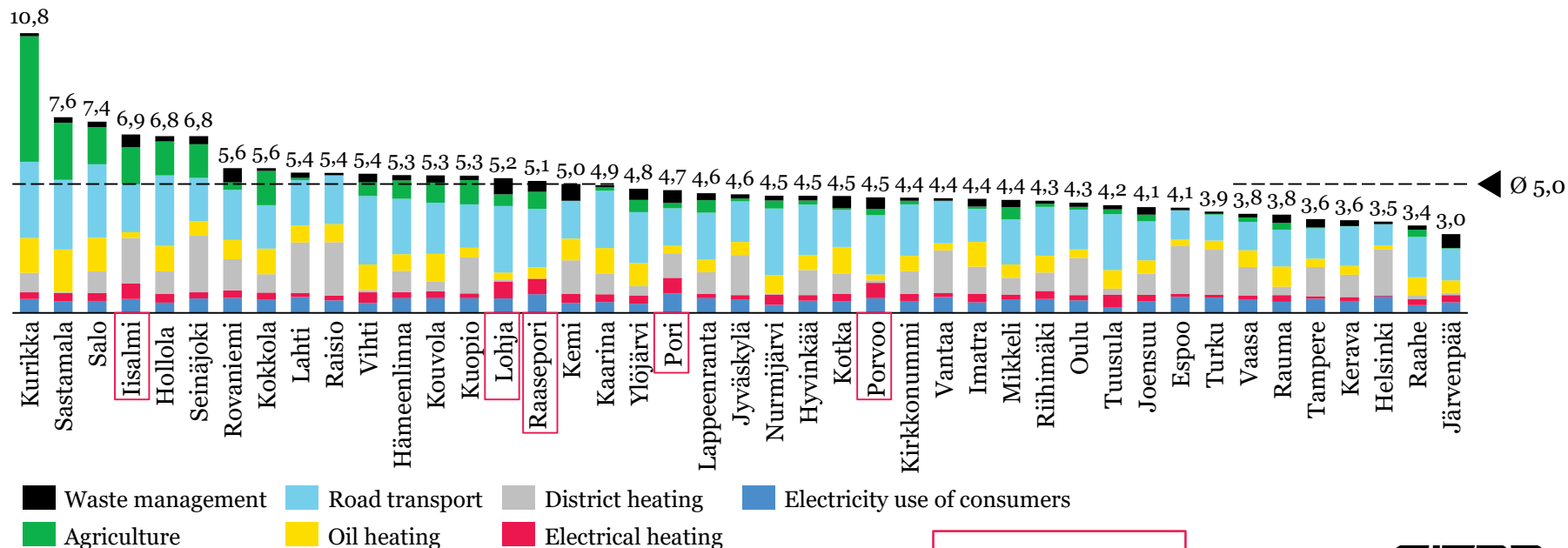
SITRA



Rural municipalities where agriculture is a major industry get high emissions per capita

The GHG emissions of the 50 largest municipalities in Finland by sector/per capita in 2015
(the order of municipalities is based on the per capita emissions data available)

t CO₂-eq. / inhabitant



INKU accounting

Sources: CO₂ reports of municipalities (Benviroc Oy), HINKU emissions accounting (Finnish Environment Institute), inhabitant count 31.12.2014 (Local Finland)

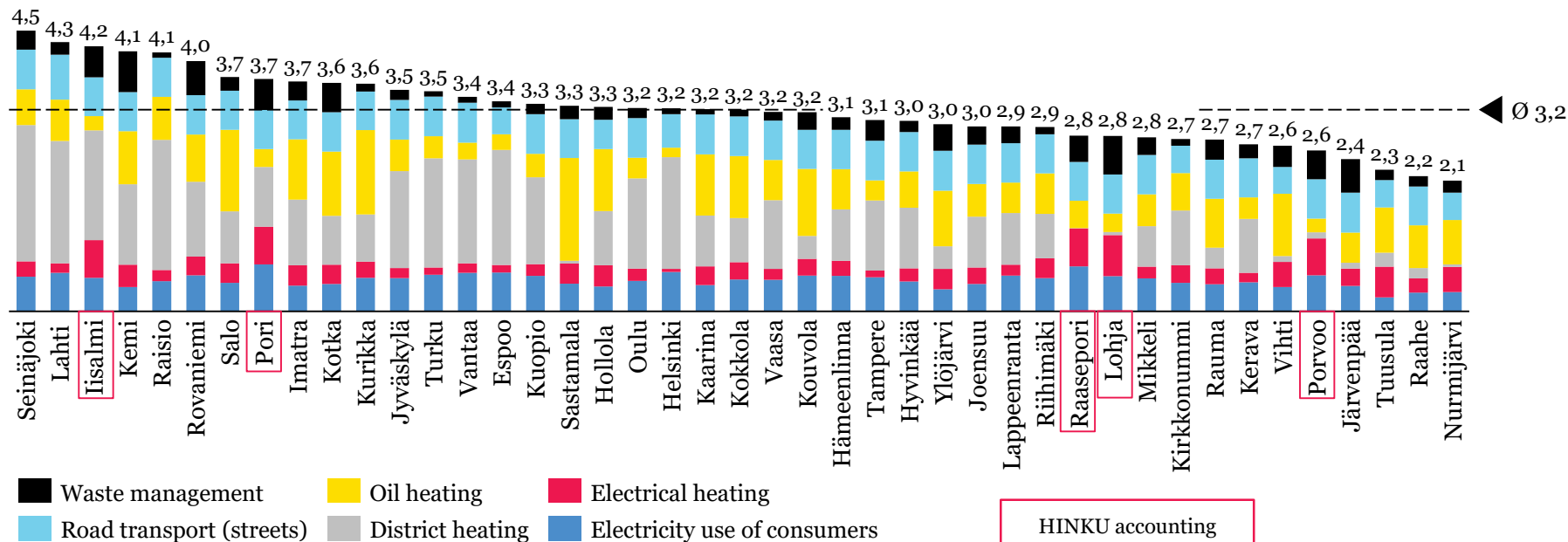
SITRA

Big differences in emissions even without agriculture and state road traffic: a resident of Seinäjoki generates more emissions than two residents of Nurmijärvi



The 2015 GHG emissions per capita of the 50 largest municipalities in Finland by sector, excluding agriculture and roads maintained by the Finnish Transport Agency (the order of municipalities is based on the per capita emissions data available)

t CO₂-eq. / inhabitant



Sources: CO₂ reports of municipalities (Benviroc Oy), HINKU emissions accounting (Finnish Environment Institute), inhabitant count 31.12.2014 (Local Finland)

Emissions from transport decrease faster than average in cities with >30,000 inhabitants; in the largest cities, the emissions of district heat decrease slowly



Sources: CO₂ reports of municipalities (Benviroc Oy), HINKU emissions accounting (Finnish Environment Institute)



Conclusions about the emission development of municipalities



- The GHG emissions of municipalities have decreased sharply in terms of electricity consumption in recent years. This is largely due to the **reduction in the emission factor for market price electricity** (226 gCO₂/kWh (2010) → 103 gCO₂/kWh (2016)). The emission factor has been reduced by the increase in imports of hydroelectricity, the increase in wind power generation and the replacement of carbon with biomass in cogeneration (CHP) plants, among other things.
- The emissions from district heating reduce **more slowly in large cities than in smaller towns**. Finland's six largest cities continue to use coal extensively for heat generation. There has been a greater shift from using coal and oil to bio-based energy in CHP plants in smaller municipalities and towns.
- Individual heating emissions decrease the slowest in the smallest towns in the sample. The drop in emissions is driven by the transition from heating with oil to using geothermal, district and electric heating.
- Emissions from transport have been decreasing faster than the national average in municipalities with 30,000 or more inhabitants. However, the pace is slow compared to, for example, energy production. **Local authorities have been urging central government to take stronger action to reduce emissions from transport.**
 - So far, the municipalities have not been willing to weaken the service level of private car use in the name of emission reductions.
 - In large municipalities, the use of public transport has grown through goal-oriented development measures.
 - The biofuel blending obligations for transport have contributed to the reduction in emissions from transport in the municipalities.
- For the most part, emissions from agriculture have largely decreased during the period under review, but **in small municipalities, the emissions have increased. On the one hand, this is due to the concentration of agricultural production and, on the other hand, because several farms have ceased operating in recent years.** The measures taken to reduce emissions from agriculture mainly fall outside the sphere of influence of the municipalities.
- Emissions from waste management have decreased everywhere, albeit the least in the sample's smallest municipalities. The emission reduction is due to **the closure of landfill sites and the proliferation of landfill gas recovery systems.** In addition, only very limited quantities of bio-waste are being dumped in landfill sites anymore, which reduces the methane emissions.





CLIMATE TARGETS OF FINLAND'S 50 LARGEST MUNICIPALITIES

Assessment of municipalities' climate targets in this analysis



Assessment of the ambition of municipalities' climate targets

Municipalities with 50,000 or more inhabitants

- Low emission-reduction target
- Carbon neutrality after 2035
- Carbon neutrality before 2035



Municipalities with fewer than 50,000 inhabitants

- No numerical emission reduction target
- Modest numerical target
- Ambitious numerical target



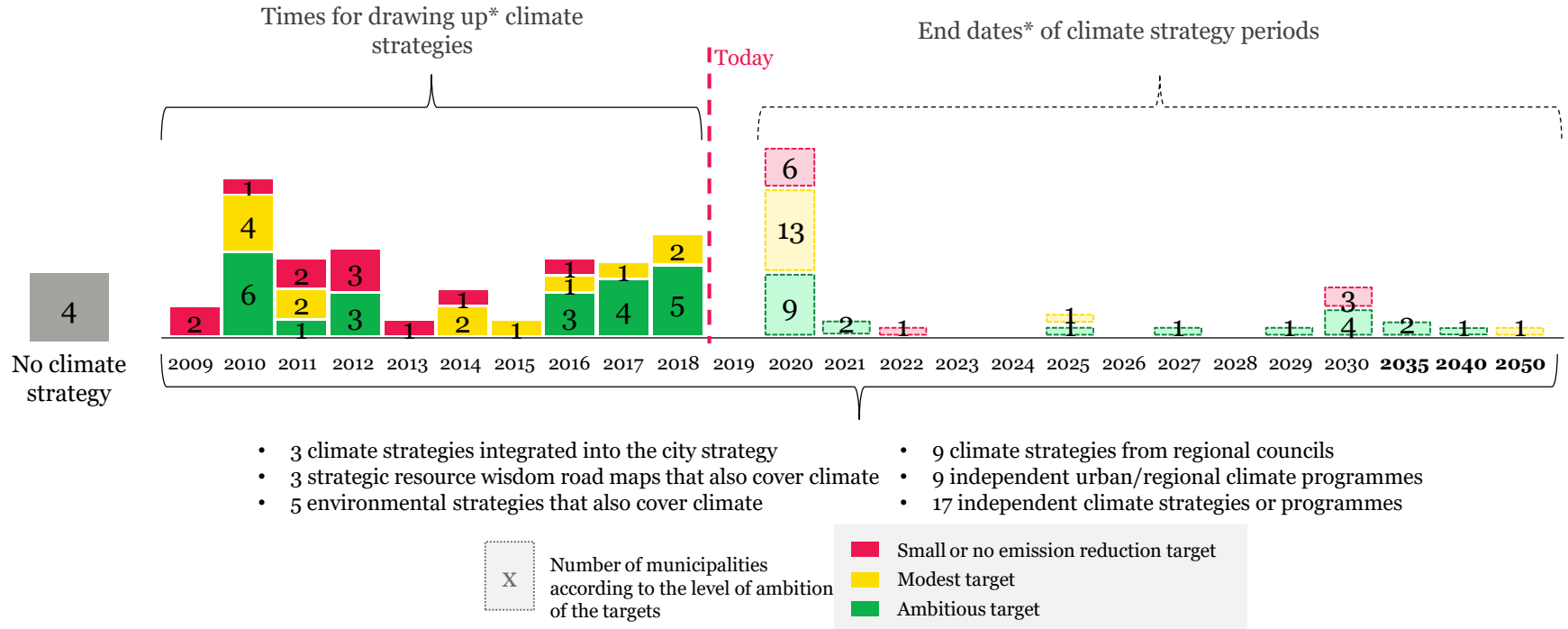
Carbon neutrality in municipalities

Carbon neutrality means balancing the amount of CO₂ emitted with an equivalent amount sequestered. The carbon footprint of a carbon-neutral society, product or system throughout its life cycle is therefore net zero. There are, however, differences in the definition of the achievement of carbon neutrality, since there is no officially agreed definition for municipalities.

In recent years, several Finnish municipalities have committed themselves to the pursuit of carbon neutrality in their own emissions. The most common definition used by municipalities in the context of the carbon neutrality target is **aiming for a reduction in GHG emissions of 80% compared to the 1990 level through the municipality's own actions, with the remaining 20% subject to compensation.**

There are **differences** in how municipalities define carbon neutrality: **the amount of emission compensation varies between 20% and 40%, and the base years also vary.** Some municipalities accept the use of carbon sinks in forests in their region as emissions compensation.

The average level of ambition has risen since 2015 – updating the strategies that only extend to 2020 is expected to bring more ambitious municipalities

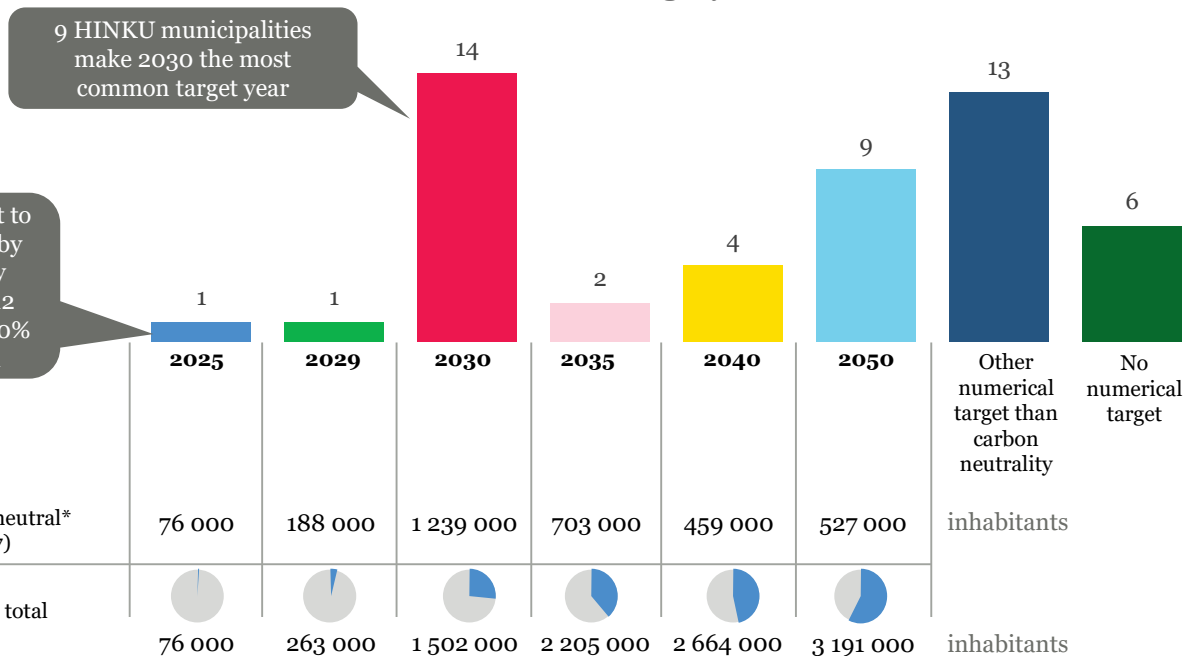


* Based on publicly available data collected during summer 2018.

In 2030, more than a quarter of Finns will live in carbon-neutral municipalities; in 2040, almost half of the population will



The number of municipalities aiming for carbon neutrality and their target years



The number of inhabitants of municipalities aiming to be carbon neutral* (according to the population in 2017)

Population living in carbon-neutral municipalities and their share of the total population of Finland*

* Only the 50 largest municipalities in Finland are included in the calculation. Ultimately, the actual population in these municipalities is likely to be larger, as many of these municipalities will have a positive net migration rate in the future

The potential of the climate efforts of Finland's 50 largest municipalities



The potential of the climate efforts of municipalities and Finland's total emissions – base data for scenario analysis



- The following page describes the potential of the municipalities' climate efforts under review and their possible impact on **Finland's GHG emissions, if the municipalities attain the climate targets they have publicly announced.**
- The calculation was implemented by means of linear interpolation based on the emission reduction targets of individual municipalities.

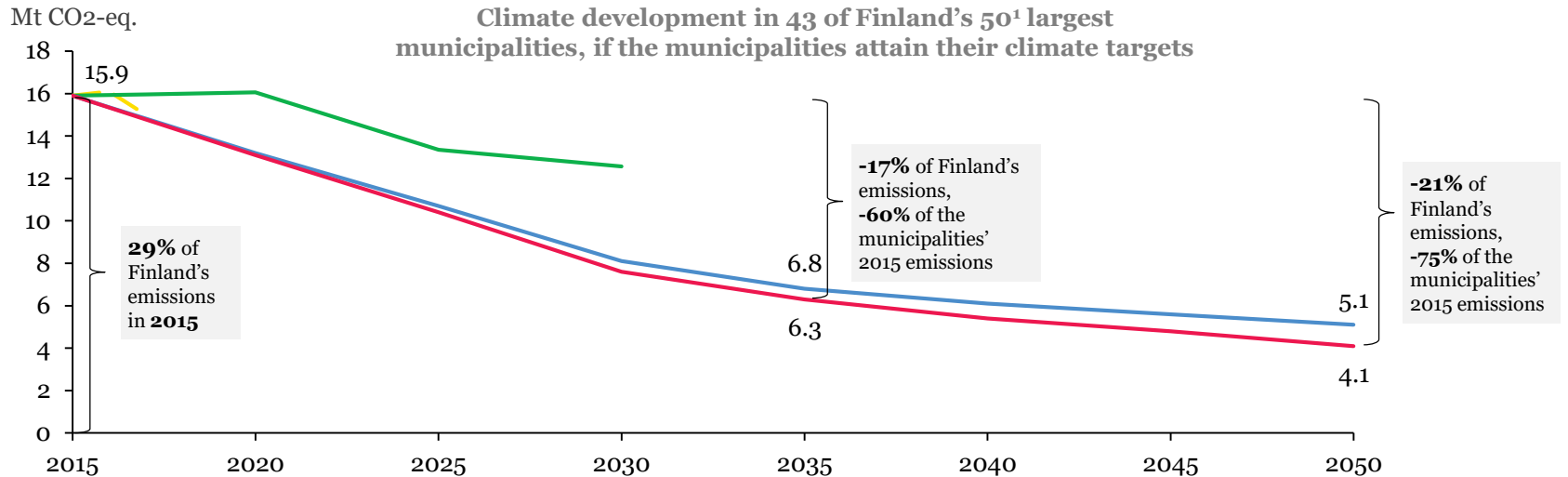


- Seven municipalities,¹ for which no emissions data was available at all for this work, are not included in the scenario analysis.
- **Because of the lack of historical public emissions data**, for the remaining municipalities, the output level for emissions in the year used as the base year for the emission reduction target (e.g. 1990 emissions) was estimated using the emissions data from municipalities of a similar size, as well as the entire historical statistics on GHG emissions in Finland.
- The calculation assumed that the municipalities' GHG emissions will continue to decrease after the carbon neutrality target years, but at a moderate rate (-2%/5 years).
- **The baseline scenario** is a national WAM (with additional measures) prediction, scaled to municipalities' current total emissions, on emissions development in Finland.² The forecast shows the impact of the policy measures on Finland's GHG emissions known at the time.

1) From among the 50 largest municipalities in Finland, Kajaani, Savonlinna, Nokia, Kangasala, Lempäälä, Siilinjärvi and Tornio were not reviewed as a result of a lack of emissions data

2) Source: Finland's Seventh National Communication under the United Nations Framework Convention on Climate Change, https://www.stat.fi/static/media/uploads/tup/khkinv/VII_Climate_Change_16102017.pdf

If realised, the climate targets of the 50 largest municipalities will reduce Finland's current emissions by one sixth by 2035



- From among the 50 largest municipalities in Finland, Kajaani, Savonlinna, Nokia, Kangasala, Lempäälä, Siilinjärvi and Tornio were not reviewed as a result of a lack of emissions data
- Source: Finland's Seventh National Communication under the United Nations Framework Convention on Climate Change, https://www.stat.fi/static/media/uploads/tup/khkinv/VII_Climate_Change_16102017.pdf

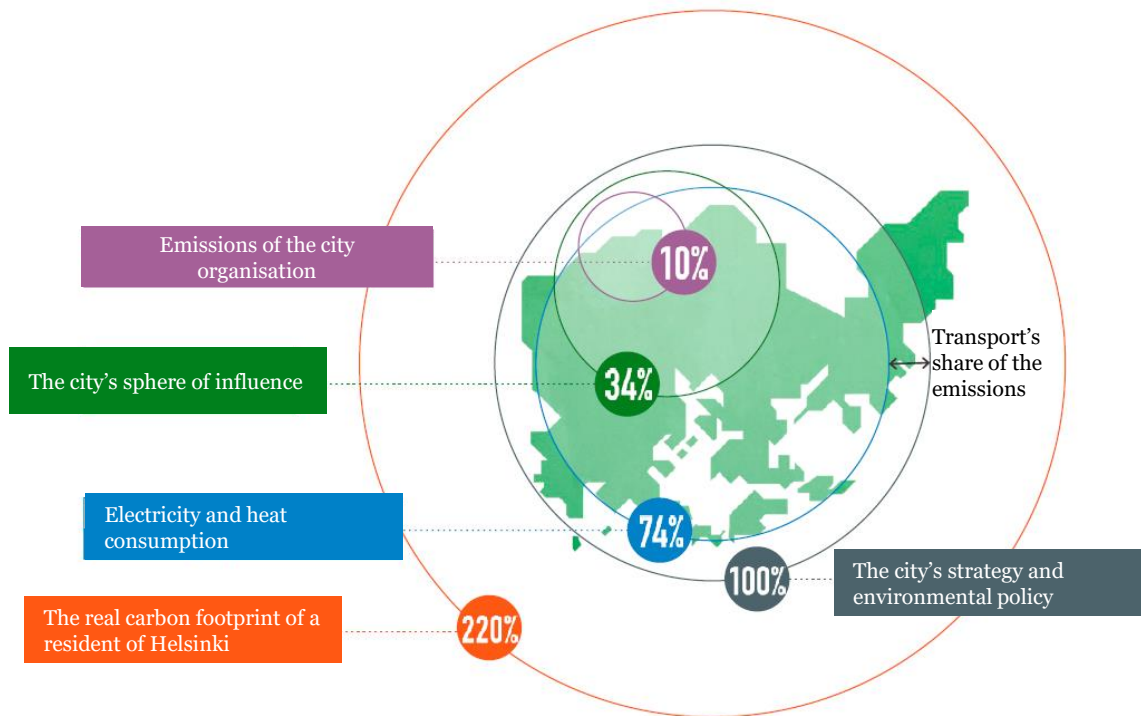


Municipalities do not have a direct influence on all emissions generated in their area

The climate policies of municipalities cover many sources of emissions that they have no direct influence on.

The example here illustrates the selected limits set in the City of Helsinki's environmental policy in relation to the emissions of its own organisation, to the city's direct sphere of influence and to the real consumption-based carbon footprint of a resident of Helsinki. Cities and municipalities cannot directly influence a large portion of the emissions included in the scope of their targets, and they need the support of, for example, a state-level policy to attain these targets.

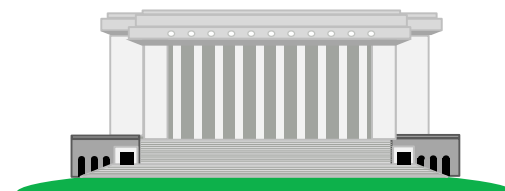
On the other hand, the consumption of a municipality's inhabitants also generates emissions that are not accounted for in climate strategies.





Conclusions on the climate targets of municipalities

- **Most municipalities have more ambitious climate targets than the Finnish state.**
- On the other hand, some municipalities do not have climate targets at all, so the climate efforts of municipalities are at very different stages.
- If municipalities attain their own emission reduction targets, **it will have a significant impact on Finland's GHG emissions.**
- In line with the current targets of municipalities (as in October 2018), the climate efforts of the municipalities under review (43 out of 50 of the largest municipalities) could reduce the total GHG emissions of Finland by **17%** by 2035 compared to the 2015 level.
 - This would mean a reduction of **60%** in the emissions of 43 of 50 of the largest municipalities.
 - New emissions reduction measures will also be needed to attain these targets.
- To attain these targets, **municipalities will have to invest**, for example, in zero-emission heat production and the reduction of emissions from transport, but national government-level measures will also be needed.





RELATIONSHIP BETWEEN CLIMATE TARGETS AND PLANNED MEASURES

Assessment of the level of municipalities' measures in this analysis



Assessment of the ambition of municipalities' climate targets

Municipalities with 50,000 or more inhabitants

- Low emission-reduction target
- Carbon neutrality after 2035
- Carbon neutrality before 2035



Municipalities with fewer than 50,000 inhabitants

- No numerical emission reduction target
- Modest numerical target
- Ambitious numerical target

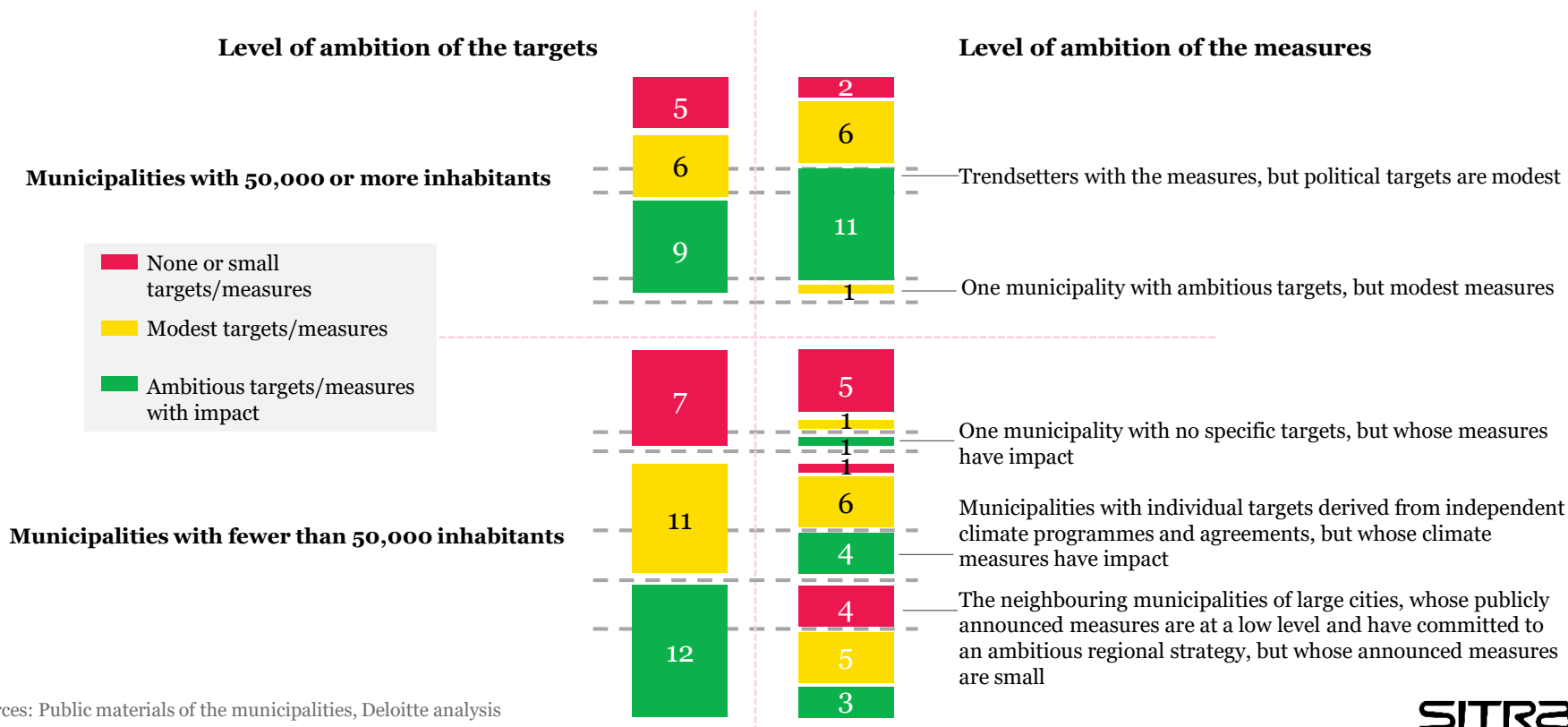


Determining the ambition level of the measures



- An independent or integrated climate strategy and significant impact from the planned actions
- An independent or integrated climate strategy and modest impact from the planned actions
- No climate strategy or small impact from the planned actions

In larger municipalities measures are better aligned with targets

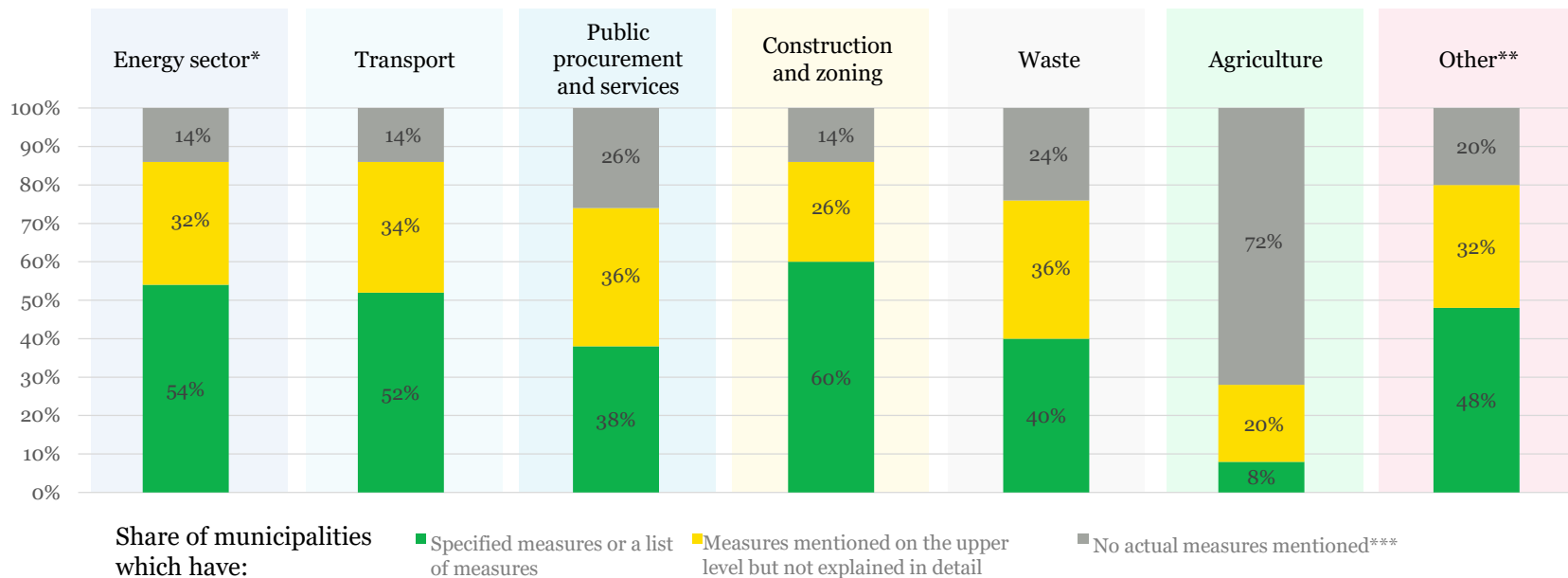


Sources: Public materials of the municipalities, Deloitte analysis



Zoning, energy production and transport are the most common planned targets for climate action

Climate measures of the 50 largest municipalities, by sector



* For the energy sector, measures related to separate heating, energy supply and energy savings have been factored in with centralised energy production (usually a part of emissions trading)

** The measures include climate-related communications, education and training, and the education of municipal residents

*** Also included in the grey bar are those of the 50 largest municipalities that have no publicly available documentation on climate measures

Sources: Public materials of the municipalities, Deloitte analysis



The most common planned climate measures of municipalities, by sector

Energy sector	Transport	Public procurement and services	Construction and zoning	Waste	Agriculture	Other
<ul style="list-style-type: none">• Fuel switching in district heat production• Energy-efficiency measures (KETS)• Buying green electricity for buildings owned by the municipality• Abandoning or planning to abandon oil heating in buildings owned by the municipality• Joint procurement programmes for solar panels for buildings owned by the municipality and for residential municipal buildings	<ul style="list-style-type: none">• Expanding the public transport network and changes to ticket prices• Conversion of sources of power for public transport to electricity or biogas• Expanding and developing the network of pedestrian and cycling routes• Promoting the introduction of a charging infrastructure for electric vehicles within the municipality's area	<ul style="list-style-type: none">• Energy-efficiency requirements in procurement• Inclusion of life-cycle analysis in the assessment of the services to be procured• Fuel requirements for procurements	<ul style="list-style-type: none">• Energy-efficiency requirements for buildings• Densification of the community structure• Changing zoning to support climate targets• Renovation of and energy-efficiency measures for buildings• Changing municipal street and interior lighting to LED solutions	<ul style="list-style-type: none">• Closures and gas recovery at landfill sites• Expanding and developing the recycling system• Modernisation and gas recovery at waste-water treatment plants• Preventing the generation of waste in the municipality's own operations	<ul style="list-style-type: none">• Steering municipal food service procurement towards supporting plant-based and local food production• Projects to enhance nutrient circulation and exploiting agricultural waste in biogas production	<ul style="list-style-type: none">• Climate education in educational institutions• Communications and advisory services• Activating residents and businesses with various campaigns and events• Joining climate networks and participating in their activities



MEASURES AVAILABLE TO MUNICIPALITIES



Range of measures: land-use policy and zoning

	Energy	Buildings	Transport	Waste	Other services	Land use
Land-use policy and zoning	<ul style="list-style-type: none">• Zoning of industrial facilities near district heating networks for heat recovery• Promoting a regional biogas ecosystem	<ul style="list-style-type: none">• Master plans, detailed plans and construction advice services that support energy efficiency and decentralised energy production• Climate criteria for land leases and transfers• Reducing the parking requirements• Energy-efficiency provisions for new construction and renovation• Not obliging those installing solar collectors, solar panels and air source heat pumps to apply for planning permission	<ul style="list-style-type: none">• Densification of community structure so that services are within walking distance• Prioritising public transport, pedestrian and cycling routes and planning them so that they support sustainable mobility• Taking account of the charging infrastructure for electric and biogas vehicles in zoning• Increasing the opportunities to choose park and ride over private car use• Restricting private car parking in city centres	<ul style="list-style-type: none">• Zoning of centralised waste collection points, e.g. automated vacuum collection systems	<ul style="list-style-type: none">• Assessing the climate impact of plans	<ul style="list-style-type: none">• Green efficiency targets for built-up areas• Minimising deforestation• Wasteland afforestation• Land-use policies aimed at protecting carbon sinks and making them bigger



Range of measures: public procurement

	Energy	Buildings	Transport	Waste	Other services	Land use
Public procurement	<ul style="list-style-type: none">Buying low-carbon electricity		<ul style="list-style-type: none">Procuring climate-friendly transport servicesProcuring public charging points for electric carsFuel switching for existing transport equipmentFuel requirements for work machines		<ul style="list-style-type: none">Steering food service procurement towards a plant-based and climate-friendly approach	
	<ul style="list-style-type: none">Climate criteria for procurement: life-cycle analysis, environmental and energy-efficiency criteria, minimum requirementsUsing new types of financing models and services to carry out climate-friendly procurementMarket dialogue: training and education of different parties on more climate-friendly practicesJoint procurement procedures for municipalities for a broader knowledge baseInnovative acquisitions: using municipalities as test platforms for developing new low-emission services					



Range of measures: corporate governance

	Energy	Buildings	Transport	Waste	Other services	Land use
Corporate governance	• Steering municipality-owned companies and group companies to take climate action					
	<ul style="list-style-type: none">Investing in zero-emission energy production and energy-efficiency improvements in the municipal energy companyProviding residents with the opportunity to monitor their energy consumptionDeveloping new services, such as two-way district heating	<p>In the municipality's building stock</p> <ul style="list-style-type: none">More efficient use of space and energy-efficiency measuresLow energy and wood constructionEnergy renovationsAbandoning oil heatingProducing zero-emission energy locally and waste heat recoverySpace sharing	<ul style="list-style-type: none">Steering the municipal organisation towards using climate-friendly vehiclesIncreasing the usage rate of equipment through the sharing economy	<ul style="list-style-type: none">Waste gas recovery at the municipality's landfill sites and waste-water treatment plantsPromoting opportunities to recycle and reuseMinimising food waste and other losses in municipal operations		<ul style="list-style-type: none">Maximising carbon sinks in municipality-owned forests



Range of measures: financial steering mechanisms

	Energy	Buildings	Transport	Waste	Other services	Land use
Financial steering mechanisms	<ul style="list-style-type: none">Switching the municipality's district heating to hourly rates	<ul style="list-style-type: none">Incentives and renovation grants for improving the energy efficiency of privately owned buildings subject to modernisationSubsidies for the introduction of renewable energy sources in buildings	<ul style="list-style-type: none">Subsidies that encourage reducing emissions, such as lowering public transport pricesPayments that encourage reducing emissions, such as the introduction of congestion charges and charging parking fees based on emissionsPersonal emissions trading for the municipality's own transport	<ul style="list-style-type: none">Invoicing of water and waste charges on a consumption basisFood waste charges for businesses and organisations		



Range of measures: other measures

	Energy	Buildings	Transport	Waste	Other services	Land use
Other measures	<ul style="list-style-type: none"> Climate communications and education Co-ordination of co-operation between various stakeholders and professional groups to create new kinds of climate action Higher education and research co-operation: offering the municipality as a test laboratory for climate-related solutions Joining voluntary agreements, for example, in order to acquire financing for peer support 					
	<p>Effective formation of organisations for implementing climate efforts</p> <ul style="list-style-type: none"> Resourcing of the co-ordination of climate efforts for one or several municipalities Industry-specific climate action plans Inter-branch discussion forum for climate-related matters Participating in national and international climate networks to obtain information and encouragement 					
		<ul style="list-style-type: none"> Building control's proactive energy-efficiency guidance in renovation projects Facilitating joint projects in the modernisation of neighbourhoods and blocks 	<ul style="list-style-type: none"> Encouraging walking and cycling in schools, among municipal employees and through collaborative projects with the area's largest employers 	<ul style="list-style-type: none"> Influence through communications to prevent waste generation and increase recycling 	<ul style="list-style-type: none"> Energy-efficiency training for housing decision-makers and property owners Energy advice and communication for municipality-owned rental properties Communication and co-operation campaigns to commit businesses and residents to the climate targets 	



Conclusions on the climate of measures of municipalities

- Municipalities have a lot of potential to influence the generation of GHG emissions in their area, but various opportunities related to zoning, public procurement, corporate governance and financial instruments could be exploited more efficiently.
- The emission reduction measures of municipalities with the most impact include
 - **Adapting zoning and land-use policy to support climate efforts**
 - **Influencing the fuel choices of energy companies through corporate governance**
 - **Public transport development and construction projects.**
- In addition to direct effects, a major role is played by the mobilisation of and support to **local and regional businesses**, for example – communications and environmental education bear fruit through tacit changes in practices and the behavioural culture.
- There are numerous best practices, and they should be scaled more actively in the municipal sector.
 - The need for more information on bad experiences has also been voiced – for the purpose of learning from the mistakes of other municipalities.












CHALLENGES AND ENABLERS OF COMMUNAL CLIMATE EFFORTS



Challenges and enablers of communal climate efforts

	Challenges	Enablers	Examples
 Financing	<ul style="list-style-type: none">• Limited financial resources for climate efforts• The financial support available is often limited to project-based funding	<ul style="list-style-type: none">• The EU and several national bodies provide funding for municipal climate projects	ERDF, LIFE, energy support, innovative public procurement support, ESCO
 Human resources	<ul style="list-style-type: none">• Municipalities often do not allocate enough human resources to climate efforts, which reduces the flow of information and implementation opportunities	<ul style="list-style-type: none">• Climate-related co-operation and third-party consulting and support services• Attitudes and strategic choices of decision-makers	Climate co-ordinators from regional partnerships and councils, financing the co-ordinators with the savings from climate efforts
 Knowledge base	<ul style="list-style-type: none">• Not everyone has access to comparable emissions data and their interpretations• The long-term benefits of climate efforts are poorly identified	<ul style="list-style-type: none">• The environmental administration is considering publishing an all-inclusive emissions database of municipalities	Use of the Finnish Environment Institute's modelling, emissions data and their interpretations
 Know-how	<ul style="list-style-type: none">• The sector-specific and successful implementation of efforts requires in-depth skills and knowledge• Knowing how and where to apply for funding and support	<ul style="list-style-type: none">• Various bodies supporting the climate efforts of municipalities provide training in operational activities as well as information on best practices	Association of Finnish Local and Regional Authorities, Motiva Ltd, regional councils, KEINO
 Political steering	<ul style="list-style-type: none">• The climate efforts take place partly in a vacuum, as the targets set in the state-level climate policy are not clear enough and do not extend beyond a single term of office	<ul style="list-style-type: none">• Parliamentary climate efforts would enable the setting of long-term national targets, measures and incentives	Climate targets set and implemented at state level; the Swedish model, for example
 Best practices	<ul style="list-style-type: none">• Good climate efforts are already being carried out in several Finnish municipalities, and resources are wasted when the same solutions are duplicated elsewhere	<ul style="list-style-type: none">• Sharing best and worst practices promotes the municipalities' opportunities to take appropriate action	Motiva Ltd, Finnish Environment Institute, HINKU and FISU networks, the Energy Leap campaign, KETS
 Commitment and attitudes	<ul style="list-style-type: none">• The resources necessary for climate measures will require that municipal decision-makers and management commit to ambitious targets	<ul style="list-style-type: none">• Information on the financial, climate-related and social benefits of climate efforts; monitoring of commitments and their realisation	Research institutes, Association of Finnish Local and Regional Authorities, Motiva Ltd, Finnish Environment Institute

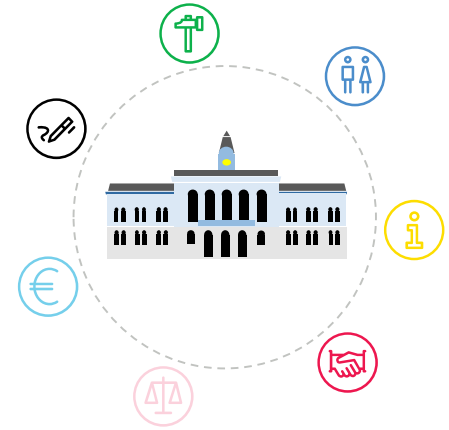


SUPPORTING COMMUNAL CLIMATE EFFORTS






Wide range of support available for municipalities' climate efforts



- Municipalities have access to different **support networks, strategic and communication support** from the public and third sectors, and national and EU-level **funding** for use in their climate efforts.
- For example, regional councils and the Association of Finnish Local and Regional Authorities offer municipalities climate-related **advisory services**, while the Ministry of the Environment, Finnish Environment Institute and Motiva Ltd provide municipalities with **expert support** and opportunities to participate in **climate networks**.
 - Through the networks, municipalities can **accelerate their own climate efforts and obtain information on best practices and measures**. For example, HINKU is a network that brings together municipalities that have committed themselves to attaining ambitious emission reductions.
- Municipalities can apply for **project or investment funding** for their climate efforts, in addition to which various **subsidies and grants for sustainable development** purposes are also available
 - Many different bodies offer funding for **climate efforts in the energy and transport sectors**.
 - Many municipalities find applying for external funding hard, because the application processes are often complex. Regional councils, Motiva Ltd and the Association of Finnish Local and Regional Authorities also **offer support and advice** on how and where to apply for funding, in addition to which various expert companies specialise in completing applications for EU funding together with the applicant.
 - When applying for EU funding, it is essential to **identify the right financial instrument** for the relevant climate challenge, as it makes getting the application approved more much more likely.
- Municipalities are in need of additional support when assessing the **costs, impact and benefits** of various climate measures, while comparable municipal-level emissions data would contribute to successfully directing the measures to where they are needed.









Support mechanisms for municipalities' climate efforts

	 Energy	 Transport	 Agriculture	 Waste	 Others
Financing	EU funding programmes, such as ERDF, LIFE and Horizon				
	Ministry of Economic Affairs and Employment's (TEM) regional innovations and experiments (AIKO funding)				
	Business Finland's Innovative public procurements				
	Funding from Municipality Finance, such as green bonds		Development Fund for Agriculture and Forestry	Municipality Finance's funding solutions	Centres for Economic Development, Transport and the Environment (ELY)
	TEM investment aid		Discretionary government transfers (YM)		
External support and advisory services	Energy Authority's financing for regional bodies				
	Support and financial services from ELY centres				
	Regional councils and Association of Finnish Local and Regional Authoritiesitto				
	Implementation of KAISU and agreements on land use, housing and transport (MAL)				
	Ministry of the Environment's (YM) national action plan for sustainable urban development				
	Association of Finnish Local and Regional Authorities' "IlmastoKunnat" activities				
Climate-related co-operation networks	Tools for assessing the impact of climate measures (Finnish Environment Institute, Ministry of the Environment)				
	Motiva (energy audits and actions taken under KETS)	Motiva (advice on transport)		Motiva (material efficiency and water supply services)	Motiva (energy advice for consumers)
	HINKU forum				
	FISU network				
	Covenant of Mayors				
Municipalities' climate campaign					
Regional climate campaigns, e.g. KUUMA climate programme					
	CIRChubs		CIRCwaste		
	KETS municipalities			KETS municipalities	

A forthcoming support mechanism

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