



Let's do some real work!

Climate change in the Helsinki region
– mitigation and adaptation



The climate in 2030

The municipalities of Helsinki, Espoo, Vantaa, Kauniainen, Kirkkonummi, and Kerava have decided to jointly take action to mitigate climate change, backed by the strength of more than 60 000 employees. Public services are intended to work in a way that greenhouse gas (GHG) emissions are reduced. At the same time, energy and money are saved while premises are used as usual.

200 new eco-support staff for offices will be trained, providing information about climate change control. Their job is to motivate all employees to do climate work and to propose practical activities that anyone can do.

The amount of carbon dioxide (CO₂) emissions will also be one of the selection criteria for the most important procurements. Since public procurements are sizeable, the new requirements will drive private businesses to reduce carbon emissions in their own products and services.

Helsinki metropolitan area residents will be directed towards the most climate-friendly means of transportation and waste prevention. Regional waste management is to be developed so that emissions from waste transportation and processing are minimized.

Reliable GHG accounting tools will be used in the climate work. The Finnish Environment Institute is also involved in the project.

The common climate work for 2009 - 2011 will be done within the Julia 2030-project by YTV Helsinki Metropolitan Area Council (from 2010 onwards Environmental Services). The millionth inhabitant of the metropolitan area, a girl born in 2007, gave the Julia 2030-project its name. The climate strategy for 2030 in the metropolitan area has identified the most appropriate ways of climate change control, and some of those will be fulfilled by Julia 2030, a project co-funded by the EU's LIFE+ programme (LIFE07 ENV/FIN/000145).



Now is the time to act, so that today's children can enjoy a good environment in the future!

CLIMATE CHANGE URGES ADAPTATION

Climate change is already underway. Battling climate change should be a priority so that global warming may be slowed quickly.

Yet global warming cannot be totally stopped at this point. Therefore, climate change adaptation, in addition to its control, is necessary. By adapting it is possible to both minimize climate change damage, and benefit from its eventual advantages.

A changing climate affects the urban environment, buildings and structures. In the Helsinki region it is necessary to prepare for the expected changes: among other things, increased precipitation and torrential rain will become common, increasing the risk of floods.

In co-operation with municipalities, the Julia 2030-project will develop the procedures and activities employed to adapt to the changes. It will also assess climate change risks and impacts and adaptation costs.

COMMON ENVIRONMENTAL REQUESTS IN CONTRACTS

Through public procurement, municipalities can significantly impact their carbon footprint. The common environmental criteria for contracting are set, so that the goal of reducing carbon emissions is taken into account in all phases of the acquisition process.

Calculators for CO₂ emissions for procurement and competition will be produced. The calculators (and their usage) will be developed for those products and services which have the greatest impact on climate change. Hence CO₂ emission reduction will be a major purchase criterion in procurement decisions.

The person responsible for acquisitions will be trained to include environmental criteria and the calculation of emissions as part of procurement processes. The goal is that all calls for tenders, bid comparisons, and purchasing decisions for products or services take into account their CO₂ emissions. The impact of the emissions of the selected services and products on acquisitions will be monitored with the indicators devised by the project.





During the time of the Julia 2030-project, the carbon calculators will be tested in a pilot competition. This competition aims to reduce the emissions from new purchases by five per cent against the CO₂ load of earlier acquisitions, and then further reduce emissions by two percent annually.

SAVING ENERGY IS EASY AND CHEAP

The WWF's climate calculator will be introduced for the calculation of premise use-related GHG emissions, and be developed to become more user-friendly. It will allow calculate carbon emissions caused by buildings' electricity consumption, heating, waste management, transportation of personnel, and business travel.

The calculator will be tested in pilot buildings in Helsinki, Espoo, Vantaa, Kauniainen, Kirkkonummi, and Kerava. The pilot buildings will be offices, schools, nurseries, sports halls, cultural centres, and other urban facilities.

All those involved will be monitoring emissions caused by real estate energy consumption, waste, and employee

business travel from 2009 onwards. Buildings can compare their own GHG emissions with other similar types of real estate.

The overall objective is to reduce the GHG emissions from the pilot sites by 10 percent in three years.

ECO-SUPPORT NETWORK WORKS ACROSS BORDERS

Within the Julia 2030-project, more than 200 new municipal eco-support staff will be trained. They will be given information, amongst other thing, about energy saving, waste prevention, and transport-related emissions reduction.

The mission of the eco-support staff is to inspire all employees to change their working methods and participate in establishing rigorous environmental targets in their own departments.

Helsinki has already trained 400 eco-support staff. Within the Julia 2030-project, they will receive more information about climate change control, and also on

the new GHG calculators developed by the project to be used on everyday work.

All of the eco-support staff of the Helsinki metropolitan area will form a cooperative network, where information about best practices is disseminated across municipal boundaries. Thus each industry will be able to develop their own best practices to reduce GHG emissions.

FORESIGHT SUPPORTS WASTE FLOW MANAGEMENT

The tools developed for calculating GHG emissions caused by waste management will be used by municipalities, residents, business, and waste management professionals. In the calculation, emissions caused by waste handling, recycling, and transportation will be taken into account, as will be methane and nitrous oxide emissions.

The GHG calculators will be added to the metropolitan area material flow accounting system, Martti. It contains information about almost all the waste generated in the metropolitan area and its treatment. Information gathered in the system is then used the long-term waste

management planning, and in the environmental impact assessment of waste management.

Businesses and government agencies can already monitor and compare their waste amounts through the Petra waste benchmarking system. A GHG emission calculator will also be added to it, so Petra users can determine their own waste-related emissions. The Julia 2030-project will also produce the Konsta calculator for household waste and its climate impact assessment.

The Emmi waste forecasting model, connected to the GHG emissions calculator and measuring the amount of waste itself and its treatment options, is also part of the Julia 2030-project. With the help of the prediction model it will be possible to plan cost-efficient and environmentally friendly waste management in the Helsinki metropolitan area. The prediction model can also be used to effectively direct waste prevention measures towards the right targets. The objective is to minimize the Helsinki metropolitan area GHG emissions arising from waste management.

MORE ACCESSIBLE MOBILITY OPTIONS

To measure GHG emissions from transportation three calculators will be devised, allowing residents to assess their own emissions and obtain further information on the basis of their transportation choices. A CO₂ calculator will be added to the public transport Journey Planner. When a user selects the distance and transportation mode, the calculator reports the emissions arising from that trip.

The project will also produce a separate calculator based on typical households. It enables the user to evaluate the CO₂ emissions caused by own household travelling and explore options for their reduction. All initial calculator data come from previously researched knowledge of transport emissions.

The Julia 2030- project also looks at selected sample areas in different parts of the metropolitan area, whose location relative to public transport connections is different. The areas' transport emissions are examined using traffic patterns, and VTT Technical Research Centre of Finland will develop the evaluation method.



At the end of the project it will be determined whether residents' traffic patterns changed during the project timeline towards more climate-conscious movement patterns.

WALKING AND CYCLING ALLEVIATE AND REFRESH

The Chocolate calculator, which will be added to the Light Journey Planner, will calculate the calories consumed during cycling or walking. In addition, it will show the amount of chocolate that would correspond to those calories.

The aim is to highlight the fact that walking and cycling are healthy lifestyle options that have the added advantage of decreasing transportation GHG emissions. Also, increased physical activity brings significant public health benefits.



ENGAGE YOURSELF IN SOME REAL WORK!

The major aim of the Julia 2030-project is that the innovative tools and GHG emission reduction policies developed become a permanent part of the Helsinki metropolitan area operations. The calculators for public procurement and premise use are free and available also for other municipalities. Energy-efficient public procurement promotes innovative, CO2 emission reducing, and service-focused product development.

The project progress will be displayed on the web site, and the results achieved will be thoroughly explained. The site contains the film story of Julia, which will encourage people to alter their own activities.

The Julia 2030-project will network with other EU climate projects and urban areas. Dissemination of information and experiences, and exploration of new ideas for cooperation, will be done in international meetings and events. The aim is to demonstrate that easily available existing information can indeed help people to change their own ways in the workplace and everyday life.

By acting locally, all over Europe, we can curb climate change significantly and safeguard a good environment for our children in the future!

Julia 2030-project partners

City of Helsinki
City of Espoo
City of Vantaa
City of Kauniainen
Kerava City
Kirkkonummi Municipality
Finnish Environment Institute
YTV (1.1.2010 HSY and HSL)



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