# The Finnish Environment Institute SYKE – Information and actions to mitigate climate change

We conduct solution-oriented research that promotes sustainable climate policy.

We help our partners to reduce climate emissions and develop climate-friendly business.

We investigate best practices for increasing the share of the sustainable bioeconomy and circular economy in the national economy.

policy makers and ministries

MORE SPECIFIC OVERALL INFORMATION FOR DECISION-MAKERS OF CLIMATE POLICY

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International and national climate policy must take more comprehensive account of changes in forests' carbon sinks than at present, in order to achieve the goals of the Paris climate agreement. This is stated in SYKE Policy Brief (2016), which clarified the concepts related to forest carbon balance and facilitated social dialogue between decision-makers, enterprises, researchers and citizens. The recommendations prepared by SYKE have been utilised both in Finland and in the EU, when discussing the importance of forests and land use in mitigating climate change and when deciding on policy measures.





The calculation of emissions in accordance with common rules is required to support the ambitious emission reduction targets of local governments. SYKE has produced local road maps that help municipalities and regions to reduce emissions. These detailed road maps and emission monitoring have enabled municipalities and regions to cut their emissions on a long-term basis. SYKE has been monitoring greenhouse gas emissions within the networks of pioneering municipalities (HINKU, FISU) since 2007. Such calculations provide information on all municipal climate emissions by sector: transport, energy use in housing and industry, agriculture, waste management and machinery.

# THE MONTREAL PROTOCOL ON SUBSTANCES THAT DEPLETE THE OZONE LAYER IS AN ENVIRONMENTAL



The 1987 Montreal Protocol on Substances that Deplete the Ozone Layer has already saved the world from ozone depletion once, and could even help in achieving the goals of the Paris Climate Agreement. Together with consultancy agencies, SYKE has advised emerging countries on how to implement the terms and conditions of the Montreal Protocol and other international environmental agreements. SYKE has provided expert assistance on the financing mechanism of the agreement and practical projects, for instance in Nepal and Turkey. In Finland, SYKE has long been responsible for regulatory tasks related to the EU's Ozone and F-Gas Regulation, including the monitoring of, and advice and information on, the use of substances.



#### CLIMATE DIET TO REDUCE PERSONAL EMISSIONS

The online calculator developed and maintained by SYKE enables citizens to evaluate their personal climate footprints. When your weight is known, the calculator suggests ways of starting a quick diet or engaging in a more thorough lifestyle change. The climate diet is a practical tool that has been included in campaigns and a television programme broadcast by YLE, the Finnish Broadcasting Corporation. The service has been used over 100,000 times and its English version has attracted international interest.

## decision-makers, the authorities, enterprises, citizens



## AIR POLLUTION ESTIMATES TARGET EMISSION REDUCTIONS WORLDWIDE

Air pollution affects the climate, the environment and human health. SYKE has been involved in developing European and global air pollution emission estimates in cooperation with the IIASA Institute based in Austria. The models have enabled the cost-effective targeting of emission reduction. They enable estimates of how a number of emissions travel in the atmosphere, their impacts, and the potential and costs of emission reductions. The results of the work are also used in the preparation of legislation, in support of regional planning, and in the evaluation and follow-up of the obligations of international treaties.

## municipalities



## THE MUNICIPALITY OF II WINS AWARD FOR PRO-CLIMATE EFFORTS

The municipality of li received the EU RegioStars award for its climate efforts. Ii has introduced cost-effective ways to increase renewable energy and improve energy and material efficiency within the region. For example, oil heating in properties has been replaced with renewable energy and electric cars have been acquired for use by the municipality. Companies, associations and local people have joined in the effort. The HINKU network, coordinated by SYKE, offers services such as the joint procurement of solar panels, expert assistance, study trips and peer experience in climate work. "Hinku is a prime example of how the piloting of new climate-friendly solutions produces know-how throughout Finland," says Professor Eva Heiskanen of the National Consumer Research Centre.

## enterprises and businesses



#### COMPANIES REDUCE THEIR CARBON FOOTPRINT

Companies seeking a competitive edge from climate-friendly products and services need information on the possibilities of reducing climate emissions. Companies have found ways to reduce the carbon footprint of their products and services in LCA clinics. SYKE has implemented these clinics alongside SMEs based in the municipalities of North Karelia. Companies have also boosted climate-friendly supply and demand. Alongside companies and decision-makers, SYKE has also performed carbon footprint assessments based on life cycle evaluations. The results of these assessments have been made public.

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