



Regional Environmental Objectives for Östergötland: Reduced Climate Impact

SHORT VERSION



Preface

IN YOUR HANDS YOU ARE HOLDING the new objectives for Östergötland's climate and energy efforts up until 2020. The targets are well-established and are the culmination of almost two years of collaborations with private and public organisations in the county. The basis for this work has been Sweden's national objectives and our own regional climate and energy strategy A winning climate.

The climate issue is one of the biggest challenges of our times and it requires a long-term approach. However, the world around us and the knowledge base is in a constant state of transformation. Based on the current conditions and prognoses for future conditions, these environmental objectives have been developed as important steps towards achieving a reduced climate impact. The next phase is to prioritise the actions necessary to achieve the objectives – but there is already active work underway in the county for reducing emissions and adapting society for a changing climate.

I would like to thank everyone who has participated in developing the objectives through discussions and comments. Backed by your knowledge and your commitment, I can proudly say: This is what we want to prioritise in Östergötland!

Elisabeth Nilsson, County Governor

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Background

IN 1999 THE SWEDISH RIKSDAG unanimously adopted 15 national environmental quality objectives, along with a number of intermediate objectives. A sixteenth objective was added at a later date. The environmental objectives are to serve as guidance for the environmental work all across society. The overall objective is to be able to give the next generation a society where the major environmental issues are solved. This shall be done without causing increased environmental and health problems outside Sweden.

THE SIXTEEN ENVIRONMENTAL QUALITY OBJECTIVES

- Reduced Climate Impact
- Clean Air
- Natural Acidification Only
- A Non-Toxic Environment
- A Protective Ozone Layer
- A Safe Radiation Environment
- Zero Eutrophication
- . Flourishing Lakes and Streams
- Good-Quality Groundwater
- A Balanced Marine Environment, Flourishing Coastal Areas and Archipelagos
- Thriving Wetlands
- Sustainable Forests
- · A Varied Agricultural Landscape
- A Magnificent Mountain Landscape (does not apply to Östergötland)
- A Good Built Environment
- · A Rich Diversity of Plant and Animal Life

The county administrative boards were commissioned to ensure the impact of the environmental objectives on a regional level. In 2002-2003, the County Administrative Board of Östergötland carried out a process where representatives for the private and public sectors worked together to produce 70 regional intermediate objectives. Information about how the environmental objective work has gone so far can be found on our webpage.

Most of the intermediate objectives had 2010 as the year for objective achievement. Thus, there is a need for a new regional set of objectives for the next step up until 2020.

READ MORE

The County Administrative Board of Östergötland, www.lansstyrelsen.se/ostergotland The Environmental Objectives Portal, www.miljomal.se The All Party Committee on Environmental Objectives, www.sou.gov.se/mmb

























Climate objectives

The Swedish environmental quality objective *Reduced Climate Impact* can be described as follows:

REDUCED CLIMATE IMPACT

The UN Framework Convention on Climate Change provides for the stabilisation of concentrations of greenhouse gases in the atmosphere at levels which ensure that human activities do not have a harmful impact on the climate system. This objective must be achieved in such a way and at such a pace that biological diversity is preserved, food production is assured and other goals of sustainable development are not jeopardised.

THE RIKSDAG'S SPECIFICATION OF THE OBJECTIVE MEANS THAT

- The global increase in average temperature is limited to a maximum of two degrees compared to pre-industrial levels
- Swedish climate policy shall be formulated so that it contributes to stabilising the conc entrations of greenhouse gases in the atmosphere at no more than 400 parts per million (PPM) carbon dioxide equivalent.

The objectives presented in this brochure form new intermediate objectives for Östergötland within Reduced Climate Impact. They also contribute to the regional climate and energy strategy A winning climate, and to reaching the vision for a Sweden with zero net emissions of greenhouse gases in 2050. The objectives are connected to national and international objectives for climate and energy.

SWEDEN'S CLIMATE AND ENERGY OBJECTIVES

A 40 per cent decrease in greenhouse gas emissions until 2020, compared to 1990 levels (Applies to activities that are not included in the trade of greenhouse gas emission allowances)

50 per cent renewable energy in 2020

20 per cent more efficient energy use in 2020, compared to 2008

10 per cent renewable energy in the transport sector in 2020, a vehicle fleet independent from fossil fuels in 2030

zero emissions of greenhouse gases in 2050

EU CLIMATE AND ENERGY OBJECTIVES

A 20 per cent decrease in greenhouse gas emissions until 2020, compared to 1990 levels A 20 per cent decrease in the use of primary energy in 2020, compared to prognoses 20 per cent renewable energy in 2020

10 per cent biofuels in 2020

In addition to measures to reduce the greenhouse gas emissions, it is important to take measures to reduce society's vulnerability to the impending climate changes. This is why a regional objective for climate change adaptation has been established.



Östergötland harbours great knowledge of, and an extensive work within, the field of climate and energy. Ambitious projects are conducted by both the private and public sectors concerning energy efficiency, renewable energy and environmentally friendly transport. Several municipalities have also begun work to introduce climate adaptation in their physical planning.

All these efforts need to continue and intensify in order to achieve the objectives.

READ MORE

A winning climate, County Administrative Board of Östergötland, 2008
The Swedish Environmental Protection Agency, www.naturvardsverket.se.
Government offices of Sweden, www.regeringen.se
The European Union, http://europa.eu

Climate actions

Regional environmental objectives means a possible joint starting point for different actors in the county and indicate what needs to be done to contribute to an environmentally sustainable development. An Östergötland with energy efficient municipalities and companies contributes to reinforcing the county's attractiveness and allows for continued profiling and development of industry. Extensive measures in terms of energy and climate are already occurring in the county today. In order to achieve the objectives, continued and intensified collaborations and actions will be required from companies, municipalities, authorities and other organisations.

The Östergötland County Administrative Board has begun work on a regional initiatives programme dealing with how to achieve Reduced Climate Impact and the other environmental quality objectives. This is done in collaboration with industry and the public sector in the county.

Climate work with a comprehensive perspective

The work to reduce greenhouse gas emissions will require great efforts that will affect many other environmental areas. In particular, increasing the efficiency of our energy usage can have a positive influence on other environmental aspects, such as air quality and economising with natural resources. However, renewable energy production may sometimes lead to negative consequences, for example concerning the biodiversity. It is important that the climate work is conducted with a comprehensive perspective, to ensure that that the measures do not limit the possibility of achieving other environmental quality objectives. Measures in Östergötland should also not result in a worsened environmental situation in other countries.

Regional process

The objectives presented here have been produced in a county-wide collaboration during 2011–2012. They are based on discussions in the reference group for the regional climate and energy strategy which has been assembled by the Östergötland County Administrative Board. The reference group includes representatives for the East Sweden Regional Council; the East Sweden Energy Agency; the Östergötland County Council; the Municipalities of Finspång, Linköping and Norrköping; Östgötatrafiken; the Swedish Forest Agency; the Swedish Transport Administration; BT Products; Siemens Industrial Turbomachinery; Billerud Skärblacka; Tekniska Verken; Fastighets AB L E Lundberg; Stångåstaden; the Federation of Swedish Farmers; the Confederation of Swedish Enterprise; Linköping University and the Swedish Society for Nature Conservation. (All organisations have not participated in the discussions on objectives.)

During the course of the work, the County Administrative Board has held in-depth conversations with several of the reference group members as well as with Alltransport and E.ON Värme. The objective concerning climate adaptation has been discussed with several municipalities. The objectives were referred for consideration for over a hundred organisations in and outside of Östergötland.



NEW OBJECTIVES



REDUCED GREENHOUSE GAS EMISSIONS

Greenhouse gas emissions in 2020 shall be reduced by at least 27 per cent compared to 1990 levels. The objective applies to activities that are not included in the trade of greenhouse gas emission allowances, and does not measure emissions outside county borders caused by electricity use or other consumption.

The emissions of carbon dioxide and other greenhouse gases from energy use, transport, agriculture and other sources need to be reduced. The objective will be followed up through the national emissions database for air pollution.



ENERGY EFFICIENCY IN RESIDENCES AND PREMISES

In 2020, the total energy use in residences and premises shall be reduced by at least 15 per cent compared to 2008. The objective relates to the overall decrease within households, the public sector, service and green enterprises.

In order to economise resources and decrease emission, measures are needed to decrease energy use in all types of buildings. The objective will be followed up with the aid of data from Statistics Sweden.

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ENERGY MEASURES IN THE INDUSTRY

In 2020, the industry's efforts to increase energy efficiency and renewable energy shall have been intensified, resulting in a decrease of 25 per cent in the use of fossil fuels compared to 2008.

The industry's energy-saving measures can contribute to both reduced environmental impact and increased competitiveness. The objective will be followed up by Statistics Sweden and the companies' environmental reports.



SUSTAINABLE TRAVEL

In 2020, personal transports shall have changed, allowing greenhouse gas emissions from private cars to be reduced by at least 20 per cent compared to 2008.

In order to reduce the environmental impact of cars, there is a need for new technology, behavioural changes and increased use of public transport and bicycles. The objective will be followed up with the aid of mileage data collected at MOT tests.

NEW OBJECTIVES



SUSTAINABLE GOODS TRANSPORTS

In 2020, goods transports shall have changed, allowing greenhouse gas emissions from lorries to be reduced by at least 10 per cent compared to 2008.

Frugal driving, new technology and a transfer of transport operations to other modes of traffic are some important measures in order to decrease emissions from road transport of goods. The objective will be followed up through the national emissions database for air pollution.



INCREASED PRODUCTION OF BIOFUELS

In 2020, the annual production of biofuels shall amount to at least 1,600 GWh, of which biogas shall constitute at least 350 GWh.

Östergötland is well-known for its production of renewable vehicle fuels. The objective will be followed up with the aid of production statistics from the facilities.

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INCREASED PRODUCTION OF RENEWABLE ENERGY

In 2020 the annual production of renewable energy shall amount to at least 2,000 GWh.

Wind power, solar power and combined heat and power from biofuels are some of the sources needed to contribute to an increased use of renewable energy. The objective will be followed up with the aid of data from the Swedish Energy Agency and Statistics Sweden.



CLIMATE ADAPTATION

By 2015, all municipalities shall have identified and analysed the significant risks of increased extreme weather events and their consequences. The municipalities shall consider the risks in their physical planning and have produced recommended measures for an adaptation of the existing environment.

The work needs to be intensified in order to reduce the society's vulnerability to a transforming climate, and the public has a particularly important role to play. The objective will be followed up through, among other things, the audit of the municipalities' comprehensive plans, performed by the County Administrative Board.



Since 1999 Sweden has sixteen national environmental quality objectives. One of them is Reduced Climate Impact.

In this brochure, new intermediate objectives for Östergötland within Reduced Climate Impact are presented. The objectives have been developed in collaboration with municipalities, companies and other organisations in the county. They include reduced greenhouse gas emissions, more efficient energy use and adaptation of society to a transforming climate.

Follow the work concerning the environmental objectives at: www.lansstyrelsen.se/ostergotland and www.miljomal.se





