



Environmental Programme

City of Växjö



The Greenest City in Europe is the sum of all the environmental measures that have been carried out and that will be carried out in the City of Växjö, both private and public.

Unrelenting work

Environmental operations in Växjö started as early as the 1960's with the decision to restore Lake Trummen. The next step was the introduction of district heating generated by renewable sources of energy in the 80's. As early as the 1990's Växjö became known as an environmental municipality for the decision to become a fossil fuel free municipality and since then people from all over the world have made field trips to Växjö. During the 2000's these successful efforts have earned Växjö three international environmental prizes for excellent climate activities.

35 percent CO₂ reduction

Since the City of Växjö decided to reduce carbon dioxide emissions by 50% between 1993 and 2010, a great deal has been done. Up to 2008 fossil fuel carbon dioxide emissions had been reduced by 35% per inhabitant. At the same time, economic growth had increased by 69%. Växjö strives for a sustainable, low carbon dioxide and resource-effective economy based on sustainable production.

Växjö shows the way

In Växjö's strategic work, the environmental programme is a central part where targets and measures are important to the realisation of the Greenest City in Europe. We continue to work for even better cycle paths and public transport, increased bio-gas production, to be energy efficient and continue the building of low-energy buildings and timber buildings within a closely connected, coherent city.

When the BBC were going to do a radio report from "the greenest city in Europe", they asked the international organisation ICLEI Local Governments for Sustainability, where they should go. The BBC was told "go to Växjö", which they did, and that is how Växjö became the Greenest City in Europe in the international and national media during 2007. This gives us the obligation to further intensify our efforts in environmental areas. For the City of Växjö the revised Environmental Programme is an important instrument and we also hope that it will be an inspiration to others.

About the Environmental Programme

The Environmental Programme for the City of Växjö is a steering document with targets that will take us further than national legislation requires. The Environmental Programme encompasses targets within both the geographical area of the City of Växjö as well as for the city's administration. In order to be able to achieve these targets collaboration between the municipality, residents and business life is essential.

The programme was approved by the Växjö city council on 18-05-2006 and revised by the council on 20-04-2010. The Environmental Programme shall be revised each mandate period and the revision shall be determined by the municipal council.

The Environmental Programme shall:

- ✓ Be well known within city administration both amongst employees and elected representatives
- ✓ Apply to the whole of the municipal group of companies, including contracted operations
- ✓ Be taken into account when making decisions and taking actions and shall apply to both employees and elected representatives
- ✓ Provide inhabitants, companies, organisations and authorities with inspiration for their own environmental activities

Responsibility and organisation

Each board and company board within the municipal administration, is responsible for its own environmental activities. Boards and company boards are responsible, through their administration managers and Managing Directors for the implementation of the Environmental Programme. The Municipal Executive Board has the overall responsibility for strategic environmental and climate issues and is responsible for the collection of statistics from boards and company boards in order to follow up the Environmental Programme. For the co-ordination and support of these operations there is an overall group environmental network.

More than environmental programme

There are several policy-making documents that affect our local environmental operations, including: Master plan, Transport Strategy, The Green Structure Programme and the Cycle Path Plan. There is no internal hierarchy between these and the Environmental Programme.

The City of Växjö has signed international agreements, such as the Covenant of Mayor's where we undertake to work in a target-oriented and progressive way with climate issues and the Ålborg commitment for integrated and systematic activities relating to sustainable development.

Bo Frank
Mayor

Gunnar Elm
Mayor

Charlotta Svanberg
Mayor



Targets within three profile areas

The Environmental Programme contains three prioritised profile areas: Living life, Our Nature and Fossil Fuel Free Växjö. The programme takes its starting point from the 16 national and regional environmental objectives, the principle aims of which are incorporated into the profile areas.

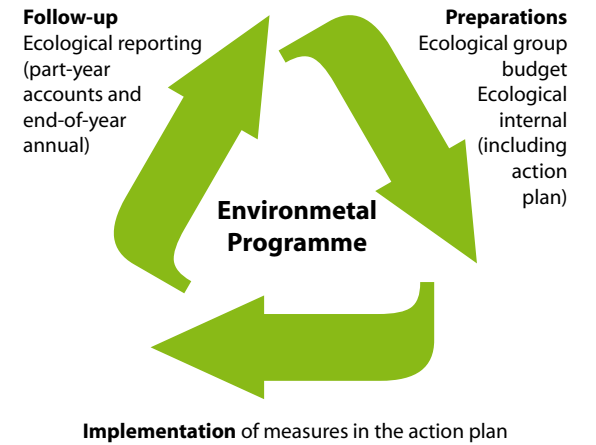
Within each profile area there is a brief vision as well as two types of target:

- Overall targets: without a specific time scale and not measurable and applies to the City of Växjö as a geographical area and the city administration.
- Targets up to 2015: with a specific time scale and measurable and which include
 - The geographical area of the City of Växjö
 - City administration, boards and company boards.

Over and above the targets there are undertakings that are examples of concrete measures that the municipality works with in order to achieve the targets. These are followed up at least once per mandate period.

Steering and follow-up

The targets of the Environmental Programme are steered and followed up on an annual basis, the system follows the financial budget activities by the production of an ecological budget, accounts for part of the year and annual accounts at group company level and at board and company board level. The Municipal Executive Board is responsible, in consultation with affected



boards and company boards, to ensure that an annual ecological budget is produced at group level.

Indicators

There is one or more indicator coupled to each target. Follow-up indicators (U1, U2, etc.) relate to the overall targets and show in which direction the targets develop.

Budget indicators (B1, B2, etc.) are coupled to most of the measurable targets up to 2015. For each budget indicator a value is set every year, a budget, in order to steer towards achieving the target. The budget is stated, for example, Reduced consumption of electricity per inhabitant (%) and Increased single journeys with city public transport per city inhabitant (%) .

Who is responsible to ensure that the targets are achieved?

Within each profile area it is clearly stated which board and company board has the principle responsibility to achieve the targets. Certain targets have more than one responsible party.

The responsible board or company board produces an internal budget, an annual action plan (planning, measures and follow-up) for the targets that affect them. Those that do not have the principle responsibility for any of the overall targets shall in addition, select an overall target from each profile area for which they should produce an action plan.

Environmental Policy

The Environmental Programme contains an environmental policy for the City of Växjö administration with attitudes and ambitions for the city administration operations, that is to say, for boards and company boards.

We shall continue to be a leading environmental municipality. All aspects of our operations shall be run and developed with major consideration to the conditions that the environment and the local and global natural resources provide. This is to ensure that future generations inherit a healthy and good environment.

We shall achieve this by

- Our elected representatives and employees continuously acquiring the knowledge that is required, taking into account the nature of our operations.
- Our social structure being based on the use of land, water and the physical environment in a resource-prudent and ecologically sustainable way.
- Being good examples and when making decisions where a conflict of interest occurs, react in a long-term, sustainable manner by taking special account of issues relating to the environment and natural resources.
- Ensuring that our position in society is used to affect and facilitate authorities', companies', organisations' and inhabitants of the municipality's reduction of their negative environmental effects.
- Involving authorities, companies organisations and inhabitants within the municipality in the development towards a sustainable society, by means of information and consultation.



Living Life

We have a vision that we in Växjö live and act so that we contribute to a sustainable development, where our consumption and production are resource-efficient and non-poisonous.

People's consumption leads to an effect on the environment, in as much as goods and services are produced and used until they become waste. By utilising waste and waste products and at the same time making the consumption of resources more efficient the environmental effect of consumption can be reduced. Production and consumption must also be free from substances that can threaten people's health or biological diversity.



Overall targets for the City of Växjö as a geographical area	Followed up with indicator U=Follow-up indicator	Principle responsibility*
1. We shall have a sustainable consumption of goods and services.	U1 Environmental awareness index (0-100). U2 Proportion of purchases of ethically produced foodstuffs within municipal administration (%)	Municipal Executive Board
2. We shall have a sustainable handling of waste firstly, by producing as little waste as possible, secondly recycling, thirdly material recycling, fourthly the extraction of energy and as a final resort, dumping.	U3 Total amount of household waste for material recycling, energy extraction and dumping per inhabitant excluding producer-responsible materials. (kg/inhabitant) U4 The apportionment of dealing with household waste between material recycling, energy extraction and dumping per inhabitant excluding producer-responsible materials (%). U5 The proportion of dangerous waste in household waste according to random selection analyses (% of total weight).	Technical Services Board
Targets up to 2015 for the City of Växjö as a geographical area	Followed up with indicator U=Follow-up indicator	Principala responsibility*
3. Ecological agriculture shall constitute at least 30% of agricultural acreage by 2015. <i>Current situation: 13% 2009</i>	U6 Acreage of ecological agriculture in relationship to the total agricultural acreage (%).	Municipal Executive Board
Targets up to 2015 for city administration (company boards and boards)	Followed up with indicator B=Budget indicator	Principle Responsibility*
4. Locally produced ¹ and/or ecological foodstuffs purchased shall, together, make up at least 45% of total purchased foodstuffs by 2015, of which at least 20% shall be locally produced. ¹ foodstuffs produced within a radius of 150 kilometres of the City of Växjö <i>Current situation: 13% ecological, 0% locally produced, 2009</i>	B1 Proportion of locally produced and/or ecological foodstuffs purchased (%)	Elderly & Disabled Care Board, Upper Secondary School Board, School & Child Care Board and Labour & Welfare Board,
<i>* Principally responsible to achieve the targets and produce an action plan for the targets</i>		

Växjö city administration undertakes to

- Strive to produce meals with a lower effect on the environment in municipal kitchens by purchasing locally produced and ecological foodstuffs, reduce waste, increase the proportion of vegetables and adapt menus to the season
- Purchase ecological and fair trade coffee and tea and always request ecologically produced products when representing and at conferences
- Offer the collection and recycling of household and their own food waste for the production of bio-gas
- Strive to achieve sustainable purchasing and purchase environmentally adapted goods and services

Our Nature

We have a vision that pure, clean water, fresh air and a diverse nature and cultural environment, with a rich biological diversity shall characterise the town, its population centres and the countryside.

The City of Växjö and its population centres lie closely surrounded by cultural landscapes, forests, lakes and streams. This nature must be husbanded for both the current and future generations. The municipality wishes to develop the nature that exists at the same time that both the population and the building of new homes, etc., increases. A diverse nature is a pre-requisite of biological diversity as well as a source of joy and recreation.



Overall targets for the Municipality of Växjö as a geographical area	Followed up with indicator U=Follow-up indicator	Principle responsibility*
1. We shall manage parks and nature in such a way that promotes biological diversity and good accessibility.	U7 Proportion of protected land acreage by means of nature reserves and biotope protection U8 Municipal park and nature land per inhabitant (m ² per inhabitant) U9 Municipal park and nature land as a proportion of built-up land area (%)	Town & Country Planning Board Leisure Services Board Municipal Executive Board Technical Services Board
2. We shall have clean, fresh air so that people's health and environment is not damaged.	U10 Proportion of the City of Växjö where the daily average value of particles (PM10) exceeds 35 micrograms/m ³ more than 37 days during one year (%) U11 The number of vehicles per weekday at vehicular traffic's average measuring points for city centre streets (number) U12 The number of vehicles per weekday at vehicular traffic's average measuring points for approaches to the town (number)	Municipal Executive Board, Environmental & Public Health Board, Technical Services Board, Town & Country Planning Board, Växjö Energi AB
3. All Växjö's lakes and streams shall have a good water status.	U13 The number of lakes over 100 hectare with good water status according to the County Council's/Water Authority's inventory (number) U14 Three-year average value of phosphorus in lakes close to the town (microgram/litre) U15 Three-year average value of nitrogen in lakes close to the town (microgram/litre)	Municipal Executive Board, Environmental & Public Health Board, Technical Services Board
Targets up to 2015 for the Municipality of Växjö as a geographical area	Followed up with indicator B=Budget indicator	Principle responsibility*
4. Proportion of individual waste water outlets with satisfactory purification capacity shall increase to 50% by 2015. <i>Current situation: 30 % 2009</i>	B2 Proportion of individual waste water outlets with satisfactory purification capacity (% and number)	Environmental & Public Health Board

** Principally responsible to achieve the targets and produce an action plan for the targets*

Växjö city administration undertakes to

- Limit the use of chemicals, by not using chemical pesticides on municipally owned land and by only using environmentally adapted cleaning products
- Certify sludge from the Sundet sewerage works (in accordance with Swedish Water's certification system) for spreading on arable and pasture land
- Maintain and develop the green structure in the City of Växjö and its population centres

Fossil Fuel Free Växjö

We have the vision of a Fossil Fuel Free Växjö, where our energy consumption does not lead to any climate effect.

A changed climate is one of our time's most serious environmental problems. People's emissions of greenhouse gasses, primarily carbon dioxide, that occur with the combustion of fossil fuels, are an important reason for climate changes. With Växjö's concentration for a Fossil Fuel Free Växjö we take our global responsibility when it comes to reducing our effects on the climate.



Växjö city administration undertakes to

- In our traffic planning and maintenance make it simple, attractive, secure and safe to walk, cycle and travel with public transport all year round
- Reduce the municipality's goods transport by the use of a coordinated loading centre
- Establish a Climate Centre for research and development and to sell energy-efficient and climate smart know-how and services
- Actively push the issue of a bio-fuel manufacturing plant in the municipality
- Always test the building of passive or plus-energy buildings

Overall targets for the Municipality of Växjö as a geographical area	Followed up with indicator U=Follow-up indicator	Principle responsibility*
1. We shall cease using fossil fuels.	U16 Proportion of renewable energy (%) U17 Proportion of renewable energy in the transport sector (%)	Town & Country Planning Board, Municipal Executive board, Technical Services Board, Växjö Energi AB
2. We shall use energy efficiently.	U18 Total amount of energy consumed per inhabitant (kWh/inhabitant) U19 Motor traffic operations per inhabitant, pace of change per year (%)	Town & Country Planning Board, Municipal Executive Board, Technical Services Board, Växjö Kommunföretag AB
Targets up to 2015 for the Municipality of Växjö as a geographical area	Followed up with indicator B=Budget indicator U=Follow-up indicator	Principle responsibility*
3. Fossil fuel carbon dioxide emissions shall be reduced by at least 55% per inhabitant by 2015, compared with 1993. Växjö shall be a fossil fuel free city by 2030 at the latest. <i>Current situation: decreased 35,0 % , 2008</i>	B3 Reduced fossil fuel carbon dioxide emissions per inhabitant (%)	Municipal Executive Board
4. Consumption of electrical energy shall be reduced by at least 20% per inhabitant from 1993 to 2015. <i>Current situation: decreased 10,9% 2008</i>	B4 Reduced consumption of electricity per inhabitant (%)	Municipal Executive Board
5. Cycle traffic in the City of Växjö shall increase by at least 20% by 2015 from 2004. <i>Current situation: decreased 1,5% 2009</i>	B5 Increased number of passing cycles per measuring point (%) U20 Cycle paths and tracks (km)	Technical Services Board
6. Public transport as part of city traffic shall increase by at least 20% per town inhabitant and for country traffic by at least 12% per county inhabitant from 2002 to 2015. <i>Current situation: decreased 20% city traffic 2009 and 12% in country traffic 2009</i>	B6 Increased number of single journeys with city public transport per city inhabitant (%) B7 Increased number of single journeys with country public transport per county inhabitant (%)	Municipal Executive Board
7. Energy consumption shall be reduced by 15% per inhabitant between 2008 and 2015. <i>Current situation: not available</i>	B9 Reduced amount of energy consumed per inhabitant (%)	Municipal Executive Board
Targets up to 2015 city administration	Followed up with indicator B=Budget indicator U=Follow-up indicator	Principle responsibility*
8. Fossil fuel carbon dioxide emissions from municipal administration transport and services shall be reduced by at least 30% from 1999 to 2015. Municipal administration shall be fossil fuel free by 2020. <i>Current situation: decreased 9,4% 2008</i>	B10 Reduced fossil fuel emissions from municipal transport and service operations (%)	All boards and company boards
9. The total energy consumption shall be reduced by 17% within municipal companies' premises and homes, calculated from an average value over the years 2003/2004 up to 2015. <i>Current situation: decreased 9,5% 2009</i>	B11 Reduced amount of energy consumed per square metre within Växjö Kommunföretag AB's properties (%) U21 Reduced use of electricity per square metre in premises owned by Växjö Kommunföretag AB, where the municipality runs operations (%) U22 Reduced use of electricity per square metre in homes owned by Växjö Kommunföretag AB (%)	Växjö Kommunföretag AB

* Principally responsible to achieve the targets and produce an action plan for the targets

Indicators

Budget indicators

- B1 Proportion of locally produced and/or ecological foodstuffs purchased (%)
- B2 Proportion of individual waste water outlets with satisfactory purification capacity (% and number)
- B3 Reduced fossil fuel carbon dioxide emissions per inhabitant (%)
- B4 Reduced consumption of electricity per inhabitant (%)
- B5 Increased number of passing cycles per measuring point (%)
- B6 Increased single journeys with city public transport per city inhabitant (%)
- B7 Increased single journeys with country public transport per country inhabitant (%)
- B8 Reduced amount of energy consumed per inhabitant (%)
- B9 Reduced fossil fuel carbon dioxide emissions from municipal transport and service operations (%)
- B10 Reduced amount of energy consumed per square metre in Växjö Kommunföretag AB's properties (%)

Follow-up indicators

- U1 Environmental awareness index (0-100)
- U2 Proportion of purchases of ethically produced foodstuffs within municipal companies (%)
- U3 Total amount of household waste for material recycling, energy extraction and dumping per inhabitant excluding producer-responsible materials (kg per inhabitant).
- U4 The apportionment of dealing with household waste between material recycling, energy extraction and dumping per inhabitant excluding producer-responsible materials (%).
- U5 The proportion of dangerous waste in household waste according to random selection analyses (% of total weight).
- U6 Acreage of ecological agriculture in relationship to the total agricultural acreage (%).
- U7 Proportion of protected land acreage by means of nature reserves and biotope protection (%)
- U8 Municipal park and nature land per inhabitant (m² per inhabitant)
- U9 Municipal park and nature land as a proportion of built-up land area (%)
- U10 Proportion of the City of Växjö where the daily average value of particles (PM10) exceeds 35 micrograms/m³ more than 37 days during one year (%)
- U11 The number of vehicles per weekday at vehicular traffic's average measuring points for city centre streets (number)
- U12 The number of vehicles per weekday at vehicular traffic's average measuring points for approaches to the town (number)
- U13 The number of lakes over 100 hectare with good water status according to the County Council's/ Water Authority's inventory (number)
- U14 Three-year average value of phosphorus in lakes close to the town (microgram/litre)
- U15 Three-year average value of nitrogen in lakes close to the town (microgram/litre)
- U16 Proportion of renewable energy (%)
- U17 Proportion of renewable energy in the transport sector (%)
- U18 Total amount of energy consumed per inhabitant (kWh/inhabitant)
- U19 Motor traffic operations per inhabitant, pace of change per year (%)
- U20 Cycle paths and cycle tracks (km)
- U21 Reduced use of electricity per square metre in premises owned by Växjö Kommunföretag AB, where the municipality runs operations (%)
- U22 Reduced use of electricity per square metre in homes owned by Växjö Kommunföretag AB (%)

