

Presentation Bilbao

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Ladies and gentlemen. My name is Henrik Johansson and I am working as an environmental controller for the City of Växjö in Sweden. I have been asked to come here and talk a little about climate work at local level.

At first, I want to tell you some things about Växjö. Växjö is a city in the southern part of Sweden. It has 78,000 inhabitants, and has a long tradition of being a centre of trading and education in this region. We have over 7,000 companies and an expanding university. The nature mainly consists of forests and lakes.

The City of Växjö has a long environmental tradition. It started with our lakes, which suffered from eutrofication. In the early 70's we started a massive program to restore the lakes and we have seen remarkable results. In 1993 we wrote an environment policy for the city administration and the year after we started writing annual environmental reports. In 1999 we adopted an Agenda 21 strategy with targets within different environmental areas. This strategy was a result of dialogue with local business, university, citizens, organisations etc.

In 1995, cooperation started between the City of Växjö and the biggest environmental NGO in Sweden. The aim of the cooperation was to develop the local environment work in many areas. It was during this cooperation the discussions about a fossil fuel free Växjö started. This cooperation was very fruitful for Växjö, and we learned that dialogue is important as well as commitment from local politicians.

In 1996, our first political steps towards a fossil fuel free Växjö was taken. There was a unanimous political decision that Växjö will stop its contribution to the global climate change. As a measurable target we said that the fossil CO₂ emissions should be reduced by 50 % per capita between 1993 and 2010. In long term, there shall be no fossil CO₂ emissions at all.

In our new Environmental Program, Fossil Fuel Free Växjö is one of three focus areas. The long-term targets for Fossil Fuel Free Växjö are the following:

- * Use energy from renewable energy sources.
- * Use energy efficiently.
- * Switch to a fossil fuel free transport system.

To reach our goal to become a fossil fuel free city, we have to deal with all these three points, in combination with changing our behaviour.

Even if it is important to have long term goals, it is also important to have measurable goals in short term, to make sure that you are heading in the right direction. Examples on our measurable goals are:

- * The fossil CO₂ emissions shall be reduced by 50 % per capita to 2010 and by 70% per capita to 2025 compared to 1993.
- * Reduce the use of electricity by 20 % per person between 1993 and 2015.
- * Stop using oil in the city administration by 2010.

(Showing graph) As an environment controller, it is my task to monitor the progress in the decrease of CO₂ emissions. This graph shows how the fossil CO₂ emissions per capita have changed in Växjö during the period 1993 to 2005. In 2005, every Växjö citizen contributed

with 3,5 tons CO₂, which is less than global average. It is also a reduction of over 24 % compared to 1993. When we take a look at the emissions from heating it is quite obvious that this is where we have succeeded the most – a reduction of 76 %! However, the emissions from transport are 19 % higher per capita in 2005 than in 1993.

The simplest explanation for this result is that local authorities in Sweden can decide quite much when it comes to heating. Many of the district heating plants are owned by the local authorities. Also, the Swedish CO₂ tax makes it more economic to use biomass than oil anyway. Though, the reason for why we started to use biomass already in 1980, was security reasons. We wanted to be less dependent on other countries when it comes to energy.

When it comes to emissions from the transport sector it is much harder to achieve reductions only on local level. We need help from national and international level in this matter. However, we have been encouraging the purchase of biofuel-driven vehicles, an increased use of bikes etc.

(Showing second graph) This second graph shows how the energy supply for heating has changed dramatically between 1993 and 2005, as a result of many local activities.

(Showing third graph) This is the same kind of graph but for the transport sector. As you see, there is a very small portion of renewable energy used here, even if it is growing. Most of the renewable fuel for transport is ethanol that is blended into the petrol.

(Showing a list) Here are a few measures that have been taken to reduce climate impact from our heating and cooling. Most of it has to do with district heating. But not all our citizens can connect to district heating. Then we have given subsidies if they convert from oil heating to biomass heating. One interesting project right now is to use district heating instead of electricity for air conditioning systems.

(Showing next list) Here is a short list of measures taken in the transport sector. We have been working quite much with encouraging use of environmental friendlier cars by having free parking and giving subsidies. We have also been working with biofuels, and during this spring our first biogas filling station will open.

As mentioned earlier – cooperation is crucial for success. In Växjö, the City cooperates with the local industry and the university. Resources for investments are also a good help on the way. Växjö has been successful in getting resources from the Swedish government as well as from EU. However, these resources would probably not be given to us if we wouldn't have a good cooperation and a solid political acceptance for the climate work.

In 2007 we started the first local Climate Commission in Sweden. The purpose is to find out concrete actions that have to be taken to actually become a fossil fuel free city. The commission has representatives from the city administration, the political level, the university and the local companies.

To sum it all up – these are my recommendations for a successful local climate work:

- * Long term and measurable goals
- * Political consensus
- * Involvement of local actors

That would be all for me, thanks a lot for your attention.