

European cities tackle climate change on their own

October 15, 2007

Story Highlights

- Green initiatives taken at the local level are being introduced across Europe
- Vaxjo, Sweden, has cut CO2 emissions 30 percent since 1993
- Barcelona requires all new and renovated buildings to install solar panels

VAXJO, Sweden (AP) -- When this quiet city in southern Sweden decided in 1996 to wean itself off fossil fuels, most people doubted the ambitious goal would have any impact beyond the town limits.

A few melting glaciers later, Vaxjo is attracting a green pilgrimage of politicians, scientists and business leaders from as far afield as the U.S. and North Korea seeking inspiration from a city program that has allowed it to cut CO2 emissions 30 percent since 1993.



Fir and pine chips are piled high outside the electricity-and-heating plant in Vaxjo, Sweden.

Vaxjo is a pioneer in a growing movement in dozens of European cities, large and small, that aren't waiting for national or international measures to curb global warming.

From London's congestion charge to Paris' city bike program and Barcelona's solar power campaign, initiatives taken at the local level are being introduced across the continent -- often influencing national policies instead of the other way around. "People used to ask: Isn't it better to do this at a national or international level?" said Henrik Johansson, environmental controller in Vaxjo, a city of 78,000 on the shores of Lake Helga, surrounded by thick pine forest in the heart of Smaland province. "We want to show everyone else that you can accomplish a lot at the local level."

The European Union, mindful that many member states are failing to meet mandated emissions cuts under the Kyoto climate treaty, has taken notice of the trend and is encouraging cities to adopt their own emissions targets. The bloc awarded one of its inaugural Sustainable Energy Europe awards this year to Vaxjo, which aims to have cut emissions by 50 percent by 2010 and 70 percent by 2025.

"We are convinced that the cities are a key element to change behavior and get results," said Pedro Ballesteros Torres, manager of the Sustainable Energy Europe

campaign. "Climate change is a global problem but the origin of the problem is very local."

So far only a handful of European capitals have set emissions targets, including Stockholm, Copenhagen and London. Torres said he hopes to convince about 30 European cities to commit to targets next year.

While such goals are welcome, they may not always be the best way forward, said Simon Reddy, who manages the C40 project, a global network of major cities exchanging ideas on tackling climate change.

"At the moment a lot of cities don't know what they're emitting so it's very difficult to set targets," Reddy said.

More important than emissions targets, he said, is that cities draft action plans, outlining specific goals needed to reduce emissions, like switching a certain percentage of the public transit system to alternative fuels.

London Mayor Ken Livingstone's Climate Action Plan calls for cutting the city's CO2 emissions by 60 percent in 2025, compared to 1990 levels. However, planners acknowledge the cuts are not realistic unless the government introduces a system of carbon pricing.

Barcelona, Spain's second biggest city, has, since 2006, required all new and renovated buildings to install solar panels to supply at least 60 percent of the energy needed to heat water.

The project has been emulated by dozens of Spanish cities and inspired national legislation with similar, though less stringent, requirements, said Angels Codina Relat of the Barcelona Energy Agency.

It's not only in Europe that cities are taking action on climate change.

Several U.S. cities including Austin, Texas; Portland, Ore.; and Seattle have launched programs to cut greenhouse gas emissions. Bogota, the capital of Colombia, has reduced emissions with the TransMilenio municipal bus system and an extensive network of bicycle paths.

In Vaxjo, the vast majority of emissions cuts have been achieved at the heating and



One of Europe's tallest wooden buildings, an apartment complex in Vaxjo, Sweden.

power plant, which replaced oil with wood chips from local sawmills as its main source of fuel. Ashes from the furnace are returned to the forest as nutrients.

"This is the best fir in Sweden," said plant manager Ulf Johnsson, scooping up a fistful of wood chips from a giant heap outside the factory.

He had just led Michael Wood, the U.S. Ambassador to Sweden, on a guided tour of the facility, which is considered state of the art. Not only does it generate electricity, but the water that is warmed up in the process of cooling the plant is used to heat homes and offices in Vaxjo.

Every week, foreign visitors arrive to see Vaxjo's environmental campaign. Last year, even a delegation of 10 energy officials from reclusive North Korea got a tour. A similar but much larger system is in place in Copenhagen, Denmark's capital, where waste heat from incineration and combined heat and power plants is pumped through a purpose-built 800-mile network of pipes to 97 percent of city.

Copenhagen is often cited as a climate pioneer among European cities. It cut CO2 emissions by 187,600 tons annually in the late '90s by switching from coal to natural gas and biofuels at its energy plants. Its goal is to reduce emissions by 35 percent by 2010, compared to 1990 levels, even more ambitious than Denmark's national target of 21 percent cuts under the Kyoto accord.

In 1995, the city became one of the first European capitals to introduce a public bicycle service that lets people pick up and return bikes at dozens of stations citywide for a small fee. Similar initiatives have since taken root in Paris and several other European cities.

Next, Copenhagen plans to spend about \$38 million on various initiatives to get more residents to use bicycles instead of cars.

Transport is one of the hardest areas for local leaders to control since traffic is not confined to a single city. Without stronger national policies promoting biofuels over gasoline, Vaxjo, for one, will never reach its long-term target of becoming free of fossil fuels.

But it's doing what it can locally. So-called "green cars" running on biofuels park for free anywhere in the city. About one-fifth of the city's own fleet runs on biogas produced at the local sewage treatment plant.

Using biofuels instead of gasoline in cars is generally considered to cut CO2 emissions, although some scientists say greenhouse gases released during the production of biofuel crops can offset those gains.

Vaxjo has also invested in energy efficiency, from the light bulbs used in street lights to a new residential area with Europe's tallest all-wood apartment buildings. Wood requires less energy to produce than steel or concrete, and also less transportation since Vaxjo is in the middle of forests.

Although Vaxjo is tiny by comparison, the C40 group, including major metropolitan centers such as New York, Mexico City and Tokyo, has been impressed by the city's progress and uses it as an example of "best practices" around the world.

"They're a small town," Reddy said. "Apply that to 7 million? It's doable but its going to take a lot longer."