

Environmental public procurement

The aim of environmental public procurement is to promote eco-based economic development by making environmental requirements known amongst consumers, thereby increasing the demand for environmentally-friendly goods and services. Environmental procurement contributes to achieving our regional environmental objectives of A Non-Toxic Environment, reduced Climate Impact and Cresh Air.

However, it is important to focus on more than just environmental requirements in order for environmental public procurement to be successful. While the requirements comprise an important part of the procurement process, other aspects are equally important in achieving success. These include such things as initiatives and aims and the purchase and use of products, as well as evaluation and follow-up to ensure purchased products meet the environmental requirements specified. We need to focus on the process as a whole, rather than on its individual aspects.

To achieve success, every part of the organisation needs to take action – to educate and inform, to impart knowledge and to understand their areas of responsibility within the process.

BioFuel Region

BioFuel Region is a collaborative initiative run by municipalities, organisations and businesses in Västernorrland and Västerbotten counties. An important part of BioFuel Region's work is industrial and regional development. The initiative also aims to increase knowledge about biofuels and climate change. BioFuel Region's vision is to become a world-leading region in the transition to biofuels and products sourced from renewable raw materials, as well as to mobilise, involve and activate as many potential forces for progress as possible. BioFuel Region is also involved in the Biorefinery of the Future innovation cluster in order to help develop biorefineries in the region and to promote biogas, DME, cellulose-based ethanol and synthetic diesel as alternative fuels. BioFuel Region also works to increase the number of green vehicles on the roads.

BioFuel Region's work is carried out in the form of closely-related projects run within different parts of the development chain: raw materials, production, distribution, vehicles and legislation. It also focuses on activating dynamic market forces. The entire chain needs to work in harmony if the transition to biofuels is to be successful.

Ethanol pilot plant in Örnsköldsvik

The Ethanol Pilot Plant in Örnsköldsvik is one example of environmental technology working in support of the transition to biofuels. Västernorrland boasts expert knowledge of how to utilise forestry products for pulp and paper production. Ethanol for use as a motor fuel can also be produced from forestry waste. Örnsköldsvik is home to a one-of-a-kind pilot plant for developing the technology needed to produce ethanol from cellulose, wood chips and spruce. The development work includes everything from the raw materials to chemical and biological processes, process control and regulation and integration with other manufacturing. The possibility of being able to produce high-quality ethanol from waste materials is an important step forward in the enormous challenge of overhauling the fossil fuel-dependent transportation sector.

Sweden has good experience in using ethanol with a low blend of petrol to power its vehicles. A large number of Swedish vehicles now run on E85 and the availability of ethanol re-fuelling stations is good.

Biogas

Forestry and household waste and sludge from wastewater treatment plants can be converted into biogas, which is then purified to become motor fuel for both private and commercial vehicles.

A project is currently under way to develop a new gas-purification technique in which biogas is converted into a liquid form, providing for more efficient distribution and an increase in the volume able to be stored in fuel tanks. This ongoing work forms part of a more comprehensive solution, in which the by-products of biological digestion from wastewater treatment plants, household biological waste and waste products from the pulp industry are digested together, after which the resulting gas is purified to become fuel for vehicles. Any remaining materials can then be used for forest fertilisation and during the summer months, excess heat from waste incineration can be used for such things as drying waste products.

The project is also working together with Östersund and Trondheim to turn road transportation routes across the Nordic region into good eco examples.

Green Highway

Sundsvall, Östersund and Trondheim are cooperating in an inter-regional project aimed at developing a 'green highway'. It is intended that, from coast to coast, traffic on the highway will be powered by locally-produced, renewable biofuels and energy. Better transportation will help create an attractive environment in which to work and live across central Scandinavia.

The Green Highway will provide good opportunities for generating growth via cleantech. One of its strengths is that it will promote locally-produced, renewable electricity and biofuels. Moreover, the project is in keeping with the EU's transport, climate and energy policies.

Green Highway means eco-friendly travel along the E14 highway. The project:

- provides information on where motorists can re-fuel with renewable fuels and charge electric cars along the Green Highway between Sundsvall and Trondheim
- works to effect a transition from fossil to renewable fuels along the Green Highway transportation corridor
- stimulates and supports the introduction of electric cars and charging stations and vehicles powered by renewable fuels through practical demonstration projects run by various players and power companies.

