Case Study PC 05 Sustainable municipal utilities in Aalborg, Denmark

The city of Aalborg drawn up a number of plans aimed at promoting a sustainable public utility supply as basic step for moving towards fully sustainable governance. Besides elements of the Brundtland Plan, nearly all the Aalborg Commitments - except the 6th one regarding mobility issues - have been tackled: encourage stakeholders’ participation in decision-making processes, implementation of sustainable management cycles, protection and preservation of natural common goods, promotion of a sustainable production and an efficient use of resources, commitment of holistic strategic plans, protection of citizens’ health, ensure a vibrant local economy which respects the environment, ensure local equity and justice, act locally and think globally.

The Energy Sector

Within the energy utility sectors, three are the public companies present in Aalborg:

- District Heating Utility Company: energy production and distribution,
- Electric Utility Company - AKE Net: energy production
- Gas Utility Company: energy production

The companies contribute to a sustainable and environmentally friendly development through the implementation of the following agreements:

1. Minimize the environmental impact in the production of energy
2. Try to limit customers’ energy consumption
3. Limiting their own energy needs.

The companies try to influence the environmental impact caused by energy production and supply, acting both on partners’ collaboration as well as through the general public education. Cooperating with local producers of surplus heat, the District Heating Utility Company is able to easily manage its environmental impact level. On the contrary, the electricity distribution by AKE Net is harder to manage directly, as the energy distribution depends on the amount bought by customers.

All of the three Public Utility Companies undertake common policies in order to keep
their environmental impacts under control:

- The Gross Energy Consumption, an indicator that compares the amount of production energy need in relation to the energy supplied to final users; three quarters of the energy consumption in the Municipality of Aalborg is needed to run the three Utility Companies;
- The Demand Side Management (DSM) aims to limit the customers’ energy consumption;
- The Integrated Resource Planning (IRP) is the tool the companies use in order to limit their energy consumption;
- An Environment Accounts is presented every year.

**Water and Wastewater**

Water is supplied by 53 non profit waterworks and by the Public Water Utility Company. They collaborate abreast within the Water Plan Cooperation frame which sets three key-points:

- Ensure groundwater protection in the catchment areas,
- A reciprocally connected supply network must ensure reciprocal collaboration and reliability in water supply,
- Ensure reasonable prices in connecting countryside areas to the public supply system.

The Water Utility Company try to influence customers’ responsible behaviour through its consultancy service which was deemed by the Energicenter Aalborg to have caused the saving of some 170,000 m³ of water during the period 1995 – 2002. The company tries to limit the losses in pipelines through their systematic renovation.

**Waste Management**

The Aalborg’s Waste Action Plan 2000 – 2012, set a recycling rate of 55%, which is also the national target. The Incinerator Plant at Reno Nord is owned by the City of Aalborg and other six local authorities in the Region. A new plant will replace the old one and will reach an efficiency rate up to 98% while supplying heat to 30,000 single family dwellings and electricity to 16,000 single-family dwellings.

**Source:** Sustainable utility supply in Aalborg. City of Aalborg, The Public Utilities Companies. February 2004.