



Lahti: from business village to a green city

LAHDEN AMMATTIKORKEAKOULU
Lahti University of Applied Sciences



LAHDEN AMMATTIKORKEAKOULU
Lahti University of Applied Sciences

Lahti and Päijät-Häme region

Location: In north-eastern corner of the greater metropolitan area of Helsinki. Between ridges and by Lake Vesijärvi.

History as a city relatively short, as a settlement more than 1000 years old. Grew rapidly especially after the Second World War.

Population today: slightly over 100000 in the city itself, some 200000 in the region.

Relatively industrialized: Metal, wood processing, new technologies (in the metal cluster alone: 250 companies).

Other environmental challenges: Agriculture and forestry in the region. Leisure time villas and cottages by the lakes.



LAHDEN AMMATTIKORKEAKOULU
Lahti University of Applied Sciences



Strategic steps in environmental questions

Lahti coordinates National Clean Tech Cluster from the business angle.

Whilst acting locally the vision is global.

The whole region has taken environment as one of the key strategic elements (the others are design and innovative solutions). All three support one another.

Green city thinking is integrated in everything from planning to practical solutions and training and education.

Clean environment, air and water are elements we are proud of in Lahti and Finland. It was not always this way.

One concrete step of the changes in this area is cleaning of Lake Vesijärvi in Lahti.



LAHDEN AMMATTIKORKEAKOULU
Lahti University of Applied Sciences



Lake Vesijärvi case

Lake Vesijärvi is a relatively large Finnish lake. However, even at the deepest point it is only 42 m deep and the average depth is 6 m only. This makes the lake very vulnerable.

Till 1980s the city of Lahti had let all her sewage waters with practically no purification to the lake. This resulted in algae increase and in oxygen disappearing. Also, sediment at the bottom of the lake increased.

Particularly in winter the oxygen levels of the lake sank dramatically. Beneath the depth of 10 m the lake was totally dead. Fish such as roach and bream did quite well dwelling in the mud and eating water fleas. This helped algae growth as water fleas had kept that at bay. Trout, salmon and pike-perch disappeared.

More mud and dead sediment was formed and the lake turned into a dying pond that had no recreational value.



LAHDEN AMMATTIKORKEAKOULU
Lahti University of Applied Sciences

Lake Vesijärvi case, 2

In all of Finland a sort of waking up took place during the last decades of the 1900s.

Also by Lake Vesijärvi efficient sewage water treatment and other methods have helped it to recover slowly but steadily.

The holistic approach is based on biomanipulation. In addition to purifying waters that run into the lake, fish such as bream and roach are caught in large quantities and in winter time oxygen is pumped into the lake.

The holistic approach includes also agriculture and forestry, leisure time housing around the lake and all other activities that may harm the balance.



LAHDEN AMMATTIKORKEAKOULU
Lahti University of Applied Sciences

Lake Vesijärvi case, 3



In Lahti the new regional strategies support clean environment and form a solid basis for actions. This is largely true in all Finland.

An example of this change are companies such as Kemira who have turned their key businesses from grow-how to water purification with new methods and holistic approaches.

A close cooperation between the city, companies and educational and research institutes is a spin-off that has been created.

The change of attitude is the key to success.

Obviously – the road never ends and even in Lahti we still have a long way to go. Results thus far show that we are on the right tracks.



LAHDEN AMMATTIKORKEAKOULU
Lahti University of Applied Sciences



Thank you for your time