

ECON-tainer: new container plant at the Port of Rotterdam

The ECON-tainer project established a new container degassing and fumigation plant in Rotterdam with the aim of eliminating methyl bromide emissions. It successfully demonstrated four zero-emission techniques, two of which are economically viable.

The LIFE-supported project set up the world's first zero-emission container degassing and fumigation facility. The project was implemented by Europe Combined Terminals (ECT), which handles 60% of containers passing through the Port of Rotterdam, and aimed to demonstrate a new environmentally friendly technique for treating containers for pests.

ECON-tainer established four new techniques at its new container plant. In the start-up phase (2003-2004), it reduced emissions of methyl bromide, an odourless, colourless gas that is used to control several pests, in the Netherlands by approximately 15%. Methyl bromide is harmful to humans and a significant ozone-depleting substance.

Project Number:
LIFE02 ENV/NL/000124

Title: An environmental friendly cargo handling plant in the Port of Rotterdam

Beneficiary: Europe Combined Terminals, the Netherlands

Total Budget: €2,999,600

LIFE Contribution: €623,000

Period: 01-Mar-2002 to 31-Dec-2004

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The plant was completed at the end of 2002 and became operational at the beginning of 2003. Twelve new gas-tight chambers were built and equipped with the required heating, conditioning and monitoring installations, and four types of treatment were performed:

1. Treatment with the EcO2 QPS (Quarantine and pre-shipment) heat treatment. This technique was developed to treat wood, and to stow wood materials and packaging materials together with their goods.
2. Gassing with methyl bromide in a controlled environment.
3. Treatment with EcO2 controlled atmosphere technology. This technique is mainly used for pest control purposes in food stocks.
4. Degassing containers with methyl bromide in a controlled environment.

Zero-emission techniques

All four zero-emission techniques used for gassing and degassing containers were technically feasible; the first two treatments were also economically viable. The results of the project have generated a lot of international interest, particularly in view of a recent regulation to cut down on methyl bromide emissions. Delegations from other European countries and North America visited the plant, and the ports of Antwerp, Felixstowe and Hamburg are considering setting up similar facilities.



New zero emission container facility at the Port of Rotterdam.

The Montreal Protocol calls for an end to the production of substances that deplete the ozone layer, and the new FAO-guideline for regulating wood packaging material in international trade, ISPM15, is expected to lead to an increase in the use of methyl bromide. The ECON-tainer project demonstrated that the EcO2 QPS heat treatment is a certified and acceptable alternative within ISPM15 for gassing with methyl bromide.