

## Energy-smart action at emballator in Mellerud

**Emballator Plast AB in Mellerud is saving energy and money by utilising waste heat from production. This measure has also led to reduced carbon dioxide emissions and a better working environment.**

The improvement in energy efficiency at Emballator is a good example of how a relatively small measure can save energy and money, reduce emissions and provide a better working environment.

In 2001, Emballator installed six water-borne fan air heaters, known as Airo-temps, for heating and ventilation in the factory. In addition, the recycling of waste heat was expanded. The aim was to save energy, stop using oil and improve the working environment for the employees. The measure was implemented with support from the Local Investment Programme (LIP).

### POSITIVE ENVIRONMENTAL AND ECONOMIC IMPACTS

- Reduced emissions of carbon dioxide, 40.5 tonnes/year.
- Reduced emissions of sulphur dioxides, 15 kg/year.
- Reduced use of electricity, 80 MWh/year.
- Reduced consumption of oil, 15 m<sup>3</sup>/year.
- Better working environment.

Photograph: Emballator



## IMPLEMENTATION

The company installed six modern wastewater-heated Airotemps and new control and regulating equipment. At the same time the old oil-fired boiler and the oil tank were removed, as well as two old Airotemps that were operated with direct-acting electricity. The wastewater-heated Airotemps heat warehouse premises up to 100 square metres in size that were previously unheated. This provides a better working environment.

One lesson from the project was that the cooperation between the municipality and Emballator was necessary to coordinate the measures, but also that such a “small” measure must not become bureaucratic and take too long.

## POTENTIAL AND FUTURE BENEFIT

Ventilation by fans is a basic technology that consumes a relatively large proportion of a country’s energy budget. Measures that link energy savings to ventilation fans are of potential global benefit. The fact that this measure is a relatively simple technical solution increases the prospects of it being disseminated.

## WHY BEST PRACTICE

Emballator has continued to work on the energy issues since the LIP project ended. All heat is now supplied through the Airotemps. 700 square metres of roof and two high-speed curtain doors have been insulated and lighting control has been installed with a motion switch. The company has now introduced heat exchange and heat recovery in the office section. The project has led to positive environmental effects with reduced air emissions, has saved energy and has contributed to a better working environment.

## FOR FURTHER INFORMATION

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[www.swedishepa.se/bestpractice](http://www.swedishepa.se/bestpractice)  
[www.naturvardsverket.se/mir](http://www.naturvardsverket.se/mir)

FACTS  
LIP Mellerud 2001  
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