

High productivity and environmental awareness

In 2008, the plant in Vara, Sweden produced just over 256,000 dishwashers, washing machines and tumble dryers. At present, the environmental impact from producing our appliances is marginal compared to the environmental advantages that may be achieved at the consumer by choosing appliances wisely, and using them in an environmentally friendly way. Asko Appliances is working intensively to ensure that our appliances are resource and energy efficient, and we are the only manufacturer to offer dishwashers and washing machines bearing the Swan mark – the Nordic Environmental Label.

Swan-labelled washing machines and dishwashers

A Swan-labelled machine is characterised by low energy consumption, low noise and low water consumption. The eco-label also encompasses environmentally hazardous substances that may be present in different components – an important aspect when it comes to recycling materials from old machines.



Plastic components must not, for instance, contain any flame proofing agents that may cause cancer or affect reproduction.

Water is in short supply in many areas of the world, and low water consumption is an important factor when choosing a domestic appliance. Asko Appliances AB is a world leader in water efficient dishwashers and washing machines, and low water consumption is also important in reducing energy consumption. Our washing machines use a technology that senses the amount of laundry and adapts the water level and cycle time accordingly. Low energy consumption and high spin efficiency in the washing machine in turn save energy in the tumble dryer.

Metal and plastic parts in all machines are labelled with material type and an item number, and are thereby ready for recycling.

ENVIRONMENTAL MANAGEMENT SYSTEM



Asko Appliances' environmental management system is certified to the ISO 14001 environmental management standard.

The system provides added opportunities to improve the company's internal and external environment, and to develop products that contribute to sustainable development. The environmental management system also encompasses the licence and self-audit programme issued for the operation in line with the current Environmental Code.

Audits and periodic inspection

DNV performed two external audits during the year. Our laboratory also underwent a NATA audit. This accreditation means that the Asko Appliance laboratory is certified to produce energy declarations for the Australian market.

A BRIEF ENVIRONMENTAL HISTORY

Production and property

Painting: In 1990 we stopped wet lacquering metal parts in favour of powder painting, thereby reducing solvent emissions from 50,000 kg a year to virtually zero. We have also discontinued electro-polishing and trichloroethylene degreasing.

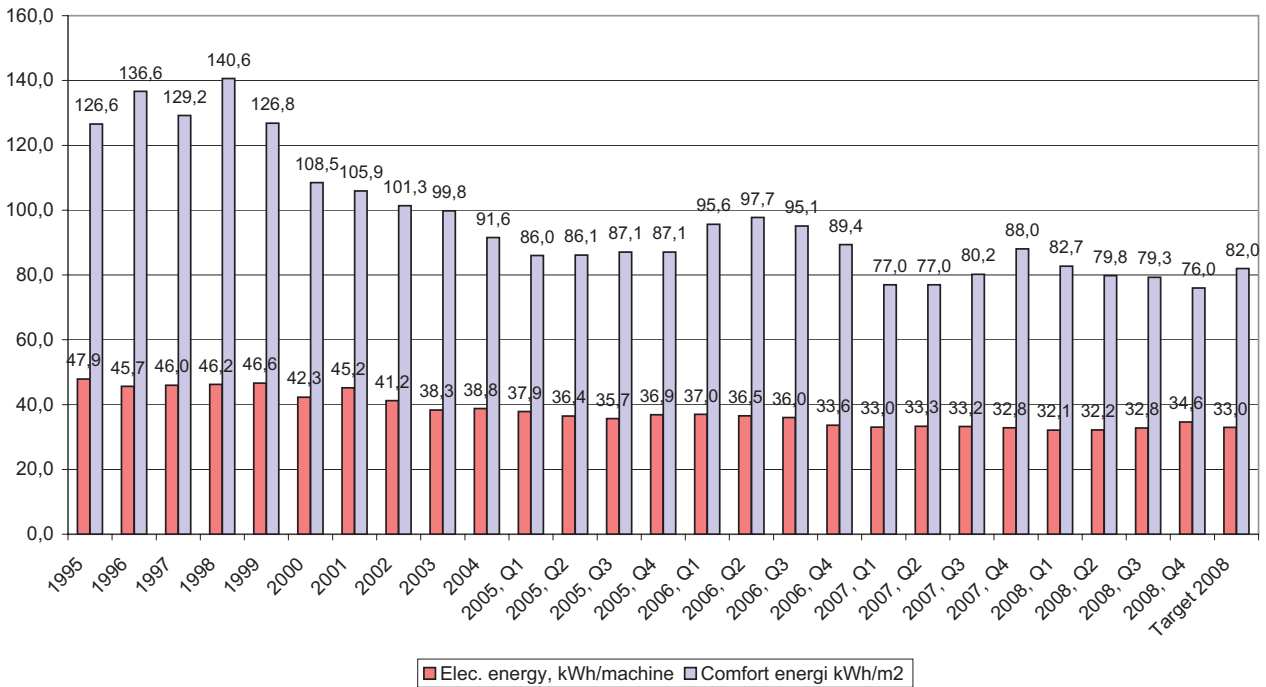
We are striving to achieve closed systems in order to minimise resource consumption and reduce emissions into the water and air. The degreasing plant is one such example of a closed system. Moreover, we are continuously developing ventilation systems with computer control, recycling and other measures. In 2002 for example, we installed a new testing system for our dishwashers which, along with the new generation of dishwashers, reduces water consumption in the testing process. Water consumption in testing varies with the model of dishwasher, but the average fell from 20 to 8 litres per dishwasher produced. In 2006 this figure decreased even further to 5 litres per dishwasher produced.

ENVIRONMENTAL IMPROVEMENTS

Environmentally friendly oil

We have replaced the heating oil Shell WRD 0,1 % to Shell WRD 0,05 % and hereby lowered the amount of sulphurous from 0,1 % to 0,05%. The emissions of sulphurous have thereby been diminished.

Monitoring of environmental targets



Preventive work against fire hazards

To improve the safety and lower the risk of fire a work has been commenced to put together a risk analysis for fire. To increase the preventive work the ordinary fire inspections have been complemented with targeted fire inspections.

The Managements review of safety/emergency readiness has been inserted two times a year to make the preventive work more efficient and to ensure that the necessary resources are available.

More Swan labelled products

During 2008 ASKO has complemented their range with Swan labelled machines, both dishwashers and washing machines.

ASKO's new generation dishwashers have been improved with a more precise sensor system for measuring of temperature and water intake, which further increases the impact on environment.

RESEARCH AND PRE-DEVELOPMENT

Environmentally sustainable washing machine for domestic use.

During 2008 the Swedish Environmental institute IVL started a three year research project in order to develop an environmentally sustainable washing machine to meet future needs. The goal is to develop a functional washing machine prototype that consumes 70 % less water; 60 % less energy and considerably reduces the consumption of laundry detergent compared to the best machines of today. The initiative that goes under the name of s'wash (sustainable washer) has been granted a support of 6 million SEK from the environmental research foundation Mistra and in addition to this the industry will contribute with at least as much. Behind the project is IVL, the institutes Swerea IVF and IMEGO, Chalmers, Unilever, Akzo Nobel, Asko Appliances and Electrolux. You can find out more about this project if you search for s'wash on: <http://www.ivl.se/english/ivlstartpage>

MONITORING OVERALL TARGETS

In 2008, we have worked with measurable environmental targets in the following areas.

Electrical energy

The electrical energy used to power production processes, lighting and other equipment. Consumption is measured for each machine. The result was 34,6 kWh per machine, which exceeds the target of 33,0 kWh per machine. During the three first quarters the development looked good but lower production volumes during the fourth quarter lead to missing our goal.

Comfort energy

Comfort energy is the energy consumption in oil boilers and electric boilers, and is primarily used for heating. The result in 2008 was 76,0 kWh/m², which is below the set target of 82 kWh/m².

Licence and self-audit programme		
Parameter		Results 2008
Dust in outgoing air powder painting	Max 10 mg/Nm ³ dry gas	Readings fell below 1 mg/Nm ³ dry gas
Sulphur dioxide emissions	< emissions from oil with sulphur content of 0.5%	Low-sulphur oil (<0.1%) is used
Nitrogen oxide emissions	<150 mg NO _x /MJ fuel, guide value	Boiler 1: 66 mg NO _x /MJ Boiler 2: 65 mg NO _x /MJ
Dust particle emissions	< Bacharach 3, guide value	Continuous monitoring shows an approved result Boiler 1: Bacharach 0 Boiler 2: Bacharach 0
Noise (Measured at boundary with neighbouring plots in 2000)	< 55 dB (A) weekdays, daytime < 45 dB (A) night-time < 50 dB (A) other times	On measuring - 08 45 dB(A) On measuring - 08 45 dB(A) On measuring - 08 45 dB(A)
Emissions into River Jungån	Total phosphorus <12 kg/yr, limit	0.087 kg/yr (-07 0.211 kg/yr)
	Copper <6 kg/yr, limit	0.045 kg/yr (-07 0.053 kg/yr)
	Nickel <12 kg/yr, limit	0.013 kg/yr (-07 0.030 kg/yr)
	Zinc <6 kg/yr, limit	0.048 kg/yr (-07 0.091 kg/yr)
	Suspended substances <15 mg/l, guide value	Average <5.0 mg/l
	Wastewater pH of 7.5-10, guide value	pH of 8.5-10.1 Average: pH 9.3
	Volume of discharged wastewater <8 m ³ /h	0.55 m ³ /h

Asko Appliances AB has a high level of environmental awareness, as evidenced by licence values well within the permitted limits.

Asko Appliances AB is a proactive domestic appliance company, and part of the Antonio Merloni Group of Italy. The company is based in Vara Municipality, western central Sweden. We are a turnkey enterprise, offering everything from development to after sales. The company produces high-end quality products in the competitive domestic appliance sector. Approximately 65% of our production output is exported to some 30 countries. Annual net sales total SEK 959 million, and the company has 524 employees.



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