

Environmental Report 2006/07

Activities relating to Environmental Issues and Working Environment at Bang & Olufsen.





Achievements

Introduction

The Head office of Bang & Olufsen is centred in Struer alongside the Development Department, the Administration and most of the production facilities. In 2006 Bang & Olufsen's factory in the Czech Republic was commissioned, and by the end of the financial year the factory in the Czech Republic employed 211. In Denmark Bang & Olufsen has 1914 employees.

This annual environmental report has as a purpose to describe all the activities relating to environmental issues and working environment at Bang & Olufsen. For each subject our current activities are presented together with our focus areas for the next financial year. This report covers the Danish sites.

WEEE

During the past financial year, efforts have been directed at the EU directive on Waste of Electrical and Electronic Equipment (WEEE). The WEEE directive introduces producer responsibility for electrical and electronic waste. We have met this responsibility by joining national collection schemes.

The responsibility for the enrolment, reporting and payment to the national collection schemes has been delegated to Bang & Olufsen's National Sales Offices and Master Dealers around Europe. The National Sales Offices and Master Dealers enrol the collection scheme as soon as they are established in their national states.

The WEEE directive will be revised next year and we remain updated on the new requirements that can have an impact on our products.

REACH

In December 2006 the EU Commission adopted a new Chemical Statutory Order: 'Registration, Evaluation and Authorisation of Chemicals' (REACH).

REACH sets new requirements for approval and use of chemicals. Bang & Olufsen are in this context in cooperation with the Danish EPA and DHI Water and Environment participating in a preproject: 'Consequences of REACH for Manufacturers of Electronic Equipment'. The reason to join the preproject is to find out in detail which consequences the Order has to the Trade of Electronics and of course to Bang & Olufsen.

The previously internal chemical key performance index was based on the Danish term KRAN which refers to carcinogenic (K), reprotoxic reproduction (R), allergic (A) and neurotoxic (N) chemicals. The target was set on a reduction of the number of chemicals on 10 % per year.

Due to the adoption of REACH it has been decided to set a new key performance index with basis in the requirements of REACH where purchase and use of 'Substances of very high concern' are banned. Existing chemicals at Bang & Olufsen

covered by 'Substances of very high concern' will be substituted continuously, but not later than June 1st 2010. We believe that REACH will not have any further consequences for Bang & Olufsen when the "substances of very high concern" have been substituted.

RoHS

The EU directive on the Restriction of the use of certain Hazardous Substances – know as the RoHS directive – went into effect on July 1st 2006. The legislation banned the use of lead, cadmium, hexavalent chromium, mercury, the flame retardants polybrominated biphenyls and some polybrominated biphenylethers in products sold to the European market. We now see similarly legislations in China, California and Japan. We have gone further and substitute the 6 substances on all our markets.

Code of Conduct

Bang & Olufsen has actively been working with supplier assessments for the last two years. The guidelines are described in the Bang & Olufsen Code of Conduct, which all suppliers must sign as a part of the cooperation agreement. The aim of the code is not to terminate business, but to help suppliers improve on social and environmental standards.

The procedures connected to the supplier management have been implemented in the overall quality system and are executed by the purchasing department.

The entire supplier port folio is being risk evaluated once a year. As a result of the risk analysis the suppliers are divided into three risk groups and categorised as a low, medium or high risk supplier.

All suppliers must sign the Bang & Olufsen Code of Conduct. Suppliers categorised as medium and high risk must in addition to this also fill out a self assessment survey. The self assessment may result in some corrective actions that the suppliers must implement.

Furthermore, Bang & Olufsen performs a full audit of all suppliers categorised as high risk based on the Code of Conduct. The audit performed together with a highly respected partner. If the audit reveals any violations from the Code of Conduct, a corrective action report will be made based on any possible findings in cooperation with the supplier.

Finally, a reaudit of the supplier is conducted in order to ensure that the corrective actions have been implemented.

Bang & Olufsen has performed six full audits of different suppliers, and the conclusions of the reaudits shows significant improvements at the suppliers in terms of human rights, labour and the environment.



Environmental Policy

All human behaviour influences the environment. This also applies to the production and use of our company's products. Bang & Olufsen works continuously on minimizing the effects on the environment. Equal weight is given to finding a balance between the needs of the environment and the consideration given to our products': practical qualities, economic value, aesthetic value and a long life span. In this way, Bang & Olufsen endeavours to be among the best in the business. We will openly discuss environmental issues related to the company and publish a yearly environmental report. We wish to be a part of sustainable global development and view our activities within a life cycle perspective. As a minimum, Bang & Olufsen will comply with national and international environmental requirements.

Development (idea, design & construction)

A product's qualities regarding environmental impact are determined in the product generation process, and the necessary steps are taken to reduce this impact in subsequent phases of the product's life cycle.

Raw Materials

We will attempt to avoid selecting environmentally problematic materials.

Production

We will give cleaner technology a high priority when choosing methods of production and equipment. We place emphasis on consideration of the local environment, as well as on creating a safe and healthy work environment for our employees. We focus here on improving the physical as well as the mental work environment. We will ensure that the suppliers we choose have adopted environmentally appro-

priate attitudes and policies. We will carry on a continuing dialogue with suppliers regarding the creation of sound environmental conditions in that phase of the product's life cycle that they are responsible for.

Transport

We will demand a great degree of efficiency of our carriers in their use of resources and application of technology in transport units.

Use

We will aim for problemfree product use in the customer's environment, long product life and a low level of energy consumption during the product's life span.

Disposal

We will endeavour to make product parts suitable for recycling. This entails making significant components easily identifiable during disassembly, and thereby making it possible to choose the best method of disposal or recycling.



Environmental Impact at Site

Raw Materials

The materials we use for our products contribute to the environmental impact through drain on natural resources. Materials are purchased as raw material or semimanufactured. In this report we include raw materials purchased to process at Bang & Olufsen which are plastic granulates and aluminium.

Waste

At Bang & Olufsen great effort is made to sort the waste correctly so it is possible to recycle.

Total waste is made up of actual waste that is delivered for recycling, incineration or landfill. The total amount of waste is 1575 tons.

74.6% of the waste is recycled. We expect this will increase next year. Until this financial year paper was incinerated, but now we sort out paper from the individual work place and send it to recycling.

Energy Consumption

In 1996, we established our own combined heat and power plant. The heat produced is used at the factories in Struer, whereas the produced electricity is sold to the Public Works. In addition to profit gained from electricity sold, other economic considerations such as the price of purchased natural gas and the sales price of electricity determine whether the plant operates or not.

In Figure 3 the emission of CO₂ from the combined heat and power plant is calculated from the consumption of natural gas.

The energy consumption is continually recorded for each factory and on some factories even for each machine. In this financial year the energy consumption has been decreased by 9% due to a decrease in energy used for heating.

Figure 1: Purchased raw materials

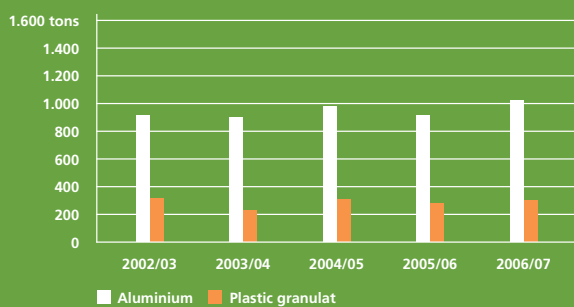


Figure 2: Total weight of waste and recycling percentage

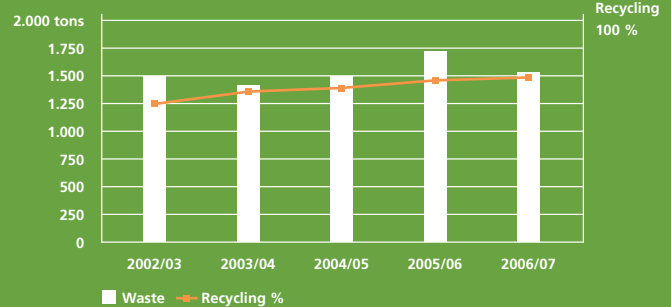


Figure 3: CO₂ emission from the combined heat and power plant

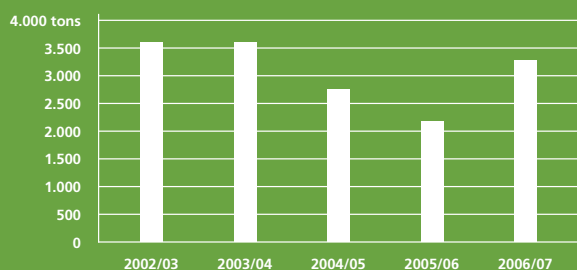


Figure 4: Total energy consumption in MWh



Transportation

All transport between and from the factories is purchased as a standard service.

The transportation of goods between the factories in Struer and the factory in the Czech Republic is carried out by truck.

The outgoing transport of goods is carried out either by truck, by ship or by plane. The disposition by weight is showed in Figure 5.

The environmental impact from the transportation on each market is reported yearly from our transportsuppliers. The impact is based on actually weight that is being transported. The CO2 emission per kg goods transported can be seen in Figure 6.

Water

The water consumption is on same level as last year. 56% of the water is used to sanitary purpose the rest is used in the anodising plant.

Waste Water Disposal

Waste water from the factories mainly consists of sanitation waste water which is led directly to the municipal purification plant.

Adjacent to the mechanic factory which houses the anodising plant is our own purification plant used for a simple purification process of waste water from the anodising plant.

The rinsing baths can be slightly alkaline or acid and contain particles of aluminium and colouring agents. The purification process neutralises the water through the addition of liquid caustic soda or acid to a pH value approximately 7-9. At this pH the aluminium particles are binding the colour particles in the sludge. The purified waste water is led to the municipal purification plant and the sludge is recycled through the production of construction material.

Figure 5: Disposition by weight



Figure 6: CO2 emission from the different types of transportation

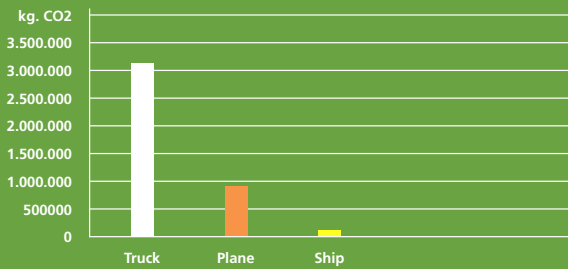
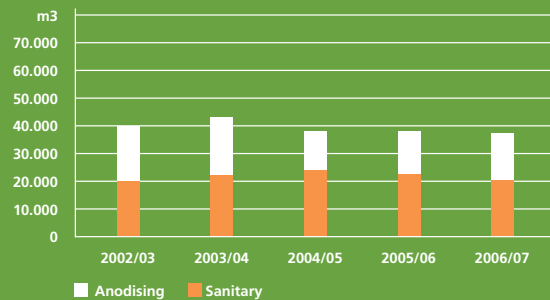


Figure 7: Water consumption



The packaging of BeoCenter 6-26 before and after the reduction of the packaging.



Environmental Impact from Products

Energy Consumption from Products

The largest environmental impact from consumer electronics is the power consumption in the use phase. In these years we see a shift from CRT-screens to flat panels and also a shift to larger screens. In 2002 the most common screen format was 28" in 2006 this was increased to 40". This development has an influence on the power consumption. The average power consumption for a television has increased with 28%. This is only because of the increased power consumption when the television is turned on. In the same period the average standby power consumption has decreased with 55%.

Reduction of Hazardous Substances

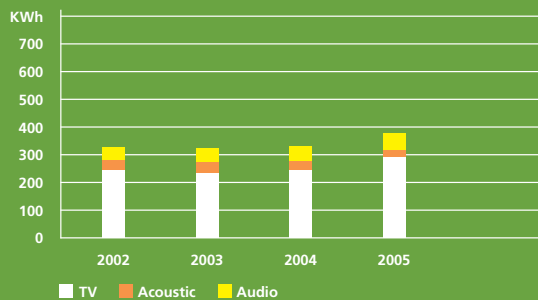
Although there is legislation on reduction of hazardous substances we are going further and have also banned other hazardous substances in our products. As an example we

banned the use of all brominated flame retardants except from TBBPA in print laminate in the beginning of 1990. PVC is another material we aim to eliminate. It is not currently regulated by any law. However, PVC is a risk to the environment in case of improper disposal and PVC often contains various substances that are believed to pose human risk. This is why we want to eliminate PVC where possible. Today we only use PVC in cables.

Packaging

Reducing the packaging reduces the environmental impact from the transportation and from the consumption of cardboard. Great effort in the past year has caused in reduction of the packaging for several products with up to 75%. Even though the packaging is reduced dramatically their function of protecting the products is still intact

Figure 8: The average yearly power consumption





Occupational Health and Safety

Bang & Olufsen operates a well-functioning safety organisation consisting of a general safety committee, four factory safety committees and a number of safety groups.

Last year Bang & Olufsen was screened by the Danish Working Environmental Services and was categorised as a 'level one company' – the best category. This means that the obligation to be affiliated to an industrial health service is repealed.

As the problems regarding the physical and ergonomic work now are solved the focus has changed to softer issues. Every year the general safety committee selects special focus areas. In the past year the focus was 'job satisfaction with focus on and the handling of stress' and 'office ergonomic and screen work'. This year the focus areas are 'order and tidiness' and 'well-being and jobsatisfaction with focus on preventing stress'.

The efforts in 2006 resulted in a common understanding of the concept stress in our production facilities. Approximately 500 employees participated in information meetings and the safety organisation, the group of managers, firstaid assistants and representatives participated in courses on the subject.

The courses held gave a greater understanding of what stress is, and how to handle it in the daily life at Bang & Olufsen. The participants were given tools so they now have the opportunity to intervene if they notice a colleague showing symptoms of stress. In 2007 further courses will be held on the subjects 'How to manage stress' and 'Job satisfaction'.

In spring 2007 the statutory assessment of the work place (APV) was carried out in all departments. Included in this assessment is the employees' evaluation of their psychical working environment and their eventually absence. The safety

organisation and the general safety committee shall evaluate the reported problem areas in preparation for improvements.

Twice a year every safety group makes a safety inspection where the general safety and working environment in the area is checked.

The safety groups still focus on preventing industrial injury. One of the methods is the registration and analysis of 'nearby accidents' with the purpose of preventing serious accidents. In the financial year 06/07 we had 12 accidents which resulted in more than one day of absence. This correlates with an accident frequency of 9,5 accidents per 1 million working hours, which is lower than the average of 13,8 in the electronics industry. The 12 accidents resulted in 110 days of absence in total.

Health Promotion

Bang & Olufsen has an opinion to health and health promotion. It is important for Bang & Olufsen that every employee feels healthy so they have the mental and physical energy to meet the daily challenges.

Bang & Olufsen's objectives with health promotion are to make the weekday healthier and to motivate our employees to take care of their own health and life style. We believe that healthiness increases wellbeing and job satisfaction, increase the efficiency and decrease the absence due to sickness.

We have been ahead of the Danish regulation regarding smoking which went into effect August 2007. Since 1.1.2006 smoking has been forbidden inside all Bang & Olufsen buildings. 'Stop smoking' courses and other initiatives to help the interested smokers stop or reduce their consumption were of-

Figure 9: Accident rate defined as number of accidents per 1 million working hours.

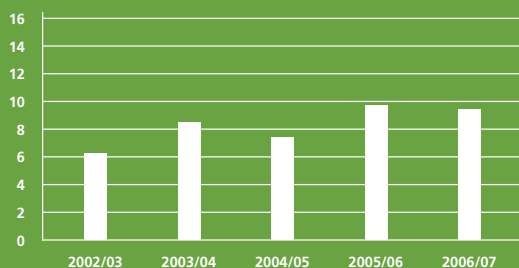
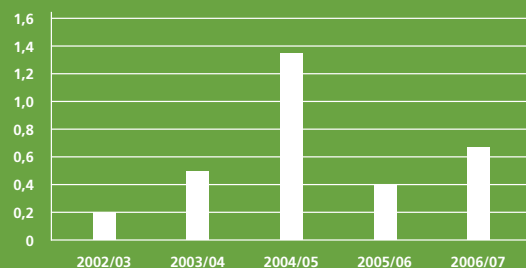


Figure 10: Absence caused by injury defined by the number of hours per 1.000 working hours



ferred. 60% of the participants in these activities were after 6 month still smokeless. On a national basis the rate of success is 20%. We are continuing with the stop smoking help.

Eurest runs our canteens according to the concept 'food in balance'. The basis is the 8 official Dietary Recommendations which ensures balanced nutritional correct food for everybody eating in the canteen.

We have a wellfunctioning athletic association with its own fitness centre. The athletic association offers many different kinds of activities for both beginners and experienced. The activities are arranged so that new social networks also can be created.

In 2006 we have developed a special offer for employees with inconveniences. These people can get a "personal health profile". The purpose of the health profile is, through dialog, to clarify the employees' motivation for working with their own health and to contribute so that concrete and realistic

objectives are set. Furthermore the health profile gives Bang & Olufsen the possibility to implement initiatives according to the employees' wishes and needs. All the participants have now fewer inconveniences and are more motivated to do preventing actions. Both managers and participants evaluate the offer as very positive.

First-aid Organisation

We have a well-organised first-aid organisation which primary purpose is to give qualified emergency treatment to colleagues. There are first-aid assistants in all factories and on all turns. In addition there is a casualty on every factory. All the first-aid assistants undergo a 30 hours first-aid course and are offered yearly follow-up course. In 2006 all the first-aid assistants were offered a course in psychical first-aid.