

## BYGGMAX ENVIRONMENTAL REPORT 2011

### Introduction

During 2009, Byggmax initiated its environmental program through the creation of an environmental policy with environmental goals. As a consequence of this policy, an environmental report has been produced and efforts to continuously achieve improvements commenced to reduce Byggmax's negative impact on the environment.

Byggmax's main impact on the environment is defined in the environmental policy as follows:

- transportation of products from manufacturer to store or warehouse and from store to customer
- the products' contents of environmentally hazardous substances and the products' packaging
- printing and distribution of brochures
- energy consumption in business activities.

Byggmax's environmental policy stipulates yearly measurement of the status and trends in the aforementioned items, in the form of measures implemented and quantitative measurement. The aim is to achieve improvement in the above specified areas every year.

The calculation methods utilized and the format of the report is checked by an external consultant.

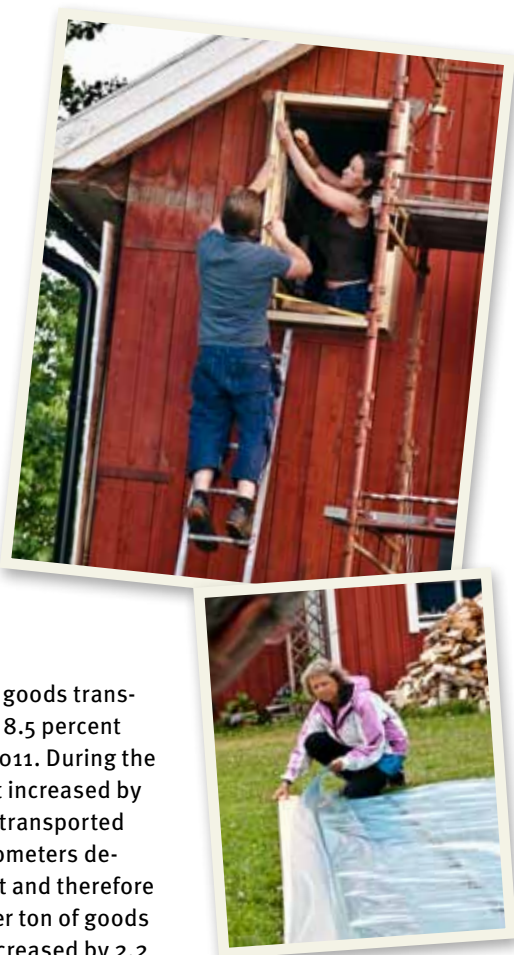
### Transportation

In the third and fourth quarter of 2011, Byggmax consolidated existing warehouse operations in Gothenburg and Uddevalla into one combined picking

and bulk warehouse in Lysekil. This enables more efficient transport solutions and a greater degree of goods deliveries to stores by full truck loads. A clear majority of goods purchased are still delivered direct to the store without intermediate storage.

The total tonnage of goods transported increased by 8.5 percent between 2010 and 2011. During the same period, freight increased by 6.2 percent. Freight transported measured in ton-kilometers declined by 2.2 percent and therefore carbon emissions per ton of goods transported also decreased by 2.2 percent.

Marine freight declined by 3.3 percent over the year due to the reorganization of suppliers thus increasing road freight. Rail freight, which started in 2010, increased but still accounts for a relatively minor proportion of total freight.



	2009	2010	2011	Trend 2010-2011
Transported goods (thousand tons)	396.0	470.0	510.1	8.5%
Freight (million ton-kilometers)	271.9	323.7	343.6	6.2%
Of which marine (million ton-kilometers)	47.0	93.5	90.4	-3.3%
Share marine	17%	29%	26%	-8.9%
Of which rail (million ton-kilometers)	0.0	2.9	3.8	32.6%
Share rail	0%	1%	1%	24.9%
Of which road (million ton-kilometers)	224.9	227.3	249.4	9.7%
Share road	83%	70%	73%	3.4%
Freight per ton (ton-kilometers/ton)	687	689	674	-2.2%
Carbon emissions per ton of goods transported (kg)	35	31	30	-2.2%
Absolute carbon emissions	13,803	14,517	15,407	6.1%

Table 1, compilation of key transport ratios. Emissions per ton-kilometer are taken from [www.ntmcalc.se](http://www.ntmcalc.se).

The emissions calculations did not include the transport of online goods and home deliveries. At present, such transportation comprises a relatively small portion of the company's total goods freight. An increasing element of online goods and home deliveries reduces freight and emissions, in part through optimizing freight to end customers, and in part through customers ordering online and not utilizing their vehicles to go shopping.

Emissions of other greenhouse gases and environmentally hazardous substances per ton of goods transported have changed as illustrated in table 2, on the right.

	2009	2010	2011	Trend 2010-2011
NOx (g/ton)	297	275	266	-3.2%
CO (g/ton)	76	66	65	-1.3%
HC (g/ton)	12.8	11,9	11,6	-3.1%
Particles (g/ton)	7.0	7,0	6,9	-4.3%
NOx (ton)	117.5	129.2	135.8	5.1%
CO (ton)	30.0	30.9	33.1	7.2%
HC (ton)	5.1	5.6	5.9	5.1%
Particles (ton)	2.8	3.3	3.4	3.8%

Table 2, emissions of other greenhouse gases and environmentally hazardous substances per ton of goods transported and in absolute measures. This category includes nitrogen oxides (NOx), carbon (CO) and small particles. Emissions per ton-kilometer are taken from [www.ntmcalc.se](http://www.ntmcalc.se).

# BUILDING THAT PAYS BACK

We've been married since 2007 and bought an old house that was built in 1923 and needs considerable renovation. Thus far, we have painted a fence and built a small extension. Now we are painting the façade. It's a matter of painting, painting and more painting.

**Elin:** We're using Falu Red Paint since it is easy to paint over with and because it breathes.

**Andreas:** We buy a lot of material at Byggmax and we don't have to try and bargain down the price since we know that the prices are great. The money we save can be used to buy even more material. When it comes to the planning, I suppose it's Elin who comes up with the ideas...

**Elin:** And you who carry them out. Though I am quite nice actually, you got a nail gun the other day.

**Andreas:** Yes that's true, I get a few small things sometimes – if you buy building material and things to renovate a home you get a payback. And it's cheaper to build it on your own than to pay someone else to do it.

Get Elin and Andreas's full story on [byggmax.se](http://byggmax.se)



Byggmax advertising circular in Sweden, June 2011



**Products and packaging**

Products and packaging affect the environment directly and indirectly. They do this through the raw materials they contain, the energy they consume in their manufacture and in use, and to the extent to which they are recycled or reused at the end of their service life.

Byggmax works actively to promote the use of wood and thus reduce the use of less environmentally friendly material including concrete, cement and hard plastic. Byggmax only retails NTR labeled pressure-treated wood that complies with the environmental goals set by the Swedish Wood Preserving Association and the Nordic Wood Preservation Council. Lumber is procured from Nordic suppliers and in full loads directly from sawmills to minimize environmental impact.

All parquet flooring sold is labeled FSC, Forest Stewardship Council, the international environmental labeling that aims to promote sustainable forestry.

Through membership in REPA<sup>1</sup>, we shoulder our responsibility as a producer for packaging on all brought-in and imported goods. Byggmax handles goods with a low proportion of packaging. Only 10 percent of articles sold are in consumer packaging. Otherwise, products have varying degrees of transport packaging for protection. Transport packaging is recycled in partnership with recycling centers and pallets are reused in the pallet exchange system of the major freight forwarders and in the building pallet

exchange system.

In Sweden, Byggmax has a broad collaboration with Ragn-Sells in respect of energy and material recovery of as much of the stores' waste as possible. The aim is to minimize the amount of waste that goes to dumps and achieve a zero degree of mixed waste. In 2011, sorting of waste increased in scope but the proportion of waste sent to dumps increased somewhat.

Sorted waste was categorized slightly differently in 2011 compared with preceding years, which means that direct comparison is difficult to perform. Those categories that are comparable show that the proportion of combustible waste including wood increased and the proportion of paper, wood/plastic and corrugated board has diminished.

Type of waste	2009	2010	2011	Difference 2010-2011
Mixed waste	11.3%	10.9%	9.4%	-1.5%
Dump unsorted	5.9%	6.2%	6.5%	0.3%
Sorted	82.8%	82.8%	84.1%	1.3%

Table 3, division of waste by type 2009, 2010 and 2011.

<sup>1</sup>The producer part of the Packaging and Newspaper Collection Service tasked with ensuring that packaging and newspapers in Sweden are collected and recycled.

### Printed matter

The printed matter we produce and distribute is an important and often ignored part of our environmental impact. In 2011, the total amount of printed advertising went from 1,212 tons to 1,028 tons. This is a reduction of 15 percent, which should be seen in relation to the number of new stores we have opened. Efforts to optimize distribution of advertising continue on an ongoing basis since the new stores established are often located in existing distribution areas.

The printers that Byggmax uses for direct mail have been awarded the Nordic ecolabel, which means their printing process uses low amounts of environmentally hazardous and health impairing chemicals in paper and printing ink.

Printed matter	2009	2010	2011	Difference 2010-2011
Printed, direct mail (tons)	1,100	1,212	1,028	-15.2%

Table 4, volume of printed matter 2009, 2010 and 2011

### Energy consumption

Byggmax endeavors to achieve energy efficiency and the new stores that are constructed surpass the building regulations imposed. Sandwich elements in facades and thermopane glass in the buildings' windows contribute to high levels of insulation. Newly built stores have heat recycling in the ventilation system and do not just rely on direct heating.

The direct energy used by Byggmax principally comprises fuel in the form of diesel and gasoline used in the organization's vehicles. These comprise diesel forklifts and gasoline-powered cars used for work.

Direct energy use (Gj)	2010	2011
Diesel	9,473	9,025
Gasoline	1,505	177
<b>Total</b>	<b>10 978</b>	<b>9,203</b>

Table 5, direct energy use by energy source for 2010 and 2011.

All new fork-lift trucks that are procured are of environmental class III in accordance with the European Parliament directive 97/68/EU and electric/diesel hybrids. The possibility of changing to biodiesel has been examined but the volumes of diesel that Byggmax buys are too small for such a change to be financially viable at present.

The indirect energy used by Byggmax per primary energy source primarily comprises electricity and heat. The figures for 2011 and the figures for Finland in 2010 were not available at the time this report was

produced. Byggmax has procured electricity with a Nordic electricity production mix, which explains the high proportion of fossil fuel. In 2010, total carbon emissions attributable to electricity consumption amounted to 650 tons, which can be compared with transport emissions of 14,927 tons

	Total (Gj)	Of which, renewable energy	Of which, nuclear	Of which, fossil fuel
Sweden	18,285	60.3%	16.4%	23.3%
Norway	15,775	100.0%	0.0%	0.0%

Table 6, indirect energy use per primary energy source for Sweden and Norway 2010. The data for Sweden regards only those stores for which electricity is not included in the rental agreement.

### Responsible establishment

A review was performed of Byggmax stores and their locations in relation to valuable areas of nature. The county administrative boards' GIS-database was used to provide basic data including the layers of data available that applied to areas of valuable and protected nature. The supporting data differs between the various counties but the most common types of nature protection are the same for all counties, areas of national interest and Natura 2000, nature reserves and national parks. In Norway, basic data has been collected from the Norwegian government site [www.environment.no](http://www.environment.no).

As to the question of whether Byggmax impacts protected or valuable areas of nature, only one store is deemed to be located in a critical location. This is the store in Karlstad, which is located in an area earmarked for the performance of a wetland inventory of biological diversity and is located in the vicinity of valuable water resources (meriting protection for fish and birds, water catchment, Natura 2000 and natural environment of national interest). The store, which is located in a heavily developed area, has no impact on biological diversity in the area designated for the wetland inventory.

### Risks and opportunities attributable to climate change

Senior management has taken climate change and the risks and opportunities this entails for the organization into consideration. The major risks comprise physical changes (seasonal changes, floods etc.) and regulations. Opportunities include the chance to better communicate the environmental efforts being made and to create an environmental profile towards the customer as well to launch products that are better from an environmental perspective than current products.

<sup>1</sup>Prefabricated wall and ceiling panels comprising an outer sheathing, an insulating core and an inner sheathing.