34. # Kewlox

Furniture that combines Savings with Respect for the Environment

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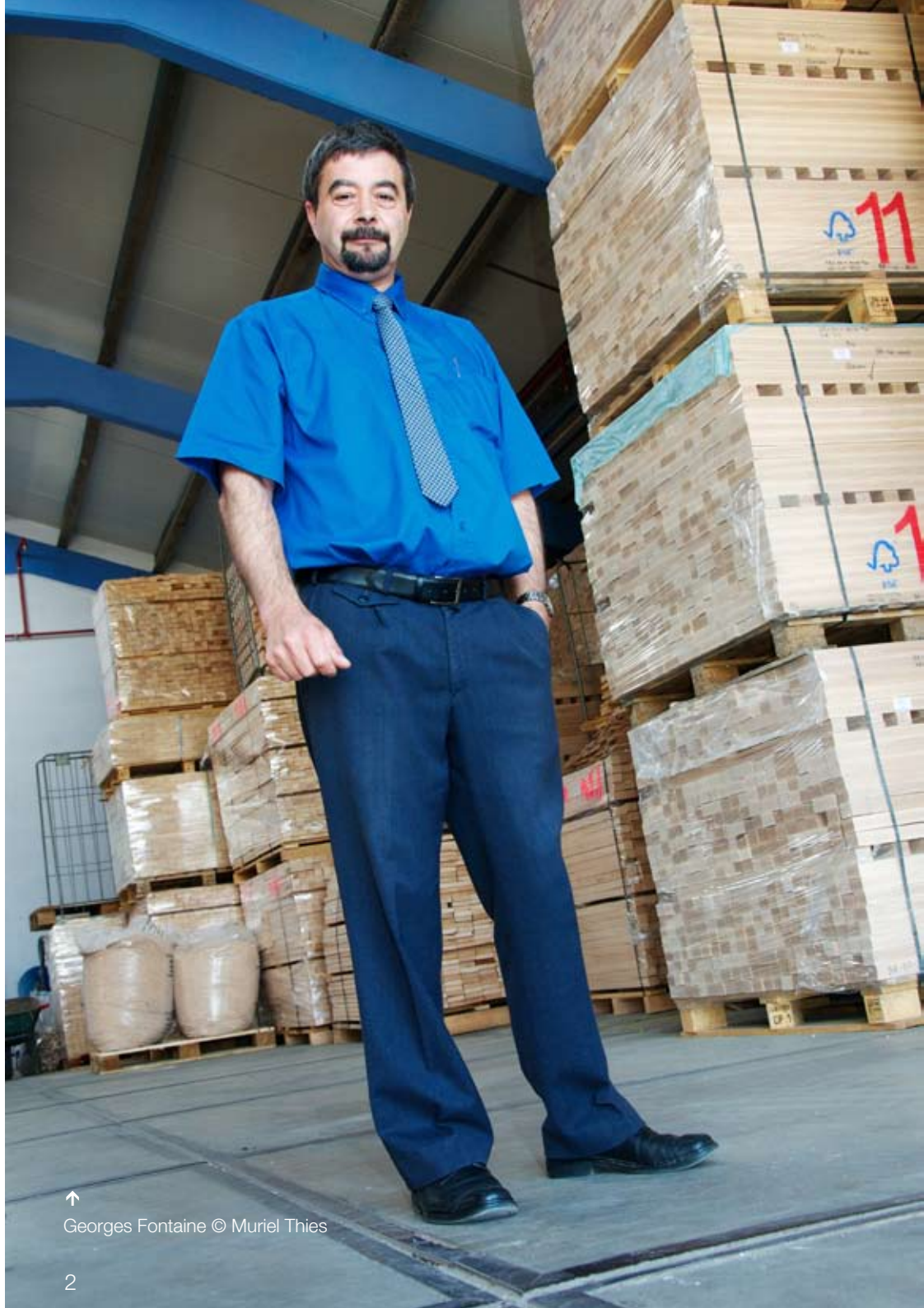

Georges Fontaine © Muriel Thies

Kewlox, a family company specialised in modular furniture for more than 50 years, experienced serious difficulties at the turn of the 21st century. The company was able to recover brilliantly, by starting up a major dynamic sales campaign, by rejuvenating its products and image, and by modernising its communications. The key person in this metamorphosis, Executive Director Georges Fontaine, arrived in 2001and has worked since then to ensure that these changes are accompanied by an environmental approach. Coming from the automation sector, his first project was to rationalize the energy efficiency of the factory in Leuze (near Eghezée). To achieve this objective, the company started up two major projects at the same time: perfecting a system for recovering the wood waste on the one hand, and rationalizing its electrical consumption on the other hand.

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"We work with wood. I don't think that there are many sectors that produce so many by-products. But these are not waste in the proper meaning of the word. Wood chips, for example, are reusable. A good chip of beech is a precious product, but transporting it costs a fortune: it weighs 200 kg per cubic metre, it takes up room, it consumes fuel and not many people are interested in that..." To make use of this material, Kewlox worked on developing new partnerships: a farmer in the region successfully tried to use these chips as bedding for his animals. The other part of the waste produced by the factory, sawdust, which seems to be unusable, is now being used to fuel the factory's heating plant. Installed in 2002, this impressive boiler made it possible to reduce the annual consumption of fuel oil from 60.000 litres to less than 3.000 litres per year. "This system is combined with very complete and complex automation, which takes into account the electrical consumption and the peak hours: it's an integrated

system!", explains Georges Fontaine, a touch of pride in his eyes. This is because it was not easy to push through these changes, which called for major investments: "In 2001, the company had been bled white. Imagine the effect, when we said that we were going to devote 150.000 euro to a new heating system with an automated boiler.

Whether we look at things from the environmental, energetical, social or economic side, we always come back to a problem of the environment: it is an entity!

There was a general outcry, a raising of shields among the shareholders. Today, people are pleased about it. But at that moment... We were paying to remove the chips, which were not selectively disposed of. To separate the sawdust from the good chips, we invested in pipes, without this bringing in anything at the beginning. But it was necessary to go through that if we wanted to be able to use these materials one day!" Today, in the workshops, the chips are sucked up by the computer-controlled silent direct-drive turbines. Ducts transport fresh air from outdoors to the place where the chips are aspirated, in order not to expel hot air from inside. Thanks to a system of vacuum sensors and valves, the power of the turbines adapts automatically depending on the needs, which participates in the drastic reduction of electrical consumption. An intelligent system provides for the electrical power needs of the production machines and the wrapping furnaces. It lowers the peak demands for electricity, and cuts off the power from the auxiliary machines for brief moments. "This makes it possible to avoid high peaks of consumption, which generate a surcharge because they represent more energy dispensed to produce the electricity, but also losses over the network." The lighting has also been optimised thanks to presence detection sensors and light sensors managed with the help of computer technology. Again, there are fewer kWh, less CO^2 and lower

production costs. “In addition, at night these sensors serve as anti-intrusion sensors”, Georges Fontaine finishes, in order to stress the ingeniousness and the originality of this system adapted to the specific needs of the factory by its own services.”Thanks to this whole system, it is less cold in the factory, we make less noise, and we consume less energy. Whether we look at things from the environmental, energetical, social or economic side, we always come back to a problem of the environment: it is an entity!”
Another example that expresses this company’s philosophy in concrete terms, Kewlox has also made a calculation of the energy necessary for the production of each piece of its furniture: “We remarked of the fact that in the price of a furniture item, the share of energy was not negligible: it represents around 25 kWh per piece of furniture, a number that corresponds to the consumption of off-peak electrical heating for a home during one hour at night in the winter.” The modern technologies established for the machines made it possible to reduce this consumption to 12 kWh per furniture item, which makes it possible to produce more than twice as much furniture for the same quantity of energy! “It was of course necessary to have a reference unit, that is a unit that could span the times, our reference point. Our standard furniture items are our benchmark...”
In any event, these furniture items are representative of their manufacturer’s determination to be consistent: the wood that is used to manufacture them is exclusively labelled PEFC. During the crises that have hit wood suppliers over the last few years, Kewlox has refused offers to lower the price of the wood, and proposed that it maintains this price in exchange for better quality. The company gives preference to local wood, and has modified its machines in order to be able to use Belgian beech. “Why use wood from Timbuktu while we have wood that comes from Anlier? We take the trouble to make certain items such as braces out of beech, because we can have Belgian beech, and because our waste can be recycled in braces. This is expensive, but it’s not bad. We could use

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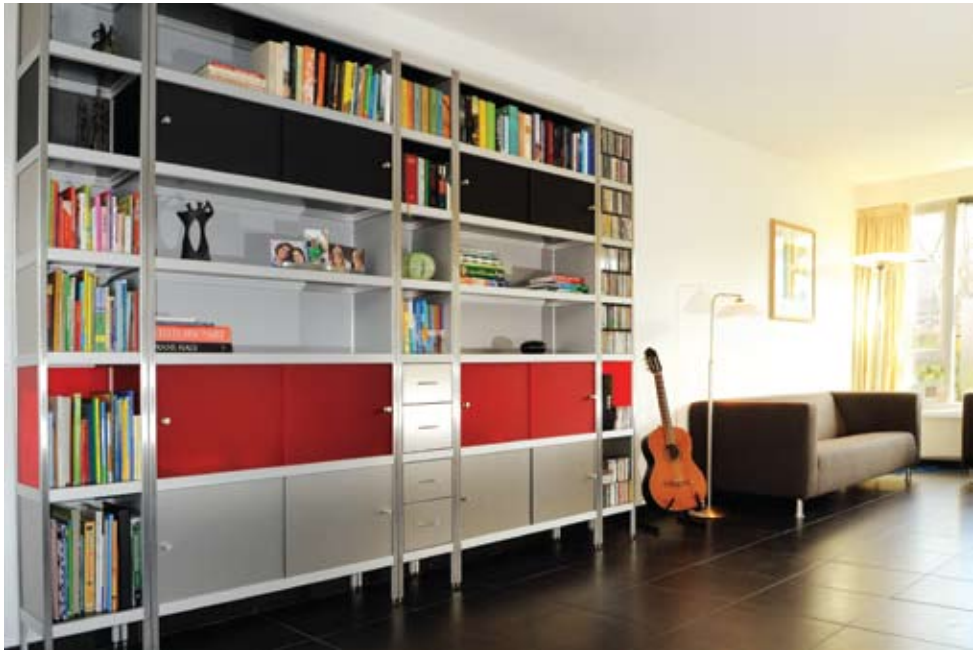

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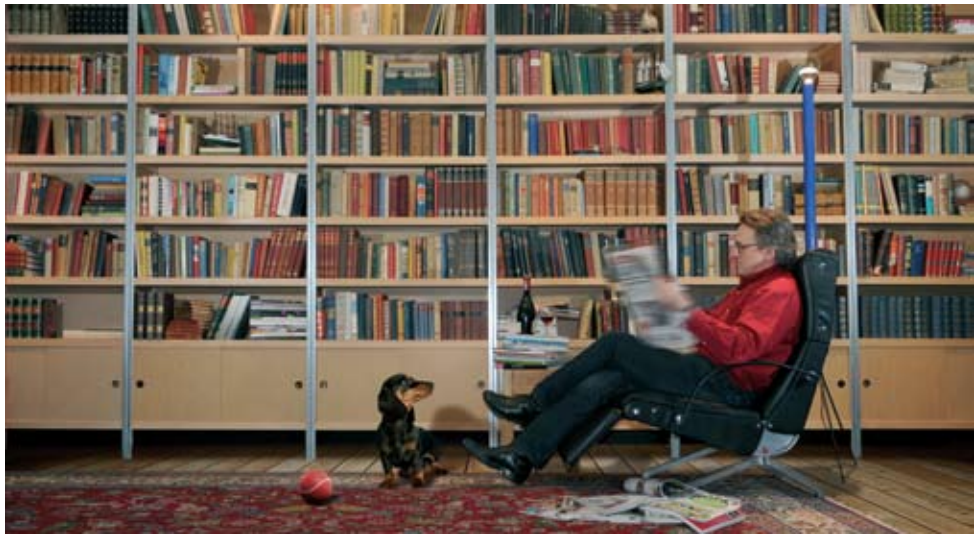

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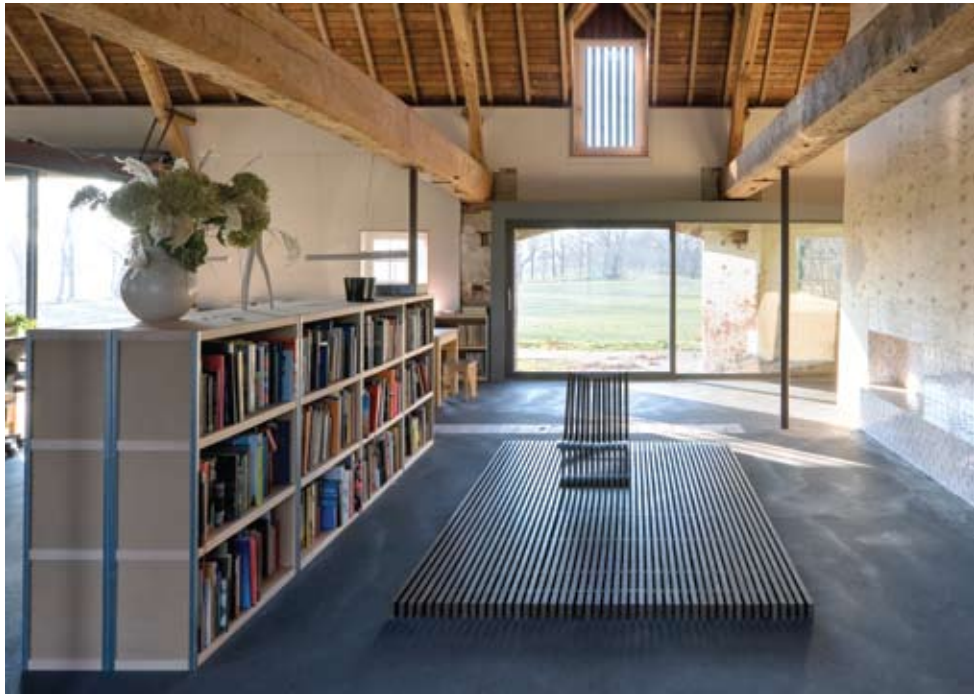

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wood that comes from the Amazonian forests, which is easy to process. But we remind each other that we have forests here, and that it is better for the wood to be used like this than to make pellets out of it."

Why use wood from Timbuktu while we have wood that comes from Anlier?

The special structure of Kewlox furniture, of steel and solid wood, enables in addition the use of much thinner panels than those of the majority of other furniture on the market. "At comparable dimensions, the weight of the panels is three times less, which reduces their emission of formaldehyde by that much." Thanks to this, Kewlox furniture is positioned at a very comfortable distance from the strictest standards of the market, and well ahead of the competing furniture. Better: the company is in the process of finalising a programme that will make it possible to calculate the indexes of harmfulness of the formaldehyde and other noxious products present in each piece of furniture, primarily due to the glues used in the wood panels. "This programme will be able to calculate the content of harmful products per piece of furniture, depending on the one hand of the surface of the panel and the speed of release of these substances, and on the other hand of the gross quantity contained in each element of the furniture." A scoop!
Having started this (r)evolution at the beginning of the 2000s, the company continues to call itself into question every day in order to do better... Producing too much hot water in comparison with its needs starting at the end of the winter, it would like to put it to good use in the form of electricity or by cooperating with a horticulturist to produce early vegetables in a greenhouse. Ideally located on a windy plateau and surrounded by fields, the factory dreams of taking on a windmill. These are projects that regional public institutions do not seem to be interested in. Nonetheless this is not preventing Kewlox from undertak-

ing other improvements: the company recently looked into its automobile fleet, and the management of the kilometers travelled by its cars. By the end of 2011, and the arrival of the first hybrid vehicle at Kewlox, its customers will be able to recharge their electric vehicle free of charge at the company's terminal while they do their shopping. A service will optimise the delivery rounds from now on, trying to reduce the kilometers.

Paying attention to the environment means not wasting. No waste makes it possible to make profit. I don't see any discrepancy between these two ideas: it's all profit for the company, and the planet will be a little bit greener.

When he is asked whether these procedures are guided mainly by a determination to make an economic profit or whether they result from a real ecological concern, Georges Fontaine answers without hesitating: "I don't like the term ecology: it has a political connotation that is rather unpleasant and it's being used out of its context. I prefer the term environment, because it is related to industrial elements and to measuring elements. Paying attention to the environment means not wasting. No waste makes it possible to make profit. I don't see any discrepancy between these two ideas: it's all profit for the company, , and the planet will be a little bit greener."

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Isabelle Masson for REcentre
Interviewee /
Georges Fontaine, Executive director

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www.kewlox.be

Sector • Furniture

Year of foundation • 1959

Number of employees •
40 people + 30 to 40
independent salespeople

Turnover (2010) •
10 million EUR