nobilia®

Sustainability journal

SUSTAINABILITY IN ACTION

SUSTAINABILITY AS A DRIVER OF INNOVATION

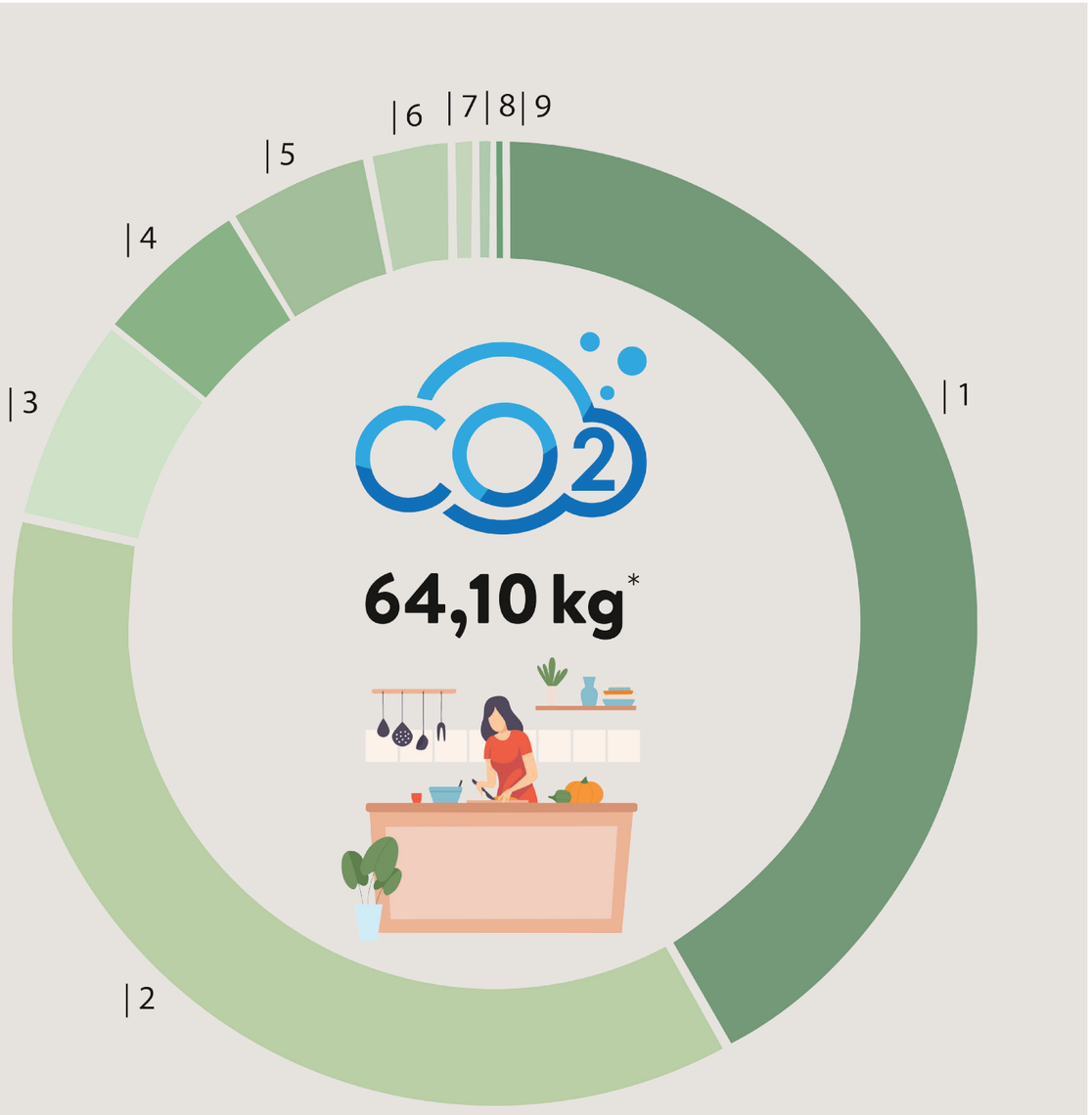
One of the greatest challenges we face at this time is that of preserving our environment and therefore the fundamentals of life for humanity. Sustainable action is one way of achieving this goal. The principle comes from forestry: we should only cut as much timber as can be renewed to maintain levels. Applied to the fundamentals of life as a whole, we understand sustainability in today's world to mean that we have to act at both an individual and corporate level in ways that enable a life worth living, now and in the future.

Sustainable action has long been part of our DNA at nobilia. Our response to the various challenges that this task entails is driven by our own team set up precisely for this purpose. As part of this, we focus on eight core areas: raw materials, supply chains, production, transport, trade, product use, durability and social responsibility. We are constantly working on improvements in these eight areas – and also making sure that our progress can be measured.

In this brochure, we want to provide you with an insight into the manifold ways in which we practice sustainability at nobilia – and illustrate how our activities in this regard drive innovation, time and again. Because that, too, is part of our DNA at nobilia: we're always striving to improve even further!

THE CYCLE OF A NOBILIA KITCHEN

Acting in ways that enable a life worth living here on this planet, now and henceforward – that's how we understand sustainability at nobilia. And we're doing everything possible as a company to meet our responsibility for the future. In order to achieve this aim, we consider every phase in the life cycle of a kitchen: from the forest where the wood is sourced and the machines used to produce the kitchen through to the point in time when the end customer decides that a new kitchen is needed. Every single aspect along the way – the raw materials, supply chain, production, transport, retail and durability – offers potential for maintaining a life worth living on our planet in the future. And we're exploiting this potential – through innovative ideas with a verifiable impact. In this cycle, we explain the sustainability measures we're taking. Of course, the social aspect also plays a major role – which is why we put people, and therefore society, at the centre of our product cycle.



* The present greenhouse gas balance shows those emissions that arise in direct connection with the company's own value creation.

| 1 Power consumption
| 2 Fuel consumption
| 3 Employee commutes
| 4 Volume of waste/water
| 5 Paper consumption
| 6 Reverse logistics through third-party providers
| 7 IT/hardware
| 8 Business travel and hotel stays
| 9 Heat consumption, gas leaks (refrigerant), consumables in production

CARBON FOOTPRINT: TRACES PRODUCED THROUGH BUSINESS ACTIVITY

A carbon footprint is a measure of the amount of CO_2 emitted into the atmosphere by an individual, product or company. All activities that generate carbon dioxide are considered when calculating the carbon footprint, including the transport of goods, travel by vehicle and operation of production facilities. In addition to carbon dioxide, other greenhouse gases are produced in the course of business. These are also taken into account and converted into CO_2 equivalents.

nobilia already began four years ago to calculate its Corporate Carbon Footprint (CCF) and complies with the Greenhouse Gas Protocol, which sets out which greenhouse gas emissions are to be considered. In 2021, we produced approximately 53,000 tonnes of CO_2 emissions through the manufacture and delivery of our kitchens. Based on around 830,000 kitchens built and delivered, this amounts to some 65 kg of CO_2 for each nobilia kitchen. Most of this relates to production (44% through the electricity consumed by machines) and transport (33.9% from the fuel that powers our truck fleet). The present greenhouse gas balance of 65 kg CO_2 shows the emissions that arise in direct connection with the company's own value creation.

Is that a lot or a little?

If you consider that every citizen was responsible for 11,170 kg of CO_2 emissions in 2021 according to the German Environment Agency (UBA), then it does not seem very much. But it's still too high for us. That's why we're pursuing a broad sustainability strategy aimed at improving our carbon footprint, in addition to many other parameters.

By the way, if we are to achieve the Paris Agreement goal of limiting the global temperature rise to 1.5 degrees, then every German will have to keep their CO_2 emissions below 1,000 kg each year. Obviously, there's still a great deal for us to do – and we want to give it our best effort!

SUSTAINABILITY PROCEDURE – OUR PATH TO REDUCING OUR CARBON FOOTPRINT

In the area of technology, the carbon footprint is a key value when it comes to sustainability: our measures aim to gradually reduce this – to the point where we emit zero greenhouse gases in the near future. Once this target has been reached, nobilia will be able to call itself climate-neutral. The road to climate neutrality comprises many steps, big and small, that all add up.

THREE STEPS TO CLIMATE NEUTRALITY:

1. In Step 1, we'll avoid emissions by preventing the unnecessary release of CO_2. In addition to eliminating wasteful consumption, the optimisation of our truck fleet is also part of Step 1: here we want to reduce fuel consumption or even switch entirely to a zero-emissions model.
2. We can't produce without energy. That's why Step 2 involves self-generating the electricity we need to cover our demand – from renewable energy sources for a neutral impact on the environment. We've already started on this, having equipped two buildings with solar installations. And that's only the beginning.
3. Step 3 is about purchasing green power to provide the additional energy that we need but cannot produce ourselves. Green power is obtained from renewable sources such as water, wind and sunlight, without any CO_2 emissions being produced (unlike conventional power generation). As a last resort, we can offset unavoidable emissions through climate certificates. But this approach is not without its critics – that's why our aim is to prevent all emissions in the first place. After all, that's the only sustainable way.

REGIONAL RAW MATERIALS

Where do we get the raw materials that go into making nobilia furniture? And what raw materials are we talking about? The environmental footprint of a piece of furniture depends greatly on what it is made of. That's why the raw materials we use have long been a focus area for us at nobilia – both in terms of their origin and recyclability.

SUSTAINABLE FORESTRY: A NEW TREE PLANTED FOR EVERY TREE FELLED – WITH A PEFC CERTIFICATE

Wood is the most important material for the furniture industry – and for us at nobilia. The term sustainability comes from forestry and originally referred to only felling the amount of trees replaced through reforesting. Of course, the world has become a much more complex place, but this idea of sustainability still fundamentally holds true. That's why at nobilia we're considerate in our use of wood as a raw material: our panel materials contain a high proportion of recycled material and our wood waste is used to heat our buildings. However, we still continuously need new wood for our furniture as well. In order to minimise the burden on the environment, we source our wood from sustainable forestry.

nobilia is certified to the PEFC (Programme for the Endorsement of Forest Certification Schemes) standard. This certification guarantees that the wood we use to manufacture our kitchen furniture originates from sustainably managed forests and controlled sources. This is how we ensure that every tree felled for our kitchens is replaced by planting a new tree – fully in keeping with the old principle of sustainability.

PEFC zertifiziert
Die Holzwerkstoffe dieser Küche stammen aus nachhaltig bewirtschafteten Wäldern und kontrollierten Quellen.

www.pefc.de

PEFC/04-31-1281

RECYCLED WOOD – CIRCULAR ECONOMY OR "TURNING OLD INTO NEW"

Wood is an enormously valuable and versatile resource – and it is especially important within the concept of sustainability as a means of storing CO_2. To maintain this quality for the maximum duration, the wood should be used as a material for as long as possible. One approach is cascade use.

In cascade use, wood is utilised in many forms, perhaps first as solid wood, then as shavings, before finally being converted to energy. This protects forests and the climate. Chipboard is therefore not an inferior resource, but an intelligent material that makes a considerable contribution to resource conservation.

You can't plane wood without producing shavings. We use a very small amount of our shavings to heat our buildings. But most of it is sold. Namely, to the chipboard industry. This closes the circle – our wood waste is a (reusable) material for the chipboard industry, whose products are then used by us again: the panels utilised by nobilia have three layers. The cover layers at the top and bottom are made from new wood. The surface quality has to be perfect – after all, this is where the décor, the face of the panel, is applied. However, you'll find almost exclusively waste wood in the centre of the panel. This old wood was previously already used. This means that no trees have to be felled for this part of the chipboard. The use of waste wood conserves resources and protects the environment without compromising on product quality.

Given that the central layer of the chipboard consists almost entirely of recycled wood and that all of our carcases plus the Speed, Laser and Riva front series are constructed from chipboard, all of our chipboard consists of up to 40% recycled material. Or to put it another way, a significant part of our wooden material was already a kitchen, living room unit or pallet.

RECYCLED PLASTICS: FROM A YOGHURT CUP TO A PLINTH FOOT

Approximately 40% of the material used for our chipboard is recycled. But what about the other materials that go into nobilia products? Obviously, there, too, we use recycled materials wherever possible. One good example of this is the plinth feet on which our kitchens stand.

These invisible helpers covered by a plinth panel are used for tall and base units. In other words, for carcases that account for almost two thirds of the units sold by nobilia. As each unit sits on at least four plinth feet, more than 20 million plinth feet have to be integrated each year – that's quite a number.

The special plastic used to make these is processed as granulate. In the case of one of our suppliers, this plastic granulate is obtained from the contents of "yellow bags" (used to collect waste made of plastic, metal or composite materials) – without compromising on the product qualities. Therefore, approximately ten million of our plinth feet each year are made from reconditioned plastic – and that has been the case for a great many years already. Accordingly, our plinth feet represent a second life for millions of former plastic bags, yoghurt cups and food packaging.

TRANSPORT PACKAGING: OPTIMUM PROTECTION AND RECYCLABILITY

Our packaging concept contributes greatly to sustainability. Here, too, if it's not required, we dispense with it. But we still have to ensure that the kitchens reach our customers in pristine condition. That's why we need packaging that has been sufficiently well designed to reliably protect the product but at the same time can be kept to a minimum in order to conserve resources. Our own well-trained employees are crucial to achieving this: only experts handle our products during loading, transport and unloading. If products have to be sent by post, however, much more stable packaging is required.

The second aspect relates to the packaging itself, namely the materials used for it. Most of the packaging used by nobilia is fully biodegradable or up to 98% recyclable. That's the result of having packaging composed of just four different materials: corrugated cardboard (91.1%) for packaging the units, plastic strapping (1.8%) to fix this cardboard in place, polyethylene film for our long parts and worktops (7.1%) and a minimum of Styropor (0.06%) to, for example, protect our carcase fillers. These materials are collected by a service provider commissioned by us (see the article on RKT), sorted and recycled. Therefore, almost 98% of our packaging material circulates within a material cycle – turning old into new.

ENVIRONMENTALLY FRIENDLY SUPPLY CHAINS

Supply chains are now a topic on the lips of consumers. Unfortunately, the current global trade in goods means that even a navigational error in the Suez Canal can have devastating effects on international supply chains. That's why at nobilia we work with local suppliers where possible.

COOPERATION ON EQUAL TERMS: SUPPLIER RELATIONSHIPS BASED ON PARTNERSHIP

As a family business, it is part of the nobilia corporate philosophy that we do not ignore ethical questions when taking business decisions. This also applies in our dealings with our suppliers.

We view this collaboration as a long-term partnership. Ultimately, this is the only way we can improve together and create smooth processes and procedures that minimise problems. This philosophy of partnership is not new – we've been cooperating with more than half of our suppliers for over 20 years.

This style of cooperation also means that we're loyal to our partners in times of crisis. Difficult times are a feature of any relationship – and the coronavirus crisis has been an example of such. Over the last two years, we could easily have switched to alternative suppliers, some with cheaper prices. But instead, at nobilia we've strengthened our relationships with our existing group of suppliers in order to overcome the crisis together. When a partner is experiencing turmoil due to forces beyond their control, we still stick by them. This holds for smaller companies in particular for whom nobilia represents a major portion of their business and where jobs depend on nobilia.

In order that we can help when help is needed while still ensuring our high quality standards are met, we conduct a supplier assessment every quarter. This looks at quality indicators, delivery performance and much more. In the end, a grade of A, B or C is assigned. Companies with a C rating receive special support from us at nobilia. What has improved since the last time? Is an audit required? Thankfully, this situation hardly ever arises – but when it does, the assessment gives us an opportunity to respond early on in the interests of both companies.

REGIONAL FOCUS: THINK GLOBAL, ACT LOCAL!

Globalisation has brought the world closer together. This has come with a host of benefits, but also disadvantages. Supply chains are often very fragile. A shipping incident in the Suez Canal may be enough to considerably disrupt global trade. The sheer amount of energy that goes into transporting goods between countries and continents is another drawback. That's why at nobilia we "think global, act local". 80% of our suppliers are based in Germany, and 50% have operations within a 50 km radius of our Verl site. On the other side, we sell around half of our finished kitchens in Germany, and another 30% in nearby European countries. Therefore, we choose not to transport raw materials or our kitchens half way round the world for processing or sale.

There are further advantages to this regional approach: ability to deliver has become especially important since the coronavirus outbreak started. Global supply chains have changed considerably and raw materials are scarce everywhere. Here, too, our ties with partners in the region are paying off. Of the almost 250 suppliers of machines, equipment and raw materials, most are based in Germany. We obtain large quantities of chipboard from Gütersloh and Brilon, for example. And our assembly equipment and control technology is sourced directly from our locality in Verl. So, supply chains are not a problem for us.

Even the farthest distance travelled by a material for us is still basically just a trip down the road in global terms. We obtain our purchased fronts from the Veneto region in northern Italy. By comparison, we're therefore a company that is deeply rooted in our home region. This is good for customers, the environment and partnerships with our suppliers. That's because this enables short response and transport times and contributes in an enormous way to lowering CO_2 emissions through reduced goods transportation.

SUPPLIER AUDITS: FOR A SMOOTH SUPPLY CHAIN

Without suppliers, we couldn't make kitchens at nobilia. We've found that the better the supplier, the easier and more efficient the cooperation. And this has an impact on not only stress levels and costs, but also resource conservation. If some or all of the goods we receive from a supplier don't meet our expectations, we can't incorporate them into our products either. This results in repeat production, special transports, delays and lots of unnecessary complications. The consequences of this include customer dissatisfaction, exceptional costs and additional resource consumption.

To prevent this, we conduct supplier audits that examine our suppliers' processes and procedures and identify shortcomings. Then we develop solutions together with these suppliers. Always with the aim of having optimum processes in place with our suppliers. After all, that's the best way to guarantee that problems don't even arise in the first place.

Traditionally, these supplier audits are always carried out when a new supplier comes on board. As we have long-standing partnerships with many companies at nobilia, the supplier audits are repeated at regular intervals. In this way, we also ensure that any issues identified are dealt with permanently – in other words, sustainably. Accordingly, supplier audits are not just a matter of quality control but also a small but important part of our sustainability strategy.

SUSTAINABLE PRODUCTION

The biggest share of our carbon footprint is attributable to production. And most of the waste we produce results in our plants, too. That's why at nobilia we've introduced a whole raft of measures to reduce energy consumption and either effectively recycle production waste or reuse it for heating purposes if there's no other option. These measures are based on carefully established figures and are coordinated by a steering team.

SOLAR INSTALLATIONS: SELF-GENERATION OF CLEAN ELECTRICITY FOR OUR PRODUCTION NEEDS

Reducing energy consumption or not consuming energy in the first place is surely the ideal solution when it comes to climate protection and sustainability. But energy is essential for production: machines have to be powered and people need, for example, good lighting to ensure an ergonomic workplace.

Not all electricity generation is the same. While conventional power generation from energy sources such as coal and gas produces high CO_2 emissions, these are much lower with renewable sources such as wind and hydro power or solar energy. That's why some of the electricity that we require for our business activities is obtained from renewables. We currently have a photovoltaic system on the roof of Plant IV with a peak output of 99 kWp. We also have another installation of a similar size on an administration building. Under ideal conditions – in other words, at noon on a cloudless day – the systems produce enough electricity to power the average detached home 30 to 40 times over.

Alexander Balsliemke, Tobias Wiesing and Dr Maik Schlickel (left to right)

We want to considerably expand this proportion of self-generated clean electricity and plan to install a state-of-the-art photovoltaic system covering all of Plant III's roof. This installation is designed to achieve a peak output of more than 2,100 kWp – enough to cover the power demand of 300 to 400 detached homes. In our case, however, the electricity generated will be used on site: the system will then cover some 50% of the current electricity demand for Plant III. We're expecting to put this installation into operation in 2023.

PURPOSEFUL UTILISATION OF WOOD WASTE: USING PRODUCTION WASTE FOR HEATING

You can't plane wood without producing shavings – a lot of shavings. At nobilia, we produce over 800,000 kitchens every year. For this, over 40 million wooden parts have to be cut, edged and bored. The amount of wood waste is accordingly high – especially borings and remnants. Indeed, over 90,000 tonnes a year.

Of course, we don't simply dispose of this, but re-use it in various ways. For example, it serves to heat our entire production facilities and the administration offices in Plants I, II, III and V, and therefore over 400,000 m² of covered space or building area, primarily in winter. The heating systems are designed for these dimensions: for instance, the system in Plant I has a peak output of around 10,700 kW – by way of comparison, the heating system for a detached home achieves an output of approximately 8 kW.

Therefore, we effectively recycle wood materials that can no longer be used: instead of meeting our heating needs with non-renewables such as oil, gas or coal, we utilise wood as a renewable material. This is an extremely sustainable use of our production waste.

HEATING IN SPRING AND AUTUMN: HEAT RECOVERY FROM AIR COMPRESSORS

We heat our buildings with wood waste when the temperatures are lowest; during the milder months of the year, however, we use another heat source, namely the waste heat from our air compressors. Compressed air is needed in large quantities for the grippers, lifting equipment and presses in our production facilities, which cover over 400,000 m². We produce this compressed air with our own compressors.

In such air compressors, an electric motor drives a turbine that then compresses the ambient air. Heat is produced when air is compressed. We take this waste heat generated through friction and compression and feed it into our heating circuits. If we didn't use this waste heat, it would simply be discharged into the air.

We therefore achieve a double effect: our heating water is also warmed up. This means that we don't have to burn any additional energy sources to heat our buildings – another example of how we at nobilia are helping to conserve resources with innovative ideas.

GENERATE ELECTRICITY, REDUCE CONSUMPTION: ENERGY RECOVERY FROM STORAGE AND RETRIEVAL MACHINES

In order to reduce CO_2 emissions to the point where our operations at nobilia are climate-neutral, we have to lower energy consumption and produce our own electricity. We are already achieving both in our high-bay warehouses, where we're generating electricity and reducing consumption at the same time.

We store mainly front materials, accessories and worktops in our high-bay warehouses. In huge numbers. Our high-bay warehouse in Plant I has more than 27,000 pallet bays, for example. Fourteen fully automatic storage and retrieval machines (SRMs) are used there for pallet movements.

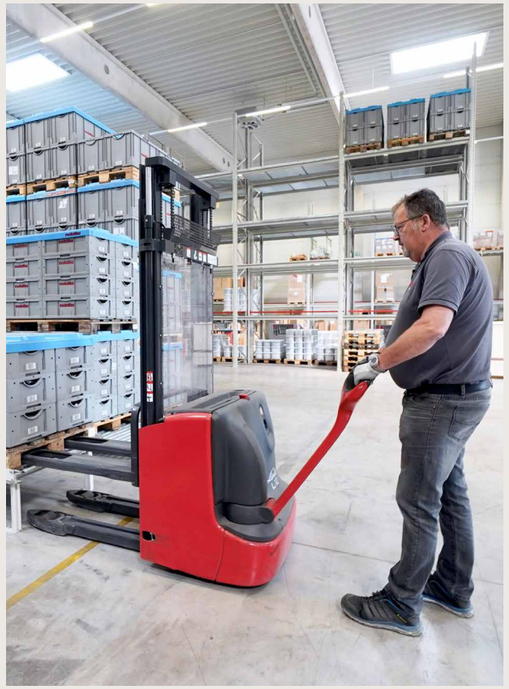
These are in motion all day long. When such a machine carries a load from up high to down low, we make use of gravity: we utilise the motors of the SRMs as dynamos to generate electricity during braking and descending.

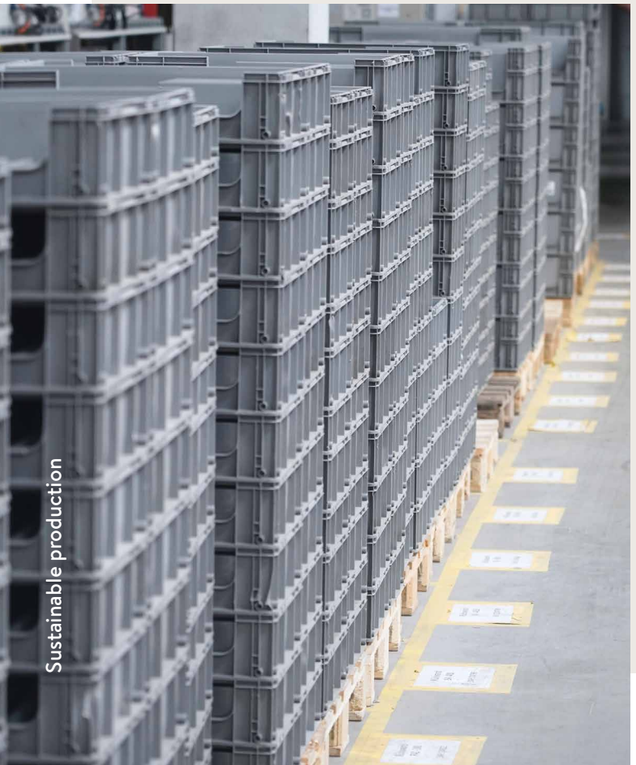
This principle is called recuperation and is now also frequently used in increasing numbers of motor vehicles, with energy being recovered under braking. At nobilia, more than half of all of our storage and retrieval machines are equipped with this technology. To impressive effect: we've managed to reduce electricity demand by up to 30%.

REUSABLE PACKAGING: CIRCULAR ECONOMY FOR MATERIAL PROTECTION

The best packaging is packaging that has not been produced in the first place. We take this sustainability principle very seriously at nobilia and, wherever technically possible, dispense with packaging entirely in all areas. To ensure goods are still protected, we use closed-loop systems – in the areas in which we have regular material deliveries. This works very well: in cooperation with our suppliers, almost all production materials are delivered in such reusable packaging.

Fittings, of which we need many thousands every day to produce drawers, pull-outs and the like, come to us in trays, like crates, instead of disposable boxes. They arrive laden and return empty. In this way, the trays are constantly moving between ourselves and our suppliers. 250,000 of these trays are in use. They have a lifespan of many years and therefore save on disposable packaging.





We also use reusable containers for the protective packaging for our worktops. These packaging elements are transported in collapsible boxes made of corrugated cardboard. Once we've removed all protective elements in production, the boxes are folded apart, returned to the supplier and filled with packaging elements once again. A circular system consisting of fully degradable materials. We work in this way with almost all of our suppliers – whether dealing with small load carriers for our logistics centre or wooden boxes for our glass niches.

WASTE CONCEPT: WHAT CAN'T BE AVOIDED IS CAREFULLY SEPARATED AND RECYCLED

Like in a household, although a great deal of waste and scrap can be avoided, there will always be a certain amount of waste. It's important that anything that cannot be avoided or recycled is disposed of properly. With our comprehensive disposal concept, we endeavour to collect and carefully separate the waste. For this to work as standard across all plants, nobilia has defined all of the different types of waste and introduced a colour coding system. This system clearly illustrates to all employees which waste should be disposed of in which container.

Having based our concept on the familiar household rubbish management system, waste rarely ends up in the wrong bin.

The different fractions of waste that result are subsequently taken away by certified disposal companies. The goal here is to recycle as much as possible of the collected fractions and avoid mixed fractions, such as general waste. In this way, we are managing to achieve a recycling rate of well over 60%.

MANAGEMENT SYSTEMS: PROCESS-BASED GOAL SETTING

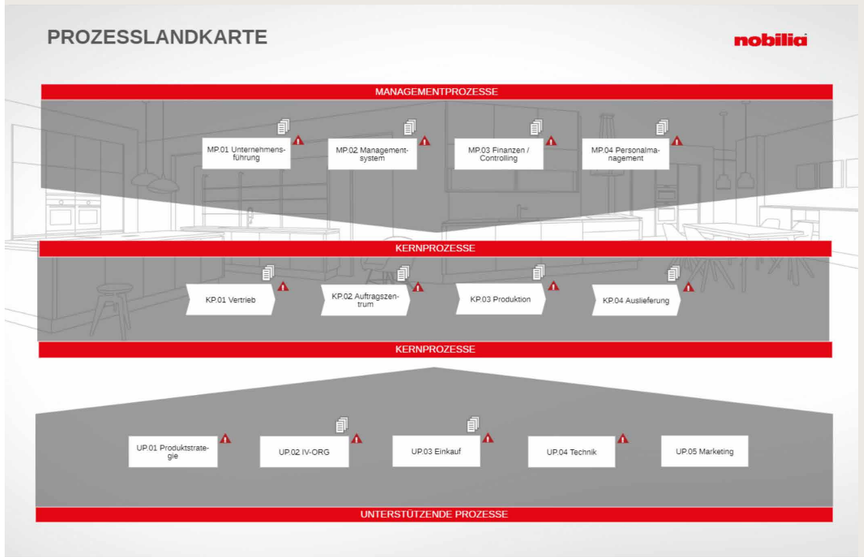
What is a management system, and what does it have to do with sustainability? Simply put: a management system bundles activities, instruments and methods in order to guide and steer a company in setting concrete targets for a specific field of work. At nobilia, our management system covers three areas: quality (ISO 9001), the environment (ISO 14001) and energy (ISO 50001). By helping us to define clear rules, instructions and processes for our activities, it creates transparency that greatly facilitates our work.

When it comes to saving energy and reducing our carbon footprint, ISO 50001 is especially important. This international standard is helping nobilia to establish systematic energy management based on recording energy flows (energy sources, use and consumers) and evaluating the level of energy efficiency. This data forms the basis on which measures can be developed and implemented. As abstract as this sounds, the results are very concrete: unused energy efficiency potential is tapped, energy costs are lowered and greenhouse gas emissions and other environmental impacts are reduced. Our management system is therefore an important basis for our sustainability concept and a useful aid on our journey towards climate-neutrality.

TÜVRheinland ZERTIFIZIERT

ISO 50001:2018
ISO 9001:2015
ISO 14001:2015

www.tuv.com
ID 9105071098



EEMC: TAKING MEASURES ACROSS ALL PLANTS

As nobilia's carbon footprint shows, a large proportion of the CO_2 emissions we produce results from production and our vehicle fleet. A targeted, company-wide concept is needed to work on measures that will improve energy efficiency – and has to be organised across five plants and various departments. With this in mind, we've established at nobilia an Energy and Environmental Management Committee (EEMC) in our technology division. This committee evaluates and coordinates all energy and environmental activities across all departments and plants and takes steps towards their implementation. Under the leadership of our management team in the technology area, energy and environmental figures are evaluated here and the measures are presented to the departments.

All technical departments with a bearing on energy and the environment therefore take part in the committee meetings. To complement this work, tax issues and important framework conditions for energy procurement are coordinated in an extended core team. The figures confirm the effectiveness of this focused approach: some 3.8 million kWh were saved in 2021 through the measures taken by the departments.

REJECT REDUCTION: PREVENTION FIRST, THEN RECYCLING

At nobilia, we produce around 90,000 tonnes of wood waste a year. We utilise this waste in two ways: a smaller part as a renewable heating material in winter, but by far the majority we return to a producer for proportional use as a recycled material in new chipboard or for energy generation in the chipboard plant. Here too, however, we take a “prevention first, then recycling” approach. This applies in particular to rejects, which, unlike normal sawdust, take valuable energy and work time to produce. Therefore, avoiding rejects benefits the environment and makes our work more efficient, which in turn saves money during production.

That’s why at nobilia we are always looking for ways to reduce the number of rejects. One place where rejects are naturally common is parts manufacturing. 40 to 50 million furniture components have to be cut, edged and bored each year in parts manufacturing in order to manufacture more than eight million units. Thanks to many individual measures, we’ve managed in recent years to halve the number of rejects there. This has reduced wood waste there by around 10,000 tonnes a year – which is good for the environment and for nobilia’s bottom line.

LED LIGHTING: INTELLIGENT LIGHTING SYSTEMS

Replacing conventional bulbs with LEDs, switching off lights when no-one’s there – just like in all our homes, this is standard practice at nobilia too. The reason is obvious: from a given amount of energy, LEDs generate four to ten times as much light as conventional bulbs. In addition, they last ten to 15 times longer, too.

Therefore, LED lighting is now standard in our production areas. And we’ve also made the switch in most of our administration buildings. This investment is having a noticeable effect: some 900,000 kWh per year are being saved in the areas converted to LEDs in 2021 alone.

And we save even more energy by only switching on lights when needed. To this end, we’ve installed a “DALI” lighting control system at nobilia, which adjusts the lighting according to the available daylight: depending on the amount of natural daylight entering the respective hall, the LED lighting is automatically dimmed.

And there’s even further potential for optimisation here: in Plant III, we’ve developed a new pilot system for improving the DALI lighting control. The workplace is being illuminated in an even more targeted and optimised way thanks to a special surface. At the same time, the lighting levels are reduced to the necessary minimum at break times. In this way, we’re essentially using the natural light available according to the workplace, achieving optimum workplace lighting and saving energy at the same time.

REDUCE WATER CONSUMPTION, AVOID HAZARDOUS SUBSTANCES

When considering the environmental aspects of our business activities, it would be remiss of us to overlook liquids such as water, hazardous fluids and solvents. Water is a scarce resource. That's why at nobilia we only use as much of this resource as is truly needed. We can largely operate without water, which is only required for some cooling processes. Otherwise, our water use is limited to the canteen, washrooms and cleaning activities.

We also minimise the use of hazardous substances, mainly adhesives, cleaning agents and lubricants. It is rare for us at nobilia to use lacquers or solvents. We are also extremely careful when it comes to hazardous substances, as protecting the health of our employees has the highest priority for us. That's why hazardous substances undergo comprehensive safety evaluation and testing before they are introduced into the company.

EMERGENCY MANAGEMENT: PREPARED FOR A SERIOUS INCIDENT

As a furniture manufacturer, nobilia is not a high-risk operation in terms of environmental damage. But there are risks in furniture production that may lead to an emergency – and, as a family company, at nobilia we take responsibility for protecting our employees to the best of our abilities. Through our emergency management plans, we aim to be best prepared for any potential risks that may arise and to ensure the best possible protection for employees and the environment. In-house paramedics, safety stations and fire protection measures are examples of our emergency management setup.

- **In-house paramedics and safety stations:** in order that we can provide targeted assistance in the case of risks to the health of employees, as well as visitors, we've introduced a system at nobilia with around 40 in-house paramedics in addition to the first-aid organisation required by law. These specially trained employees are equipped with a broad selection of medical supplies in a backpack and are called in by plant security in the event of an emergency. In addition to this rescue backpack, there are also additional safety stations with defibrillators, blood pressure monitors, breathing apparatus and oxygen masks in place across every area.
- **Fire protection:** companies engaged in furniture production have an increased risk of fire. We take this risk very seriously. Fire protection measures of all kinds aimed at preventing fires have the highest priority for us. We also take very seriously the residual risk that remains despite these comprehensive measures: the best possible preparation for a serious incident is essential here. When everyone knows exactly what they need to do if a fire breaks out, then crucial minutes are saved – and minutes can make all the difference to saving lives and preventing environmental impact in the event of a fire. Our focus in this area is on cooperation and drills with the local fire department, briefings for employees and external companies, training of fire protection assistants and the establishment of an alert system to notify all necessary individuals in the event of an incident.

ENERGY MEASUREMENT SYSTEMS AND KPIS: ESTABLISHING A SOUND BASIS FOR MEASURES

Before developing strategies aimed at improving our energy efficiency, we want to know where we stand and the most useful places to start. We base this analysis on figures – which we obtain via a company-wide energy measurement system for electricity. To this end, digital electricity meters – over 700 in total – have been installed in the transformer substations and in various power distribution systems and machines. These meters permanently measure consumption and transfer the data via network to a database.

We use this data material for all kinds of evaluations. This includes our quarterly internal energy and environmental report as well as detailed analysis on various matters: for example, the energy data allows us to tell whether machines and systems that are not needed are being switched off at the end of the day. We can also compare the energy demand of different systems.

All of this helps us to understand where we use the most energy and where there's room for improvement – as well as what the best possible approach might be.

INDUSTRIAL ENGINEERING: OPTIMISING ENERGY EFFICIENCY IN MACHINE PROCUREMENT

At nobilia, responsibility for designing, planning and optimising production processes lies with Industrial Engineering (IE) – a strategically important division when it comes to sustainability and other matters. One of the main tasks of this division is to equip production with new machines. To this end, the employees design projects, purchase equipment and organise installation and commissioning. Operation in particular plays a major role in reducing energy consumption. To maximise efficiency here, IE maintains an overview of three aspects in particular: the energy review, the energy measuring systems in new equipment and the optimisation of production processes.

Energy review:
optimising energy efficiency together with partners
At nobilia, we work together with a wide range of partners: when a new system is ordered, we draw up specifications that clearly describe the requirements that our suppliers have to meet. By doing so, we aim to ensure that we get efficient machines that consume the least possible energy. To achieve this, we conduct an energy review: we take a look at the design and major energy consumers and then define ways of improving energy efficiency. This might be through the use of especially efficient electric motors, for example, or different cooling systems or mechanical solutions.

Optimising production processes:
eliminating unnecessary power consumers
When operating equipment, there's always potential for energy savings. That's why Industrial Engineering is continuously looking for ways to optimise power consumption. Here are a few examples:

- **Turning off the light on camera inspection systems:** units pass a camera system three times a minute for two seconds at a time. The camera system light used to be kept on at all times. Now the lighting system has been optimised so that it only stays on for the necessary six seconds per unit.
- **Switching off machines outside of production hours:** even when there's no kitchen on the line, systems still consume a great deal of power. Overnight, at the weekend and when the company is closed, there is therefore great potential for savings with machines, and nobilia makes use of this.
- **Reducing the speed of suction fans:** the extraction system is the biggest energy guzzler in production. We are now aiming to reduce the speed of the fans so that energy consumption can be reduced while still maintaining the requirements in respect of shaving extraction.

ENVIRONMENTALLY FRIENDLY TRANSPORT

Goods transportation ranks second in contributing factors to our carbon footprint. At nobilia, we've introduced a raft of measures in this area, too. Some need a bit more time, such as the full conversion of our vehicle fleet to hydrogen. Others, such as the use of long trailers and optimised route planning, are already established routine. In all cases, the aim is the same: to make transporting our kitchens sustainable!

VEHICLE FLEET WITH LONG TRAILERS AND A GIGALINER: BIGGER IS MORE SUSTAINABLE

Loading and unloading kitchens requires expertise: everything has its place, nothing can be damaged. That's why we offer our customers – in other words, kitchen studios and furniture stores – a special service: our "white fleet" delivers kitchens directly to customer warehouses. Although this adds value for customers, the disadvantage is that logistics accounts for a large proportion (33.9%) of our carbon footprint.

In order to greatly reduce this, we're taking a two-pronged approach: our long-term strategy is to convert our vehicle fleet to hydrogen power. And we've already found ways to significantly reduce diesel consumption today: for example, through the use of long trailers. This means trucks that are 1.38 m longer than normal trailers (14.8 m instead of 13.4 m). This extra 1.38 m has a considerable effect on loading volume, which is around 10% greater than the normal 74 m^3. As a result, every seventh route driven by a long trailer saves one route with a normal trailer. Which means – fewer journeys, less fuel consumption, lower CO_2 emissions. Or in concrete terms: in 2021, approximately 74,000 km were saved between mid-August and the end of December thanks to using long trailers. This roughly amounts to 18,500 l of diesel. We currently have 32 long trailers in our fleet and another ten on order.

We're also trialling what's known as a gigaliner at this time. At 25 m, this is far longer than a normal truck – and has a loading volume of around 105 m^3. This means that every second route driven by a gigaliner saves one route with a normal trailer. We are currently using a test vehicle to investigate whether this enormous advantage outweighs the disadvantages, such as the space needed at customer premises and the ban on driving on certain roads. Nevertheless, this example also shows that we're leaving no stone unturned at nobilia in our efforts to reduce our CO_2 emissions. This is sustainability in practice.

Long trailers in the nobilia vehicle fleet

HYBRID LOGISTICS MODEL: TRAILER TRANSPORT BY RAIL

Our vehicle fleet accounts for nearly one-third of our CO_2 emissions. It's difficult to make savings in this area: the kitchens have to be transported to customers, including some outside of the main centres. That's why we can't eliminate truck transports entirely – and currently there is no alternative drive for trucks of the size we use on the market.

But there's still room for savings here, namely through transport by rail. We tend to do things somewhat differently at nobilia, however, and this also holds for rail transport. We actually use a hybrid model here. Which means – we load our trailers onto rail wagons.

Specifically, the transport works like this: the trailers are first driven from the plant to a railway freight terminal, where they're loaded from the truck onto a train. The trailers are then transported by rail to the destination station, where they're offloaded and received by the local nobilia driver team and later unloaded in the usual careful way. Our team on the ground stays for an extended period of time in the destination region and unloads not just one but numerous trailers.

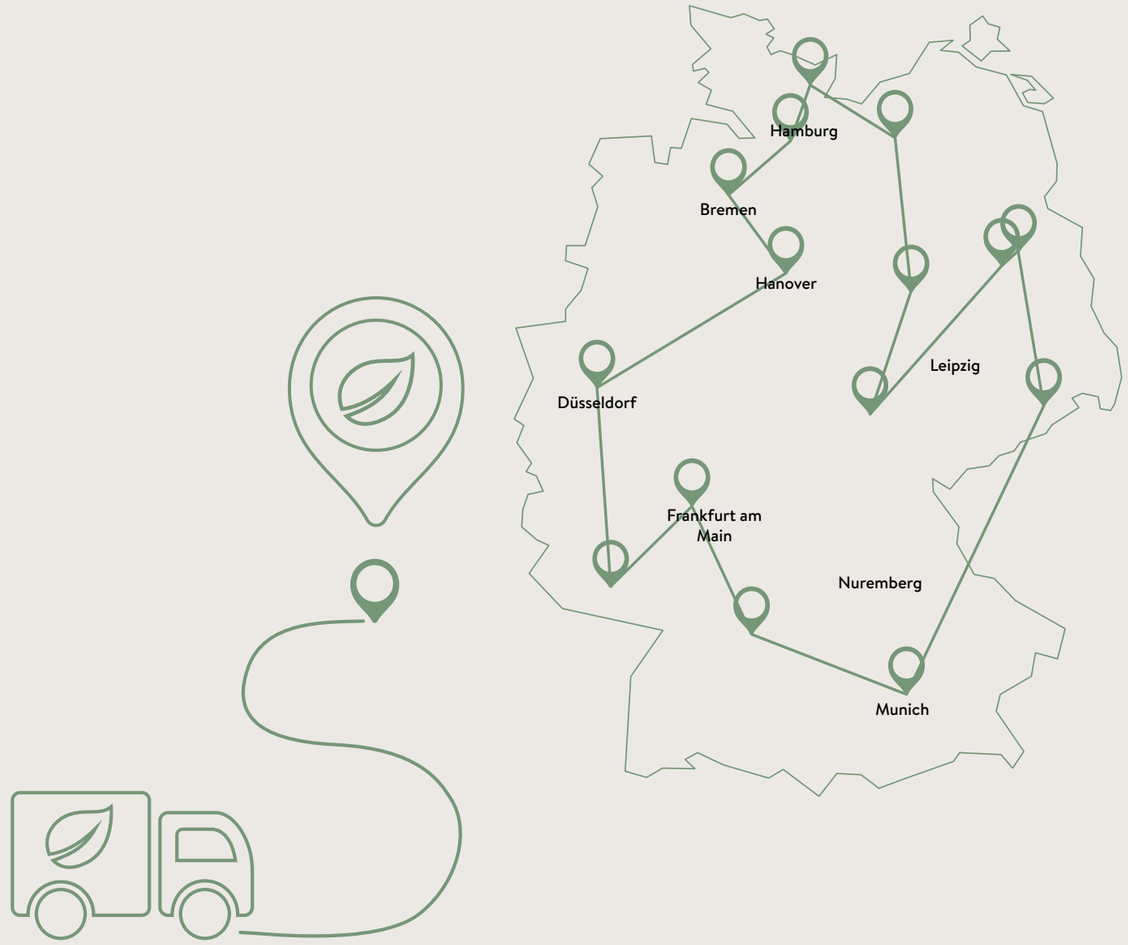
The advantage of this method is that there's no need for long journeys via truck, and only relatively short routes have to be covered locally. As transport by rail generates much lower CO_2 emissions than the same trip by road, this form of transportation is considerably more sustainable. However, it's only a useful option when large distances have to be covered. That's why at nobilia we're testing hybrid transports for two of our more distant delivery regions: one around Vienna and another in the south of France.

Environmentally friendly transport

OPTIMISED ROUTE PLANNING: SAVING DIESEL BY THE SHORTEST ROUTE

Long trailers, hybrid transports – at nobilia, we're already doing many things to reduce the diesel consumption of our truck fleet. Nevertheless, our vehicles cover some 20.6 million km each year. With so many kilometres to be driven, there's another very obvious instrument for cutting back on diesel use – optimised route planning.

Every detour and additional delivery costs time and money, but also means unnecessary emissions. In order to find the most efficient journey at all times, we're working at nobilia with a service provider on a software that helps schedulers to plan the right route. Various criteria (such as volume, location, warehouse opening hours, special customer requests) with different levels of priority are considered for this and the computer produces a number of possible solutions. Our aim is to optimise the process to the greatest possible extent and therefore find the most economical routes in each case.



REGIONAL
TRADE

What does the kitchen trade have to do with sustainability? It's simple: kitchen studios and furniture stores are the interface to the end customer and should also provide good advice on sustainability. Proper assembly is another important aspect when looking at this topic in the round: mistakes put additional pressure on resources. And the same applies to the transport packaging used for our furniture components. At nobilia, we've also tackled these two issues.

ASSEMBLY ACADEMY: TRAINING KITCHEN FITTERS

Well-trained employees are a valuable asset from a social and sustainability point of view. This doesn't just hold for nobilia, but also the personnel along the entire supply chain. Kitchen fitters play a key role here. If they make mistakes, products then have to be delivered again or remade – with a resulting knock-on effect on resources. Well-trained fitters, on the other hand, make a positive contribution to conserving resources.

But, where can those well-trained fitters be found? "Kitchen fitter" is not a recognised apprenticeship trade. That's why at nobilia we've decided to take matters into our own hands in this regard: we're in the process of establishing in Verl an Assembly Academy that should help to provide kitchen fitters with professional skills.

Together with various cooperation partners, the future attendees will learn everything there is to know about correctly assembling a kitchen: from skilled handling of the kitchen furniture and the perfect tools for furniture assembly through to proper connection of electric appliances and plumbing. All of this content will be offered in individual modules and also as complete courses of study. This will be a major step for the industry – and another contribution to sustainability.

TRANSPORT PACKAGING: ENSURING RECYCLING TAKES PLACE

We use transport packaging to make sure that our kitchen furniture is secure and well-protected until it reaches the end customer. This can be easily recycled. To make sure this happens, nobilia has partnered with Recycling Kontor Transportverpackung (RKT).

RKT was established by the kitchen industry so that there would be a single company that could collect transport packaging in Germany, Austria, the Czech Republic and Slovakia and take it for recycling. Our retail partners simply have to contact RKT to let them know they're expecting a nobilia delivery. RKT then ensures with its local partners that all of the different elements of the transport packaging are collected and taken for recycling.

The benefit to our customers of this approach is that they no longer have to take care of disposing of the packaging themselves. The environmental advantage is that all transport packaging is purposefully collected and recycled. Easy, efficient, sustainable.

RKT RECYCLING KONTOR Transportverpackungen

SUSTAINABLE PRODUCT USE

Sustainability is now a factor influencing consumer decisions – and increasingly a selling point. nobilia is the first choice here for many good reasons when customers decide on the kitchen they want: we ensure careful inspections, zero-emission components and high quality for a whole host of parts and accessories that make kitchens greener, more sustainable and more convenient.

ROOM AIR: ZERO-EMISSIONS FURNITURE FOR A HEALTHY INDOOR CLIMATE

In addition to environmental protection, health is a core element of sustainability – and that holds for our products, too. When it comes to chipboard, for example, formaldehyde emissions that are harmful to health are a major topic of consumer discussion. But not with nobilia: our products emit such small amounts of this substance that they meet the toughest requirements and are certified to the highest standards, such as CARB2, F4Star and Blauer Engel (blue angel eco label).

- **TSCA Title VI compliant/CARB2:** for the manufacture of kitchen furniture, we use only engineered wood products that meet the stringent US EPA Formaldehyde Emissions Standard of the Toxic Substances Control Act (TSCA Title VI). Accordingly, the company fulfils the American requirements in effect since 1 June 2018 for the further reduction of formaldehyde emissions from derived timber products. The TSCA Title VI limit values correspond to those of the CARB2 (California Air Resources Board) standard. The furniture is labelled with the information “TSCA Title VI compliant”.
- **F4Star standard:** Some of our engineered wood products were even certified under the Japanese F4Star standard last year, which sets requirements that are higher again than CARB2.
- **Blauer Engel:** nobilia is a trailblazer when it comes to matters of quality and sustainability. Many of our product ranges are therefore labelled with the “Blauer Engel” (blue angel eco label), the official eco label of the German government. This label identifies products in the nobilia range that meet particularly high standards for environmental and health protection as well as consumer protection. nobilia is the first and only manufacturer in the industry to have received this certificate for several product ranges.

www.blauer-engel.de/uz38
- emissionsarm
- Holz aus nachhaltiger Forstwirtschaft

LEGAL CONFORMITY: AT NOBILIA, WE GO THE EXTRA MILE WITH THE GS QUALITY SEAL

Sustainable action means that our customers can rely on us – and this in turn presupposes consistency and permanence. In addition to building trust through quality, legal conformity matters: products have to meet statutory requirements, such as those of the German Product Safety Act (ProdSG). This applies both to products from nobilia and from our suppliers, such as the large electrical appliances, like fridges and ovens, that we purchase from other companies.

At nobilia, the legal conformity of our products is confirmed with the GS quality seal for tested safety, which guarantees that ready-for-use products meet the requirements of the German Product Safety Act. These requirements are mainly set out in concrete terms in DIN and European standards or other generally accepted rules of engineering. The GS quality seal was introduced in 1977 with the aim of protecting users and third parties against harm to life and limb in the case of intended and foreseeable use. It is the only product safety quality seal in Europe that is regulated by law. It is often compared to the CE mark, but this is simply a non-verified declaration of the manufacturer or distributor. That’s not enough for us at nobilia – our company goes the proverbial extra mile with the GS quality seal.

Which means – at nobilia, all ranges within our collections undergo safety testing by the TÜV Rheinland GS furniture testing institute. It is thus independently confirmed that the requirements with regard to operating convenience, load capacity, material consistency and safety have been met in full.

INDOOR GARDENING: TURNING THE KITCHEN INTO A GARDEN

We all came to appreciate our kitchens even more during the coronavirus. They are the central space for spending time with family and friends. And of course, they're where we cook and eat. The kitchen has been adapted for these various functions – and is now increasingly meeting the needs of people. Our love of nature in particular, which is only getting stronger in our increasingly virtual world, is a focal aspect of the new kitchen.

That's why we've been offering a special plant unit for our popular pole-mounted shelving system for some years now. This unit enables indoor gardening directly on the shelf. Green plants or herbs can be planted in a wooden box with a plastic insert. An LED surface luminaire with light waves designed specifically to promote growth and automated light control ensures that plants can thrive.

We're extending our offering in this segment to include the gardening box in the 2023 collection. The box is inserted into a pull-out in a kitchen unit. Microgreens of many flavours can be grown as young edible seedlings in the four trays. Integrated plant lights and ventilation control the day and night cycle. Depending on the plant type, the growth phase takes seven to ten days and can even be tracked and controlled using an app. Microgreens have a more intensive taste than fully grown vegetables. They even contain more vitamins and nutrients and are a real eye-catcher. The gardening box includes cress, mustard, pak choi and radish as a starter set. By the way: we use only organic seeds from Germany.

SAY GOODBYE TO WATER CRATES: GROHE BLUE & RED IN ONE®

Even small steps can make a difference: since the 2022 collection, we've been offering Blue & Red in ONE® in cooperation with Grohe. It integrates perfectly into our furniture and has an unbeatable advantage: once installed, the system can be used to draw filtered water enriched with CO_2 directly from the tap. Still, medium or sparkling as desired. This makes the drinks basket much lighter – even more importantly, it saves many kilometres of transport and obviates the need to produce disposable and reusable bottles. Good for the environment!

SINKS FROM THE CRISTADUR® GREEN LINE: SUSTAINABLE, CLIMATE-NEUTRAL AND HANDMADE IN GERMANY

In the area of sinks, too, we're offering at nobilia an especially sustainable solution from our 2023 collection onwards in the form of CRISTADUR® Green Line products.

A new chapter in the history of quartz composite sinks began with the CRISTADUR® Green Line. All sinks are produced with up to 75% quartz sand from the local region. What's more, the CRISTADUR® Green Line consists of approximately 99% natural, renewable or recycled raw materials and sets special standards of aesthetics.

The Green Line models are loved for their sustainable designer characteristics and all of the premium features that come with CRISTADUR®. They are carbon-neutral, like all of the sinks from this manufacturer.

SINK GREEN means thinking holistically, through to the end. For example, even the most durable and sustainable sinks have to be replaced at some point. This is where the latest recycling technology comes in, with the CRISTADUR® Green Line models going back into a closed cycle and being recycled into new sinks – obviously without compromising on quality. *

* Return option on CRISTADUR® Green Line sinks for customers in Germany and Austria and on waste material from production in SCHOCK's closed cycle

PULL-OUT PANTRY BOX

Food lasts longer when stored correctly, which also boosts sustainability. The pantry box is the ideal unit for storing vegetables, bread and the like. A plastic box with an inset mesh base which ensures good ventilation offers the ideal storage conditions – so that vegetables stay fresh and nutritious for longer.

XTRA CERAMIC: THE RESOURCE-EFFICIENT CERAMIC INNOVATION

Innovation requires preparation: many years of development work preceded the product launch of our new ceramic material, for example. Our goal was to develop a resource-efficient, light and durable composite concept that did not yet exist in this form on the market. The result was the patented and multi-award-winning Xtra Ceramic.

The most important difference between our material and the industry standard is that we use a very thin ceramic layer. This considerably reduces the environmental impact in production, as ceramic requires a firing temperature of over 1000°C. The thinner the ceramic layer, the less energy is needed for the firing process.

But even with 6 mm of thickness, the layer is so strong that all positive material properties such as heat and scratch resistance are still maintained. The intelligent combination of the ceramic with foam glass and a glass fibre stabilising layer also makes the product extremely stable. This minimises much of the potential transport damage and resulting resource- and energy-intensive repeat production. The concept of a closed cycle was considered during product development as well: by using foam glass in the middle layer, we are helping to reduce resource use as this is a recycled product.

The spirit of green innovation that went into designing the product has been recognised many times over. We've not only won numerous design awards for Xtra Ceramic, such as the Red Dot Design Award, but also the extremely coveted Green Product Award. For ten years, the international Green Product Award has been bestowed annually on products that stand out on account of their sustainability, innovation and design.

Green Product Award
Winner
2022

XTRA CERAMIC

EFFECTIVE DURABILITY

In terms of sustainability, the best kitchen is the kitchen that does not have to be replaced. Durability, quality and freedom from harmful substances are prerequisites to this. All of these are aspects that we've long focused on at nobilia. Nevertheless, a kitchen will inevitably reach the end of its life cycle at some stage – and we also have this in mind. We don't assume that our responsibility ends when the guarantee runs out!

DURABILITY: PROTECTING RESOURCES THROUGH QUALITY

The longer a product lasts, the less often it has to be replaced. This is a very important aspect of sustainability. After all, resources are consumed every time a new purchase is made. Therefore, durability saves on resources.

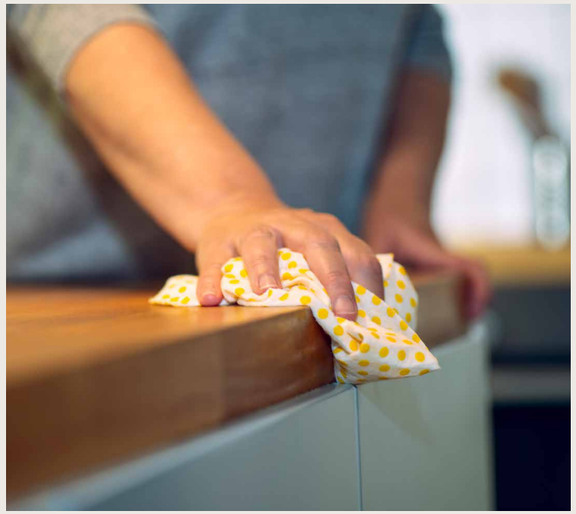
nobilia kitchen, bathroom and living room furniture items are highly durable products. We know from customer feedback that our kitchens are frequently used for 15 years or more. In 2020, we ran an internal competition to find the oldest nobilia kitchen still in use – and the winner dated from the 1960s!

This durability isn't achieved by chance, but results from intensive product testing and painstaking quality checks: even though the relevant standards require that hinges can withstand 20,000 openings and closings without failing, for example, this doesn't go far enough for us at nobilia. As we've committed to meeting the strict requirements of the quality mark conferred by Deutsche Gütegemeinschaft Möbel e.V. (DGM, German Furniture Quality Association), we reach a higher benchmark when it comes to durability. Here at nobilia, a hinge has to be able to withstand 80,000 opening and closing cycles, for example. We therefore set our requirements for durability far above the market standard – to the benefit of customers and the environment alike.

CARE & EASE OF REPAIR: CONTRIBUTING TO DURABILITY

The quality of a product is crucial to determining how long it lasts. However, it's equally important that the materials are properly cared for. At nobilia, we already concern ourselves with suitable care agents during the product development phase and put these through their paces in our own laboratory. The care instructions then give customers detailed information on the care agents that will produce the best cleaning results in their kitchen. Practical: all of the recommended products are available from our own online shop.

When something does go wrong, however, the kitchens' modular structure means that individual components can be easily replaced – using standard tools. At nobilia, we guarantee the availability of spare parts many years beyond what is required by law. And as every kitchen can be identified via a permanently affixed product identification code, normally placed in the sink base unit, the Customer Service team can have the right part ordered in next to no time.



END OF LIFE: AT NOBILIA, WE ALSO KEEP THE END OF THE PRODUCT CYCLE IN MIND

At least 15 years – that's how long a nobilia kitchen can be used for. But even the most durable product will eventually reach the end of its useful life. That's why consideration of this phase is integral to our product development process. Two factors are paramount here: emissions of harmful substances and recyclability.

Harmful substances: material composition is a key determinant of recyclability. If materials are blended with toxic additives, then high-quality recycling is not an option. That's why we ensure here at nobilia that only harmless materials are used. This is guaranteed through regular checks and precise analysis of the substances used by nobilia itself and our suppliers. Thanks to these high standards, the nobilia product lines have been certified with the DGM emissions label – and many even with the "Blauer Engel" (blue angel eco label). Components and products with a harmful substance content of greater than 0.1% by weight are duly registered and this information can be viewed by disposal companies.

www.blauer-engel.de/uz38
- emissionsarm
- Holz aus nachhaltiger Forstwirtschaft

RECYCLABILITY

Recyclability: using healthy materials doesn't necessarily mean a product is recyclable. At the end of the day, only items made of a single material can be easily recycled. This is where the modular and detachable design of our furniture helps. The main component of the furniture is chipboard. From a technical perspective, this is 100% recyclable and there's the possibility of creating a truly closed cycle here in which old furniture could be turned back into new, modern pieces. However, the problem here is that many disposal companies prefer to use chipboard to generate heat because this is a more financially attractive option. To fix this gap in the closed cycle, we're in discussion with a number of disposal firms – as this problem can only be solved if we put our heads together.

ENGAGEMENT FOR SOCIETY

There isn't just one definition of sustainability. At the United Nations Conference on Environment and Development in 1992, social development goals were incorporated in addition to environmental aims. As a family company, we feel a particular responsibility for these goals. Our social measures cover employees, suppliers and neighbours in the region alike.

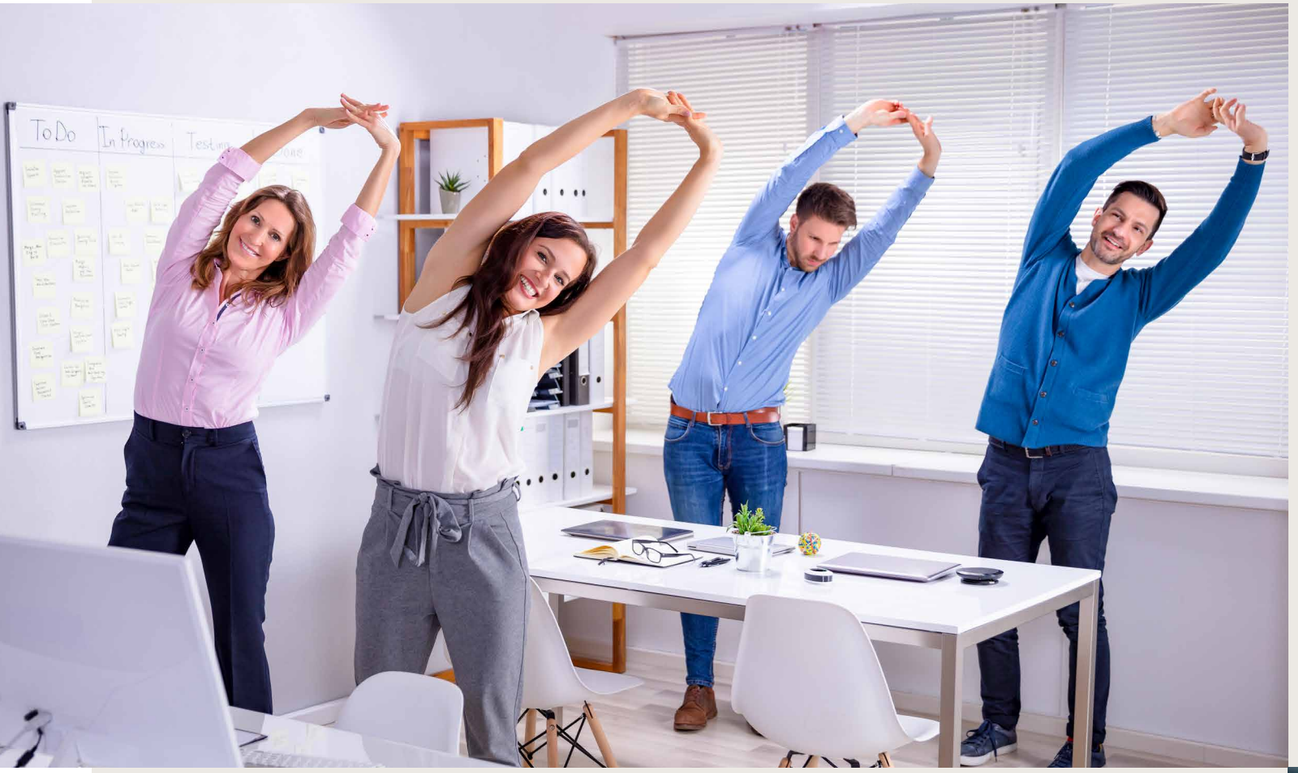
PROFESSIONAL TRAINING: SUSTAINABILITY IS ACHIEVED BY PEOPLE

What does professional training have to do with sustainability? It's simple: only when people understand the increasingly complex processes in furniture production can they take targeted action and minimise faults and waste. Skilled workers are therefore not just a requirement for effective business – but also provide the impetus for corporate sustainability.

The most promising way for a company to retain skilled professionals in the long term is to train them itself. And we've been doing this for some time at nobilia: currently, over 110 young people are learning one of nine commercial or technical professions or completing one of three dual-study programmes in business economics, wood technology or industrial engineering. In 2021, over 40 new trainees and students started working on their professional qualifications at nobilia. Indeed, a large proportion of these trainees are nobilia's skilled workers of tomorrow.

In addition to training, nobilia also attaches great importance to targeted onboarding of new employees. To this end, all new colleagues undertake special training when they join us. Quality, safety, the production flow, remuneration, etc. – the training team explains everything involved in working at nobilia.

COMPANY WELLNESS PROGRAMME: SUSTAINABILITY ALSO MEANS TAKING SOCIAL RESPONSIBILITY



Sustainability covers more than just the environment. Social responsibility also falls under this term. Accordingly, at nobilia we look after the health of our employees with a company wellness programme. This includes everything that might foster worker well-being – from sports to flu shots.

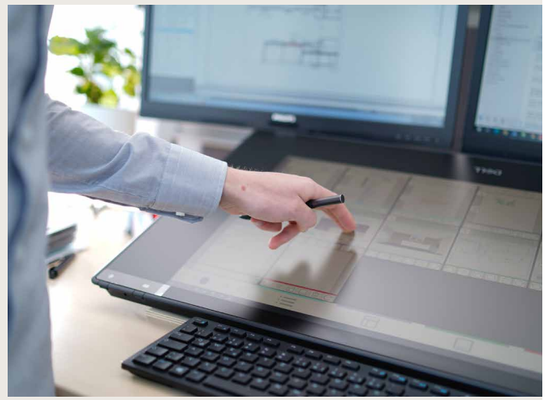
During our Health Weeks, we offer our employees one-week training on health topics. They can sign up for flu jabs as well as skin cancer screening.

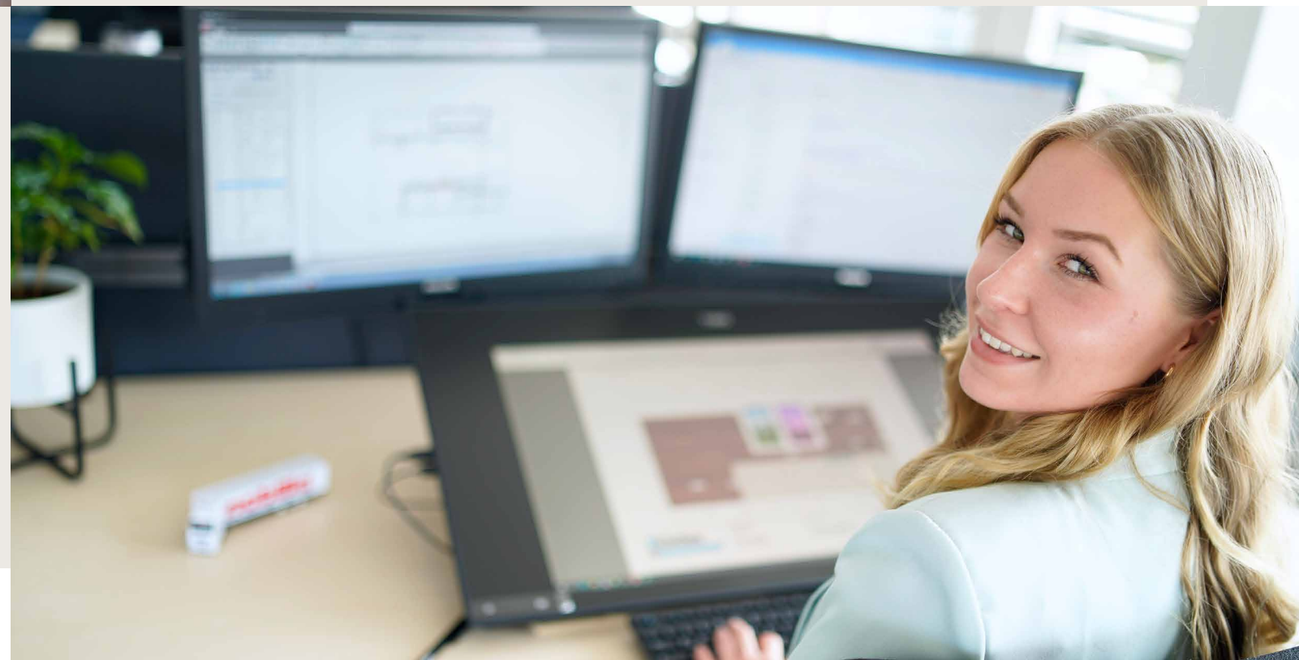
The best preventive measure is maintaining physical strength. That's why we offer a range of sporting activities at nobilia: jogging under the guidance of a trainer is held once a week. For company runs, we cover the sign-up fees and provide singlets for our employees. Once a year, a cycling trip is organised and the whole company invited. And last but not least, there's "Sportnavi", a flat-rate fitness and wellness offering. For a small fee, every employee gets access to a multitude of partners: there's something for everyone here – from massage, fitness, tennis and squash through to table tennis, badminton, canoeing and swimming. Around 600 employees are currently making use of this offer.

WORKING CONDITIONS: ACCOMMODATING INDIVIDUAL CIRCUMSTANCES

When it comes to well-being in the workplace, working conditions are of primary importance – and these differ from remit to remit and person to person. That's why the special features of the many different jobs have to be explored – and every employee empowered to create a healthy and stimulating environment for themselves. We've a wide selection of offerings in this regard at nobilia: for example, we offer Health Weeks during which employees can avail themselves of a week of training on preventing back problems. On production of a medical certificate, we pay for the computer glasses for employees. We've invested in office ergonomics in administration: chairs of a premium quality are set up in such a way as to ensure comfort while supporting the back. Height-adjustable tables can be ordered as well.

Manual tasks in the plants are also carefully monitored in respect of working conditions. Comfort and occupational safety have been considerably boosted there thanks to numerous measures taken. The many transparent skylights, for example, mean the lighting is as natural as possible. Personal protective equipment, such as earplugs, safety shoes and much more, is provided by nobilia and is always state of the art. What's more, in-house training is held so that employees can continue to develop and are made aware of the right ways to move and the topic of ergonomics. And, of course, financial appreciation plays a role in how well a person feels in their job. At nobilia, we make further benefits available in addition to the normal remuneration, such as contributions to capital formation. We also offer employer-funded pension care to our employees.





IN-COMPANY FURTHER TRAINING: PROSPECTS FOR ALL EMPLOYEES

Sustainable personnel development requires further training of employees. Acquiring new skills, further educating oneself, learning – these things lead to more highly skilled employees and to increased safety and expertise in the company. With our comprehensive further training, we endeavour at nobilia to ensure that there are suitable offerings for every position.

Conventional opportunities for further training are offered across all divisions. These include, for example, leadership seminars for team, department and production unit leads as well as MS Office training. Of course, more specialised courses are also available: language courses, seminars on wood, training on occupational safety and the environment, and seminars on leadership and soft skills. In addition, we've established at nobilia individual job-relevant further training that is coordinated between employees and supervisors in annual routines.

HEALTH AND A SMALL CONTRIBUTION TO LOWERING CO_2 EMISSIONS: BIKE LEASING FOR EMPLOYEES

Many of nobilia's activities combine different aspects of sustainability: social topics with environmental protection and employer branding. With our bike leasing scheme, however, the former is clearly to the fore: employees are the backbone of a company. Content, engaged and well-trained colleagues are the result of corporate culture. That's why we do a lot at nobilia to ensure that employees also feel good. The company wellness programme is part of this – featuring our bicycle leasing scheme through which our employees can lease premium quality bikes and e-bikes on attractive terms.

The scheme has proven an enormous success: over 1,300 bicycles have already been delivered! The benefits are varied: cycling keeps you fit and healthy, strengthens the heart, circulatory system and feelings of well-being, is cheaper than driving, is less stressful at peak traffic times and is good for the environment. At the same time, it also makes a small positive climate contribution: according to the German Federation for the Environment and Nature Conservation (BUND), the average car emits approx. 140 g of CO_2 per kilometre travelled. A bike or e-bike, by comparison, emits almost nothing. This means that 1 kg of CO_2 is avoided when covering a route of 7 km with a bike instead of a car. Therefore, if 1,000 colleagues with a commute of 7 km were to travel by bike, this would avoid a tonne of carbon dioxide – it's also the small steps that add up. That's why nobilia is approaching the topic of sustainability from so many different angles.

BUILDING STANDARDS: MAKING SAVINGS THROUGH PROPERTY

Buildings built to the KfW 55 standard have to meet defined energy-efficiency requirements. This standard considers the average energy needed for heating, ventilation and hot water preparation over the course of a year and how much energy is lost from a heated property to the outside. Based on this data, buildings are divided into different categories that indicate the percentage of energy consumed by the respective building compared to a reference house.

So what does all of that have to do with nobilia? That's easy! Our new administration buildings in Verl and Saarlouis have been built to the KfW 55 energy efficiency standard. Accordingly, they only consume 55% of the energy of a reference structure. They are contributing to energy savings thanks to their exceptionally good building insulation. By meeting the KfW 55 standard, they in some cases far exceed the standards of many detached homes in Germany.

The German Buildings Energy Act (GEG, previously the German Energy Saving Ordinance (EnEV)) sets out the energy requirements for new builds. All of our administration and production buildings have obviously been built to meet the applicable standards. With our well-insulated administration and production buildings, we are making a considerable contribution to the topic of sustainability here, too.

NOISE AND AIR EMISSIONS: RESPONSIBILITY FOR OUR NEIGHBOURHOOD

Every industrial company produces not only carbon dioxide but also other emissions that may impinge on the environment and surrounding areas. At nobilia, these are mainly noise and air emissions:

- **Noise emissions:** noise is unavoidable when manufacturing furniture. Take, for example, the trucks delivering the goods, cutting saws in production and the fans in the wood chip extraction systems. In order to meet requirements in respect of our surroundings and the environment, however, all machines and processes are designed to comply with the legal framework and are approved before operation. This approval is always based on a noise survey produced by an independent expert. The relevant requirements in respect of the operation and design of machines and systems are set out in these noise surveys. We then consistently implement these at nobilia. In Plant III, the close link between both sound and building insulation is clear: the acoustic barrier and aerated concrete building envelope there have led to a considerable improvement in the building's thermal insulation.
- **Air emissions:** air emissions are mainly produced by our heating system and chip extraction setup. With respect to the requirements, it is essentially a similar story here to that for noise emissions. The legal requirements set out in the underlying permits are the basis for the design of the systems. In the case of our heating system, for example, emissions (smoke gases) are cleaned in three filter stages (post-combustion, multicyclone and electrofilter). A downstream measuring sensor system also monitors and records all relevant emission parameters.

Both examples show that here, too, we take a conscientious approach to the environment at nobilia. Meeting legal requirements and reducing emissions to the necessary minimum are of paramount importance.

nobilia Plant V in Saarlouis

PREVENTION OF WATER POLLUTION: INVESTMENT TO AVOID OVERLOADING OF WATER BODIES

Halls, buildings and transport routes for delivery traffic are needed when producing furniture. The construction of such industrial facilities leads inevitably to land sealing, which has an impact on natural water cycles. The rainwater that accumulates can no longer seep through to the subsoil and therefore has to be collected and drained away in an environmentally friendly way. At nobilia, we discharge most of the rainwater into surface water bodies – in other words, streams and rivers. The rest seeps into the groundwater or is dissipated via the connection to the public rainwater drainage system.

Regardless of which route the precipitation takes, the following aspects are of major importance to ensuring an environmentally sound transfer:

- Impeccable water quality
- Rainwater buffering in the event of heavy rain

When rainwater is discharged into surface water bodies or the groundwater, impeccable water quality is a must. For this purpose, precipitation from traffic routes is cleaned before ending up in rainwater purification basins. In addition, all drainage systems are regularly checked, cleaned and repaired to ensure smooth operation. The water is regularly sampled to make sure it is of a consistently high quality.

Changing weather patterns are one consequence of climate change. Temperatures are rising, regular rainfall is lacking, storms are more prevalent. This also means changing requirements in respect of rainwater discharge, as many systems are not designed for heavy rain events. In order to mitigate the risks stemming from this, we at nobilia have invested in basins and rainwater storage options in recent years. These act as buffers, collecting water when it falls in abundance during heavy rain events, before it can be gradually released into rivers and streams. This prevents overloading of these water bodies.

nobilia Plant I in Verl and Plant III in Gütersloh

INTEGRATION AND APPRECIATION: WORKING WITH SHELTERED WORKSHOPS

In today's world, sustainability also has a social component. Accordingly, sustainable action means taking social responsibility as well. And we do this at nobilia at different levels. One important measure is close cooperation with various sheltered workshops. People with disabilities are often excluded from working life. Sheltered workshops are one way to enhance their inclusive access to the labour market so that they can then feel valued for what they do.

Our colleagues in the sheltered workshops generally take on simple, but still important tasks. One example is packaging small parts into fittings bags. These small bags with brackets, screws and dowels are processed in various institutions that support integration. We've been working very closely with cooperation partners such as Wertkreis in Gütersloh, Bethel in Bielefeld and other workshops of this nature for many years. At the end of the day, these many small items are also essential to assembling the perfect kitchen.

nobilia®

This journal has been printed on FSC® certified maxi offset paper in an entirely climate-neutral process.

Since 1993, FSC® has been committed to responsible and sustainable forestry worldwide.

ClimatePartner has been certifying products and companies since 2006 and ensuring carbon emission offsetting through international climate protection projects.

FSC
www.fsc.org
MIX
Paper from responsible sources
FSC® C074325

Carbon neutral
Print product
ClimatePartner.com/11834-2209-1001

/nobilia_de /nobilia_de /nobilia_de

nobilia-Werke
J. Stickling GmbH & Co. KG
Waldstraße 53-57
D-33415 Verl
info@nobilia.de
www.nobilia.de

Sustainability journal – EN
91578
nobilia