

Greater awareness in our life and work – our sustainability strategy













Ralf and Anja Neuhaus with their sons Yannik and Justus.

As a business owner and father, I know what it means to have responsibility for people. Responsibility for the health and well-being of company staff, and responsibility for the community that we call home. Taking responsibility for where we're based and for future generations is also an integral part of how we run our business. Both are important in order to play a part in shaping the future. We must therefore respect nature and better protect the environment from which we gain the raw materials for our products. Only in this way can we succeed in preserving and enhancing what we've achieved.

Very early on, the Neuhaus Lighting Group derived from this recognition the necessity to plan and produce its own products as energy efficiently as possible in order always to offer consumers long-lasting, energy-saving products. Over the past decades, a whole series of measures aimed at climate and environmental

protection have also been initiated in order to make our production operation and our products more sustainable.

We can be proud of the energy balance that we have achieved so far at the Werl site, where we already cover our electricity requirements 100% and our heating requirements 35% by means of regenerative forms of energy (solar power and brine heat pumps), where we are using more and more electric vehicles in our fleet and where we have thus reduced our CO₂ emissions. However, the challenges that lie before us require our combined efforts in order to ensure that the appreciation of our environment and of our customers and employees is carried forward to the next generation. **\(\Cappa\)**

Ralf Neuhaus, CEO and Managing Partner of Neuhaus Lighting Group GmbH & Co. KG



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"We are the first generation that can put an end to poverty, and we are the last generation that can save our planet."

It was with these words that Ban-Ki Moon, UN General Secretary of the United Nations (UN) from 2007 to 2016, introduced the UN's 17 goals for a better world.

17 goals* that the 193 nations aim to achieve together by 2030 in order to make our world a better place to live in and to simultaneously counter climate change.

The vision is ambitious – to create a world in which natural resources are treated with care and a good life is made possible for everyone.

... AND THESE EIGHT GOALS ARE PARTICULARLY IMPORTANT TO US!

Increasing numbers of businesses and institutions are declaring the strategic importance of these 17 goals as the guiding principle for how they personally act. The Neuhaus Lighting Group also feels committed to this United Nations agenda and is trying, with a willingness to act, to be of service in achieving these goals.

Within the 17 goals for global sustainable development there are 8 goals of importance to our company, of which we are focussing on goals 3, 7, 13 and 17 – not because we deem the other goals to be unimportant, but because given the orientation of our company as regards our products, markets and production methods these goals are of particular significance.

In addition, we as Neuhaus Lighting Group are conscious of the responsibility that we have towards our staff, the environment and society. Together with our workforce, our customers and suppliers, we seek to actively collaborate with an ecological, economic and social sense of responsibility on the achievement of these goals. In this way we strive together for greater sustainability.











13 CLIMATE ACTION















The 17 goals* of the United Nations – Our focus is on the eight coloured topics numbered 3/4/7/9/11/12/13/17.

These goals are in particular harmony with our company's sustainable orientation.



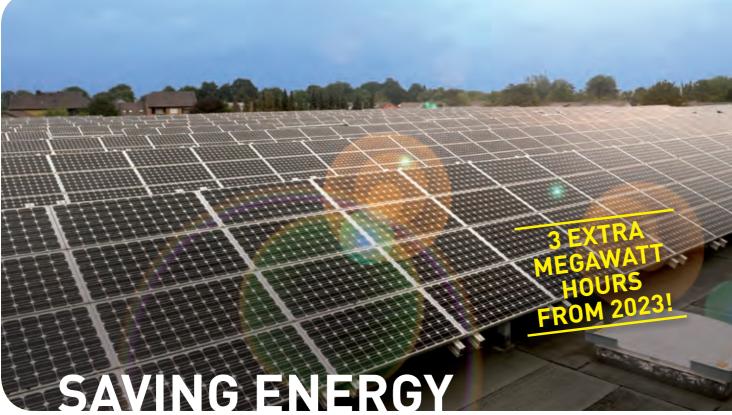


^{*} Source: 17ziele.de

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IN ALL AREAS OF THE **BUSINESS**



Electrically powered forklift trucks -Climate neutral as they drive around the high-rack

If the energy requirement of an SME business like the Neuhaus Lighting Group is looked at without taking into account transport distances for the products and their materials, a large part of the requirement comes from electricity, heating and air **conditioning.** In this regard, using our own solar power system, the Neuhaus Lighting Group already generates at our main company base in Werl more than 2.5 times as much electricity/ energy as we consume. The remaining energy requirement is generally attributable to business trips by land and air, and to consumables. Through systematic measures aimed at reducing our requirement, we will permanently improve the Neuhaus Lighting Group's environmental balance here too.

E-bikes for the workforce nealthier and more environmentally aware as they go to and fro. The management team's initiative of leasing e-bikes for the staff is also creating added value in support of our company's sustainability.



Heating and cooling using heat pumps – and reducing



New DC charging stations – in total 15 charging stations to enable more staff to get about on electric power.



VEHICLES - 3/4 of the company vehicles are electrically powered

HEATING - 35% from heat pump recovery*

ELECTRICITY - clear surplus from our own solar power systems

100%

* Related to administrative offices and showrooms at the company's Werl site



CO₂ REDUCTION ACTIVITIES

WITH SOLAR POWER ALONE WE HAVE ALREADY CUT DOWN CO₂ BY OVER 7,243 T*.

Thanks to maintaining a central warehouse and optimised despatch processes, customer orders are efficiently picked. The electric forklift trucks used for this can be powered in a climateneutral way via the large solar power facility, which covers 25,000 square metres.

In the course of various conversions of the office building, recreational areas and showrooms, powerful brine heat pumps have been installed that have avoided the need to use any fossil

For the accounting year 2021 the solar power facility produced c. 1.4 million kWh of electricity, which equates to a reduction of 616.2* tonnes of CO₂, which would otherwise have been released into the atmosphere.

In terms of **electric motoring**, we purchased our first electric vehicle way back in 2016 and began to develop an appropriate charging infrastructure. Today, there are already 16 electric vehicles available in the staff fleet, and customers and staff are able to utilise the now expanded charging infrastructure. In 2021, the management began offering the use of e-bikes, in order to make the workforce's individual transport more carbon neutral and to promote staff health and fitness.

As a result of the company's increasing digitalisation, work-fromhome jobs have been created for many employees, which reduce journeys to and from work. In the last few years, we have also been able through video conferencing to greatly minimise business trips and flights. Together, all these measures are reducing the Neuhaus Lighting Group's CO₂ balance.

* At 474 gr CO₂ per 1 kWh in the German electricity mix, incl. 40% green electricity / Oct. 2020





On Königsmoor – Ralf Neuhaus (right) learns on site about the climate protection measures, (from left) Karen Marggraf and Leif Rättig of the Schleswig-Holstein Nature Conservation Foundation.









Thinking globally – Acting regionally. Actively driving climate protection forward, and in the process keeping an eye on our own home area and nevertheless facing up to the global challenge of climate change with sustainable and above all verifiable projects is a particular concern of the Neuhaus Lighting Group.

The highly visible effects of climate change on the very wooded regions of Arnsberger Wald, where wide areas of the pine tree stock are infested by bark beetles and are currently being cut down, moved the Neuhaus Lighting Group to participate in the regional 'WaldLokal' reforestation programme in the Arnsberg local administrative district.

(See also www.waldlokal.com)

CLIMATE NEUTRALITY IS A GOAL THAT WE'RE ACTIVELY WORKING TOWARDS.

With the launch of the 'WaldLokal' (Woods Locally) project in the Arnsberg district, a regional reforestation programme has now been created in which companies such as the Neuhaus Lighting Group have participated since 2021. Put in concrete terms, businesses, associations and private individuals are able to financially support, for example, with a monthly contribution, the planting work on the sites identified for reforestation. The project is supported by the regional forestry commission, Arnsberg Chamber of Industry and Commerce, Möhnesee local authority and the woodland farmers.

An expansion of the **'WaldLokal'** project to cross-regional areas is being planned in order in this way to further improve the carbon footprints of the companies involved.

Another important climate protection project that the Neuhaus Lighting Group is supporting as of 2022 is the 'MoorFutures®2.0' project being run by the Schleswig-Holstein Offset Agency. Since 2014, the rehydration of upland moor pastures in Königsmoor within the Eider-Treene-Sorge flats has already been undertaken on a partial area of around 68 hectares and relevant climate protection certificates issued to the supporters.

Moors play a special role in the reduction of ${\rm CO_2}$ in the atmosphere, as they are, after all, the biggest natural carbon reservoir that we have. Moors can, however, only fulfil this function if they are kept constantly damp. Dried-up moors also release harmful greenhouse gases.



Ralf Neuhaus has been supporting the Nature and Wildlife Conservation Calendar produced under the patronage of Hannes Jaenicke since way back in 2012.



STEP BY STEP, WE ARE IMPROVING OUR CO₂ BALANCE.

For autumn 2022, the Schleswig-Holstein Offset Agency is planning as part of the 'MoorFutures®2.0' project to incorporate further areas into the land restoration process and to offer the backers appropriate climate protection certificates. Ralf Neuhaus will participate in quite a major way in this climate protection measure in order to thus further improve the company's CO₂ balance

Due to our production chains, it is not possible for our company to achieve complete climate neutrality without participating in CO₂ certificates. We are currently looking at further projects that would enable us to enduringly **improve our CO₂ balance going forward.** To that end we are as a next step drawing up a comprehensive CO₂ balance sheet for our business and our products, which is intended to show us the way forward. The aim has to be to make the Neuhaus Lighting Group and its products verifiably climate neutral well before the target date for a **'climate-neutral Germany'** in 2045.









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LAST LONGER AND USE **LESS ENERGY**



2002 - Lumeco®: the Globe range was one of the first energy-saving lights for home use in Germany.

Around the turn of the century, shortly after Ralf Neuhaus took over management of what was then 'Paul Neuhaus GmbH' from his father and company founder Paul Neuhaus, there was ever growing public debate on the constantly increasing consumption of energy.

Reason enough for the company management and product development team to think about a solution for energy-efficient lighting in domestic settings. The aim was to fundamentally improve the service life and energy consumption of new lighting ranges and in parallel through our in-house quality management system (NLGQS) to drastically reduce the proportion of warranty returns.

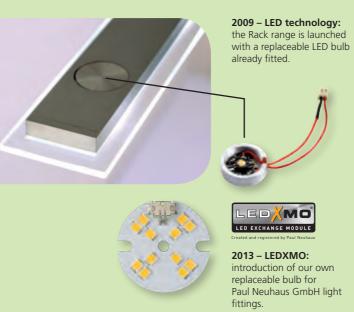
THE ERA OF ENERGY-**EFFICIENT LIGHT FITTINGS BEGAN FOR US IN 2002**

With the introduction of the Lumeco® range of energysaving lights, new territory was being entered back then in the home lighting sector. We were one of the first manufacturers in Germany to incorporate into its portfolio over 100 different energysaving light fittings, which with their energy-efficient bulbs were perfectly tailored to the design of the respective lighting family. The innovative Lumeco range was the first at Paul Neuhaus Leuchten that as a result of the individual products' much lower energy consumption and the long life of the bulbs was able to make a contribution to climate protection.

A good seven years later (2009), the Lumeco range was superseded through the introduction of energy-efficient **LED lighting technology.** Here too we were one of the pioneers and in the very early days of LED technology introduced a replaceable LED bulb in order to underline the sustainability of Paul Neuhaus Leuchten. This innovative technology led in 2013 to the development of our own, standardised **LED replacement** module LEDXMO® for LED light fittings. Around the same time, using our own LiLUCO® bulb brand, we established a comprehensive range of retrofit LED bulbs for use in conventional types of socket, such as E14, E27, G9 and GU10.

At the same brightness of c. 450 Lumen	Power/watts	Service life in hours/years	Electricity saving per operating hour
LED bulb	4W	Up to c. 50.000 hr = c. 16 years*	c. 90%**
Energy-saving bulb	7W	Up to c.10.000 hr = c. 3 years*	c. 52%**
Conventional bulb	36W	Up to c. 2.000 hr = c. 0,6 years*	-

* Calculated based on an average operating duration of 60 hours per week ** Compared to conventional 40W bulbs







LIGHT INTELLIGENTLY **CONTROLLED AND ELECTRICITY SAVED IN** THE PROCESS

With the introduction of the Q Lights range, Paul Neuhaus GmbH, which trades under the umbrella of the .Neuhaus Lighting Group GmbH & Co. KG', has taken another step forward in the area of energy-saving lighting technology. With the smart home compatible Q® lighting range, the lights can now be individually controlled, merged into lighting groups, and adapted in colour and/or brightness to the respective mood and desired intensity. Lighting schemes can be created and saved and by means of the **ZigBee wireless standard** the lights throughout the house can be controlled via tablet or smart phone, including from on the road. That helps to save energy and creates greater security around home and garden.

With the Q® and Neuhaus PURE® lighting ranges, the Neuhaus Lighting Group is offering two particularly long-life product lines that are being sold with a 5-year guarantee in the case of Q products and a 10-year guarantee for PURE light fittings. For PURE products there is also a paid-for repair service available for a further 5 years.

So that our products are always up with the times, the Neuhaus Lighting Group joined the 'Universal Home' network way back in 2015. It is a network of high-profile brand-name manufacturers, service providers and technologically advanced businesses working towards a future that is sustainable and good to live in, and seeking synergies between new developments, especially in the smart home field. We convey findings from this network into continual ongoing development of our light fittings, so that our products are always compatible with the future requirements of the market. That creates additional sustainability for our customers.



Consumption of paper

for administrative tasks in the business reduced by 45%.



PRESERVING RESOURCES AND MORE SUSTAINABLE PRODUCTION Paper consumption reduced by 45% – As a result of the

The film used to protect the light

fittings in the Neuhaus Lighting Group's

recyclable packaging is also exclusively

digitalisation measures systematically introduced since 2011 in the offices and dispatch department, the consumption of paper for administrative tasks has to date been reduced by 45%.

All paper required by the Neuhaus Lighting Group has been switched since 2021 to recycled paper. This made it possible, for example, to print the product catalogues for the 2021/22 light fittings season in a climate-neutral way on 100% recycled paper. Through reducing print runs and introducing an electronic flip catalogue, sustainability is in this way also being appreciably increased in the area of marketing and our CO₂ balance improved.

WASTE AVOIDANCE IN ALL AREAS OF THE PRODUCTION CHAIN

Since the introduction of the waste separation system in 1989, we have now reached a stage in our production and distribution operations, where all but a small amount of the materials used can be recycled. Thanks to a special agreement with the local ESG-Soest GmbH waste disposal company, Neuhaus Lighting Group's production waste and ordinary rubbish at the Werl site are separated in accordance with the 'Yellow Sacks' guidelines and appropriately recycled.

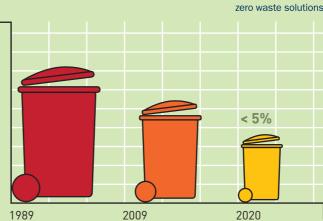
It is not only high global prices for raw materials that have caused our suppliers to optimise their supply and production chains. Our requirement for innovative manufacturing methods and our quality management system (NLGQS) also ensure that our production processes are becoming more sustainable.

Less is more – through our systematic downsizing strategy, the packaging sizes of all products were reviewed, optimised and where possible drastically reduced. As a result of this it was possible to optimise our warehouse space and to forgo the use of any off-site storage. These measures too have contributed to a further improvement in our CO₂ balance.

The final certificate from our recycling service provider 'Interseroh - zero waste solutions' shows, for example, that for 2020 alone through the recycling of paper, cardboard, cardboard boxes and mixed plastics it was possible to save 108 tonnes of resources and additionally to cut out 13.3 tonnes of greenhouse gases.* In accordance with our internal packaging guidelines we seek to keep the weight and volume of our packaging materials as low as possible, avoid using any hazardous substances and paying attention to any hygienic and safety-relevant characteristics of our packaging that is used for shipping.

Using the Fraunhofer UMSICHT method of calculation, based on data for 2019,







Innovative packaging design the proportion of plastic has been reduced to a minimum. All plastic film used for the indispensable protection of products is now solely recyclable film.





INNOVATIVE PRODUCTS TAKE ACCOUNT OF **USING RECYCLABLE RAW MATERIALS**

In the new development of our innovative light fitting concepts we aim for minimal use of raw materials, for all components used to be recyclable and for our suppliers to be appropriately certified. including by the Business Social Compliance Initiative (BSCI), which is globally committed to the improvement of working conditions. In our product development we also put special focus on the light fittings' ability to be repaired and on minimising warranty cases due to faulty components.

For every item complained about is one too many, having as a result of the extra shipping and work involved a negative impact our company's carbon footprint.

The proportion of non-recyclable plastic components from production, packaging and transportation (within Germany) has gone down year on year since the introduction of the waste separation system (1989).



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The workforce represents the most important potential of any business. The health of our employees and their well-being create added value for our company that plays a key part in our success. The well-being and fitness of our staff and the quality of the environment provided for them in our business is therefore of particular importance to the management team.

With the ,Health Days' that have been run in collaboration with the Techniker Krankenkasse health insurance company and through the creation of new, appealing recreational areas, such as the canteen and outdoor terrace, we are underlining this aspiration. Across the business there are also 10 side-by-side fridges with drinking water and fresh fruit available free of charge to our employees.

ACCREDITED, AWARD-WINNING TRAINING BUSINESS

The **Arnsberg administrative district** is one of Germany's most interesting regions for education and training. The southern Sauerland, **the hidden stronghold of the German light fittings industry**, offers possibilities to study or train in all sorts of different directions and the opportunity to work at companies of significance both nationally and internationally.

'Here at our SME businesses young people have fantastic opportunities to develop', stresses the Neuhaus Lighting Group's senior management. 'In our rolling training system they go through every area of the business. The trainees are able here to learn and work in an attractive region that is great to live in.'

With its roots by tradition in the South Westphalia region, the Neuhaus Lighting Group offers secure employment to people of all ages who are prepared to work hard and is recognised and accredited by the Arnsberg Chamber of Industry and Commerce as a **training business** for the fields of industrial commerce, logistics, industrial management and business management. At the company we also offer young people the opportunity to do a **dual study course**, e.g., a business degree course in combination with commercial training.

'Only a business that provides training is making an active contribution to countering the looming threat of a lack of skilled staff,' says the Neuhaus Lighting Group management. That most trainees are later also taken on is for the Neuhaus Lighting Group the rule rather than the exception – there are, for example, cases of trainees going on to become purchasing manager, among many others.

Accredited by the Arnsberg Chamber of Industry and Commerce as a **training company** since 2011.





Werler Stadtquellen – financially supported by the European Union and through donations.



Photo: @Historischer Stadtkern Werl e.V./Robert Burschka

SUPPORTING DEVELOPMENT OF LANGUAGE SKILLS, OUT-OF-SCHOOL LEARNING PLACES AND SPORT

Commitment to corporate **social responsibility** for the region is for Ralf Neuhaus, CEO of the Neuhaus Lighting Group, also an important task. For him, it goes without saying that he should be involved in the 'Business Supporting Werl' association,

which champions the development of disadvantaged children's language skills at Werl schools. It is an **exemplary flagship project,** which was nominated in 2009 for the, NRW State Government Business Leader Award'.



We have also supported the 'Historic Heart of Werl' society, which in 2021 as part of the 'LEADER – Börde trifft Ruhr' project created with the 'Werler Stadtquellen' fountains, public seating and information panels an **out-of-school learning place** and crossgenerational meeting point on Werl's central market square. This was made possible by donations, EU grants and the work of committed volunteers.

Sports clubs from the surrounding area also repeatedly receive financial support from Ralf Neuhaus for their youth sections in order to continue their valuable work supporting children and young adults from all areas of society.





For 2022/23 we aim to pursue further concrete goals with our sustainability strategy:

- Expansion of the solar power system by 3 megawatt hours
- Production of a comprehensive CO₂ balance sheet for the company
- Development of a continual sustainability reporting system



Brands belonging to the Neuhaus Lighting Group include Paul Neuhaus Leuchten GmbH, LeuchtenDirekt GmbH and SellTec GmbH

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