

Taking care

...



**Investing
in the future**

New Electronic
Center

**Heat pumps
first choice**

From Scandinavia
to Spain

**Heroes for
a warm home**

Partnership with
SOS Children's Villages

...
of a better
climate.

Inside each home
and the world
around it.

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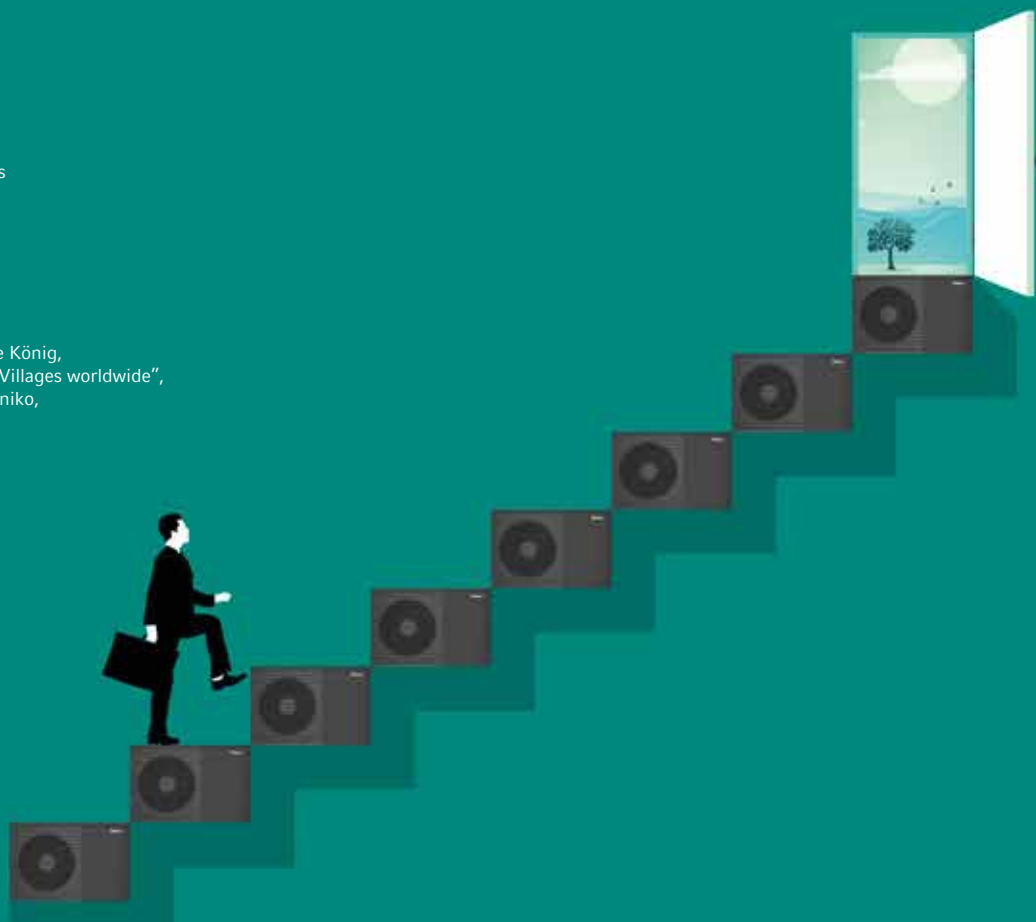
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Senica plant voted Building of the Year



The Association for the Development of Slovak Architecture and Construction organised the “Building of the Year” competition for the 29th time. The People’s Choice Award went to the Vaillant Group plant in Senica. 14 projects from all over Slovakia received nominations.

New plant in Wuxi, China

In September 2024, production in the new Vaillant Group plant in Wuxi was launched. The new site is more than three times the size of the old location. The maximum expandable production capacity enables a doubling of volume with corresponding market demand. The Vaillant Group has been present with a plant in China since 2007.



WORTH KNOWING

Electronic Center inaugurated

A new factory for the production of electronic components has gone into operation in Remscheid. The official commencement ceremony was attended by North Rhine-Westphalia Minister President Hendrik Wüst (second from right), the Mayor of Remscheid Burkhard Mast-Weisz (first from left) and representatives of the Vaillant Group Management Board on 20 November 2024.

See also p. 10



100 per cent hydrogen in the future!

Vaillant gas-fired condensing boilers can be adapted to run on 100 per cent hydrogen in the future. This will be done with a conversion kit, which will be available from 2026.

H₂

It pays off ...

... according to nine out of ten heat pump owners. This is the result of a representative survey conducted by the market research institute Civey. The survey questioned 1,500 German consumers who had installed a heat pump in the last five years. More than 80 per cent of respondents stated that they would recommend

investing in a heat pump to friends and relatives at any time. The most important reasons for their decision are independence from fossil fuels and lower energy costs.



For detailed survey information see:



Partnership with SOS Children's Villages

The Vaillant Group and "SOS Children's Villages worldwide" entered into an international partnership in 2013. Since then, 81 SOS Children's Villages in 25 countries have been supported with heating technology and social projects – an interim result that is impressive, makes everyone involved a little proud and motivates us to intensify the cooperation in the coming years.

See also p. 18



New heat pumps and digital services

Vaillant showcased numerous new products at the leading international industry trade fair ISH in Frankfurt in March 2025. The focus was on the next generation of heat pumps: high outputs for multi-family homes, solutions in the entry-level segment, modern design, greater efficiency and a completely new electronics platform. Visitors to the trade fair also had plenty of new innovations to discover in the range of digital services for installers and end customers.

See also p. 26



150 years of Vaillant

After all, you only turn 150 once ... if at all. Because statistically only one company in a million can look back on such a long period of success. To mark the occasion, all Vaillant Group sites organised large and small celebrations, exhibitions, campaigns and events in the anniversary year 2024.

“150 Years of Vaillant – 150 Years of the Future of Heating” was the motto of the anniversary year. A vibrant success story from a small craftsman’s business to a global family-owned company with 30 million customers in more than 60 countries.



Heat Pump Week

Vaillant Germany joined the “Heat Pump Week” in November 2024 with more than 130 events and activities. The initiative was launched by the German Energy Agency (dena). At the events and at the company headquarters, visitors had the opportunity to ask Vaillant experts and installers questions about the benefits and possible applications of heat pumps as well as the available subsidies.



REVIEW

150 YEARS OF VAILLANT



- FRANCE -




- CHINA -




NETHERLANDS -


Local company parties, summer festivals, team events and get-togethers with long-standing partners and customers – the Vaillant Group's 150th anniversary year had many aspects.

- AROUND THE WORLD -



- GERMANY -




- GREECE -



- GREECE -




SLOVAKIA -
 Senica




- SLOVAKIA -
 Senica




- SLOVAKIA -
Senica



- CHINA



- GERMANY -



- GREECE -



- ITALY -



- FRANCE -



- SLOVAKIA
Skalica



- SLOVAKIA -
Trenčín

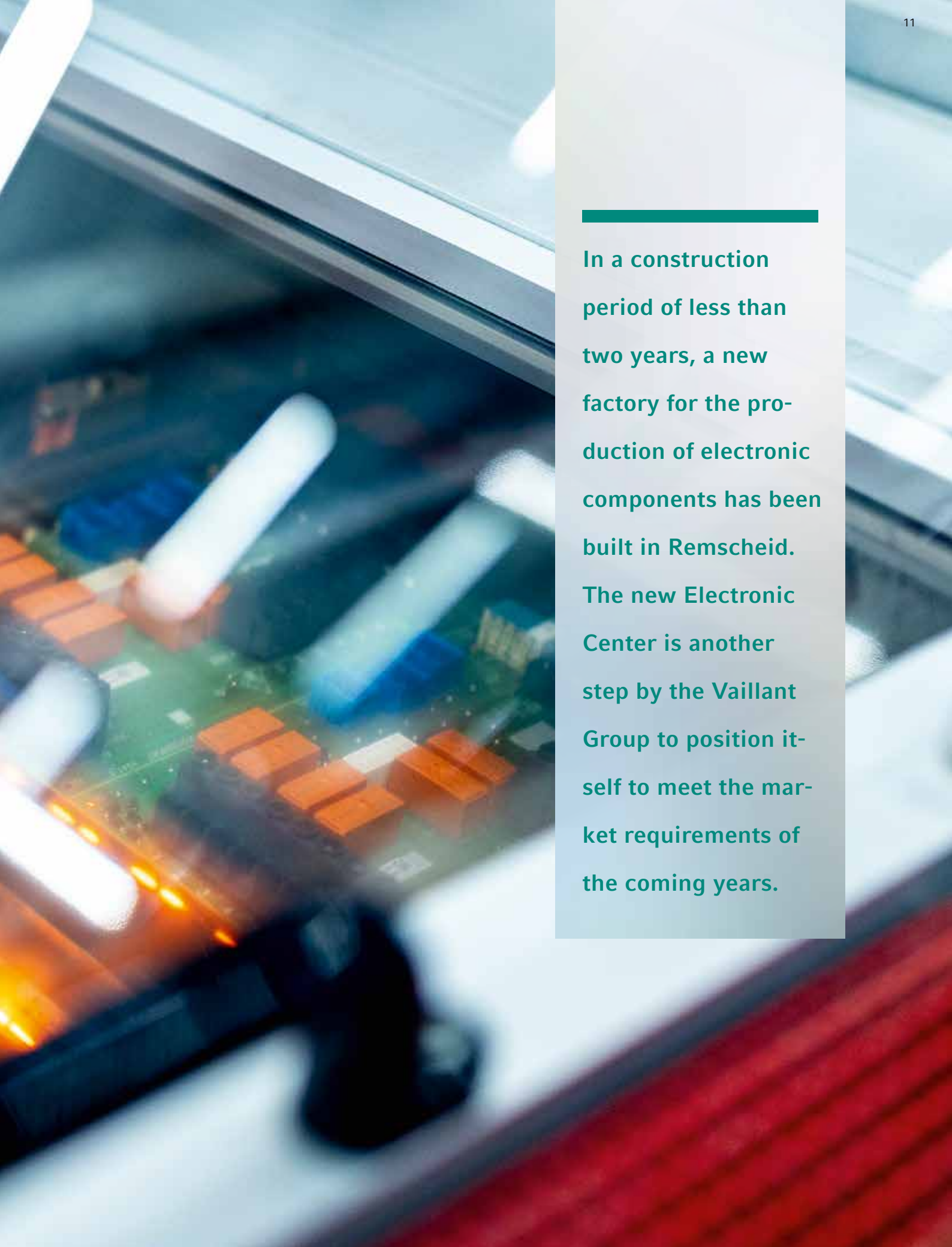


- AUSTRIA -



INVESTING // IN THE // FUTURE //

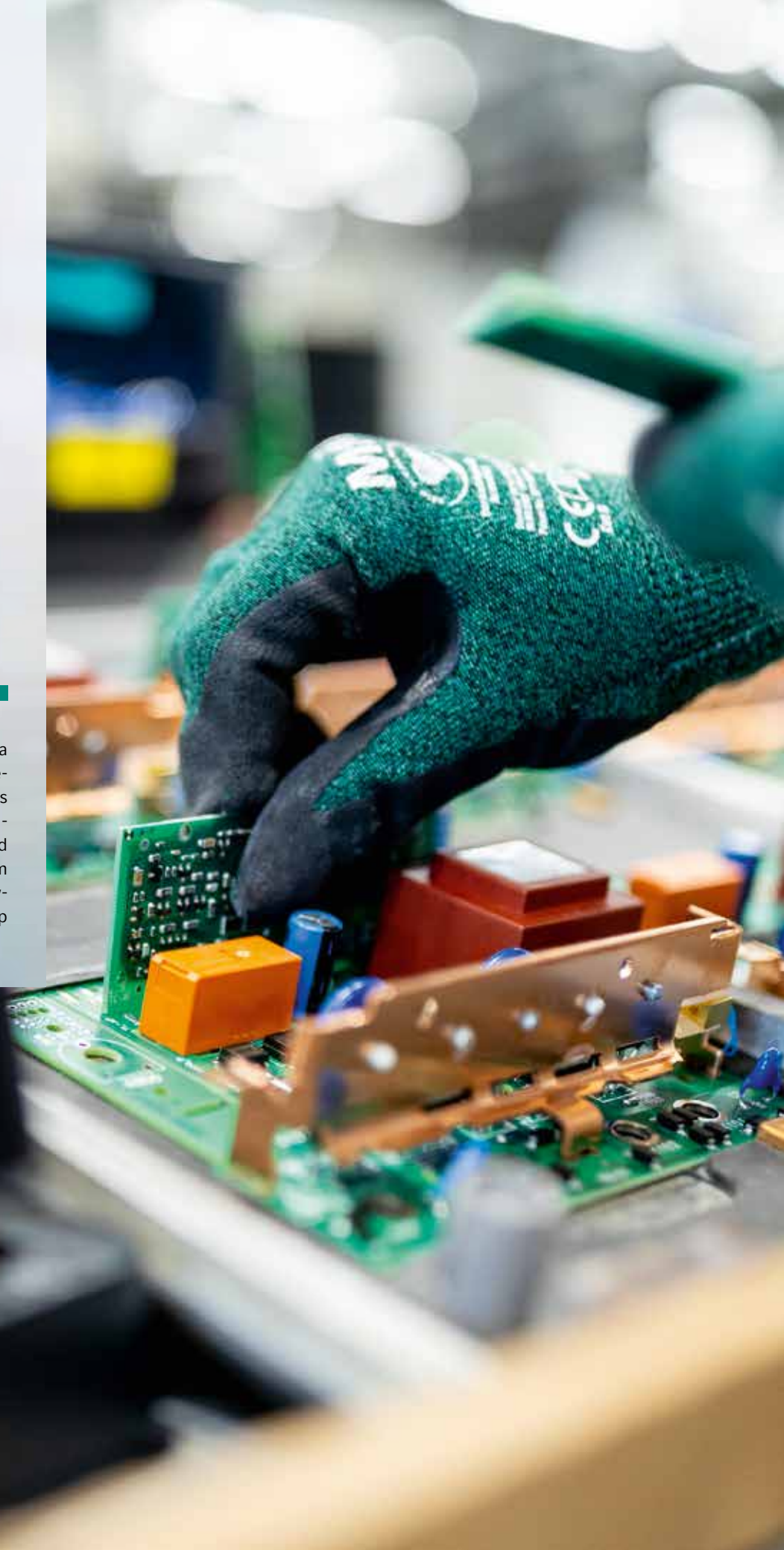




In a construction period of less than two years, a new factory for the production of electronic components has been built in Remscheid. The new Electronic Center is another step by the Vaillant Group to position itself to meet the market requirements of the coming years.

The new Electronic Center is located across from the plant in Remscheid, where heat pumps have been manufactured since 2018, and the R&D centre, where technical innovations originate.

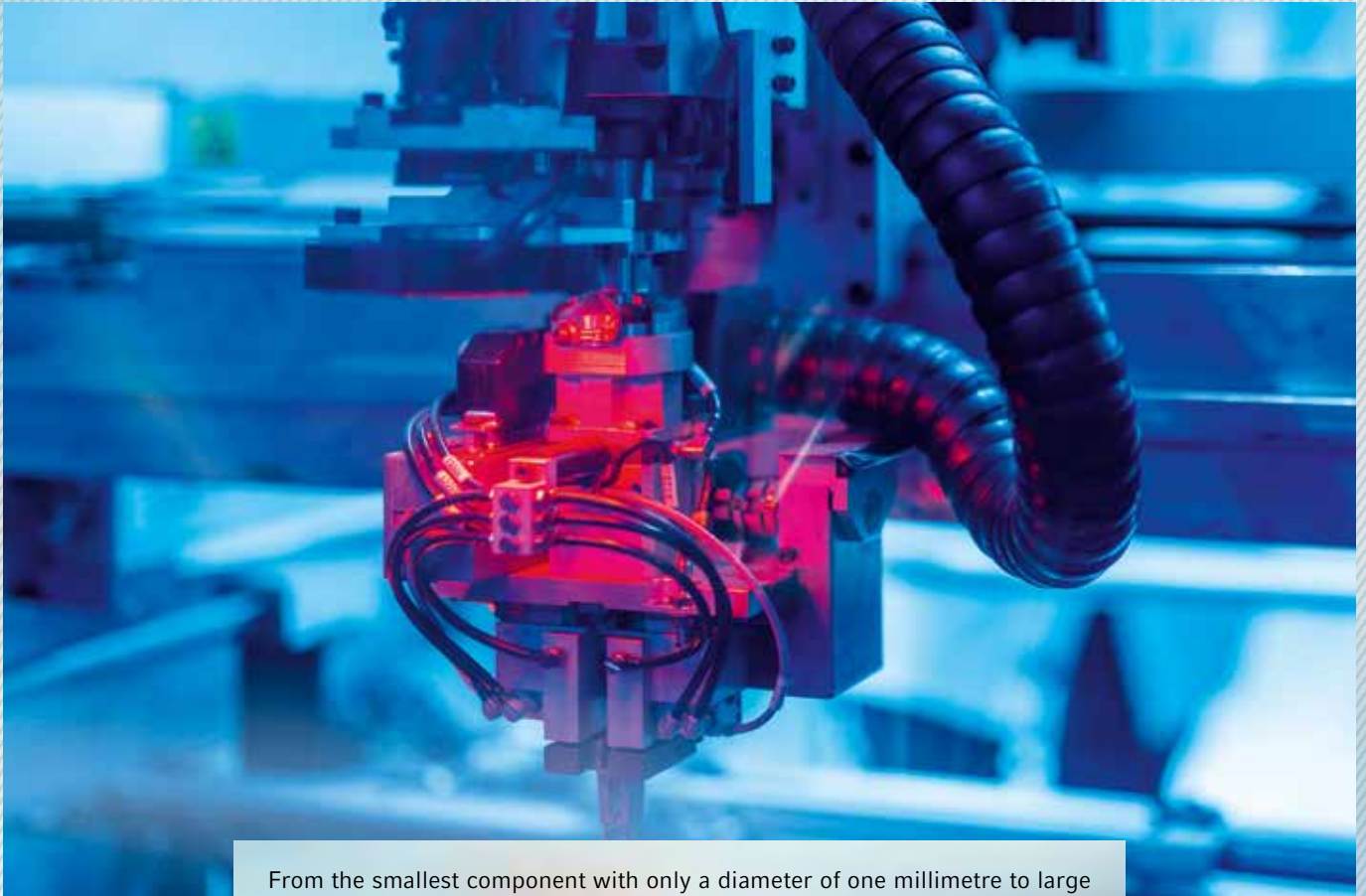
The Electronic Center occupies a floor space of 12,000 square metres. Around 150 skilled workers are employed in production. Operations run in several shifts around the clock. A photovoltaic system supplies the building with renewable energy, while a heat pump system heats and cools it.





The Electronic Center plays a crucial role in the company's international production network. Because it supplies all Vaillant Group sites worldwide with electronic assemblies and components that are necessary for the control and operation of modern heat pump systems and gas-fired heating appliances.





From the smallest component with only a diameter of one millimetre to large switch boxes – capacitors, resistors, coils and semiconductors are placed on circuit boards in a fully automated assembly line with millimetre precision.





Other modules require manual assembly. A single circuit board can consist of around 500 individual parts. Each module is tested after production before it is sent to the final assembly line at the other plants.

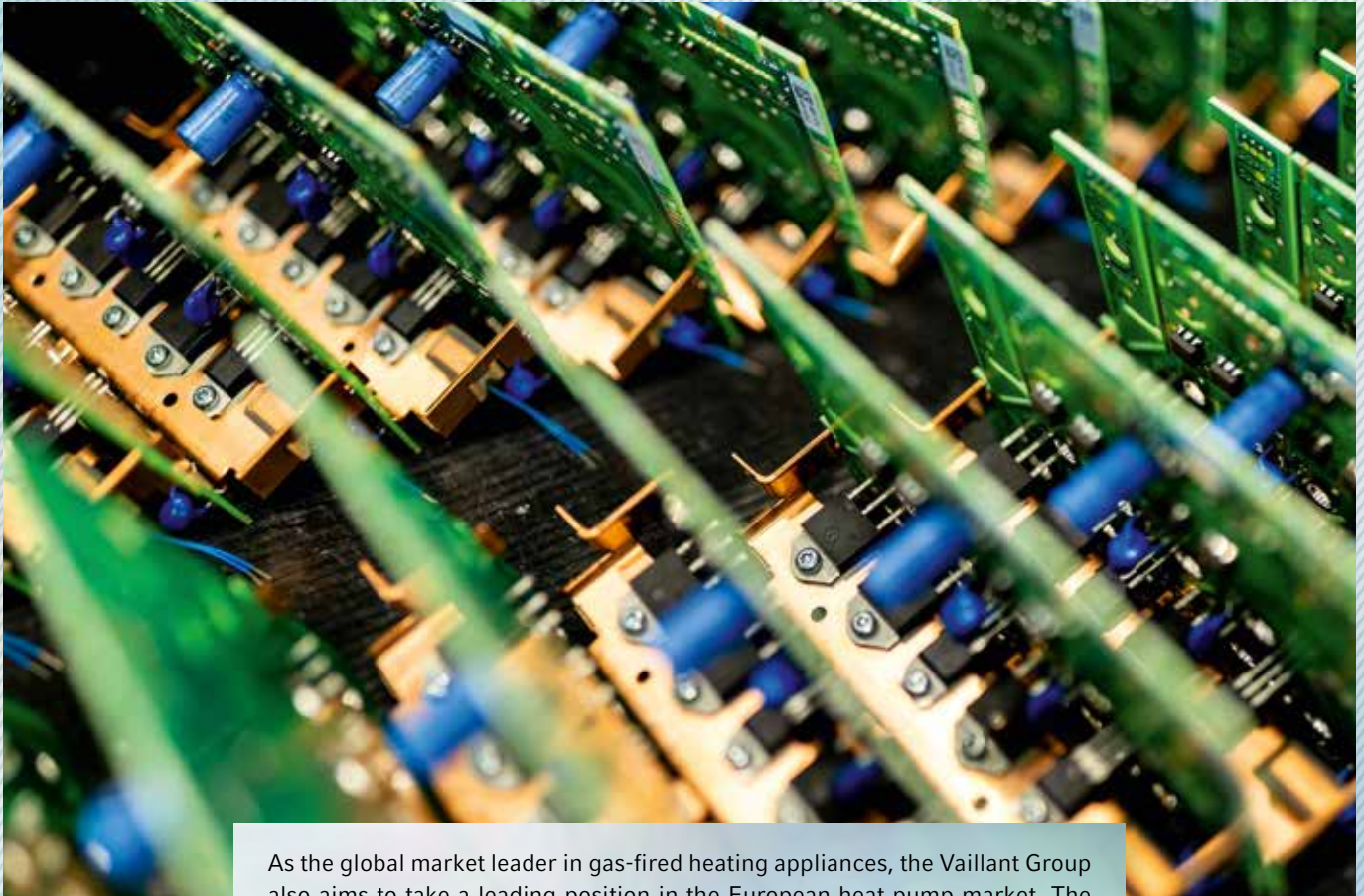
Up to 300 different types of modules and components are sent from the electronics factory to the Vaillant Group's ten production sites in Europe, Turkey and China. There they find their place – in a small wall-hung heating appliance, an intelligent controller or a complex heat pump system.

The production output is at several million electronics units per year and can be expanded further.

With the new production facility, the Vaillant Group will have sufficient in-house manufacturing capacity for electronic components in the long term and will be able to react flexibly to increases in demand at any time. This enhances the company's independence from international procurement markets.

The expansion of electronics production and the production network is part of a long-term corporate strategy. For this purpose, all areas involved in product development were initially pooled in the Johann Vaillant Technology Center. This step was followed by the growth of heat pump production in Germany, France and England. Most recently, a plant built specifically for heat pump production began operations in Slovakia.





As the global market leader in gas-fired heating appliances, the Vaillant Group also aims to take a leading position in the European heat pump market. The Vaillant Group is already one of the largest suppliers of heat pumps in the European market as a whole.





Heroes for a warm home



The Vaillant Group and SOS Children's Villages have been linked by a global partnership since 2013. Over the years, the partnership has become a matter close to the Vaillant Group's heart as a family-owned company.

It's not just about heating technology. Creative projects, fundraising campaigns and the individual commitment of many colleagues seek to give children not only warmth but also prospects for their future. Initiatives such as the Vaillant World Cup were organised, the longest smile was sent around the world and even 1,000 books were taken to the Himalayas for better educational opportunities.

The fact that the international cooperation with the SOS Children's Villages sometimes involves places where there is a lack of warmth, opportunities and optimism is part of the commitment to disadvantaged children and families. When an SOS Children's Village is located in a crisis or war zone, replacing a broken down or destroyed heating system can be a Herculean task.

Mission in Ukraine

It's a situation that Ukraine has been struggling with since the beginning of the war: conventional crisis strategies, which provide for emergency aid and infrastructure repairs, cannot be applied here. Simply because the situation requires everything at the same time and in equal measure. The SOS Children's Village Brovary is one of the places struggling with such adversities. It is located around 20 kilometres north-east of Kyiv and comprises 16 houses in which up to 13 families and up to 90 children find shelter.



Many of the families who live here come from the south and east of Ukraine and arrived in Brovary to escape the assaults on their home towns. 22 employees provide comprehensive care for the children in the SOS Children's Village. The trained staff in Brovary try to bring a bit of normality and light-heartedness into everyday life.

Cosy to –35 degrees Celsius

The laughter of playing children in the Brovary complex with its lush vegetation, tall trees and pastel-coloured houses almost makes you forget that the SOS Children's Village also had to be evacuated at the beginning of the war. When operations resumed, there were no serious damages to the building. The outdated heating technology, however, urgently needed to be replaced to ensure a reliable heat supply.

In a joint initiative between the Children's Village, the local Vaillant organisation in Ukraine and the company headquarters in Germany, it was possible to solve this problem before the start of the heating season. Since then, a combination of powerful heat pumps and efficient condensing boilers has been keeping the houses cosy. And that even in winter temperatures of down to –35 °C, which are common in the Kyiv area.

Aid for families

The Vaillant Group's Ukrainian sales company has been involved with the local SOS Children's Villages organisation for many years.

"We were able to arrange internships and summer jobs for young people. In addition, we took over the funding of health insurance for 75 children living in the care of the Ukrainian SOS Children's Villages shortly before the outbreak of the war," says Country Director of the Vaillant Group Ukraine, Alexander Rohn, who considers the support to be a matter of course, especially in times of war.

He is not alone with this view within the company: soon after the war began, Vaillant employees, who work in many countries around the world, showed their solidarity and took part in a transnational fund-





The SOS Children's Village Brovary is located around 20 kilometres north-east of Kyiv.



Via their local branches, the SOS Children's Villages teams often provide first aid – as they do in Ukraine.





raising campaign. Within a very short time, the private donations and a contribution from the company raised €255,000 for the benefit of Ukrainian families.

Experts for support in emergency situations

In addition to donations of goods, the SOS Children's Villages in Ukraine are particularly dependent on relief funds to provide emergency aid. Reliable partners are an important asset for them. The Vaillant Group, for its part, can rely on the SOS Children's Villages to deliver relief supplies safely to their destinations and to get them to the people who urgently need them. Because they have locations on-site, the SOS Children's Villages teams are often the first to provide support in a disaster area. This is the prerequisite for fast, efficient and sustainable aid. The organisation's employees know the country and its people very well and know exactly what is needed in an emergency.

One of these employees is Julian Erjautz, who has been working for SOS Children's Villages for many years. Whether wars, floods or earthquakes: the 33-year-old Austrian is always one of the first to support families all over the world in the most difficult situations as an emergency aid coordinator for SOS Children's Villages International. The list of countries in which the Graz native has already organised relief aid for SOS Children's Villages is long – Palestine, Syria, Lebanon, Armenia, Azerbaijan and Jordan are among them. In addition, he has also worked in European countries.

“ Supporting the Ukrainian SOS Children's Villages is a matter of course in times of war. ”

Alexander Rohn,
Vaillant Group Country Director, Ukraine



Driven by a passion to help

Since the beginning of 2022, the risk manager has been involved in projects in Ukraine. His work began with the coordination of aid missions in the Polish border region. Over the years, his work for Ukraine has become his most extensive project to date: “Millions of people have to live with the war. Even if the conflict near the front line in the east or in the cities of Kharkiv and Poltava is even more intense and fiercer than in other areas of Ukraine. The sirens, which sound at regular intervals and shake people to the core, have become a surreal part of everyday life almost everywhere.”

Julian sees his most important task as being supporting the local teams and affected families. He makes sure that children in emergency situations can feel safe, at least temporarily. But that alone is not enough: the coordinator’s work requires a great deal of empathy in personal encounters with those affected. And it is precisely this experience that the Styrian also passes on to other helpers, whom he trains on-site in dealing with crises. This makes him a “Hero for a warm home”, whose story and daily work is part of “SOS Children’s Villages worldwide”.

Get to know other “Heroes for a warm home” and people who work with great personal commitment for SOS Children’s Villages around the world:



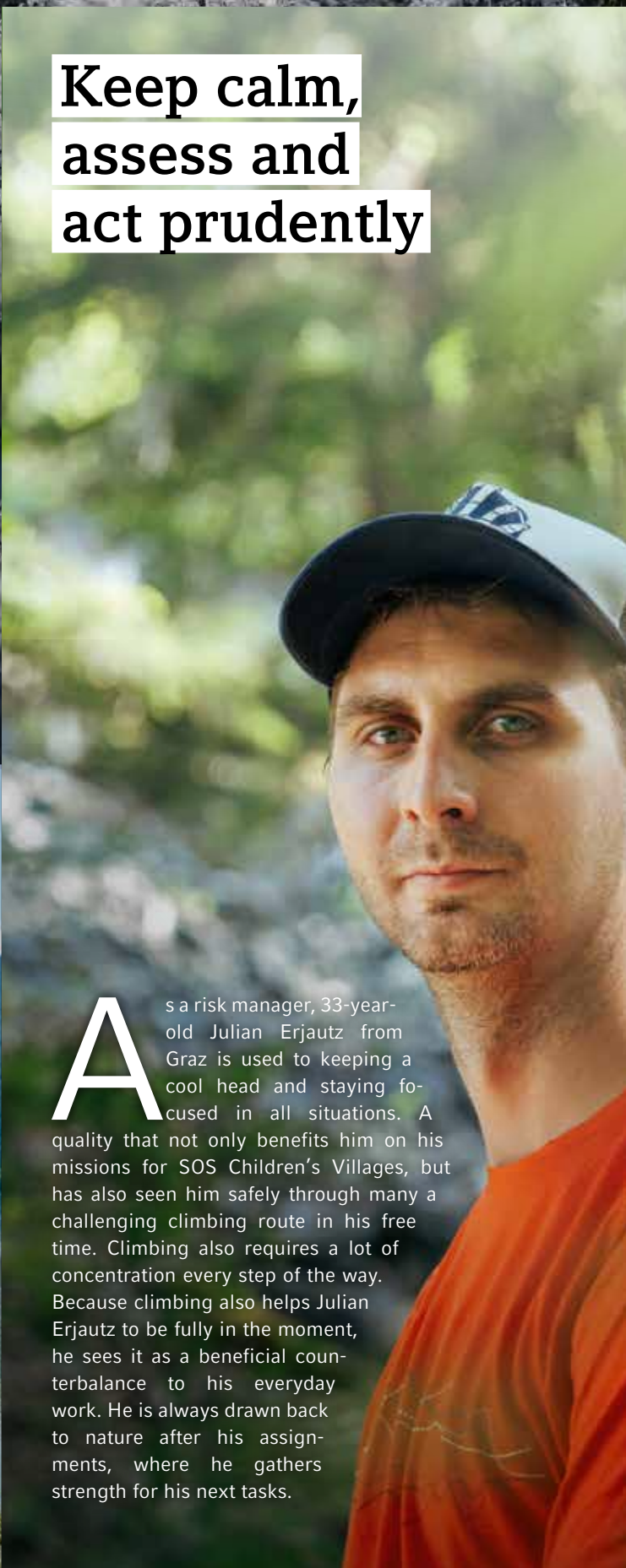
Julian Erjautz is always one of the first to arrive in crisis regions around the world as an emergency aid coordinator for SOS Children’s Villages International.



**Keep calm,
assess and
act prudently**



As a risk manager, 33-year-old Julian Erjautz from Graz is used to keeping a cool head and staying focused in all situations. A quality that not only benefits him on his missions for SOS Children's Villages, but has also seen him safely through many a challenging climbing route in his free time. Climbing also requires a lot of concentration every step of the way. Because climbing also helps Julian Erjautz to be fully in the moment, he sees it as a beneficial counterbalance to his everyday work. He is always drawn back to nature after his assignments, where he gathers strength for his next tasks.



NEW HEAT PUMPS AND DIGITAL SERVICES

In March 2025, the Vaillant Group presented the next generation of heat pumps and a wide range of digital services for installers and end customers at the International Trade Fair for Sanitation and Heating (ISH) in Frankfurt am Main.

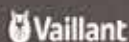
aroTHERM pro

A safe choice for numerous applications

The new aroTHERM pro heat pump is available in three output sizes: 5, 7 and 11 kW. It is particularly space-saving and can reach a flow temperature of 65 °C at an outside temperature as low as -10 °C. However, even in extremely cold weather at -25 °C, the heat pump can produce a flow temperature that provides warmth and comfort.

Like the aroTHERM perform, due to new safety features, the aroTHERM pro can be set up almost anywhere on a building, virtually without any limitations. Furthermore, the new heat pump model also has new indoor units that are even easier to install and use.





aroTHERM plus – technically
remastered for significantly
higher efficiency

aroTHERM plus

More efficient, quieter and in a new design

The aroTHERM plus air-water heat pump – one of the best-selling heat pumps in Germany – has been substantially revised. Thanks to new indoor units, it is much easier to install and operate. With the natural refrigerant R290, the aroTHERM plus can achieve high flow temperatures, making it suitable for all weather conditions.

Also, this new generation is even quieter than its predecessor and has a newly designed outer shell. It can be installed directly next to a building with almost no limitations, thereby offering maximum flexibility, even where space is limited.

aroTHERM perform

Excellent performance in large buildings

The new aroTHERM perform air-water heat pump with a heat output of 15 and 20 kW has been developed specifically for large detached homes and apartment buildings. It is the first heat pump that has been optimised for efficient operation involving radiators. Even at temperatures well below freezing, at -15°C , the heat pump still reaches its maximum flow temperature of 70°C . This means that it can also be operated in extremely cold areas.

With a maximum noise level of 62 dB(A), the equivalent of a normal conversation, it is extremely quiet in this output class. Integration of the new iQconnect electronic platform allows for particularly easy cascading of up to six heat pumps as well as intuitive control via a convenient 7-inch touch display. Thanks to innovative safety features, the aroTHERM perform can be installed almost anywhere in the home with virtually no limitations. Furthermore, the heat pump has new indoor units that are even easier to install and use.

geoTHERM exclusive and geoCOMPACT exclusive Space-saving geothermal energy

The new geoTHERM exclusive and geoCOMPACT exclusive models are the first indoor geothermal heat pumps from Vaillant that use the natural refrigerant R290. Thanks to an activated carbon box developed by Vaillant and the Fraunhofer Institute for Solar Energy Systems ISE, there is no need for safety precautions such as exhaust pipes or leakage sensors in the installation room. This simplifies installation and saves both space and additional costs. Moreover, both heat pumps maintain a maximum flow temperature of 75 °C for guaranteed safety in all weather conditions.

The geoTHERM exclusive and the geoCOMPACT exclusive are equipped with a cooling module, a brine filling unit, isolation valves, safety assemblies, a controller with an Internet interface, an electric heating element and a hot-water changeover valve as standard. The geoCOMPACT exclusive also includes a stainless-steel hot-water storage, allowing for particularly space-saving installation.

geoTHERM exclusive – indoor
ground source heat pump with
R290 refrigerant

iQconnect

New electronic platform: easier operation, quick installation

The aroTHERM perform, geoTHERM exclusive and geoCOM-PACT exclusive heat pumps are equipped with iQconnect, a completely newly developed electronic system with integrated control technology and a touch display designed for ease of use. For installers, iQconnect simplifies and speeds up the installation process, as it significantly reduces the effort required for wiring and commissioning. Installers can also access device functions in real time and install updates for new functions and optimised operation via an Internet interface. In the medium term, iQconnect will be available for all new Vaillant heat pumps.

Digital services for installers and smart energy management for end customers

As well as new heat pump models, Vaillant also presented a wide range of digital services for installers and end customers at the ISH. The new ProjectPORTAL combines all digital applications for partner installers on a single platform and makes their daily work much easier. Additional Internet-based services from Vaillant support installers in the planning, installation and maintenance of heat pump systems.

End customers benefit from EnergyFORECAST, an application that calculates and compares the expected operating costs of various heating systems. Continuous monitoring and optimisation of heat pump operation using OptimisationPLUS can save up to 15 per cent in energy and costs. EnergyPLUS enables heat pump owners to reduce the operating costs of their system by optimising the use of self-generated photovoltaic electricity. Energy from the grid is used for the operation of the heat pump whenever dynamic electricity rates are available at a good price.





VAILLANT + ALDI UK

Vaillant UK has been supporting Aldi with its sustainability ambitions since 2016. This long-running and successful partnership continues to evolve, as the two companies roll out a heating and cooling solution across the entire 990 Aldi UK & Ireland store network.

Over the past decade, Vaillant and Aldi have established a strong relationship beginning with the installation of renewable energy heating solutions at seven of the chain's large regional distribution centres, as well as its headquarters in Atherstone, Warwickshire. Now, the collaboration is moving into a new phase with its stores.

Richard Conway, National Real Estate Director for Aldi UK, comments: "Aldi is a forward-thinking supermarket business, and we continue to look at ways to improve efficiencies, whilst being mindful of our important sustainability targets. This means continuing to examine how we can reduce our environmental impact across our activities."

Our success working with Vaillant to support our distribution centres and UK headquarters over the past eight years has given us the confidence to extend the relationship into a new phase. We are using Vaillant's technical solutions, expertise and support to further enhance the green credentials of our store estate across the UK and Ireland."

Vaillant's aroTHERM plus air source heat pump is central to the strategic plan to upgrade each store's sustainability performance. As part of a multi-year plan, every Aldi store is undergoing the installation of between two and five aroTHERM plus 12 kW heat pump units with the number of units required based on each store's size.

Steve Cipriano, Vaillant's Commercial Director, explains:

"The aroTHERM plus air source heat pump is the latest technology innovation that can help meet the low-carbon challenge facing commercial businesses. To be able to extend the renewable technology across Aldi's entire store network over the next five years is a great way to demonstrate how heat pumps have a significant impact on the retail sector and its journey to net zero."



> 990

Aldi stores
in the UK and
in Ireland

The aim is
to install

2-5

heat pumps
per shop

The strategic decision to roll out the aroTHERM plus solution is a result of the technology's positive impact following its installation at Aldi's innovating eco-concept store, which opened in Leamington Spa two years ago.

Testing the concept

Richard Conway explains: "Aldi UK & Ireland have ambitious carbon reduction targets, validated by the Science Based Targets initiative. To help us achieve them, we have solar panels on over 400 of our UK stores and use 100 per cent green electricity from renewable sources. But to help move our sustainability understanding on, we knew that the 'eco-concept' store model would be a significant step towards exploring how to best use sustainable technologies within a real-life commercial setting. Solution learnings in areas such as renewable heating and cooling, as well as using solar panels to power around 10 per cent of a store's consumption each year, can then be transferred out as a standard design for our store developments in the future. And the work we have undertaken with Vaillant at the first eco-concept store has already opened exciting possibilities."

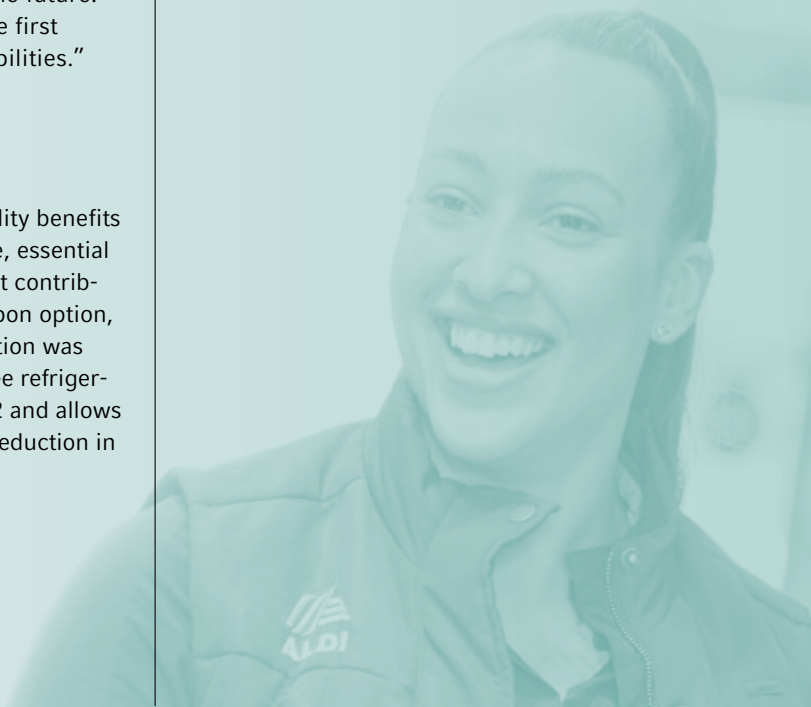
Heating and cooling sustainably

The aroTHERM plus solution has delivered sustainability benefits for both the heating and cooling requirements in store, essential in supermarkets where commercial chilling equipment contributes greatly to overall carbon emissions. As a low-carbon option, the decision to specify Vaillant's aroTHERM plus solution was reinforced because of the hydrofluorocarbon (HFC)-free refrigerant R290. It has a global warming potential of just 0.02 and allows the aroTHERM plus solution to achieve a 60 per cent reduction in refrigerant charge.



***Aldi UK & Ireland
have ambitious
carbon reduction
targets, validated by
the Science Based
Targets initiative."***

Richard Conway,
National Real Estate Director for Aldi UK







aroTHERM plus

R290

Natural
refrigerant



The roll-out is now expanding with a target to have the complete stores network upgraded."

Richard Conway,
National Real Estate Director for Aldi UK

To date, around 200 Aldi stores have upgraded to a Vaillant air-water source heat pump, with heat pumps being standard for any new store. The roll-out started in England, and is now expanding into Scotland, Wales, Northern Ireland and Republic of Ireland stores with a target to have the complete stores network upgraded by 2030.

Manufacturer service and support

The new phase of the Aldi and Vaillant relationship includes a ten-year service and support agreement with a standardised call-out arrangement in place so that Aldi has access to Vaillant's technical expertise when required.

This is something Richard Conway values. He says: "In addition to the low-carbon technology benefits the aroTHERM plus air source heat pump solution is delivering, we also have the confidence of knowing that the long-term service agreement with Vaillant means all our stores are supported going forward. Such technical support is an essential element of the holistic backing we enjoy from Vaillant."

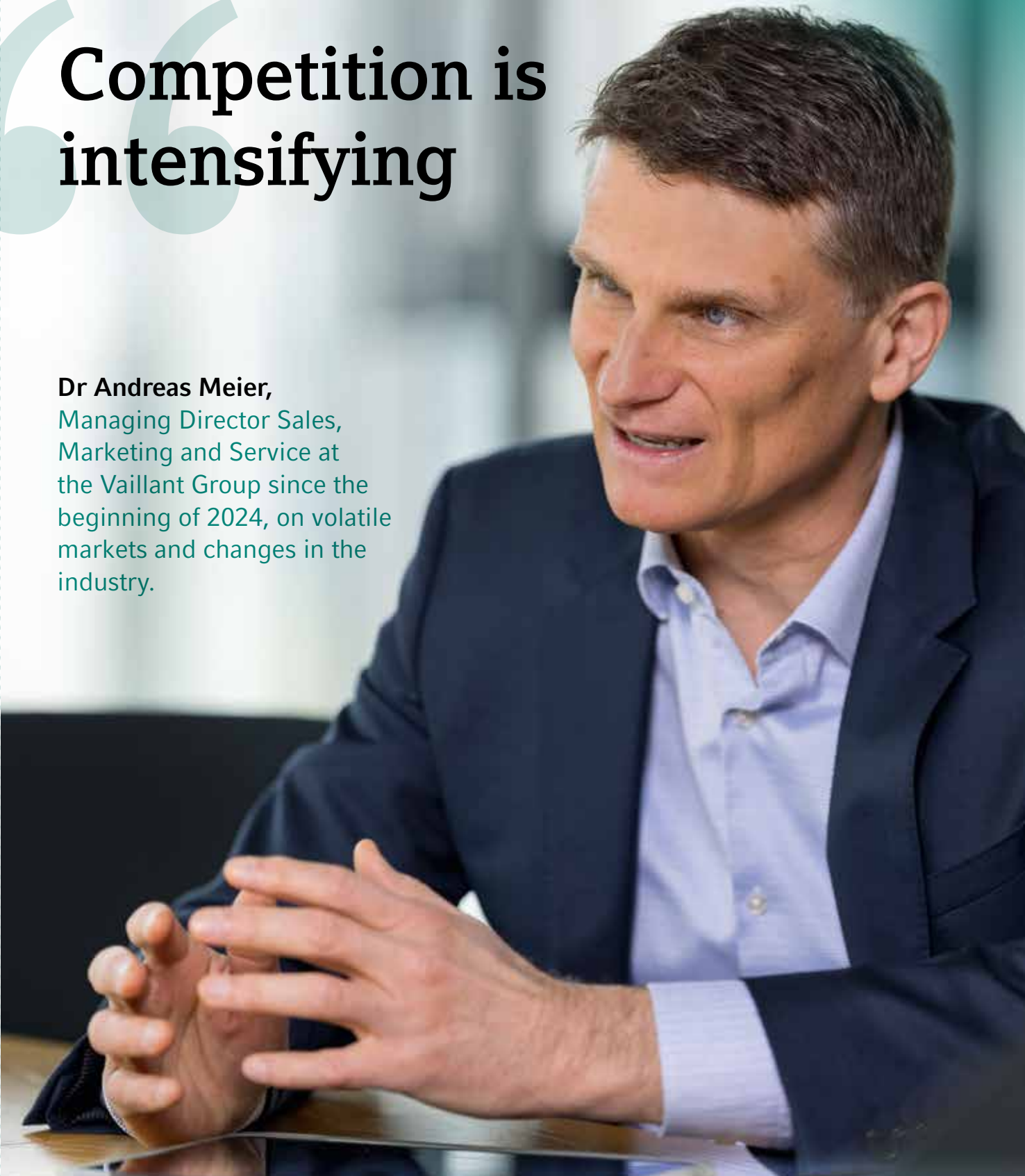
Steve Cipriano adds: "We have nurtured the relationship with Aldi, from initial concept right through to full system design and aftersales support. The service agreement we have in place not only means that Vaillant expertise is readily available for the business but also ensures there is a clear line of communication for Aldi across the UK and Republic of Ireland."

From eco-concept store to everyday reality in a busy retail space, the progressive installation of Vaillant's aroTHERM plus air source heat pumps as a proven and sustainable renewable heating and cooling solution is delivering tangible results for Aldi's large-scale store network.

INTERVIEW

“Competition is intensifying

Dr Andreas Meier,
Managing Director Sales,
Marketing and Service at
the Vaillant Group since the
beginning of 2024, on volatile
markets and changes in the
industry.



You became Managing Director Sales, Marketing and Service a year ago. What is your impression of the Vaillant Group after a year?

→ There are three impressions that come to mind immediately: first, the high level of trust in our brands, both among our specialist partners in the HVAC industry and our end customers. This explains our large market share and our leading position in the European heating technology market. Secondly, the willingness of our colleagues to work together on the best possible solutions across the entire value chain. And what really impresses me is the commitment of the owner family, the speed with which decisions are made and how united the family is in backing this company.

Is it different for you to work for a family-owned company compared to previous jobs?

→ The Vaillant Group is the first family-owned company I have worked for. But there are parallels. At one of the companies I worked for previously, there were no capital market investors as owners in the background, but rather a foundation. The long-term orientation is comparable in this case.

Your arrival coincided with major market turbulence. The heating technology markets are more volatile than they have been for decades. Which developments were particularly noticeable or surprising?

→ The market environment in 2024 was of course a challenge for me when I started out. But the volatility we experienced began long before that, in the COVID era. At first, there were difficulties in the procurement markets during the pandemic. Next came the very strong peaks in demand from the beginning of 2022, which

pushed the existing delivery capacities to their limits. This was followed by a massive drop in demand, which was in part caused by political uncertainty. In other words, the volatility was not a surprise, but its severity was.

It was remarkable that the heat pump market declined throughout Europe, in some cases by more than 50 per cent. This was partly due to changes in the subsidy landscape, for example in Italy and France. Additionally, there was a surprising drop in demand for gas-fired heating appliances, particularly in Germany.

I must add that I come from an industry that has been confronted with such fluctuations before. This means that for me personally, dealing with such volatile times is quite a familiar experience.

Looking back and looking ahead, what lessons have been learned?

→ In recent years, we have learnt to react ever faster and more effectively to changes in the business environment. This means not only reacting quickly to market downturns, but also ramping up quickly when demand picks up. This requires a high degree of flexibility from the entire organisation, not only in production, but also on the sales and marketing side in the markets, in the targeted customer approach and in cost management.

“Volatile markets require a high degree of flexibility from the entire organisation.”

The Vaillant Group has continued to invest in the heat pump business as planned. Why has the company stuck to this strategy despite a considerable decline in some markets?

→ The investments of the last few years are part of a long-term strategy and transformation of the Vaillant Group into a leading supplier of highly efficient heat pumps. The question is not whether fossil fuels will be phased out, but when this will happen. The expansion of modern infrastructure and production capacities as well as the advancement of digitalisation form the basis for future growth in the coming years and decades.

New players are entering the HVAC market and competing for market share, particularly in the heat pump segment. Do you think the structure of the market will change permanently?

→ Competition is shifting and intensifying. Air-conditioning manufacturers are entering the heating technology business, as are utility companies and newly founded green-tech

enterprises. The competitive landscape will be more fragmented in future and, in my opinion, it will not consolidate in the short term. I am convinced, however, that the Vaillant Group has the right strategy and the technological and sales expertise – combined with first-class service – to succeed in this competitive environment.

Given the competitive environment, what will be the most important success factors for the Vaillant Group to focus on in the future?

→ The changing landscape with the entry of new competitors requires us to adapt. We will actively develop new business relationships in various countries where it makes sense to do so.

The second issue is that end customers are becoming increasingly involved. This means entering into close contact and direct communication and it demands clear answers as to what the brand stands for and what the right products are for individual needs.

Thirdly, digitalisation is of central importance. In appliance control, but also in additional

“We are prepared for 2025 to bring new entrepreneurial challenges and surprises.”





services such as connective operational optimisation, intelligent energy management, the consideration of dynamic electricity tariffs or the system integration of photovoltaics. In this context, however, it's not just about implementing this on the product and technical side, but also about subsequent successful marketing. These are topics that we are working very hard on in order to be fit for the future and that we are clearly focusing on on the sales and marketing side.

What is your assessment of the development of the strategically important Chinese business in the recent past?

→ China is the most important and largest non-European market for the Vaillant Group.

In recent years, the weak construction industry in particular has contributed to an overall economic slowdown in China. Added to this is the subdued consumer climate among Chinese households. We have succeeded in maintaining our market share. But the market environment remains challenging as more local Chinese manufacturers want to develop the HVAC market for themselves.

An important question with regard to China is when and in what time frame the market will switch from gas to heat pump technology. China is among the countries with the largest expansion of solar and renewable energy infrastructure in the world. Transformations are taking place faster there than in other countries. We expect the heat pump market in China to grow dynamically in the future. When this market picks up, and it will, we will be there.

What are your expectations for market and business development in the current year 2025?

→ We expect the markets to stabilise and then grow moderately. It remains to be seen how the subsidies for heating technology, especially heat pumps, will develop politically. The target is to gain further market share with heat pumps and maintain our leading market position in gas-fired heating appliances. We will also benefit from an improved cost base. Nevertheless, we are prepared for 2025 to again bring new entrepreneurial challenges and surprises for us.

Where do you see the company in five years' time?

→ In five years, we have the potential to be as technologically leading in heat pumps as we are in gas-fired appliances today. We want to remain the market leader in the field of hydronic heating. And I think that in five years' time we will have achieved even stronger loyalty to our brands among consumers.



100% Renewable Energy

In Spain, a sports club and a tourist resort are using heat pumps and solar energy.

Cost savings and environmental benefits go hand in hand.

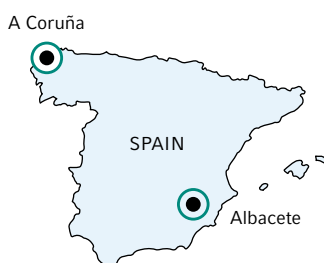


SPORTING CLUB CASINO, A CORUÑA

The club, with over 130 years of history, comprises sport facilities on an area of 12 hectares.

The Sporting Club Casino of A Coruña is a non-profit organisation with a history of more than 130 years. The club was founded at the end of the 19th century, inspired by English clubs that promoted physical and cultural activities, which was very fashionable at the time.

Today, the Sporting Club Casino comprises numerous sports facilities spread across the 12 hectares of La Zapateira Park. The facilities include swimming pools, a spa and a 700-square-metre gym, several tennis courts and basketball courts. In addition, the club's main building includes a large gastronomy area of over 1,000 square metres. No wonder that the energy requirements of a complex of this size are not low. For this reason, the club decided five years ago to renew the old and inefficient



building technology. The outcome: the new system consists of eight GeniaAir Max heat pumps with 15 kW each, which are operated in a cascade. The system is additionally supported by a 100 kW_p photovoltaic power array. The technical realisation was carried out in coordination between the Sporting Club Casino, the specialists for system planning from the company Creative Energy and the regional colleagues from Saurer Duval.

In order to finance the purchase and construction expenses, the Sporting Club Casino took advantage of the financial help of the Instituto Enerxético de Galicia (Inega). One year after the installation, the results are more than satisfactory. In particular, the energy consumption for heating the swimming pools has fallen by more than 60 per cent. The Sporting Club Casino has not only realised considerable savings, but has also improved the comfort level throughout the facilities. Previous problems associated with fluctuating water temperatures in the pools are now a thing of the past.

The club thus joins the list of companies and organisations that are proving that the transition to a greener and more efficient future is not only possible, but also of great economic benefit.



Las Salegas del Maguillo

Not too far away from the small town of Villaverde de Guadalimar in the Spanish province of Albacete, José Ramón Fernández's childhood dream came true 17 years ago. His dream was to build an ecologically sustainable tourism destination on a 43-hectare pine farm. Las Salegas del Maguillo, as it is called, now includes ten small country cottages, a hotel with ten double rooms and a central lodge where guests can gather and socialise.

When José Ramón started his project more than two decades ago, electric air-conditioning systems were always preferred as the first choice. Therefore, each of the country cottages was equipped with seven radiators and a 100-litre storage tank for hot water – all powered by electricity. However, the steady rise in energy costs motivated José Ramón to look for alternatives. In fact, the energy bills were so high that it was not possible to economically maintain the property, which is located in an area with a mountain climate, during the winter season.

This is how Aguahorro, a local company specialising in energy solutions, came into play. The challenge posed by Las Salegas del Maguillo was quite consider-

able. After all, the tourist complex initially had an energy efficiency rating class of G.

In order to make the building supply more sustainable both ecologically and economically, Aguahorro proposed different solutions for the country houses and the hotel. In the first case, three GeniaAir Max heat pumps were recommended. Together they would supply the ten cottages which were built scattered throughout the forest. The hot-water supply is provided individually in each of the cottages. In each case, this is made possible by the installation of a 100-litre Magna Aqua hot-water heat pump.

In the hotel, on the other hand, a single central GeniaAir Max heat pump with an output of 15 kW was fitted. Two additional Magna Aqua heat pumps, each with a

storage capacity of 270 litres, meet the hot-water requirements. Aguahorro looked for a system that was as self-sufficient as possible and finally installed a 30 kW photovoltaic solar system. Its maximum output corresponds to the calculated energy demand of the entire estate.

José Ramón emphasises that the renovation has reduced his energy costs considerably, dropping them by 60 to 70 per cent. All the heat pumps for water heating in the country houses combined consume only as much energy as just two of the old electric water heaters that were formerly used.

Today, Las Salegas del Maguillo is a place as great as ever for those who want to enjoy a few days of peace and quiet. From now on also in winter.

“It was not possible to economically maintain the property during the winter.”

José Ramón Fernández,
proprietor of Las Salegas del Maguillo



LAS SALEGAS DEL MAGUILLO

The rural resort in Albacete is completely sustainable thanks to renewable energy.



Gohann's

Sustainability *objectively assessed*



The Vaillant Group makes
it even more transparent where
the company is standing.





Sustainability Manager **Pascal Schäfer** and **Beata David**, Head of ESG Reporting in Group Accounting at the Vaillant Group, are working on the implementation of new EU regulations. Together with **Anja Graff**, Senior Manager at the auditing and consulting firm BDO, they talk about the challenges and benefits for the Vaillant Group.

The EU has introduced new reporting standards for sustainability. What is the intention behind this?

→ **Anja Graff (AG):** The EU wants companies to report transparently on their impact on the environment and society. Until now,

anyone could claim to operate ecologically and sustainably because there were no standardised assessment criteria. Clear reporting requirements should make it easier for customers, end consumers and business partners to compare the sustainability performance of companies. In concrete terms, this means that companies must document how they deal with issues such as climate protection, fair working conditions, compliance with human rights and the responsible use of resources. This makes sustainability more objective and measurable.

Which companies will be affected?

→ **AG:** Under the proposals published by the EU in February 2025 as part of the omnibus package, companies with more than 1,000 employees that either have sales revenues of more than €50 million or a balance sheet total of more than €25 million are affected, regardless of their capital-market orientation. The Vaillant Group belongs to this category of companies.



So where does the Vaillant Group rank when it comes to sustainability?

→ **Pascal Schäfer (PS):** The Vaillant Group's sustainability ambition has already been implemented in the SEEDS sustainability programme for over ten years. We have defined specific and measurable targets up to 2030 in the four focus areas of Environment, Employees, Development & Solutions and Society with corresponding actions. SEEDS is the compass for the overall strategic direction of the Vaillant Group's sustainability activities. We have been systematically recording our progress for years in the form of key performance indicators, which are tracked across the Group in a sustainability scorecard. We have been publishing sustainability KPIs and our progress on a voluntary basis since 2009. In this respect, we are already well positioned with SEEDS.

What is now changing for the Vaillant Group?

→ **PS:** We have more complex requirements for sustainability reporting. In addition to sustainability management, the finance department in particular, as well as other specialist departments, are contributing expertise. Basically, almost all areas of the company are directly or indirectly affected. Our national sales companies and industrial production sites also provide data. We use this data to determine relevant key figures such as our greenhouse gas emissions along the entire value chain, our use of raw materials or how many installers we have trained on heat pumps.

→ **Beata David (BD):** In the area of finance, we determine the proportion of our sales, investments and expenditure that are con-



sidered sustainable according to defined assessment criteria. We analyse in detail which company activities contribute to the EU environmental targets and to what extent. This data is used to calculate quotas in the form of key financial figures. This means that at the end of the financial year, we can provide concrete and verifiable information on the proportion of our investments that contribute to climate protection, for example.

What is the role of BDO, Mrs Graff?

→ **AG:** The sustainability disclosures are subject to mandatory verification by independent third parties. In the vast majority of cases, these are auditors who also certify the sustainability report as part of the annual audit. For companies, this means that they not only have to collect and document the required sustainability performance indicators, but also provide evidence of standardised processes and methods for collecting their data.

What are the biggest challenges at the moment?

→ **PS:** We have been measuring some key figures, such as our energy consumption, our waste generation and our direct and indirect emissions, for years. Other areas such as the circular economy, which also relates to the lifespan and reparability of products, are rather new. This involves questions relating to the extent to which products are recyclable or the proportion of recycled materials they contain.

→ **BD:** In future, sustainability data will be recorded in a manner as systematic and standardised as financial data. This requires the inclusion of new data sources and data flows as well as new reporting processes within the company. In addition, the entire sustainability reporting will be integrated into the annual financial statement process.

What are the advantages of greater transparency for the Vaillant Group?

→ **BD:** One of the EU's declared objectives is to channel financial resources into sustainable business models. More sustainable companies should be favoured when it comes to financing. Banks are already linking loan conditions to sustainability performance. This will increase noticeably. For companies with sustainable business models, such as the Vaillant Group, we expect lending to become easier and more favourable.



→ **PS:** The new EU transparency rules will enable the Vaillant Group to differentiate itself even better with its products as a manufacturer of environmentally friendly and energy-efficient heating solutions. We have been doing a lot for years to drive forward the green transition. The new EU regulations give the topic of sustainability additional visibility. This also creates an even greater awareness of sustainability within the company.





The manor house and orchard have been immersed in the rolling landscape since 1892.

Geothermal heat is extracted at a depth of 1.5 to 2 metres.



 MODERNISING
 WITH HEAT PUMPS

Flexibility is key

Energy concepts are many and varied.
Just like the houses they are made for.
This is especially true when it comes
to modernisation.



When a house is getting on in years, a refurbishment cannot be avoided. This poses the question of how extensive the renovation should be. For the owners of two ageing residential properties in Austria, one thing was clear from the outset: if they were going to renovate, they wanted to do it properly and with foresight. In both cases, they opted for new heat pumps. This allowed the heating standards in both houses and the associated living comfort to be raised to a new level.

The orchard remains

In Kittenberg, Styria, a country villa steeped in history underwent a general overhaul. Equipped with modern heat pump and PV technology, it was intended to serve as a home for a family of four later on. The building, with its rich variety of fruit trees, has been nestled in the hilly landscape of the so-called Styrian Tuscany since 1892 and offers a spectacular view as far as Slovenia.

It was precisely this idyllic setting – above all the fruit trees – that was to remain untouched. Which is why the realisation of the new heating system required a great deal of finesse and detailed planning. The decision in favour of a heat pump solution with geothermal energy was made quickly. The implementation under these conditions was somewhat more complex: deep drilling on the 2,500-square-metre property proved to be difficult due to the hillside location and installing classic surface collectors was unfavourable due to the trees.

This is why Vaillant consultant Christian Gröller came up with flexible ring trench collectors for “circling the orchard” as a solution: “For this unusual option, a U-shaped trench 1.5 to 2 metres deep was excavated at the outer edge of the property and two circles with 300 linear metres of pipes for geothermal heat extraction were laid in a loop shape,” he explains. Not only did this allow the available space to be utilised extremely efficiently, but the connection to the house was also completed in just two days.



A combination of measures increases building efficiency in Vienna's Prechtlgasse.

Let's preserve the charm

The project in Vienna's Prechtlgasse, where an apartment block more than one hundred years old was completely refurbished, demonstrates just how effective the renovation of an older building in an urban setting can be. The switch from gas to an air-water heat pump was a paradigm shift in energy supply. From the outset, it was important to the building's owners to preserve the character of the property as far as possible, while at the same time positioning themselves sustainably for the future.

Both requirements were achieved successfully in the four-storey residential building: whether it was the new façade insulation, the window replacement, the switch from decentralised gas-fired heating to a central heat pump system or the electric boilers that draw their electricity from the PV system on the roof – the comprehensive mix of measures significantly increases the building's efficiency. And it's hard to see with the naked eye just how much new technology is inside the old brick walls.

In order to make the renovation work from the basement to the roof as efficient and "attractive looking" as possible, the property owners enlisted the help of an architect with extensive renovation experience. The architect advised them on appropriate construction measures and the associated funding opportunities. Vaillant and

the installation partners were responsible for the new heating concept – and first had to examine possible options: because district heating was not feasible due to the location and deep drilling was not permitted due to a planned underground railway line, an air-water heat pump solution was chosen.

Keeping an eye on housing preferences

The only possible place to install the outdoor heat pump units was in the courtyard and the only product that could be specified was Vaillant's aroCOLLECT. The reason: these outdoor units are the only ones to fulfil the noise protection requirements applicable on-site and to ensure sufficient output despite noise-reduced operation. They also comply with the playground norm in accordance with DIN EN 1176, which is essential for providing a safe environment for children in apartment blocks.

The renovated building in Prechtlgasse is a sight to behold after the makeover. And it has the potential to encourage other homeowners of old buildings in their endeavours to heat with renewable energies. It has been shown that extensive refurbishments can be carried out very quickly with good planning: in Prechtlgasse, for example, it was possible to install the heating system in just one day per flat and thus to implement the modernisation in record time.



Preserving the character of the building was important to the property owners.



The outdoor units fulfil the playground norm in accordance with DIN EN 1176.



Vaillant and the installation partners developed the heating concept.



HEAT PUMPS

IN A NORDIC CLIMATE

Modern and eco-friendly

Not burdening the climate was the objective of the Bullinger family. To build their house, they chose naturally degradable materials and an environmentally friendly heating solution.

T

he desire to live more sustainably is widespread in Denmark. According to surveys, eight out of ten people in the Scandinavian country want to live in a more environmentally conscious way. And that's exactly what Jette and Simon

Bullinger wanted when they started the construction of their house a few years ago. Building and living ecologically without compromising on aesthetics, indoor climate and comfort.

"Many people tend to think that eco-friendly living is a bit dogmatic and uncomfortable. But you can build in an environmentally friendly way without moving into a clay-clad straw house," says Simon.

The result is a three-storey home about 200 metres off the harbour in Hvidovre. And a house that emits only half as much CO₂ as even the stricter environmental standards for detached houses in Denmark will require in the future.

"You can get a little lost in the jungle of sustainability criteria. But it doesn't have to be that complicated. The type of heating supply is very important because it's something that lasts for a long time," says Jette.

Gas-fired boiler or heat pump as the heat source? Gas was more expensive, and although district heating will indeed be an option at their home in 2028, the heat pump solution proved to be the better alternative.



The Bullinger family made their home environmentally friendly without sacrificing comfort.



The heat pump has ecological and economic advantages over district heating.

The intelligent sensocomFORT control operates the system.

Environmentally friendly refrigerant for northern climates

When it came to choosing the heat supply, the Bullingers had to decide between district heating and a heating system. Ultimately, two factors came into play. First, district heating plants differ considerably in terms of combustion. Heat generation can be very environmentally friendly. But this is not necessarily the case. Secondly, the financial aspect had to be taken into account. The heat pump ultimately had

both ecological and economic benefits for the family.

As the energy demand for heating is low and the house is very well insulated, a small heat pump is enough to cover the family's heating requirements. It was important to the Bullinger family, however, that their heat pump is fully suitable for use in a northern climate and that it should ideally be manufactured locally if possible. After all, importing a product from the other side of the world

causes quite a few pollutant emissions. The refrigerant also played an important role in the overall environmental balance. In comparison, the Vaillant heat pump was convincing in all respects.

Quieter than expected

Before the Bullinger family moved into their dream home, the builders expected the heat pump to make audible operating noises. "I once stood next to the heat

“A heat pump is a big investment, so it’s important to think long-term.”

Jette Bullinger



pump and waited for the fan to actually start up,” says Simon. “And then I realised that although it was running, I couldn’t actually hear it. I was very surprised that there was such a big difference between the perceived noise and the measured level that we could read.” The noise development of heat pumps varies greatly from manufacturer to manufacturer. Vaillant attaches particular importance to keeping noise levels as low as possible, as this is a very important selection criterion for customers.

Gaining perspective

Both Jette and Simon would advise others thinking about eco-friendly building and living to seek advice from professionals. “I think a lot of people decide to do the same as their neighbour because they think it’s normal. But maybe the neighbour was thinking the same thing when they did. For example, we are not experts in heat pumps, but we have asked people who are familiar with them,” says Jette. “A heat pump is a big investment, so it’s important to think long-term.”



Professionals assisted the Bullinger family with the planning and installation.

