

Shaping tomorrow

As a family-run company, we think in generations, not just business cycles – committed to making long-term decisions that benefit people, the planet, and our business.

Our Corporate Responsibility documentation provides insights into how Liebherr Appliances embeds sustainability across its operations, from energy-efficient appliances and responsible sourcing to circular economy initiatives and employee development. While we have made significant progress, we recognise that there is always more to do. Our goal is to continuously innovate, reduce our environmental impact, and contribute to a more sustainable future.



Always on - always improving

Optimising the use phase of our appliances

The use phase contributes greatly to the environmental impact of an appliance. That is why we focus on energy efficiency, durability, and repairability — ensuring long-lasting performance while reducing costs and footprint. Our technologies also help minimise food waste, supporting a more sustainable way of storing and preserving food.





Making it last. And last. And last.



Durability and repairability of our appliances

At Liebherr, durability and repairability are central to our philosophy and sustainability strategy. Whether for household or professional consumers, our appliances are designed to deliver long-lasting quality and reliability, ensuring efficient use over many years. By extending product lifespans, we reduce resource consumption and waste, promoting a more responsible use of resources.

We craft our appliances using high-quality materials, subjecting every component to rigorous testing to ensure reliability and longevity. Features like easy-to-repair designs and readily available spare parts further minimise downtime and align with regulations such as the EU Ecodesign Directive, which prioritises repairability and extended product use.

Durable products not only conserve resources but also provide our customers with long-term value. Through robust materials, precise engineering, and a global service network, we support a more sustainable lifestyle. This commitment reflects our responsibility to the environment, our customers, and future generations, reaffirming our dedication to sustainability and customer trust.

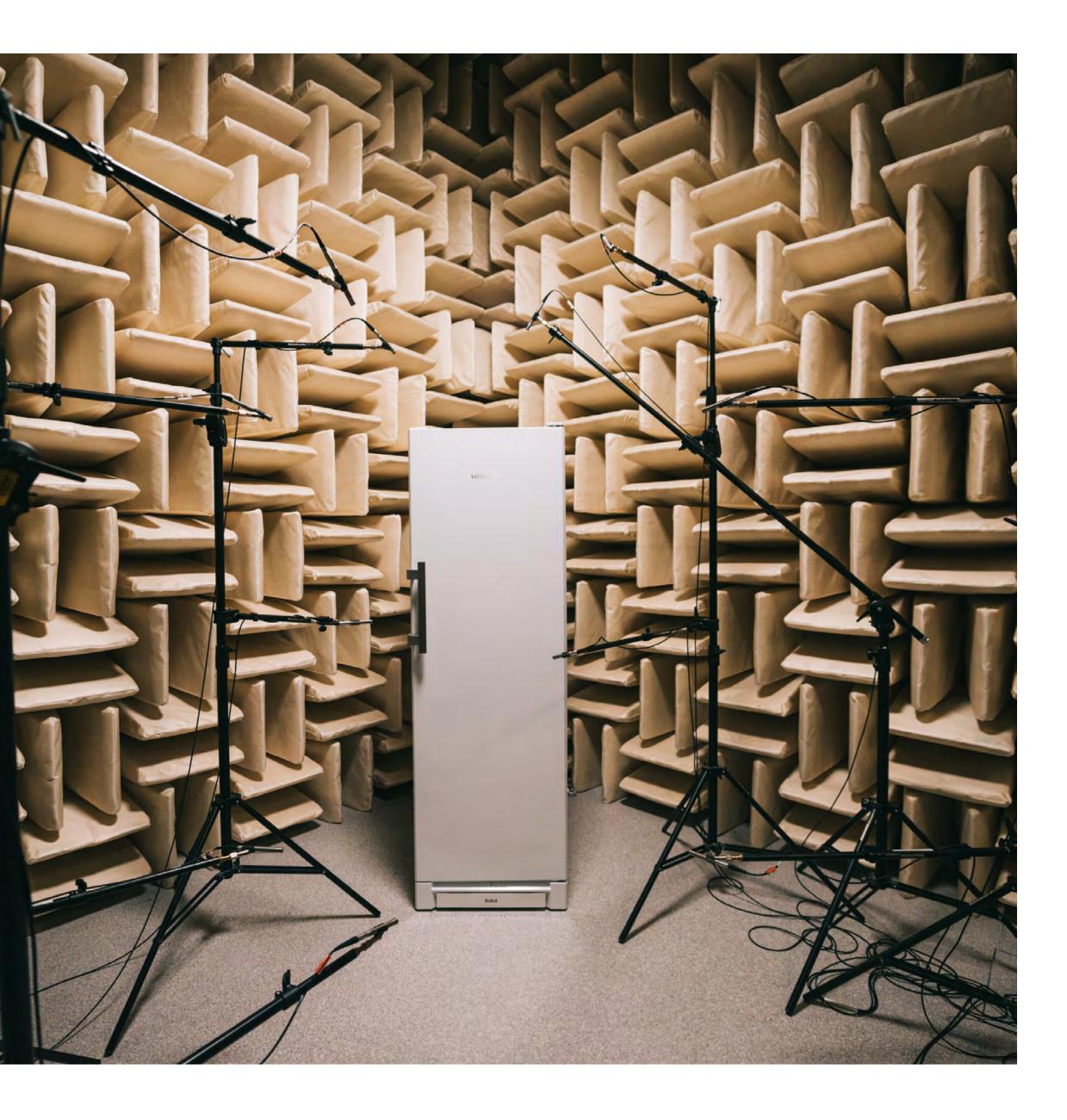
Materials that stand the test of time

We are driven by a commitment to deliver appliances that embody our promise of exceptional quality, timeless design, and genuine value. Durability and reliability are central to our philosophy, ensuring long-term performance and environmental responsibility. By carefully selecting highquality materials, we minimise the need for frequent replacements, enhancing sustainability and customer satisfaction.

Our dedication to excellence extends to every detail. To make maintenance easier and reduce the need for harsh cleaning agents, we use stainless steel with an anti-fingerprint finish. Interior materials are specifically chosen for their easy-to-clean properties, which not only prolong the appliance's lifespan but also reduce the environmental impact of cleaning over time.

Through ongoing innovation, precision, and a focus on longevity, we create appliances that seamlessly combine functionality, aesthetics, and sustainability, delivering reliable performance for years to come.





Examples of outstanding quality

BluRoX - insulation for long-lasting energy efficiency

Our latest innovation is the patented BluRoX technology. It uses a more effective form of cold insulation: a vacuum. Finely ground lava stone, known as perlite, stabilises the vacuumed components. BluRoX ensures optimal thermal performance over the entire lifetime of an appliance. This was determined through long-term measurement series with various samples in Liebherr's laboratories.

MORE ABOUT OUR BLUROX TECHNOLOGY

Timeless design

Liebherr appliances are more than functional they are a style statement. With their timeless design, they seamlessly integrate into any space, maintaining a modern and elegant appearance even after years of use. At Liebherr, form and function go hand in hand to deliver enduring value.

Durable interiors: drawers built to last a lifetime

The interiors of Liebherr appliances reflect our commitment to durability. Drawers and shelves are made from robust materials designed to withstand heavy use while maintaining reliable functionality for decades.

SEE THE MATERIAL WE USE

The test of time

At Liebherr, our commitment to quality extends to even the smallest components. Take, for example, our door hinges: before they are approved for use, they must endure at least 100,000 opening cycles, equivalent to over 15 years of regular use. This rigorous testing isn't limited to hinges — all functional parts of our appliances are evaluated to meet the same high standards for durability and reliability. Our dedication ensures that every component contributes to a long-lasting, highperformance appliance.



Service quality for long-lasting appliances

Liebherr appliances — both household and professional – are built for a minimum lifespan of 15 years, significantly above the industry average. Designed for repair, they can be restored to operation when needed. Service specialists receive continuous training, including online courses, to stay updated on targeted diagnosis approaches and repair concepts.

Always available: our Liebherr service hotline

At Liebherr, we listen to our customers. Whether they have questions about refrigeration and freezing or need support, our service team is there to help. For their convenience, all our call agents are accessible through our hotline: one number for all the customer's needs.

SEE OUR SERVICE PAGE

Exceptional service quality

With a global network of authorised service partners, Liebherr ensures fast and efficient solutions. In approximately 85 % of cases, our technicians resolve issues on the first visit - sometimes even

remotely, eliminating the need for a visit altogether. Regular training ensures they stay wellprepared to offer knowledgeable and efficient assistance. This approach reflects our commitment to supporting customers and maintaining the high standards of our appliances.

SEE OUR SERVICE PAGE

With our own sales and service companies in key regions and a network of service partners and Liebherr field service technicians in some areas, we provide clear guidelines to maintain customeroriented service. This structure allows for prompt repairs and reliable customer assistance.

Finding local service has never been easier

To find the nearest authorised Liebherr service partner, customers can visit our website and use the online search tool to find qualified dealers and our service teams in their area.

FIND AUTHORISED LIEBHERR APPLIANCES DEALERS FIND LIEBHERR APPLIANCES TRADE AND SERVICE PARTNERS

Manufacturer's warranty that goes beyond

Freshness without compromise: in many regions, our fridges and freezers come with a two-year manufacturer's warranty, covering the costs of remedying defects caused by material or production faults. In selected countries, customers have the option to extend this warranty with the WarrantyPlus certificate.

EXTENDED WARRANTY

Enjoy peace of mind with Liebherr's 10-year manufacturer's guarantee. In Germany and other select markets, customers can purchase an energy-efficient promotional model before 31 December 2025 and register their appliance online within 12 months via the SmartDevice app or our web form.

Pre-sales support: finding the perfect fit

When searching for a new fridge or freezer, customers can share their priorities with us. We will assist them in finding the perfect model. In selected markets, our product experts are

available through phone, email, or social media to answer any essential questions before making a purchase.

Customers who already own a Liebherr appliance can count on our team for guidance on usage and care, ensuring they get the most out of their appliance anytime and anywhere.

FIND AUTHORISED LIEBHERR APPLIANCES DEALERS FIND LIEBHERR APPLIANCES TRADE AND SERVICE PARTNERS

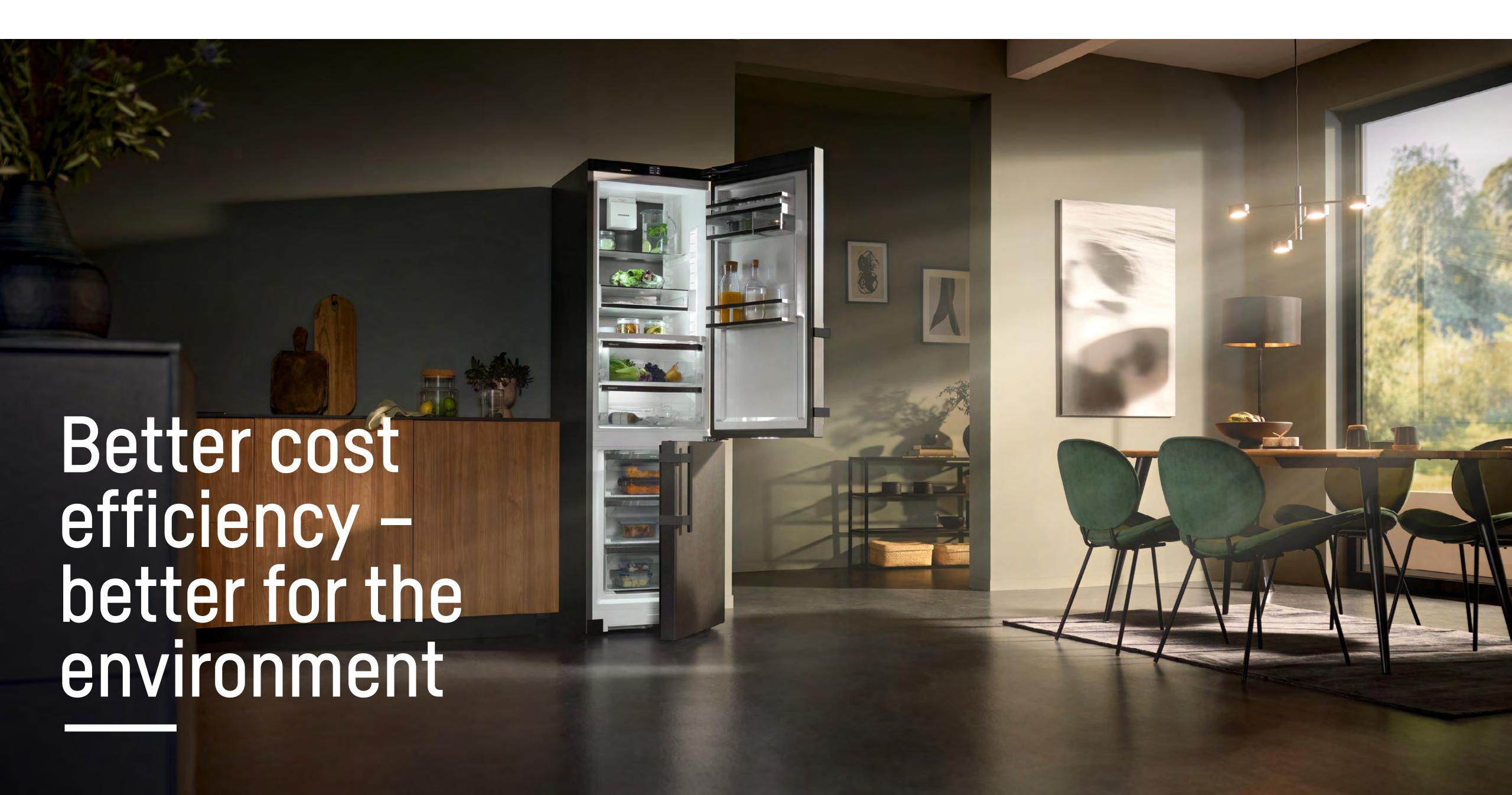


Spare parts availability for long-term support

As of 2023, we've increased spare parts availability from 10 to 15 years after the end of production for each model. This applies to all functional components and stockable equipment parts and surpasses the seven-year requirement set by the Ecodesign Regulation. This extended availability is retroactively guaranteed for all appliances produced since **January 1, 2021**, ensuring customers can repair and extend the lifespan of their appliances.

We ensure that spare parts can be replaced using commercially available tools, making repairs easier for professional technicians. Certain components, such as interior fittings, can also be replaced by customers with basic repair skills. Relevant documentation, such as operating instructions, can be downloaded from the Liebherr website. Additionally, information on spare part availability and ordering options is provided.

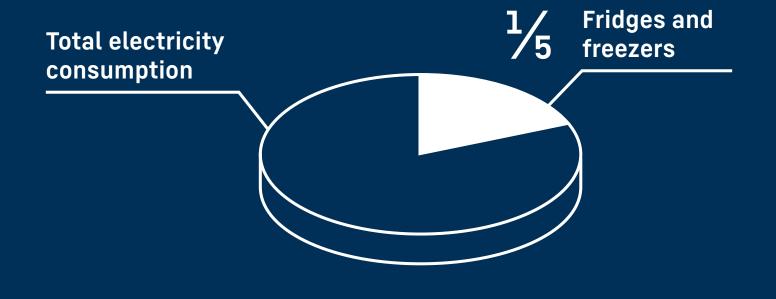






How energy efficiency makes an impact

Rising energy costs and climate change are pressing challenges. In Germany, for example, fridges and freezers account for approximately 20 % of the electricity consumption in an average household* (Germany).



*Source: German Environment Agency (UBA), 2023.
Based on an average household in Germany.

The use phase accounts for the majority of their environmental impact — up to 90 % for less energy-efficient models. This makes improving energy performance a top priority for us and our customers.

By optimising refrigeration components, insulation materials, and operational systems, we continue to enhance energy efficiency, lowering both environmental impact and energy costs over an appliance's 15-year lifespan.

Customers also play a crucial role in reducing the carbon footprint of their appliances by choosing climate-friendly energy sources.

Together, these efforts highlight our commitment to designing appliances that not only perform exceptionally but also help build a more sustainable future.

Source: UMWELTBUNDESAMT 2024

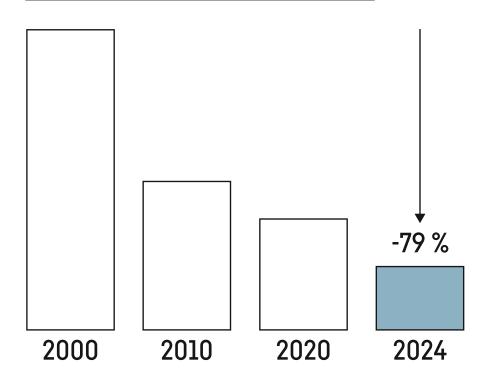
Reducing energy consumption – step by step

We prioritise energy efficiency to reduce environmental impact and address rising energy costs. With the use phase accounting for the majority of an appliance's ecological footprint, we focus on developing technologies and designs that minimise energy consumption. As a result, our fridges and freezers today use just a **fifth of the electricity** they did 24 years ago.*

The Energy Efficieny Class Label (EEC Label)

With energy efficiency becoming increasingly important due to rising costs and climate change, choosing the right appliance can make a real difference. The reformed EU energy label, introduced in 2021, empowers consumers to make informed decisions. The corresponding EU regulation (Regulation (EU) 2019/2019) also sets out further tightening of the Energy efficiency index (EEI) requirements for certain product sub-groups. Its clear A-to-G scale, combined with features like QR codes linking to the European Product Registry for Energy Labelling (EPREL) database, makes it easier than ever to identify appliances that save energy.

Development of the power consumption of Liebherr freestanding and fully integrated appliances



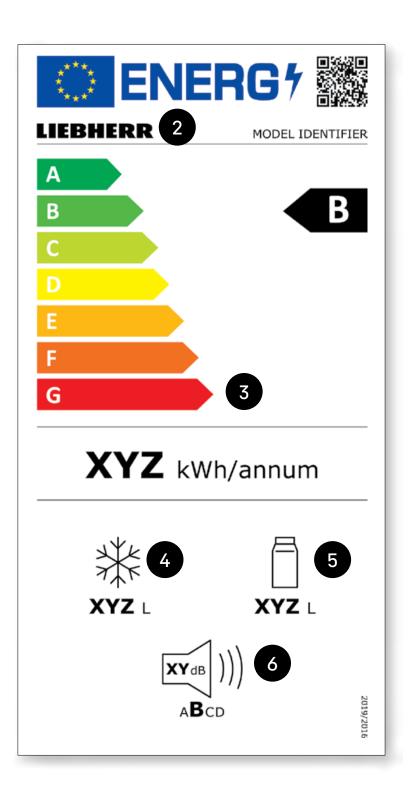
Reference appliances:

2020: KGN3446 (492 kWh/a) 2024: CBNbsa10 (104 kWh/a)

Freestanding fridge-freezer with NoFrost, approximately 200 cm high and 60 cm wide

We focus on optimising every component for efficiency – from space-saving vacuum insulation panels, over continuous improvements in the components of our cooling technology, to smart features like **EnergySaver** and **HolidayMode**. Our appliances are designed to perform not only sustainably, but also quietly, meeting the highest noise standards.

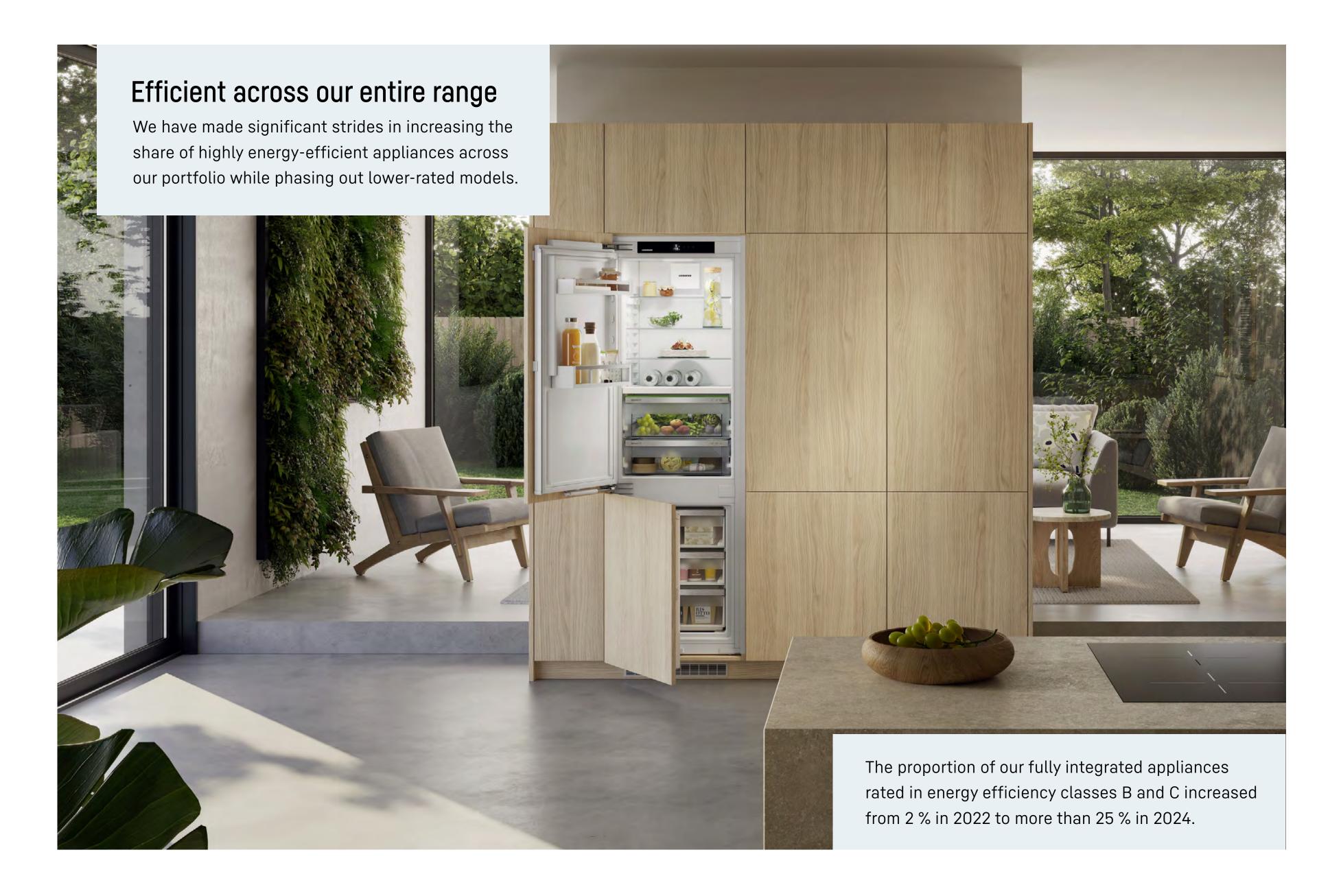
Every Liebherr appliance is labelled at the plant, with a unique serial tag for traceability. QR codes link directly to the EPREL database, providing essential information to help consumers and retailers make responsible choices.



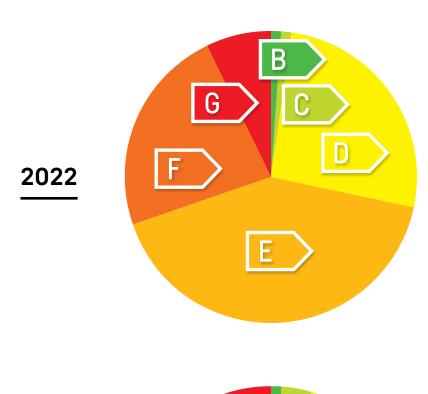
This is what the EU energy label looks like:

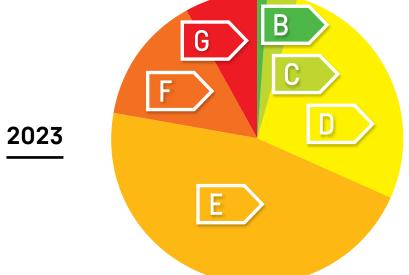
Use **13**

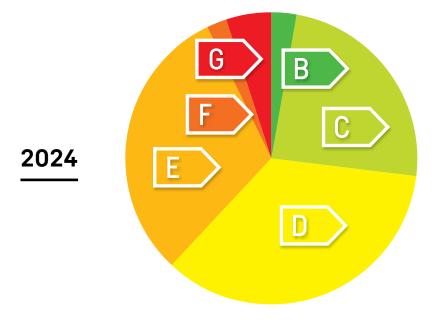
- The QR code for identifying the product in EPREL (European Product Database for Energy Labelling)
- 2. The model identifier for manual identification of the product in the EU's EPREL database, e.g. using the article number
- 3. The efficiency scale from "A" to "G".
 "G" and "F" for special appliances
- 4. The total volume of all freezer compartments
- 5. The total volume of all cold storage and fridge compartments
- 6. The noise level is now classified into classes "A" to "D"



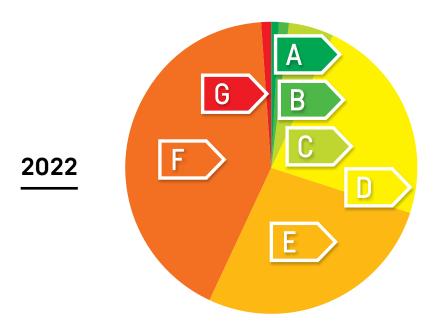
Improvement in energy efficiency of fully integrated appliances

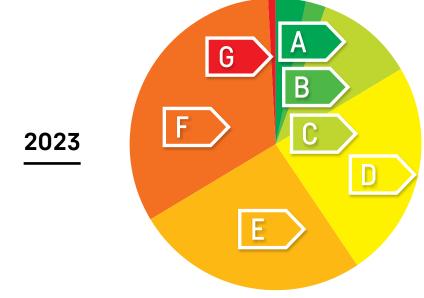


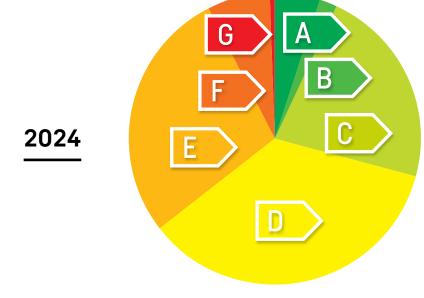




Improvement in energy efficiency of freestanding appliances











Efficiency in every detail

At Liebherr, we see energy efficiency as an evolving challenge. While we have made meaningful strides, our focus remains on innovating cooling technologies and designs to reduce environmental impact while meeting customer needs. For us, this means leaving no stone unturned – continuously working on improving every detail.

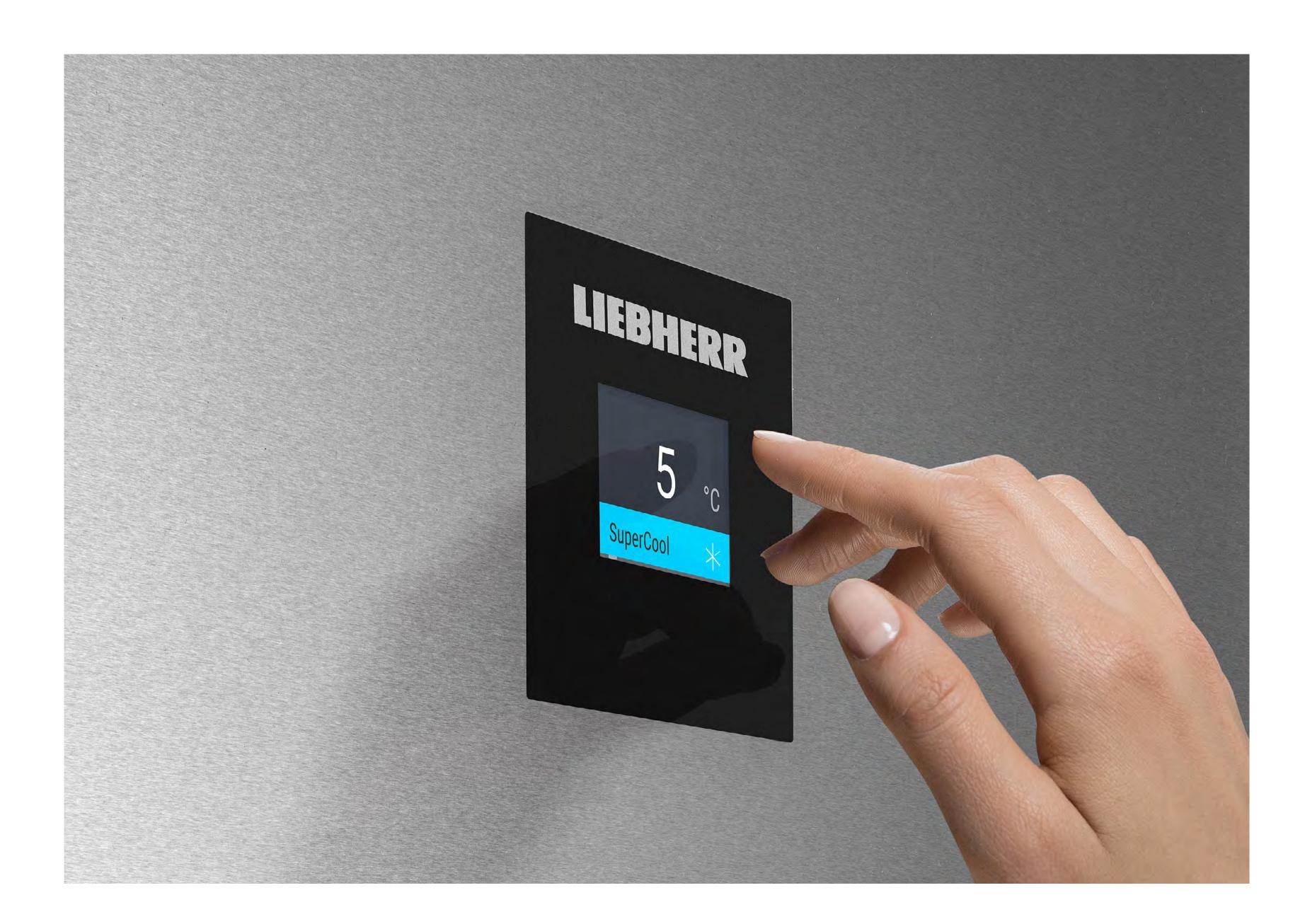
Super Cool Super Frost

Measures for optimising cooling technology and control systems

VCC: precision cooling for optimal energy use

Our Variable Capacity Compressors (VCC) adjust cooling output by varying speed, ensuring energy is used only when needed. This flexibility allows for rapid cooling when necessary while maintaining quiet and efficient operation at lower speeds during regular use. By optimising energy consumption, VCC technology plays a key role in reducing the environmental impact of our appliances without compromising performance.

Features like **SuperCool** and **SuperFrost** benefit from VCC's ability to quickly increase speed, ideal for rapid cooling or freezing of new items.

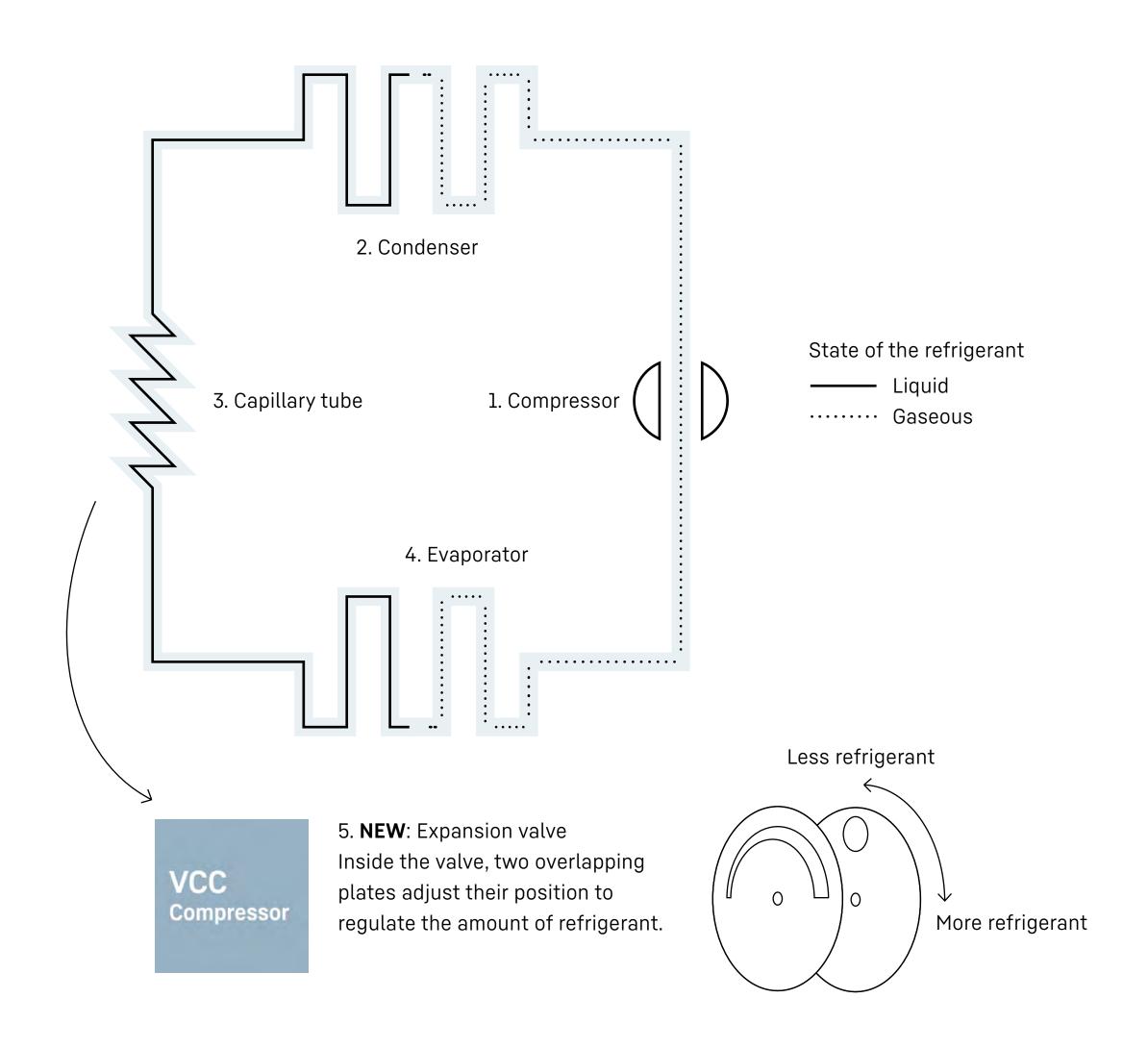


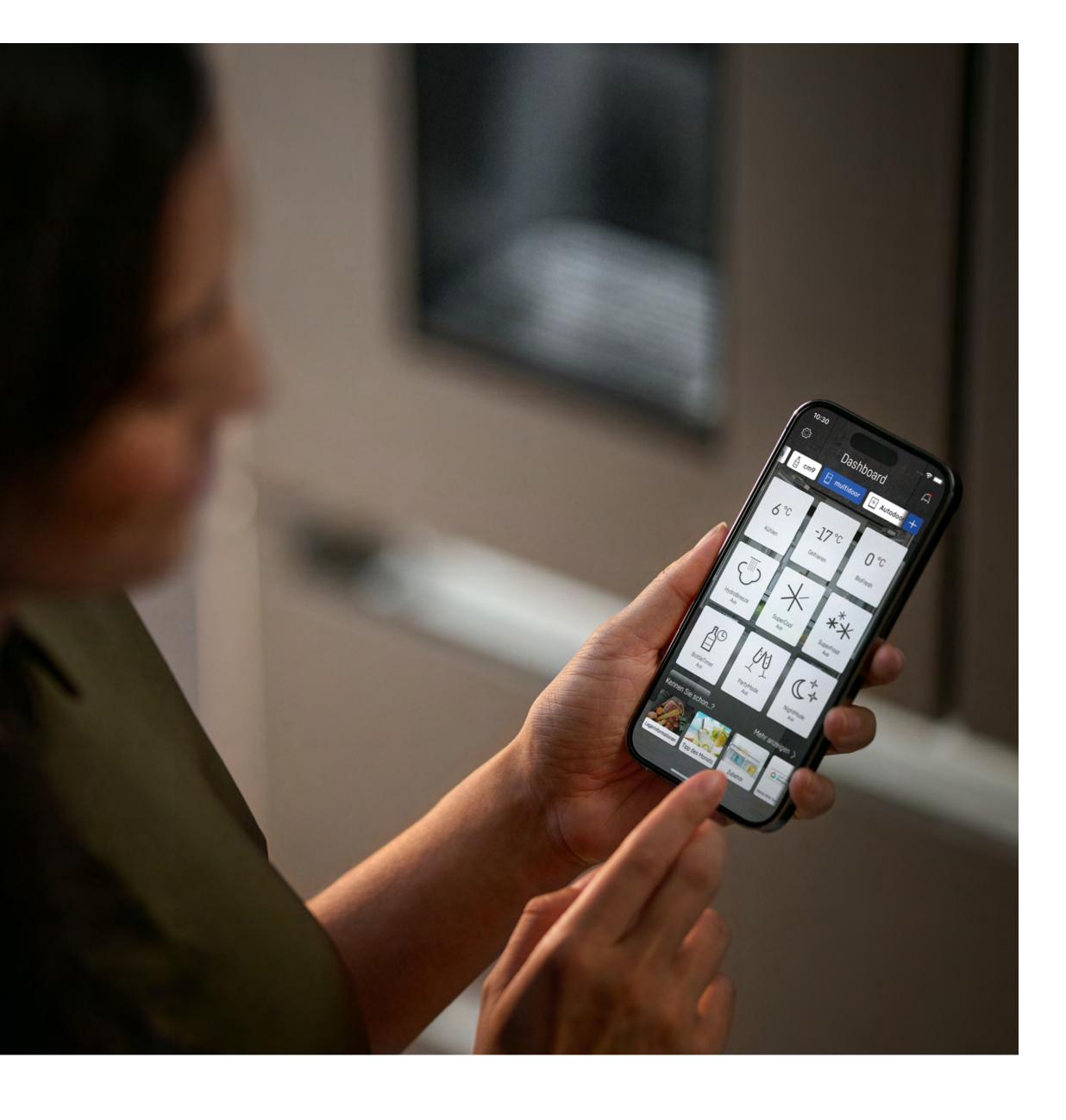
Advanced cooling, lower footprint: our microexpansion valves

Microexpansion valves, a new addition to Liebherr Appliances' cooling technology, deliver enhanced energy efficiency and quieter operation by precisely regulating the refrigerant flow. Unlike traditional fixed-diameter capillaries, these valves adjust pressure and volume dynamically, ensuring that the refrigerant reaches the evaporator fully liquefied for optimal cooling performance. This adaptability allows the system to respond to varying conditions, such as ambient temperature, maintaining efficiency and reducing noise.

The benefits of this innovation are significant:

Energy consumption can be reduced by up to 12 % — contributing to lower operating costs and a smaller carbon footprint. Additionally, noise is minimised through advanced design features, including vibration-dampening components, making appliances such as the FNb 505i, FNa 6625, and 6635 with 33 dB(A) among the quietest on the market.





Smart Device

Everything under control

Our adaptive cooling systems, electronic controls, and innovative features ensure every item is stored in its ideal conditions, while also reducing energy consumption and environmental impact.

Staying fresh with adaptive cooling

Our adaptive cooling technology, or "good-dependent temperature management," adjusts the cooling process based on the specific needs of the stored items. This ensures that each food type is kept at its ideal temperature, preserving freshness and reducing waste.

Smart, efficient controls

Liebherr appliances utilise precise electronic controls paired with temperature sensors to optimise cooling cycles. These controls, working seamlessly with our highly efficient compressors, enable our appliances to operate with exceptional energy efficiency.

Variable Capacity Compressor (VCC) technology

as mentioned earlier – further enhances this
 by adjusting compressor speed based on demand,
 ensuring optimal performance while minimising
 energy use.

Innovative refrigerant circuit

Our advanced refrigerant circuit, controlled by electronic systems and powered by microexpansion valve technology, ensures precise and flexible management of refrigerant flow. By adjusting to changing conditions like ambient temperature, this system maintains efficiency and performance, offering a significant improvement over traditional designs.

SmartDevice for connected convenience

The SmartDevice technology integrates seamlessly with our BluPerformance appliances offering enhanced security, monitoring, and remote control. From switching off the fan when the door opens to sending notifications, SmartDevice makes managing your appliance easier and more intuitive.

Advanced insulation for maximum efficiency

Effective insulation is crucial for reducing energy consumption, ensuring that cold air remains inside the appliance. We continuously refine our insulation materials, exploring new formulas to enhance thermal performance. Our aim is to optimise energy efficiency while maintaining maximum internal storage space.

To further improve efficiency, we use high-quality, durable vacuum insulation panels (VIPs) in many of our foam-based appliances. These space-saving panels not only enhance energy efficiency but also maintain low energy consumption over years of use.

Our latest innovation, the patented BluRoX technology, combines vacuum insulation with perlite, eliminating the need for polyurethane in insulation.



Vario Temp

Other innovations and measures

Smart energy modes for everyday convenience

The **EnergySaver** function gently increases the default temperature, enabling significant energy savings without affecting the appliance's cooling performance. This feature ensures efficient operation while reducing overall electricity usage.

For customers with fridge-freezers, **HolidayMode** is designed to optimise energy efficiency during extended absences. This function sets the fridge compartment to 15 °C, effectively preventing odours even with the door closed, while the freezer continues to operate as usual. HolidayMode helps maintain freshness and significantly lowers energy consumption compared to regular operation.

Flexible storage with VarioTemp

VarioTemp is an innovative feature that allows flexible use of the freezer compartment in a fridge-freezer. The freezer compartment temperature can be adjusted from -2 °C to +14 °C, transforming it into a versatile space for individual needs.

Possible use cases:

- Additional cooling zone

The freezer compartment can be used as an extended cooling zone for beverages or snacks when needed, such as during parties.

- Cellar compartment

For storing temperature-sensitive food like potatoes or onions, the freezer compartment can be set to higher temperatures and used as a cellar compartment.

- Expanded fridge space

When extra space in the fridge is needed, the freezer compartment can temporarily serve as an additional refrigeration area.



Interior Fit

Innovation at the base: our plinth design

Our innovative relocation of refrigeration components to the appliance plinth has transformed the design and functionality of freestanding appliances. By moving the condenser and evaporator from the rear to the base, we were able to create significantly more usable interior space without sacrificing performance.

The plinth design also introduces front ventilation, allowing seamless integration into kitchen units with Liebherr's **InteriorFit** feature. This ensures appliances maintain their sleek, modern appearance while delivering optimal cooling performance.

Introduced in 2016, this technology optimises appliance performance without compromising on user comfort. This groundbreaking design is a key element of Liebherr's **BluPerformance** line, combining exceptional energy efficiency, increased capacity, and minimal operating noise.

Since their introduction, BluPerformance appliances have consistently achieved top energy efficiency ratings, making them the first freezers on the market to receive an Energy Efficiency Label A classification. The technology optimises insulation while maximising capacity, enabling appliances to consume less energy without sacrificing functionality.

SEE OUR BLUPERFORMANCE RANGE

LED lighting

LED lighting is standard in our fridges and freezers. It offers low energy consumption, long service life, and high performance — not only reducing power usage but also providing pleasant and effective interior illumination. Smart features like **CleaningMode**, which keeps LEDs on for cleaning while refrigeration is off, further demonstrate our focus on efficiency and convenience.

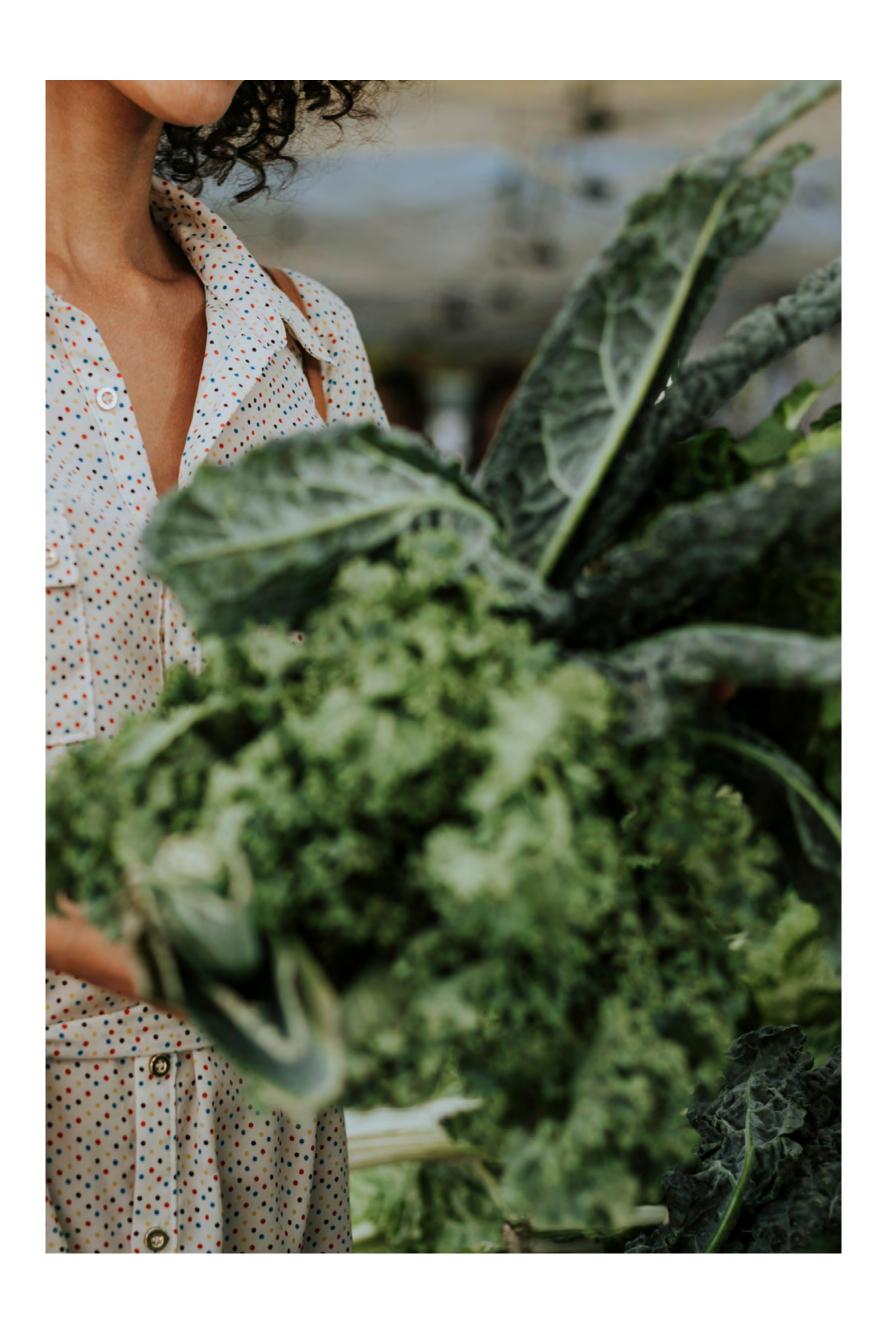


Food is valuable – ecologically and economically.

Food production and its impact

Food production has a major impact on the environment and climate. It is responsible for around one quarter of global greenhouse gas emissions — with methane playing a particularly significant role in accelerating climate change. Food also occupies about half of the world's habitable land and accounts for approximately 70 % of global freshwater withdrawals. Nutrient runoff from agricultural activity contributes to water pollution and eutrophication in both freshwater and marine ecosystems, driving habitat loss and broader ecological degradation.

Producing food requires substantial resources — including water, land, energy, and labour. When food is wasted, so are all the resources that went into its production. This adds unnecessary strain on the environment and undermines the ecological and economic value of food.



The environmental impacts of food and agriculture

Croophood goo					
Greenhose gas emissions	Food 13.7 billion tonnes CO₂eq		Non-food 38.7 billion tonnes CO₂ec	7	
	26 % of greenhouse	e gas emissions	s come from food	t	
Land use	Agricult			ban area, freshwater	
	50 % of the world's	habitable land	is used for agric	culture	
Freshwater withdrawals	Agricult 70 % of freshwater		Industry,	household	
	70 % of global freshwater withdrawals are used for agriculture				
Eutrophication	78	Agriculture 3 % of global eutrophicatio	n	Other sources	
	78 % of global ocea	n and freshwa	ter pollution		
Mammal biodiversity	94.5	Livesto 6 of global mammal bioma		Wild mammals	
-	94 % of global mammal biomass (excl. humans) is livestock				
Bird biodiversity	9	Livestock 4 % of bird biomass		Wild birds 29 % of bird biomas	
-	71 % of global bird biomass is poultry livestock				

^{*} Data sources: Poore & Nemeck (2018): UN FAO; UN AQUASTAT; Bar-On et al. (2018). OurWorldinData.org — Research and data to make progress against the world's largest problems.

What a waste

Why we need to rethink our relationship to food.

Economically, food waste represents a major financial loss, amounting to approx. 1 trillion euros annually. It impacts farmers, businesses, and consumers alike, and increases waste management costs for municipalities. On a social level, while millions of people suffer from hunger and food insecurity, vast amounts of food are wasted that could otherwise help those in need. Reducing food waste could significantly improve food security and help address global hunger.

The ethical implications of food waste are equally concerning. It highlights social inequalities and

raises moral questions about wasting food when so many people lack adequate nutrition. Additionally, food production often involves the use of pesticides and fertilisers, which harm ecosystems and reduce biodiversity. When food is wasted, these negative impacts occur without any benefit.

Addressing food waste is crucial for improving food security, reducing environmental impact, conserving resources, saving money, and promoting social equity. Reducing food waste can help create a more sustainable and just food system for everyone.

Amount of foodwaste – worldwide

	Global average food waste (kg/capita/year)*	2022 total (million tonnes)
Household	79	631
Food Service	36	290
Retail	17	131
Total	132	1,052

^{*} Data sources: UNEP Food Waste Index Report (2024)

Key facts

- 1. Food waste contributes to greenhouse gas emissions, particularly methane, exacer bating climate change.
- 2. Wasted food means wasted resources, including water, land, energy, and labour.
- 3. The economic loss from food waste is estimated to be over approximately 1 trillion euros annually.
- 4. Households are responsible for around 60 % of food wasted.

- 5. One fifth of all food is wasted while 783 million people suffer from hunger.
- 6. Food waste has social and ethical implications, worsening social inequalities.
- 7. Food production impacts biodiversity, and wasting food exacerbates these negative effects without providing any benefit.

Source:

FOOD WASTE INDEX REPORT 2024, UNITED NATIONS

What we do to reduce waste



Innovations that help store food better

We waste food. A lot of it. This has a significant environmental and economic impact, and we need to rethink our consumption and the value of food. At Liebherr, we celebrate food and have taken proactive measures to address this issue through innovative appliance design, customer education, and the promotion of energy-efficient appliances.

Our technologies to combat food waste

We have developed advanced freshness technologies to extend the shelf life of groceries, thereby reducing food waste.

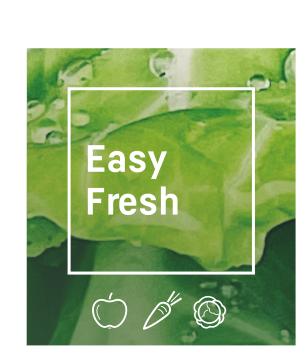
DuoCooling, featured in all Liebherr fridge-freezers, employs two separate cooling circuits to prevent air exchange between the fridge and freezer compartments, which helps maintain optimal humidity levels, prevents food from drying out, and reduces spoilage.

EasyFresh safe is another innovation that provides an airtight compartment for storing loose fruit, and vegetables, keeping them fresh for longer.

BioFresh technology creates a near-freezing temperature zone with controlled humidity, significantly extending the shelf life of fruit, vegetables, meat, fish, and dairy products.

Compartment labelling with pictograms, in accordance with the EU's Ecodesign Directive, indicates the ideal storage locations for different food types, promoting optimal storage conditions.

Additionally, specialised compartments like the Fish & Seafood safe and the **BioFresh Professional** safes offer tailored storage environments, for specific food items and maintaining freshness.







DuoCooling





Making our voices heard

At Liebherr, we believe in empowering our customers with the knowledge and tools to store food optimally, ensuring maximum freshness, taste, and nutritional value. Here is how our research and innovations make a difference:

Comprehensive food storage guide

Decades of research and expertise have resulted in our detailed storage guide for over 500 food items. This guide offers clear recommendations on the ideal temperatures and humidity levels needed to preserve nutrients, vitamins, and flavours. It is a scientific approach to helping maintain food quality and reduce waste.

Proper food storage is key to preserving valuable nutrients. With years of research in refrigeration and freezing, we have gained deep expertise in optimal storage conditions. Through channels like our FreshMAG blog and social media, we share expert food storage tips, raising awareness and guiding customers in reducing food waste.

Compartment labels for easy organisation

Our fridges feature compartment labels with intuitive pictograms that indicate the best zones for various types of food. These labels, aligned with Ecodesign regulations, make it easy to store groceries correctly and keep them fresh for longer.

FreshMAG:

the source for freshness and inspiration

FreshMAG is Liebherr's online magazine for those passionate about freshness, sustainable eating, and culinary enjoyment. It provides insights into modern freshness technologies, practical storage tips, and creative recipes. Whether customers are looking to extend the shelf life of fruit and vegetables, explore the benefits of BioFresh, or try new kitchen ideas, FreshMAG delivers expert knowledge in an engaging and accessible format.

DISCOVER FRESHMAG

Collaborating for better food storage

Our extensive network of research and cooperation partners, including the German institution FH **Münster** (University of Applied Sciences Münster) and **Albstadt-Sigmaringen University**, helps us continually enhance our understanding of food storage. This collective knowledge flows directly into the development of our appliances, ensuring that customers have scientifically backed solutions for preserving their food's freshness, taste, and nutrients.

With Liebherr, customers can trust that their food is stored under the best possible conditions, combining science, innovation, and ease of use for a better everyday experience.

Social media

Additionally, we use our **social media** channels extensively for educational content around the topic of food, whether it is on LinkedIn, Instagram or our most recent TikTok channel.

SEE OUR SOCIAL MEDIA CHANNELS



Use **29**

Professional appliances

Total Cost of Ownership (TCO) is a critical factor for professional customers. Given the rising costs of energy and the urgent need to combat climate change, energy efficiency has become the focus. Total Value of Ownership (TVO) serves the basic need of professional customers, which is the storage of temperature-sensitive goods at desired conditions for later use. Our appliances are designed to offer not only immediate performance but also long-term value through innovation, durability, and sustainability.

Our commitment to durability and reliability means fewer breakdowns and a longer appliance lifespan, reducing repair and replacement costs. Combined with our service and support network, including long-term spare parts availability, we help businesses maximise their profit.

Sustainability is central to our approach. We design products for recyclability, support circular economy practices, and reduce greenhouse gas emissions to help our customers lower their environmental impact and align with global sustainability goals. We exclusively use pure hydrocarbon-based refrigerant with low Global Warming Potential (GWP), which enhance compressor efficiency while reducing energy consumption and electricity costs.

Liebherr appliances provide the perfect balance of cost efficiency, storage safety, and value enhancement. By focusing on TCO and TVO, we ensure our products provide environmental and financial benefits throughout their lifecycle.





Reducing the Total Cost of Ownership

Our professional appliances are designed to minimise Total Cost of Ownership (TCO) through intelligent, durable solutions. By reducing energy, maintenance, and operational costs over the product's lifespan, our appliances deliver long-term efficiency, making them a cost-effective choice for businesses.

1. Upfront investment

Liebherr appliances are an economically sustainable investment. Built for durability, with components tested for a 15-year lifespan, they help minimise replacement and repair costs.

2. Energy efficiency

With outstanding energy efficiency, our appliances significantly lower operating costs while conserving valuable resources.

3. Low maintenance costs

- Easy-to-clean materials and design
 Simplified cleaning reduces labour costs
 and streamlines operations.
- NoFrost technology
 NoFrost eliminates the need for manual defrosting, avoiding work disruptions and extra expenses.
- Minimal maintenance and repair needs
 Liebherr's professional appliances require
 minimal maintenance thanks to intelligent
 design and high-quality components.

 Engineered for reliability, they help reduce
 repairs and lower operational costs.

4. Ergonomics and efficiency

Our ergonomic designs facilitate smooth workflows, improving productivity and reducing labour costs associated with daily use.

Optimising the Total Value of Ownership

We aim to enhance the overall value our appliances bring to businesses. From supporting sustainability goals to improving workflows, Liebherr appliances deliver tangible benefits that extend beyond financial savings.

1. Supporting sustainability goals

Our energy-efficient appliances and their long lifespan actively help customers reduce their carbon footprint and meet environmental targets by lowering CO₂ emissions.

2. Saving time

Our product design simplifies maintenance and reduces cleaning time and labour. Our **NoFrost technology** eliminates the need for defrosting, helping to streamline workflows and save valuable time.

3. Storage security

Temperature stability and alarms ensure safe storage and help prevent product losses, while HumidityControl creates ideal storage conditions to maintain product quality. SmartMonitoring (available in selected markets) enables continuous temperature tracking, alarm alerts, and comprehensive documentation for full transparency.

4. Enhanced productivity and ergonomics

Our ergonomic designs enable effortless workflows, boosting efficiency and delivering added value to daily operations.



Ever more efficient

We continuously improve our refrigeration technology, incorporating advanced features like vacuum insulation panels, variable capacity compressors, and state-of-the-art temperature management systems. These technologies ensure optimal energy use, reduce food waste, and lower running costs.

Putting a label on energy efficiency

Most of the environmental impact of fridges and freezers occurs during their use phase, as they operate 24/7. That is why, for decades, we have prioritised improving energy efficiency across both our consumer and professional appliances.

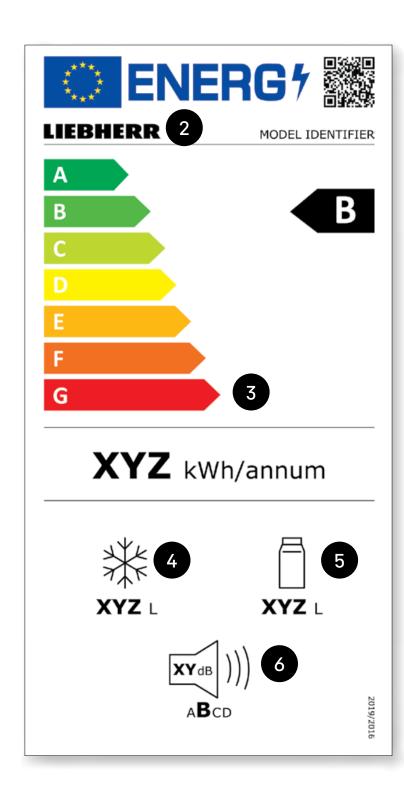
In 2021, a new energy label for professional fridges was introduced, offering a clear classification of energy efficiency. The label rates appliances on a scale from A (highest efficiency) to G (lowest efficiency), helping businesses select products that lower operating costs while contributing to sustainability.

A key element of this label is the Energy Efficiency Index (EEI). The EEI compares an appliance's actual energy consumption to a standardised reference value, which considers factors such as size, type, and storage conditions. Appliances with a low EEI are especially efficient, consuming significantly less energy than the reference allows.

The EEI is calculated based on:

- Actual energy consumption
 The real electricity use over a defined period
- Reference energy consumption
 A theoretical value determined by the appliance's size and usage conditions
- Modern technologies
 Features like advanced insulation, energyefficient compressors, and optimised cooling
 circuits that reduce energy use

A low EEI indicates not only superior energy efficiency but also lower operating costs and a reduced carbon footprint. The energy label helps businesses make informed decisions, selecting appliances that deliver long-term economic and environmental benefits.



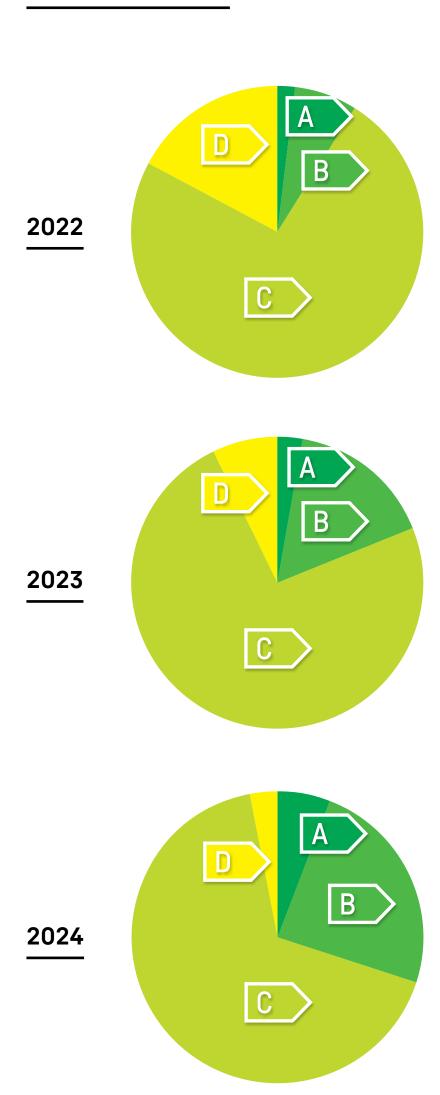
Example of the energy label for beverage coolers:

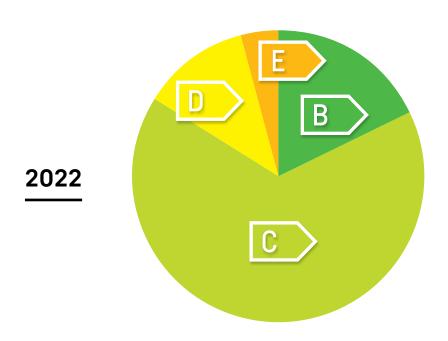
- 1. The QR code for identifying the product in EPREL (European Product Database for Energy)
- 2. Labelling
- 3. The model identifier for manual identification of the product in the EU's EPREL database
- 4. The efficiency scale from "A" to "G"
- 5. The gross capacity in litres
- 6. The average compartment temperature in degrees Celsius
- 7. The highest ambient temperature in degrees Celsius at which the appliance will function properly

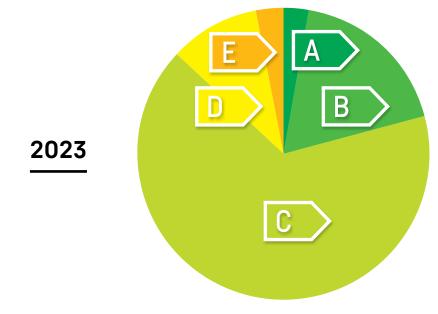
2019/2018

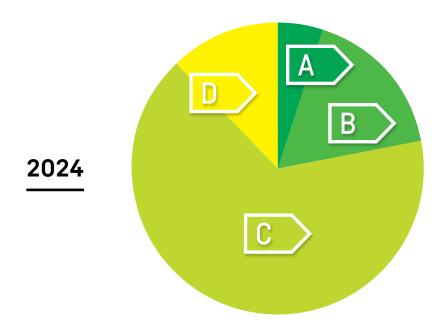
ENERGY EFFICIENCY PROFESSIONAL FRIDGES AND FREEZERS

Improvement in energy efficiency of professional refrigerated storage cabinets in the EU













Storage you can rely on

Reliability, no matter the application

Liebherr's professional cooling and freezing appliances are synonymous with exceptional storage reliability. Whether in gastronomy, laboratories, or other demanding environments, our appliances deliver consistent cooling performance and ensure stable temperatures critical to preserving the quality of stored goods.

A robust cooling circuit and the seamless integration of high-quality components guarantee top performance, even under heavy use.

Monitoring for peace of mind

To complement our reliable performance, Liebherr appliances feature comprehensive monitoring systems. Visual and acoustic alarms promptly alert customers to any deviations, enabling swift action to maintain optimal conditions.

With Liebherr, customers are investing in safe, durable, and precise storage solutions designed to meet the highest standards of reliability, offering peace of mind in every application.

WATCH OUR FILM ON SMARTMONITORING