3 ENVIRONMENT

OUR RESPONSIBLE APPROACH TO ENVIRONMENT, NATURE, AND RESOURCES

As a healthcare company, Helios recognizes its responsibility to act sustainably toward the environment, nature, and resources. This is because a healthy environment is necessary if people are to be healthy. Wherever possible, we therefore avoid any possibility of negative impacts on the environment and human health. To this end, we identify and evaluate potential risks and take the necessary measures to provide optimum protection for the environment.

OUR ENVIRONMENT AND ENERGY MANAGEMENT SYSTEM

Our goal is to continuously reduce any potential environmental impacts arising from our hospital operations. With this end in mind, we manage our energy consumption, establish environmental protection measures, and raise the awareness of our employees with respect to the need for sustainable conduct.

The Infrastructure Business Unit (IBU) is responsible for environmental and energy management. This unit reports directly to the Chief Operating Officer (COO). The IBU develops recommendations on action and guidelines for Helios facilities. Furthermore, the unit coordinates the collection of environmental data for all Helios hospitals. The hospitals themselves are responsible for the local operational implementation of environmental protection measures on site.

In 2020, we successfully certified the energy management system of all Helios hospitals and outpatient care centers in accordance with ISO 50001. In 2023, the comprehensive recertification of all Helios and Vamed hospitals confirmed that the sites continued to comply with the requirements of ISO 50001. Helios will train its own auditors in the hospital's own energy teams for internal quality assurance in 2024. By building up these competencies in our hospitals, we want to ensure that in future internal energy management audits can be carried out in accordance with ISO 50001. This approach is directed toward gradually strengthening expert knowledge and independent responsibility in energy management.

OUR MANAGEMENT SYSTEM

Find out more (German language only)

ENERGY CONSUMPTION: INTELLIGENT DATA COLLECTION, RENEWABLE ENERGY, SAVINGS AND EFFICIENCY MEASURES

We require large amounts of energy for the operation of our healthcare facilities. Continually monitoring energy consumption is therefore a key function of our energy management system – since well before the energy crisis. As early as 2013, we developed a comprehensive energy benchmark system at Helios and we have been systematically recording all energy data since 2014. This means that we are in a position to compare the consumption data of the hospitals, initiate targeted improvement measures, and apply best practices from individual hospitals throughout the Helios network.

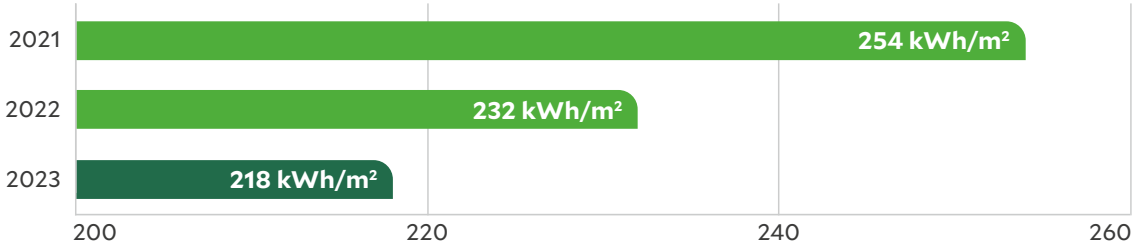
In 2021, Helios rolled out a central energy procurement and management system throughout the Group together with an associated metering and delimitation plan. Corresponding meter technology measures the total electricity usage at all hospital locations. The aim of these measures is to improve the data for electricity consumption and to meet the requirements of Germany's Renewable Energies Act (EEG). These data also support the work of Helios' own energy supplier and service provider HKG Energiedienstleistungen GmbH, which is responsible for implementing energy projects at Helios and for procuring energy.

OUR ENERGY CONSUMPTION IN 2023

(MWh) of energy (see the Key figures chapter). Since 2022, Helios has been switching over to procuring 100% green electricity for base load from certified renewable energy sources. The continuous increase in our owned generation rate supports a secure and uninterrupted supply of energy in our hospitals. Our combined heat-and-power systems will make a particularly important contribution to this. Presently, we have a total of 82 combined heat-and-power systems installed at 52 of our 87 Helios sites. As a result of their particularly effective use of fuels, we succeeded in reducing our energy consumption.

We determine the relative energy consumption figures for each hospital to enable a better comparison. In 2023, the average energy consumption for each planned bed was 25,066 kWh (2022: 26,424 kWh). In the reporting year, energy consumption per square meter of space used totaled 218 kWh/m² (2022: 232 kWh/m²) and therefore represented a significant decrease year on year.

ENERGY CONSUMPTION PER SQUARE METER AND YEAR



„100 points“ checklist for hospitals to identify **energy-saving potential.**

LOWER ENERGY CONSUMPTION AND IMPROVED ENERGY EFFICIENCY

In response to the energy crisis, Helios set itself an ambitious target for 2023. During 2023, Helios intended to reduce the total energy consumption of our hospitals by 20% compared with 2021. We laid the groundwork for this in 2022 and continued to expand the existing measures. These included, for example, a “100-point” checklist to enable our hospitals to identify their energy-saving potential. The 100 points on the checklist encompass measures such as the analysis and optimization of heating and ventilation systems in buildings. Implementation of the checklist was monitored by way of regular updates between a task force of the Infrastructure Business Unit and the hospital energy teams. These measures empowered Helios to save a total of 17% of energy per square meter in the reporting year in comparison with 2021.

Alongside user behavior, the condition of our building infrastructure and the structure of our healthcare facilities exerts a direct impact on our energy consumption. Helios is continuously investing in new buildings and modernizations that meet the relevant current energy standards, and comply with the appropriate regulatory requirements. Furthermore, we have been optimizing

the existing ventilation and cooling systems in line with site-specific requirements. Air quality measurements are conducted at various sites to ensure the appropriate control of systems. For example, ventilation systems are switched on and off according to the values measured for ambient air temperature and CO_2 content.

Our business units are always looking for ways to improve further the energy efficiency of our facilities. To this end, we maintain various working groups that continuously examine how energy can be saved and systems optimized appropriately with the technologies used in day-to-day hospital operations. Furthermore, Helios is raising awareness of potential energy savings, energy efficiency initiatives and careful energy usage among the staff concerned with internal and external energy audits at the hospital sites. We regularly use the energy management system to monitor and evaluate the impacts of our measures on energy efficiency in a process that is governed by ISO 50001, to which our energy management system is certified. In addition to the centrally managed energy efficiency projects, individual Helios companies are implementing site-specific projects with the aim of improving their energy and environmental performance.

SAVINGS

Helios was able to save

17 %

per square meter

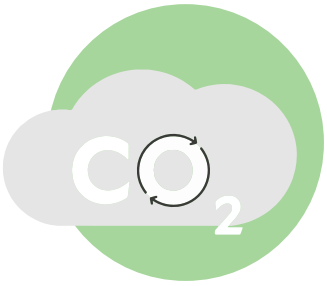
across all clinics

RELIABLE ENERGY SUPPLY

A key priority at Helios is to keep energy consumption to a minimum accompanied by maximally low potential environmental impacts. On the other hand, it is also critically important to have a consistently reliable and stable energy supply so that we can provide our patients with the best possible treatment at all times. To this end, each Helios hospital has a backup power system. It guarantees that a secure backup electricity supply can be provided for the key energy consumers at the hospitals within a few seconds if there is a power outage.

GREENHOUSE GAS EMISSIONS: ACHIEVING A MINIMUM CARBON FOOTPRINT AND CLIMATE NEUTRALITY BY 2040

Our energy consumption results in the liberation of substantial quantities of greenhouse gas emissions. In 2023, the operation of our hospitals released 104,125 tons of CO_2 (2022: 110,156 tons of CO_2). This is equivalent to 14.3 tons of CO_2 (2022: 15.7 tons of CO_2) per €1 million of revenue. Approximately 81.9% of our emissions are generated from the operation of our pellet, fuel oil, and natural gas boilers, as well as our combined heat-and-power systems and backup power systems (**Scope 1**). The remaining 18.1% is accounted for by the purchase of district heating (**Scope 2**). More detailed information can be found in the **Key figures chapter.**

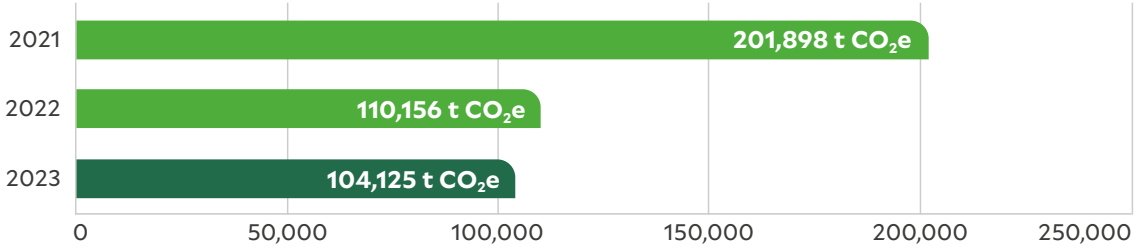


Helios climate target:
Helios will reduce its CO_2 emissions by 50% by 2030. In respect of its scope 1 and 2 emissions, Helios will be **climate-neutral by 2040.**

The climate target announced by Fresenius in 2022 aims to achieve a 50% reduction in emissions by 2030 and to be climate-neutral by 2040 in relation to Scope 1 and Scope 2 emissions. As far as Helios is concerned, this means reducing its CO_2 emissions by around 100,000 tons by 2030 and achieving climate neutrality by 2040. Helios intends to reach these goals primarily by avoidance of emissions on the basis of implementing energy efficiency measures.

This also involves adapting to changing external influences. For example, we can expect an increase in the energy needed to cool our hospitals in the future. Even today, the annual demand for cooling capacity at maximum care hospitals is higher than their demand for heating. We are working on the development of intelligent systems to improve energy efficiency in our hospitals so that we are able to meet our carbon emissions target.

SCOPE 1 AND 2 GREENHOUSE GAS EMISSIONS



CUTTING DOWN SPECIFIC EMISSIONS: RECYCLING ANESTHETIC GASES

In 2022, Helios focused on anesthetic gases as an additional source of emissions. These are included under Scope 1 emissions and have to be neutralized in accordance with the Group-wide climate goal of Fresenius by 2040.

Anesthetic gases used in operating rooms are released into the atmosphere through the exhaust air system where they are more harmful to the climate than carbon dioxide. Anesthetic gases cause up to 35% of a hospital's total greenhouse gas emissions. As a consequence, recycling anesthetic gases is a major lever for environmental and climate protection. Helios uses activated carbon filters to absorb the gases used for anesthesia and to drastically reduce the release of these gases into the atmosphere. The gases absorbed by these filters and the activated charcoal are extracted and then available as pure materials for reuse.

In November 2022, a pilot project to recycle anesthetic gases was therefore launched in two hospitals. Following successful implementation throughout 2023, the initiative was expanded to the hospitals in the eastern region.

CO_2 EQUIVALENT

around

1,300

tons

of CO_2 equivalent were saved by the implementation of our reduction measures for anesthetic gases compared with 2022.

Alongside recycling anesthetic gases, we were also able to cut down additional emissions by means of hospital-wide reduction of the climate-damaging anesthetic gas desflurane and by the use of the minimal-flow procedure. This technique uses less anesthetic gas and lower quantities of the gas are therefore released into the atmosphere. As a result, we achieved a total reduction of around 1,300 tons of CO_2 equivalent in 2023.

RECORDING OUR SCOPE 3 EMISSIONS

In 2023, Fresenius continued its work to systematically record and evaluate **Scope 3 emissions** throughout the Group. In **this report** Fresenius discloses its group-wide Scope 3 emissions in accordance with the Greenhouse Gas Protocol Scope 3 Accounting and Reporting Standard for the first time. Helios will report in detail on its Scope 3 emissions for the first time in 2024.

WATER CONSUMPTION AND QUALITY: FRESH WATER AND WASTEWATER MANAGEMENT IN HOSPITAL OPERATIONS

The water used in healthcare facilities is subject to a large number of stringent legal requirements. At the same time, water management at our hospitals focuses on an uninterrupted supply of water of uniformly high quality. Furthermore, strenuous efforts are necessary to prevent microbial contamination. The Central Service Hospital Hygiene and the Infrastructure Business Unit, including the cleaning department, deal with all issues relating to water quality.

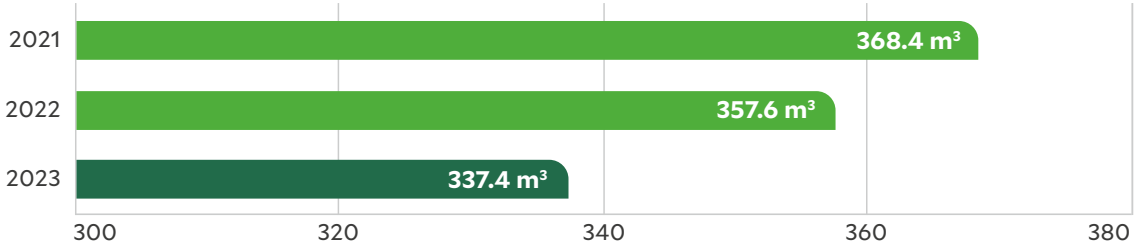
Due to the strict requirements for water quality in hospitals and healthcare facilities, water is not recycled at Helios, and gray water (treated water from showers or sinks) is not used at Helios. Water management at our hospitals is closely associated with hygiene management to ensure that patients, our employees, and other people are not put at risk at any time. Reliable compliance with Germany's Ordinance on the Quality of Water Intended for Human Consumption (TrinkwV) is a top priority at Helios so that water quality and hygiene are maintained.

We have developed our own action guidelines and specifications that expand on the statutory regulations. They define hospital-specific processes and other internal Helios requirements in relation to the quality of drinking water. This approach has enabled us to keep the number of water-based findings in our standard reviews at a low level. Precautions have been taken to ensure consistent supply if drinking water from the public supply system is contaminated. Alongside our own treatment systems, our facilities have additional water treatment modules that enable us to provide sterile drinking water. All our hospitals have emergency plans for tackling any supply shortages and safeguarding the provision of healthcare to our patients.

OUR WATER CONSUMPTION

In 2023, we consumed a total of approximately 2.455 million cubic meters (m^3) of water (2022: 2.510 million m^3). Measured by revenue, water consumption was approximately 337m^3 (2022: 358 m^3) per €1 million of revenue. Nearly 100% of the water consumed was provided by public utilities. This was due to the special hygiene guidelines and strict water quality specifications for healthcare facilities. We are also required to meet strict regional and local legal requirements for the discharge of wastewater. Our compliance with them is reviewed by the responsible wastewater disposal agencies.

WATER CONSUMPTION



CONSUMING RESOURCES – CONSERVING RESOURCES

The healthcare sector consumes a great deal of resources. The Fraunhofer Institute for System and Innovation Research (ISI) quantified the annual consumption of resources by the provision of inpatient and outpatient services in Germany at approximately 107 million tons. Domestic resources only account for around one third of the resources consumed, with two thirds being attributed to imports. The sustainable use of natural resources is therefore an extremely important issue for Helios.

As a rule, the raw materials used by the healthcare sector have been processed into manufactured products. This means that a lower level of resource consumption can primarily be achieved by efficiently managing the use of these products. One example is the contribution made to extending lifetime through proper maintenance and care of medical appliances and equipment. Hospitals then have to purchase new appliances less frequently and this conserves valuable resources while generating cost savings at the same time.

CONSERVING RESOURCES IN DAY-TO-DAY HOSPITAL OPERATIONS

In 2023, Helios put measures into practice to reduce the consumption of resources particularly in the area of administration. We set up printing on both sides of a sheet of paper on all multifunction devices, introduced automatic shutdown of PCs and monitors standing idle, and increased the proportion of recycled paper used. The only printing paper available is certified recycled paper. 75% of sanitary paper (for example toilet paper and paper used in towel dispensers) is recycled paper, and the proportion is being continually increased. Our Central Service Procurement and Logistics has replaced disposable disinfection wipes with wipes made from renewable materials. Since January 2023, we have been offering reusable food containers supplied by service provider Relevo in Helios cafeterias. We are working on further reducing the use of disposable tableware in our cafeterias, and an environmental charge will be introduced on disposable tableware from spring 2024.

We are also looking to conserve resources in the provision of private services. For example, services such as bath robes and cosmetic bags will only be provided on request. The service therefore continues to be available, but we are reducing the volume of products provided that in turn have to be unnecessarily disposed of or cleaned.

An important campaign for Helios related to the reduction in the number of disposable gloves used in 2023. The training campaign highlighted the improper use of non-sterile gloves and the associated huge consumption of resources this entailed. The hygiene experts at Helios developed training courses for all employees and these sessions raised awareness of the potential health hazards. This made an important contribution to patient safety and the safety of all our employees.

REUSE, NOT SINGLE USE?

In 2023, the Central Service Procurement and Logistics drew up a Top 10 List of the most frequently purchased single-use products and reviewed whether a switch to reusable alternatives would be possible here. The result was that five out of the ten products could not be switched for reasons of hygiene. A switch was not possible in the five other products either for reasons of cost or owing to considerably more effort expended on the process. The analysis demonstrated that ultimately we can only avoid waste and conserve resources in the case of these products by reducing or optimizing consumption.

WASTE AVOIDANCE AND DISPOSAL – SAFE FOR PEOPLE AND THE ENVIRONMENT

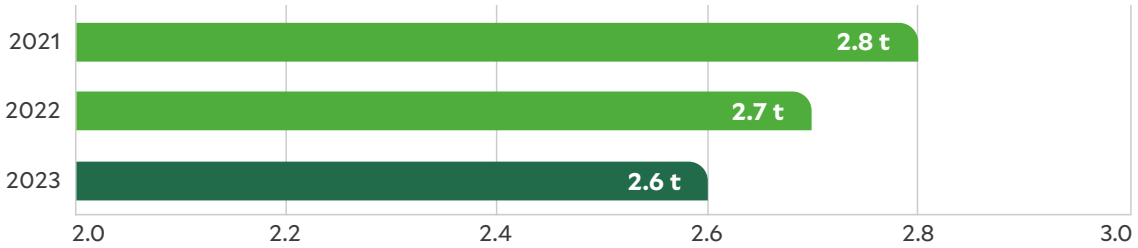
At Helios, we regard waste management and disposal management as a process. It starts with waste avoidance through our procurement processes and extends to consistent recycling or environmentally friendly disposal. The goal is to have a better understanding of the route taken by our waste from generation to recycling and to derive measures for the future, e.g. in the form of a recycling rate.

Our hospital operations must comply with strict hygiene requirements at all times. Medical instruments and supplies are cleaned, sterilized, and packaged separately to enable reuse. Various disposable medical products are also used. This generates waste, and safeguards are required so that we can ensure that this waste is disposed of professionally and safely. Requirements for environmental protection, occupational safety, infection control, and hospital hygiene must be considered in this context. These range from the selection of suitable disposable containers, and cleaning and sterilization procedures, to the occupational safety and health of our employees when they dispose of hazardous waste, such as infectious waste. Clear internal regulations and comprehensive controls empower us to ensure compliance with these requirements at all times.

In 2023, we produced a total of approximately 19,194.2 tons (2022: 19,466.7 tons) of waste. Measured by revenue, this was equivalent to 2.64 tons (2022: 2.8 tons) per €1 million. Around 98.3% of the total waste was classified as nonhazardous, including, wound dressings, casts, disposable clothing, and household-type waste. The remaining amount consists of waste that is a risk to people's health and the environment, including items such as infectious waste, hazardous chemicals, and critical medicines. Special methods and procedures are defined by law for handling this waste to ensure its safe disposal. Specially trained employees are responsible for compliance with all regulatory requirements in our hospitals.

More detailed information about the waste we generate can be found in the **Key figures chapter.** The waste working group set up in 2023 established a new waste survey that is intended to provide more nuanced and detailed information on the waste generated. The aim is to increase the quality of the data being collected and to ensure compliance with the future requirements of the Corporate Sustainability Reporting Directive (CSRD).

WASTE



RELATED LINKS

Environment focus (German language only)

Interactive indicator tool

ESG KPI Overview 2023