



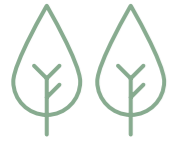
Planet

- Climate Change —
- Value Chain Management —
- Responsible Use of Resources —
- Product Sustainability —
- Animal Welfare —

Planet at a glance

Transition to *renewable energy*
99% of total global electricity consumption from renewable sources

Do no harm
by protecting our planet and minimizing any negative impact produced by our activities



Code of Interdependence



Supplier Code of Conduct co-created with our partners

Climate Advocacy
Linking planetary and human health

GUIDING PRINCIPLES



Carbon Disclosure Project 2023

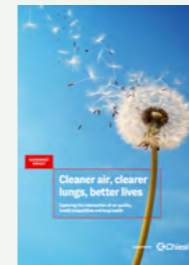
Rating



EcoVadis
Platinum Medal
Score: 78/100

The Economist *Impact report*

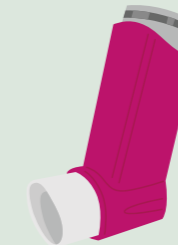
Cleaner Air, Clearer Lungs, Better Lives. Exploring the intersection of air quality, health inequalities and lung health



HIGHLIGHTS

Reach Net Zero GHG emissions across the value chain

NET Zero
by **2035**



€ 350 Million

5-year investment in 2019 for development of low global warming potential propellant for pMDIs reducing their carbon footprint by up to *90%*

ROADMAP

Climate Change

In response to the climate emergency, we are committed to taking actions against climate change, a global crisis with far-reaching implications for generations to come. As a business, we are crafting a robust decarbonization strategy aimed at contributing to limiting global warming to 1.5°C by 2100. Our approach involves **combating the root causes of climate change and reducing greenhouse gas (GHG) emissions, alongside implementing governance systems for climate change adaptation.**

In line with the goal of achieving **Net Zero GHG emissions by 2035**, the Group has consolidated the inventory of its greenhouse gas emissions following the ISO 14064 and **GHG Protocol**. Our GHG emission inventory is verified annually by external third parties. The last verification

process was completed by March 2024.

Chiesi's GHG emission reduction targets were approved by the **Science Based Targets initiative (SBTi)** in April 2021. When the new **SBTi Corporate NetZero Standard** was released, Chiesi made the decision to move from carbon neutrality to the more demanding and science-based Net Zero emissions standard. Recognizing the urgency of the climate crisis, we are deliberately pursuing a more ambitious and impactful goal.



Looking for detailed ESG data? [Explore our Sustainability Performance.](#)

Net Zero Pathway

Following a hierarchical approach of Avoid, Reduce, Substitute, and Remove, our plan to reduce greenhouse gas emissions focuses on **improving operational efficiency, transitioning to renewable electricity, electrifying our vehicle fleet, engaging suppliers and adopting carbon minimal inhalers.**

Avoid

In 2019, Chiesi announced an investment of €350 million to reduce the **carbon footprint of pressurized metered dose inhalers (pMDIs)**. This initiative involves developing new formulations of a platform of currently available pMDI products replacing the current hydrofluorocarbon (HFC) propellant (HFA 134a) with a low global warming potential (GWP) propellant (HFA 152a). Chiesi's investment aims to accelerate the development and market introduction of this innovative solution. By using the new propellant, Chiesi anticipates reducing the product's carbon footprint by up to 90% compared to the current ones, while still supporting Dry Powder Inhaler (DPI) technology to provide patients with a variety of treatment options tailored to their individual needs.

With the set of studies already completed and the Phase III long-term safety trial recently started, Chiesi is on track in the development of its carbon minimal inhaler platform.

Reduce

To reduce emissions from the production process of our pMDIs, we introduced a dedicated propellant cryogenic **abatement system** at our Italian and French manufacturing sites. The abatement system is designed to prevent emissions containing propellant from entering the atmosphere by liquefying it instead and collecting the liquid waste for recovery. We have optimized our HFA gas abatement systems throughout 2023.

Chiesi is actively working to reduce its **logistics**-related carbon footprint. The company has analyzed its logistics network at a Group level to test CO₂e calculation methods and identify inefficiencies. Procedures within the corporate supply chain department have been reviewed, resulting in measures such as favoring sea shipments over air whenever possible. Additionally, Chiesi is mapping the GHG emissions impact of our secondary distribution¹⁴, analyzing the distribution network to optimize distribution center locations for maximum efficiency.

Substitute

When it comes to indirect greenhouse gas emissions linked to **electricity, steam, heat, or cooling purchases** (Scope 2), we prioritize energy efficiency improvements and aim for consuming 100% renewable electricity.

In the area of **mobility**, Chiesi is committed to providing employees with more environmentally preferable commuting options. This involves supporting train subscriptions, urban bus passes, shuttles services and bike amenities. Through a dedicated policy, we also promote videoconferencing, optimizing travel, electrifying our car fleet, and prioritizing low-emission transportation for business events.

Remove

Chiesi's Net Zero strategy emphasizes minimizing carbon-intensive processes to reach our goals without relying heavily on emissions removal. Our approach derives from the SBTi Net Zero Standard, which requires deep emissions reduction (minimum -90% for absolute targets) and the **removal of only a residual share of emissions (maximum 10%)**.

However, given that removals will play a key role in the global decarbonization pathway and that beyond value chain mitigation¹⁵ is encouraged by SBTi and global scientists, we aim to work on pilot projects in the field of carbon removal, with a special focus on programs that create a positive impact beyond emissions reduction.

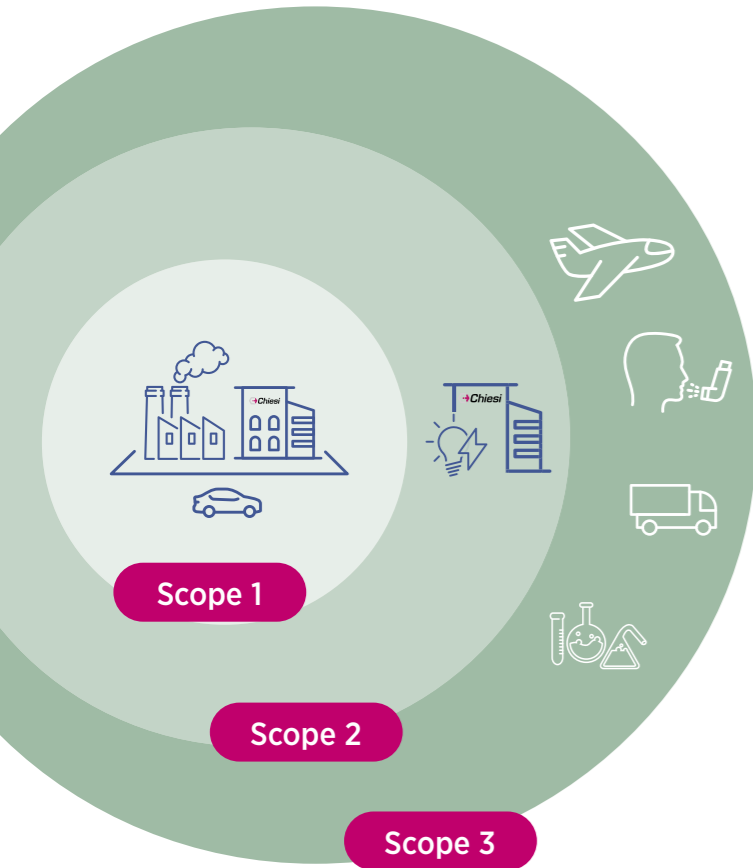


¹⁴ Primary logistics moves goods from our plants to distribution hubs, while secondary logistics distributes them to hospitals, pharmacies, and wholesalers.

¹⁵ "Companies should take action or make investments outside their own value chains to mitigate GHG emissions in addition to their near-term and long-term science-based targets. For example, a company could provide annual support to projects, programs and solutions providing quantifiable benefits to climate, especially those that generate additional co-benefits for people and nature. Companies should report annually on the nature and scale of those actions" SBTi Corporate Net Zero Standard <https://sciencebasedtargets.org/resources/files/Net-Zero-Standard.pdf>



Climate Impact in 2023



Scope 1 & Scope 2

Propellant losses, heating, car fleet, refrigerant losses, process emissions, purchased electricity, district heating and cooling

Compared to our 2019 baseline, Scope 1 emissions decreased by 12%, mainly due to reductions in car fleet and stationary emissions. The electricity for our Italian facilities and all of our manufacturing facilities comes from 100% low impact energy sources (wind and solar).

With the exception of a few Chiesi sites 99% of our electricity consumption comes from renewable sources, leading to a 96% reduction in our scope 2 market-based emissions compared to our baseline year 2019.

Despite a significant pMDIs production increase, GHG emissions coming from the manufacturing process remained stable since 2019.

Scope 1 emissions decreased by 12%
with respect to 2019



100%
Low-impact renewable energy
of total electricity consumption at production facilities and Italian sites

Scope 3

Use of sold products, purchased goods and services, business travel

In 2023, our Scope 3 emissions increased by 28% compared to 2019¹⁶, primarily due to a 28% increase in emissions from the use of sold products, which correlates with the increase in sales of pMDIs. Use of sold products is also the category with the most significant impact in 2023 for Scope 3. Here we have a 6% increase in emissions from 2022, again driven by higher pMDI sales.

However, emissions per unit of respiratory products are lower than in both 2019 and 2022.

Similarly, for purchased goods and services, we achieved a 3% decrease in emissions compared to 2022, despite a 21% increase in spending.

Business travel, which accounts for 2% of our total Scope 3 emissions, saw a 91% increase compared to 2022, reflecting increased air and land travel due to higher emission factors under the SBTi standard.

6% increase in Scope 3 emissions from 2022 driven by higher pMDI sales

¹⁶ For further information of the Chiesi Group baseline, its calculations and restatements, please, refer to the section "Methodological Note" and "Sustainability performances".

Climate Advocacy

As part of our commitment to emissions reduction, Chiesi recognizes the importance of taking a public stance to raise awareness about the climate crisis and drive positive social change and legislation.



A moment from the presentation of the Economist Impact Report in Milan

2023

Chiesi had already joined the [Carbon Disclosure Project](#) (CDP) and achieved an “A” rating in 2021 and 2022. In 2023, after the Climate Change questionnaire of the CDP had considerably been revised, Chiesi still proudly received an “A-” rating.

Chiesi was recognized among the [130 Most Climate-Conscious Companies](#), for its efforts in reducing the ratio between CO₂ emissions and turnover. Notably, Chiesi topped the list among pharmaceutical companies.

Chiesi Germany introduced [WeACT Con](#), a fresh congress format highlighting the **connections between health, environment, and sustainability**. WeACT Con brought together diverse healthcare figures, including doctors and policymakers, for a two-day event in Berlin. With a focus on understanding how healthcare impacts climate change and vice versa, the congress aimed to explore comprehensive solutions and perspectives through collaboration and open discussion.

Supported by Chiesi, an **Economist Impact report**, titled **Cleaner air, clearer lungs, better lives**, revealed the significant impact of climate-related factors on lung health. The report explores how air quality affects health disparities and lung health, drawing from the experiences of lung disease patients in the UK, Italy, Spain, Germany, and France. It underscores the broader impact on overall well-being and advocates for comprehensive health policy solutions. [Dive into the report here.](#)

Chiesi participated in **“The Climate and Us”** series by **BBC StoryWorks** and the Global Climate and Health Alliance. This series, launched during COP 28, examines the **severe impact of climate change on global human health**, particularly affecting those with respiratory conditions.

In our sponsored episode, **“How redesigning inhalers could reduce their environmental impact”**, we underscore the urgent need to minimize inhalers’ environmental footprint. Lara, an asthma patient, shares her firsthand experience of the health risks posed by air pollution. [Click here to watch Lara’s story.](#)

“We are proud of the **International Respiratory Coalition’s** progress in equipping every country with the tools needed to **implement a national respiratory strategy**. Amid rising social inequalities and the climate crisis, our collaborative efforts to prioritize respiratory health and enact national strategies are more urgent than ever.”

Paolo Saccò
Group Communication & External Relations,
Head of Global Public Affairs

CHIESI IMPACT COMMITTEE MEMBER



2022

TCFD

Chiesi completed a pilot project in 2022 aimed at analyzing climate-related risks and opportunities in accordance with the recommendations of the **Task Force on Climate-related Financial Disclosure (TCFD)** promoted by the Financial Stability Board. Our TCFD report is available under this link.



Chiesi became a member of **CO2alizione Italia**, joining forces with over 50 Italian enterprises to incorporate a climate neutrality objective into their bylaws¹⁷. This collaboration aims to create conditions for achieving the European Union emission reduction targets.

2021



The Group took a significant step by joining the **B Corp Climate Collective (BCCC)** and endorsing the Race to Zero initiative under the United Nations Framework Convention on Climate Change (UNFCCC).

2020



Chiesi is a founding member of **Italy for Climate**, an initiative of the Sustainable Development Foundation, that aims to promote the implementation of a climate road map for Italy, in line with the European Green Deal and the Paris Agreement.

2018



Chiesi is part of the **Sustainable Development Foundation**, a promoter of the green economy through civic and environmental engagement. The Foundation focuses on climate neutrality, energy transition, circular economy, green cities, sustainable mobility and natural capital.

Ambitions for 2024 and beyond

Climate Transition Plan

In 2024, a key focus will be the definition of a Climate Transition Plan. As extreme weather events and resource scarcity increase, and regulations evolve towards a low carbon economy, it is important to understand and manage our business' exposure to these climate-related issues. With the publication of this report, the plan has already been released and may be accessed here.

Net Zero Targets Submission to SBTi

Chiesi has updated its reduction targets to align fully with the standards set by SBTi. We anticipate SBTi's approval of these revised targets by 2024. Additionally, we are reaffirming our commitment to achieving Net Zero emissions through a formal commitment letter. This demonstrates our unwavering dedication to sustainability and environmental responsibility.

New Environmental Governance and Environmental Steering Committee

As emphasized in the chapter on **Transparency and Governance**, the establishment and implementation of the Environmental Steering Committee will be another key priority. This newly formed governance body will play a central role in overseeing and guiding our environmental initiatives and strategies.

¹⁷ To this end, in 2022 Chiesi Farmaceutici modified one of its common benefit purposes included in its bylaws. For details, please see our Impact Report in the appendix.

Value Chain Management

At Chiesi we believe that responsible companies must consider all aspects of their value chain's impact, which has led us to launch a long-term initiative called **Value Chain Evolution**.

This initiative aims to **reduce CO₂ emissions by collaborating with strategic vendors** to achieving our Net Zero emissions goal by 2035 and to enhance overall value chain sustainability.

Value Chain Evolution centers on our strategic vendors, thoroughly evaluating their performance, seeking improvements as necessary, and ensuring accountability for agreed-upon actions over time. This approach will ensure that our strategic vendors align with our

environmental and social objectives as we collectively work towards a shared goal of environmental stewardship and value creation for all stakeholders.

By setting ambitious sustainability standards and fostering collaboration, we aim to drive a more equitable and healthier future ecosystem, recognizing the **interconnectedness of our world and the importance of collective prosperity**.



Looking for detailed ESG data? [Explore our Sustainability Performance.](#)

Code of Interdependence – Supplier Code of Conduct

The **Code of Interdependence** (CoI), Chiesi’s standard of conduct for suppliers, partners, and distributors, was **developed collaboratively with strategic partners** in 2019. It serves as a set of values guiding Chiesi’s collaboration with entities that share our dedication to sustainability.

Rooted in **11 selected UN Sustainable Development Goals (SDGs)**, this framework incorporates mandatory requirements as well as improvement actions to guide those aiming for deeper commitments. The Code aligns with the Pharmaceutical Supply Chain Initiative (PSCI), International Labor Organization (ILO), and B Corp principles. Approximately 76% of Chiesi Group’s annual strategic spending is with suppliers who have adopted the Code of Interdependence. To ensure compliance, Chiesi audits suppliers. In 2023, we **audited 11 suppliers** through PSCI standard audits or self-assessment questionnaires.

In 2021, after a thorough review involving all of Chiesi global functions and strategic vendors, the CoI underwent the first revision, which was published in January 2022. As a dynamic document, the Code adapts to our evolving business landscape and drives sustainability efforts for both Chiesi and our suppliers.

EcoVadis

Chiesi utilizes EcoVadis, an advanced **third-party platform**, to evaluate the sustainability practices of our strategic suppliers. We leverage on the EcoVadis scoring system to track **progress toward a more sustainable value chain and our Scope 3 emissions target**, and to engage in constructive dialogues with partners. By collaborating closely with our suppliers, we aim to foster mutual learning and drive collective evolution across the ecosystem.

In 2023, approximately 47% of our Group spending was covered by suppliers assessed in EcoVadis.

Chiesi received in 2023 the EcoVadis Platinum Medal with a score of 78/100. EcoVadis Platinum Medals are given to companies that have not only completed the rigorous assessment process but have also demonstrated exceptional management systems that meet the organization’s sustainability criteria. Companies must excel in four key areas to receive this recognition: environment, ethics, labor & human rights, and sustainable procurement.



Vendor Qualification and Evaluation

Since 2019, our vendor qualification process has **integrated sustainability parameters** alongside other selection criteria, using EcoVadis as source for the ESG evaluations. In 2023 alone, only considering **new suppliers starting business with Chiesi**, we screened 117 new suppliers based on environmental criteria and 131 new suppliers on social criteria.

We also evaluate periodically the performance of our existing strategic suppliers, gathering information directly or through third-party providers like EcoVadis. These evaluations are shared with our partners, fostering collaborative dialogue to celebrate positive performance and discuss opportunities for enhancing our business relationship.

117 new suppliers
screened based on **environmental** criteria

131 new suppliers
screened based on **social** criteria

47% of Chiesi spending on **EcoVadis** rated suppliers



Supply Chain Risk Evaluation

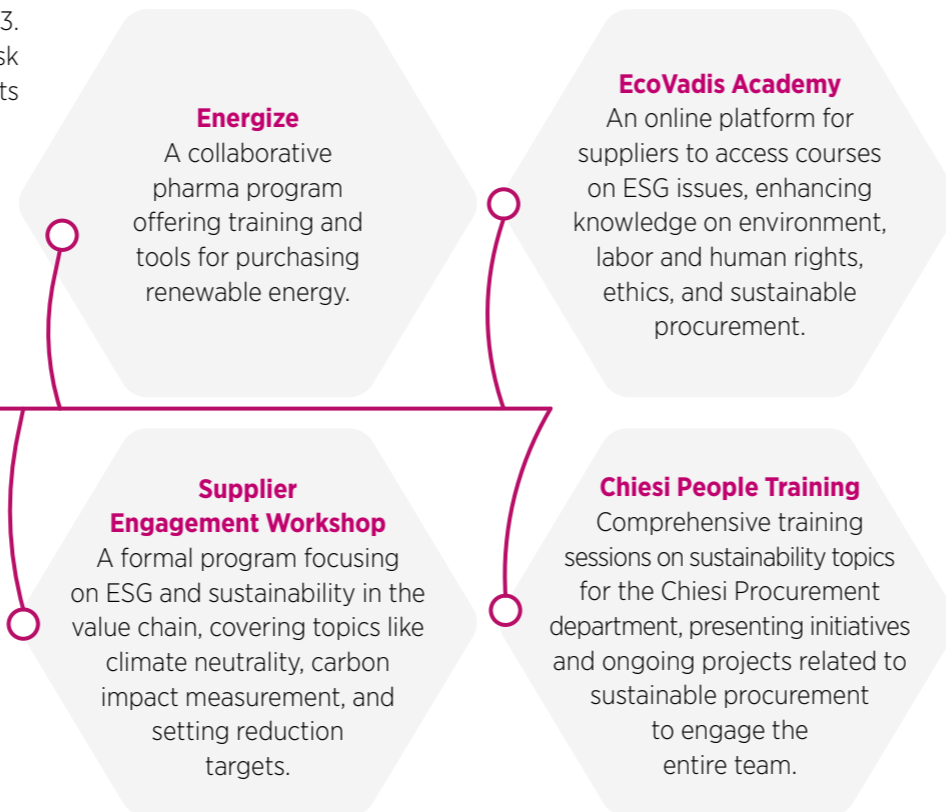
Since January 1, 2024, the German Supply Chain Due Diligence Act (LkSG¹⁸) requires German companies with at least 1,000 employees to meet detailed human rights and environmental obligations. Although Chiesi GmbH is not directly subject to LkSG due to its smaller workforce, we are committed to upholding these standards in line with our values and goals.

In addition to our vendor qualification process, [Human Rights Policy](#), [Code of Interdependence for Suppliers](#), and whistleblower system, we voluntarily met another LkSG requirement by the end of 2023. Using the IQ module on our EcoVadis platform, we conducted a risk assessment for 90% of our Chiesi Germany suppliers. The results were satisfactory, with no serious risks identified.

Value Chain Educational Program

The Value Chain Education initiative, a part of Chiesi's Value Chain Evolution program, strengthens engagement with trading partners. This comprehensive training program enhances Environmental, Social, and Governance (ESG) skills and competencies among partners. It provides resources and tools to raise awareness of social and ecological issues and encourages partners to set and achieve targets within the value chain.

Key components of the Value Chain Education program include:



Partnership Day & Partner Awards

On November 16th, Chiesi hosted Partnership Day 2023, an annual event to engage suppliers, share sustainability objectives and acknowledge outstanding contributions, reinforcing Chiesi's collaborative approach. This event allows us to **recognize, through partner' awards, our top-performing partners** who have shown exceptional commitment to sustainability and collaboration with Chiesi, and to **set medium- and long-term goals** for building a sustainable value chain.

Partnership Day underscores our interdependence, highlighting the crucial role of each partner in creating shared value and protecting our planet.

Ambitions for 2024 and beyond

In 2023, as part of the Sustainability Strategic Plan 2023-28, Chiesi approved strategic objectives for the value chain. Implementation of these actions will begin in 2024.

Four strategic objectives have been established:

1. Regularly update the Code of Interdependence to engage all Chiesi third parties.
2. Utilize the EcoVadis tool across the Group to measure the ESG performance of all third parties.
3. Monitor the value chain emissions baseline with specific reduction targets, aligned with Chiesi Group's 2035 Net Zero goal.
4. Implement due diligence measures and audits on ethics, human rights, and environmental protection for suppliers, partners, and distributors, in preparation for Sustainable Due Diligence regulations.

¹⁸ Lieferkettensorgfaltspflichtengesetz

Responsible Use of Resources

Chiesi is committed to responsibly managing resources, promoting alternatives, reducing waste, and recycling materials to protect current and future generations' health. Our approach is science-based, and our governance framework supports achieving these goals systematically.

Energy

Efficient energy use is crucial to mitigate the impact of human activity on the climate. To achieve our decarbonization goals, we strive to meet our energy needs by relying on renewable energy and minimizing the use of fossil fuels. This includes **reducing energy demand through innovation, improving equipment efficiency, and enforcing strict energy standards for new equipment and buildings.**

Energy Management System

We have adopted the **ISO 50001 standard** for energy efficiency at our main energy-intensive sites, ensuring continuous improvement in energy performance. This system operates on a Plan-Do-Check-Act cycle, requiring meticulous monitoring throughout asset lifecycles, from design to operation. Our **Research Center in Parma (Italy) and manufacturing sites in Parma, Blois (France), Santana de Parnaiba (Brazil), and logistic site in Parma** are all certified according to ISO 50001:2018 standard.

Renewable Energy

We recognize the pivotal role of renewable energy in mitigating the threat of climate change, and it is a cornerstone of our Net Zero strategy. To achieve this, we are increasing our **on-site renewable electrical energy production** and integrating low-impact, off-site renewable energy sources.

A key milestone in 2023 on our decarbonization path and contribution to the energy transition is the **signing of a 10-year Power Purchase Agreement (PPA)** for off-site renewable electricity production. This agreement involves a newly built photovoltaic plant in Montalto di Castro, Italy, which will supply over 30 gigawatt-hours of clean, **renewable electricity annually to all Italian sites** starting in 2024.

The approach of using green energy is also being pursued across **manufacturing sites** outside Italy, and the electricity used by the French and Brazilian plants is currently produced from renewable sources.

We are also taking active steps to increase the use of **renewable electricity in our affiliates.** To achieve this, we have defined specific requirements, outlined in our **Corporate Green Energy Procurement Guideline** and **Green Energy White Paper**, which align with international sustainability standards adopted by Chiesi (GHG Protocol, LEED, Science-Based Targets initiative). These requirements ensure that energy suppliers meet parameters for high-quality green energy, sourced possibly from low-impact renewable

sources such as wind and solar, and from new plants to smooth the transition away from older, more impactful power plants.

Chiesi has actively invested in installing **photovoltaic panels** within its facilities and we are exploring further opportunities to expand **on-site renewable energy generation** capacity. Recent installations, such as the new photovoltaic unit at the Blois production site and the expansion of the Parma unit, enable us to prevent nearly 312 tons of GHG emissions annually, covering 3% of our 2023 site electricity needs.

In 2023, Chiesi's total energy consumption came from fuel consumption, energy purchased and energy self-produced.

In terms of energy consumption within our organization, 2023 shows a better performance compared to 2022 (-3.96%), despite the new acquisitions of Amryt, the start-up of the new biotech plant in Italy and the increase in production at the Parma and Santana sites.



Looking for detailed ESG data? [Explore our Sustainability Performance.](#)

Fuel Consumption

Chiesi groups non-renewable fuel consumption into two main uses: Car fleet (diesel and gasoline) and sites & technological uses (LPG and natural gas). Overall, 2023 recorded a better performance with respect to 2022 by -8%, mainly driven by the reduction of natural gas and diesel consumption.

Natural gas consumption decreased by 9% in 2023 compared to 2022. This has been achieved thanks to the implementation of new electrifications measures and smart heat recovery.

Due to the Chiesi Group's ongoing efforts to convert its fleet from fossil fuels to electric vehicles, in 2023, we were able to more than double our electric and hybrid vehicles to 28% (12% in 2022). This shift resulted in increased consumption of electricity and gasoline, the main non-renewable fuel for hybrids.

Finally, the use of renewable fuels increased, particularly in Brazil, where bioethanol consumption grew significantly.

Electricity

The percentage of **renewable electricity** consumed increased slightly from 98.71% in 2022 to 98.80% in 2023. All electricity consumed in 2023 was renewable, with the exception of a few affiliates and off-site fleet charging.

Our Italian sites are 100% powered by low-impact (wind and solar) renewable electricity and our manufacturing sites are 100% powered by renewable electricity.

Self-produced electricity consumption increased by 54% compared to 2022, thanks to the new photovoltaic unit at Chiesi's Blois site and the expansion of the Parma units.

Stationary Emissions and Electricity Decarbonization Study

In 2023, Chiesi took a significant step towards achieving net zero greenhouse gas (GHG) emissions with the Decarbonization Study. This study targets the most impactful sites—production plants in Italy, France, and Brazil—focusing on the following key areas:

- Energy efficiency
- Reduction of stationary CO₂ scope 1 emissions
- Increased self-generation from renewable sources

The study evaluated the maximum performance achievable in each area and identified the measures and resources needed to reach these goals. This assessment enabled the creation of a global roadmap and the setting of targets for the coming years, refining our long-term Net Zero planning. Implementing this global roadmap is a key aspiration for 2024 and beyond and has informed the update of our Manufacturing Strategic Plan.

28% Transitioning car fleet from fossil fuels to electric and hybrid vehicles (12% in 2022)



Water

With only 3% of Earth's water being freshwater and much of it trapped in glaciers, water conservation is fundamental. Although our manufacturing processes do not heavily rely on water, Chiesi has a targeted project assessing the water impact of our products as part of our Sustainability Strategic Plan. Our primary **water usage stems from production processes and associated cleaning needs**, with our Italian manufacturing plant being the largest consumer.

Water usage is strictly analyzed and treated throughout our processes and at our sites. Various measures are taken to **minimize water consumption**, such as the implementation of wastewater treatment systems that significantly reduce the generation of liquid waste. Wastewater is treated to meet local regulations before discharge, and waste disposal is in accordance with local laws.

As part of our TCFD assessment, we have **evaluated risks and opportunities linked to water**, including scarcity, droughts, and floods.

Since 2020, we use a Risk Assessment System to evaluate the **potential impact of the release of active pharmaceutical ingredients (APIs)** into industrial wastewater and effluent from production sites, in accordance with the guidelines of the European Federation of Pharmaceutical Industries and Associations (EFPIA).

2023 Impact

The water used by Chiesi consisted mostly of fresh water (99.9%) and was primarily withdrawn from areas with no water stress (92%). The majority of the water (298.7 ML) was supplied by third parties, with a small portion sourced from groundwater (28.66 ML) and surface water (0.55 ML).

Water Withdrawal

In 2023, water withdrawal **decreased by 8.5%** compared to 2022, largely due to the implementation of a **Water Recovery System** at our Italian manufacturing plant. Introduced in 2022 by our site engineering team, this system allows us to **reuse a significant portion of wastewater** generated during production, reducing overall water withdrawal.

The project was initiated to cut industrial waste from pharmaceutical processes and lower management costs. Utilizing vacuum evaporation, which boils solutions at low temperatures, the technology is energy efficient. This new system was integrated downstream of existing wastewater treatment plants.

Discharged Water

Discharges mainly originate from manufacturing sites, as offices primarily use water for civil purposes. Thanks to efficient measures, discharges from production activities decreased from 2022 to 2023. The majority of discharged water (90.2%) was directed into municipal sewers, with some discharged into surface water sources.

Water Consumption

Water consumption is measured as the difference between water withdrawal and water discharge. In 2023, water consumption accounted for 33% of overall water withdrawal, **with 96.4% occurring in non-water stress areas**, where most Chiesi affiliates are located.



Chiesi employees at
volunteering initiatives in
Italy

Waste

Waste management is a critical issue that is often overlooked despite its substantial greenhouse gas emissions. Landfill waste generates methane, while transportation and incineration produce CO₂, dioxins, and pollutants.

Chiesi is committed to reducing waste across our sites, focusing on both hazardous and non-hazardous materials. To achieve this, we prioritize efficient production processes and waste control systems, along with implementing **waste reduction measures**. Our production plants, headquarters, research center, and logistic site adhere to **ISO 14001:2015** standards, each with an environmental management system aimed at promoting best practices in waste management and recycling.

We have implemented innovative technologies, like the Water Recovery System, which also serves as advanced **water discharge treatment** at our Parma plant. The system concentrates liquid residues (sludge) from wastewater operations, leading to notable reductions in waste and costs.

2023 Impact

In 2023, Chiesi Group's waste increased due to higher production levels by 17% compared to 2022. Manufacturing sites accounted for 90% of the total waste, with the Blois plant in France making a significant contribution due to the implementation and testing of new production lines.

Hazardous Waste

Chiesi Group's hazardous waste primarily stems from the production process, **involving solvents and active pharmaceutical ingredients**. Following local regulations, these wastes are collected and disposed of properly, with **72% undergoing recovery operations**.

Non-hazardous Waste

Non-hazardous Waste from production processes consists of paper, dashboards, and plastic. These materials are similar to those from offices and are largely recycled.

Approximately 20% of the total waste was disposed of, mainly through incineration with energy recovery, while **80% was recovered through recycling and other operations**.

All waste from Chiesi was appropriately treated by external authorized suppliers.



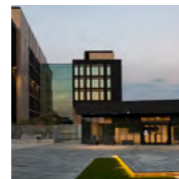
Chiesi employees at volunteering initiatives in France

Better Building

Launched in 2020, our Better Building program aims to **elevate our global sites to high sustainable building standards**, such as LEED and Green Building. This initiative enhances **occupant well-being and reduces environmental impacts on local communities**. It adopts a holistic approach to energy reduction, water conservation, waste management, and human experience, addressing the entire building lifecycle from design to operation.

The program follows a twofold strategy: upgrading existing facilities and designing new buildings or renovating older ones with sustainability in mind. It emphasizes **responsible site management** and living by monitoring, ranking, planning improvement actions, and tracking progress, fostering continuous improvement.

Best practices are shared across sites to encourage ongoing enhancement. To date, the Better Building program has been implemented at 43 Chiesi sites worldwide.



Parma HQ:
LEED Platinum
ISO 14001
ISO 45001



Blois (production site):
LEED Gold
ISO 14001
ISO 45001
ISO 50001
BREEAM In-Use



Santana de Parnaiba (production site):
ISO 14001
ISO 45001
ISO 50001



Parma R&D Centre:
LEED Gold
ISO 14001
ISO 45001
ISO 50001



Parma (production site):
ISO 14001
ISO 45001
ISO 50001



Fontevivo (Logistic site):
LEED Gold
ISO 14001
ISO 45001
ISO 50001



*“In 2023, we transitioned from a standard Vendor Day to an integrated **Partnership Day**, awarding top partners in the categories “People & Planet” and “Innovation & Collaboration.” Additionally, we launched the **WeReduce** project, **inviting every employee to suggest actions for reducing Chiesi’s energy consumption.**”*

Guido D’Agostino
Global Finance, Head of Global Procurement
CHIESI IMPACT COMMITTEE MEMBER

Ambitions for 2024 and beyond

Chiesi's future focus will be on key areas of resource management. Circular management and electronic equipment recycling are crucial to demonstrating our commitment to superior waste management. Additionally, water management is becoming increasingly important due to concerns about water scarcity and upcoming regulations from the TCFD.



Better Building

Chiesi has several key objectives for the Better Building project in the coming years. They include achieving LEED EB:OM v4.1 certifications, specifically for the Santana de Parnaiba and San Leonardo sites and obtaining LEED NC v4.1 certification for the Biotech facility. The certification of San Leonardo will enable us to reach the milestone of certifying 80% of Chiesi's building portfolio.

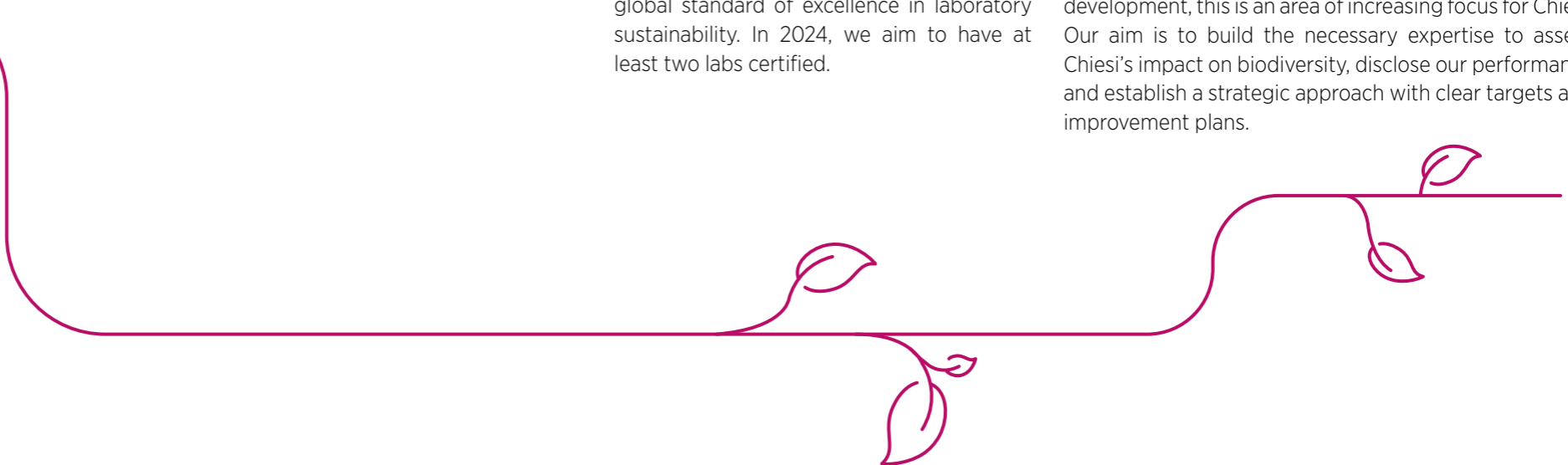
In addition, our Global Procurement team is actively working on renewable energy initiatives to address the challenges Chiesi affiliates face in sourcing green electricity.

My Green Lab

Focusing on our research facilities, one of our goals is to embark in the journey towards "My Green Lab" certification for Chiesi labs. The certification is recognized globally as a gold standard for laboratories sustainability and offers actionable measures for cost savings, resource conservation, and a safer, healthier scientific environment. By pursuing this certification, we aim to contribute to a global standard of excellence in laboratory sustainability. In 2024, we aim to have at least two labs certified.

Biodiversity

Biodiversity and nature loss have become an emerging priority in recent years, prompting the development of methodologies to assess an organization's impact, prepare for disclosure requirements, and meet investor expectations. While still in the early stages of development, this is an area of increasing focus for Chiesi. Our aim is to build the necessary expertise to assess Chiesi's impact on biodiversity, disclose our performance and establish a strategic approach with clear targets and improvement plans.



Product Sustainability

As a biopharmaceutical company, we operate in a highly regulated industry where ensuring the safety and quality of our products are paramount. At Chiesi, we extend this responsibility by embedding sustainability into every facet of our product development process, alongside our unwavering focus on safety, efficacy and quality.

Our commitment to quality is exemplified by:

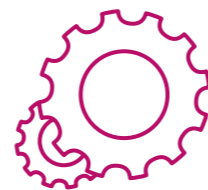


Looking for detailed ESG data? [Explore our Sustainability Performance.](#)



Quality and safety standards:

Chiesi's products adhere to European and international regulations such as EU Good Manufacturing Practices, EMA, US FDA, Sino FDA, and Brazilian ANVISA.



Compliance inspection:

Production sites in France, Italy, and Brazil undergo regular inspections to ensure compliance with regulations.



Internal quality control:

Chiesi conducts self-inspections to uphold high-quality standards.



Transparent reporting

Safety and quality information is transparently tracked and analyzed in compliance with laws and best practices.



Pharmacovigilance

A proactive approach is taken to monitor therapy performance and safety globally.



Adverse event reporting

Chiesi collects and analyzes adverse patient experiences, submitting relevant information to regulatory authorities for appropriate action.

All of Chiesi's product categories are assessed for **health and safety impact** improvements. Furthermore, in 2023, no incidents of non-compliance concerning the health and safety impacts of our products were registered. The very limited cases of product recalls that occurred were on a voluntary basis, promptly managed by the company, and did not lead to penalties or impacts on health.

Circularity and Responsibility

In 2021, we launched the Eco-Friendly Products program to critically evaluate the environmental footprint of our products. This includes how manufacturers take responsibility for their products, using industry-specific methods to reduce our ecological impact, embracing circular design and models, minimizing waste, and using materials wisely. We are attentive to evolving regulations on materials, chemicals, and packaging, both at the EU and global level. Additionally, as circular economy solutions and metrics become increasingly available and scalable, we are committed to adopting and integrating them into our sustainability framework.

Chiesi developed an internal **green design tool**, called Life Cycle Perspective (LCP) tool to align products from the initial design phases with circular economy principles. The tool takes into account external trends and best practices, with version 3 released in 2023. It integrates input from various development stages and analyzes four macro-areas: chemistry, device and packaging, natural resources, and ethics. The green design tool has already been applied to products in our R&D pipeline and the assessment was extended to a group of commercial products representing 56% of units sold in 2023 (based on total Chiesi products).

As a pharmaceutical company, we are dedicated to responsibly managing chemicals, aiming to minimize their usage and prioritize less hazardous options to mitigate their impact on human health and the environment. Since 2019, we have implemented an internal **Sustainable Chemistry Policy** outlining principles and measures to ensure our chemicals and materials uphold these standards.

Since 2020, we have been implementing a risk assessment system to evaluate the potential impact of releasing active pharmaceutical ingredients (APIs) in wastewater from our production sites, aligning with EFPIA commitment (**Pharmaceuticals in the Environment (PIE)** (efpia.eu)). This project, known as **Pharmaceutics in the Environment (PiE)**, identifies environmental risks using a methodology called the Risk Quotient (RQ)¹⁹ to gauge risk levels. The ratio between Predicted Environmental Concentration (PEC)²⁰ and Predicted No Effect Concentration (PNEC)²¹ determine the RQ. Our goal is to keep the risk controlled (RQ < 1), intervening where needed if risks are identified (RQ ≥ 1).

At our affiliates, **managing products at their end-of-life** is crucial. We prioritize plastic management and the extraction and reuse of propellant gas due to its high greenhouse gas emissions potential. Additionally, we are analyzing pharmaceutical waste management options and end-of-life treatments across major EU countries. Environmental regulations, recycling infrastructures, awareness levels, and other factors vary significantly among countries, impacting the development of **take-back schemes for pharmaceutical waste**.

¹⁹ The Risk Quotient (RQ) helps predict the probability of reaching a concentration of a pharmaceutical ingredient in the environment that could cause adverse effects to identified compartment(s).

²⁰ The Predicted Environmental Concentration (PEC) is initially estimated using mathematical models based on the production site, followed by analysis of wastewater samples from the site.

²¹ The Predicted No Effect Concentration (PNEC) is determined through ecotoxicity tests, establishing a toxicity threshold using assessment factors per guidelines (e.g., ECHA, EFPIA).



Progress in 2023

- Chiesi introduced an updated **packaging solution** for a key neonatology product, replacing the polystyrene anti-crush box with a cardboard anti-crush packaging system made with FSC certified paper. This change aligns with our dedication to environmentally conscious and recyclable packaging solutions.
- In 2022, Chiesi R&D initiated the **Sustainable Patient Kit** project to minimize the GHG footprint of clinical trial kits. The project focuses on optimizing kit design, packaging materials, documentation, and labeling. The first activities implemented in 2023 include transitioning from polyester ancillary labels to unique study labels applied directly to each clinical kit. These actions are expected to reduce the annual GHG emissions of the labels by approximately 40%, based on 2022 data. Additionally, new materials for shipping boxes have been introduced, such as paper bubble replacing plastic filling material.
- For our consumer healthcare brand **NHCO Nutrition**, Chiesi was able to reduce the size of the packaging for more than 20 product references. This initiative resulted in a significant reduction in the use of both cardboard and plastic.

NHCO Nutrition
packaging reduction of

6.1 tons of cardboard **14.7** tons of plastic

- Back in 2022, Chiesi introduced the **Recupera e Respira** (Take Back and Breathe) project as a 2-year pilot in the Friuli Venezia Giulia region. The goal is to **recover and dispose of inhalers in an eco-friendly and safe manner**. Through local pharmacies, people can return used inhalers, which are then collected by specialized operators and taken to certified waste-to-energy facilities for incineration, with energy recovery.

Developed with Federfarma, Recupera e Respira aims to change patient habits regarding inhaler use and disposal by involving pharmacists and patients across the healthcare ecosystem. Recognized by the Italian Ministry of the Environment, the project partners with Assinde for proper waste disposal through incineration, minimizing environmental impact while generating electricity.

Looking ahead, Chiesi plans to continue Recupera e Respira in 2024, expanding nationwide to emphasize collective action in addressing environmental challenges and inspiring similar initiatives.

403 pharmacies in Friuli-Venezia Giulia took part in Recupera e Respira.

30,225 inhalers collected not only manufactured by Chiesi but also by other companies.

Ambitions for 2024 and beyond

Chiesi has ambitious goals for the coming years to improve the impact of its products. Together with suppliers and partners, we plan to **explore new and alternative materials** and technologies. Further **expanding the product carbon footprint** assessment and applying the Life Cycle Perspective tool to key products will be a key objective for Chiesi. Finally, **building a sustainability mindset** and awareness is a priority. We want to raise internal awareness of end-of-life issues and formulate a **company take-back strategy**.



*“Achieving the **platinum medal by EcoVadis in 2023** marked a significant milestone in our sustainability journey. Through continued collaboration with our partners and suppliers, we will keep supporting a journey of mutual learning and co-evolution of our whole ecosystem in the **pathway towards Net Zero GHG emissions.**”*

Davide Borrini
Shared Value and Sustainability,
Environmental Strategy Leader
CHIESI IMPACT COMMITTEE MEMBER

Animal Welfare

Chiesi Group prioritizes **global health for people, animals, and the planet**, emphasizing animal welfare as a core principle while promoting advanced care practices.

Biomedical research on laboratory animals is crucial for our understanding disease prevention and treatment, developing safe therapies, and ultimately improving our overall quality of life. Animals have contributed significantly to scientific advances that have led to longer life expectancy and improved access to health care. They have played a critical role in almost every major medical breakthrough.

Chiesi is **required by law to conduct animal testing of all new drug candidates** on live animals per the requirements of international regulatory authorities such as the US FDA (Food and Drug Administration) and EMA (European Medicines Agency).

To guarantee the **highest level of safety and protection for patients** and consumers, the national and international regulations governing discovery, development, and manufacture of medical products mandate pharmaceutical companies to submit data on safety in animals. This data is required before authorities approve the use of a compound for human clinical trials, throughout clinical development or license a new medicine for use in patients.

Chiesi's animal studies follow strict criteria, including adherence to the 3Rs (Refinement, Reduction, Replacement) and approval by the Animal Welfare Body.



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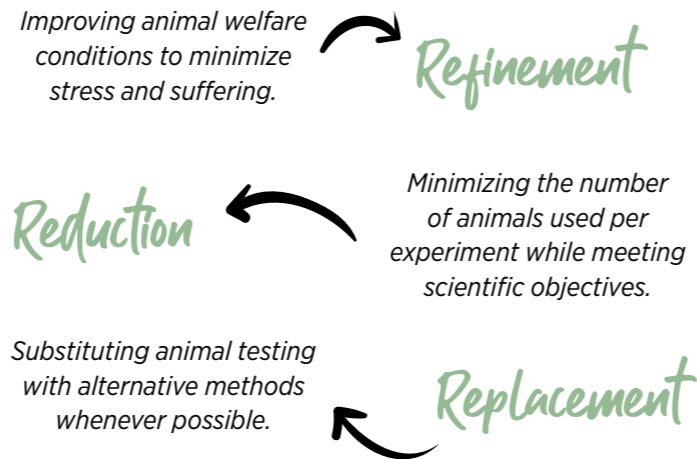
Animal Welfare Body (Institutional Animal Care and Use Committee)

The Animal Welfare Committee, required by law, oversees animal care programs to ensure humane treatment in research, testing, and education. It functions much like an ethics committee in human medicine, providing ethical oversight. The committee reviews research protocols, assures compliance, and inspects facilities. It ensures that each research protocol states the purpose, justifies the use of animals, assesses the welfare implications, and implements appropriate care protocols.



3Rs – Refinement, Reduction, Replacement

Research involving laboratory animals has to adhere to the 3R principle, mandated by the European Directive 2010/63/EU on the protection of animals used for scientific purposes, which guides national laws across the European Union.



Refinement includes methods to improve the understanding of the impact of welfare on scientific outcomes and **ensure that each animal in the experiment is experiencing minimum pain, suffering, distress or lasting harm.** Examples of refinement are the use of appropriate anesthetics and analgesics.

Reduction involves techniques to **maximize data collection** per animal **and sharing resources** between research groups to minimize the overall number of animals used.

Replacement refers to the development and use of new methods and tools based on the latest science and technologies, like human

volunteers, tissues, cells or computer models, that entirely replace animal use or use animals incapable of suffering, like certain invertebrates.

While complementary methods to animal research are advancing, animals remain crucial for developing innovative treatments and drugs for human health.

AAALAC Accreditation

The Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC) international accreditation program evaluates organizations that use animals in research, teaching, or testing. AAALAC International is a private, non-profit organization that **promotes the humane treatment of animals in science** through voluntary accreditation and assessment programs.

Through AAALAC's voluntary accreditation process, research programs demonstrate not only that they meet the minimum standards required by national laws and regulations, but also that they are **continuously striving to achieve excellence in animal care and use.**

Chiesi facilities achieved full accreditation in June 2021. A new document was submitted to AAALAC for re-accreditation in December 2023. The AAALAC re-accreditation inspection is expected in 2024.

In 2023 in preparation of the AAALAC site visit, two mock inspections were made by an external consultant (former AAALAC inspector) to identify potential issues related to documentation deficiencies, record keeping, training gaps. In both cases, the outcome was positive, confirming that we are meeting the AAALAC standards.