

Chiesi Carbon neutrality



THE CLIMATE CRISIS IS A HEALTH CRISIS

We all know global warming has devastating effects on the planet and on human health.¹ Governments, NGOs, international organisations and citizen groups are calling for urgent, pervasive change.

Many corporates are joining the movement, responding with bold and farreaching sustainability announcements.

Their commitments talk passionately about reducing the carbon footprint of operations, people and products and many promise to also uphold quality, access and safety for consumers and end users.

Proof points in the section:

1. Several studies show the impact of climate change on health issues – especially respiratory – and of the use of some medication on carbon footprint:
 - Climate change: challenges and opportunities for global health. Patz JA, Frumkin H, Holloway T, Vimont DJ, Haines A. JAMA. 2014 Oct 15;312(15):1565-80. doi: 10.1001/jama.2014.13186.
 - Climate change and respiratory diseases: a 2020 perspective. Joshi M, Goraya H, Joshi A, Bartter T. Curr Opin Pulm Med. 2020 Mar;26(2):119-127.
 - New data show overuse of reliever medication in asthma is responsible for 250,000 tonnes of greenhouse gas emissions every year in the UK, Astra Zeneca. M2 PressWIRE. 2021 Feb.

BUT ARE THESE WORDS ENOUGH?

Industries recognise their environmental responsibility and are making commitments to do better.

But are commitments being rushed in response to societal pressure? Are they making gains beyond the positive coverage these announcements generate?

Stakeholders and shareholders usually insist that corporates adhere to universally understood, transparent and comparable standards. The public usually insists that corporations should be straightforward, that they should not hide behind words.

Is it still the case? Or are corporations guilty of word-washing when it comes to sustainability commitments? Announcements like this sometimes mark the start of action, but they are often celebrated as a stand-alone accomplishment. At Chiesi we question whether announcements should be celebrated, or if we should wait until we can verify progress.

We are looking for society to hold companies accountable for delivering on their commitments and for reporting on them transparently. Right now, there's a risk we are forgetting the promises corporations have made.

For us, it is time to walk away from catchphrases and make bold announcements that mean something, that invite accountability.

BEHIND THE WORDS

We've looked at what the terms used *really* mean.²

- **Net zero emissions:** Reducing greenhouse gas (GHG) emissions with the goal of balancing the emissions produced and emissions removed from the earth's atmosphere.
- **Carbon neutral:** When the GHG emissions associated with an entity, product or activity are reduced and offset to zero for a defined duration.
- **Climate neutral:** Reducing GHG and all other radiative forcing to have no net effect on the climate system.

Sustainability commitments stand or fall based on the actions taken to reach the goal. If these actions are not independently verified by international standards, the commitments themselves are just words.

For now, protocols to measure progress at company level only exist for carbon neutrality (such as PAS 2060 and the Carbon Neutral Protocol).³

Proof points in the section:

2. The Science-based Targets Initiative, "Foundations For Science-based Net-Zero Target Setting in the Corporate Sector"
www.sciencebasedtargets.org

3. British Standards Institution, "PAS 2060 Carbon Neutrality"
www.bsigroup.com
Certified Carbon Neutral Global Standard, "The Carbon Neutral Protocol January 2021"
www.carbonneutral.com

WE BELIEVE IN ACTION OVER WORDS

At Chiesi, we stand with all those doing their part to halt climate change. Our strong beliefs define our actions, and the way we do business. That means we make commitments which are clear and can be measured. We also commit to report transparently on our environmental impact and progress every year.

Chiesi's reduction targets have been approved by the [Science Based Target Initiative](#) (SBTi)⁴ and are in line with the Paris Agreement's most ambitious goal to limit global temperature rise to 1.5°C above pre-industrial levels by 2100.⁵

But Chiesi's targets also go beyond these requirements.

Chiesi has selected the internationally recognised PAS 2060 specification process to demonstrate the value and efficacy of Chiesi's plans (including mitigation actions and carbon offsetting of residual greenhouse gas emissions). With an independent third-party verification, Chiesi wants to add maximum credibility and trust in its carbon neutrality commitment.⁶

Why do we choose SBTi and PAS 2060? Comprehensive and long-lasting measurement standards and frameworks are essential to encourage and track progress towards a low carbon society. They allow businesses to plan and implement carbon reduction targets with accuracy and transparency. And they help citizens and policy makers identify those mitigation measures that make the difference.

Proof points in the section:

4. The Science-based Targets Initiative, "How it works?"
www.sciencebasedtargets.org
5. United Nations Framework Convention on Climate Change, "The Paris Agreement"
www.unfccc.int
6. British Standards Institution, "PAS 2060 Carbon Neutrality"
www.bsigroup.com

WE BELIEVE IN ACTION OVER WORDS

CHIESI'S CARBON NEUTRAL PLAN

-50% direct greenhouse gas emissions generated (scope 1) and the emissions associated with the purchase of electricity and heat (scope 2) by 2030 compared to 2019. This will be achieved by improving business operations, maintaining 100% renewable energy consumption at Chiesi sites that have already achieved this and transitioning to 100% renewable energy at the remaining sites, and electrifying the car fleet.

-80% scope 3 greenhouse gas emissions per unit of inhaled products sold by 2030 compared to 2019 emissions.

-90% absolute scope 3 greenhouse gas emissions from the use of sold products by 2035 compared to 2019, thanks to a new low global warming potential propellant used for inhaler devices.

100% transparency. Full disclosure of Chiesi's direct and indirect emissions inventory (scope 1, 2 and 3) through the Carbon Disclosure Project⁷ by Q2 2021. This will benchmark Chiesi's emissions inventory against industry peers on a yearly basis.

Value and efficacy of Chiesi's plans (including mitigation actions and carbon offsetting) are verified independently within the internationally recognised PAS 2060 specification.⁸

Proof points in the section:

7. Carbon Disclosure Project

www.cdp.net

8. British Standards Institution, "PAS 2060 Carbon Neutrality"

www.bsigroup.com

WE BELIEVE IN ACTION OVER WORDS

As the largest pharmaceutical B Corp, Chiesi is serious about behaviour change. We believe protecting patient health and the environment should not be a matter of compromise. With the decision to change our legal status to a Benefit Corporation,⁹ Chiesi has made sustainability contractual and legally binding, by incorporating a double purpose for the creation of shared value, and therefore to generate value for its business and for society and the environment.

Moreover: by achieving B Corp certification,¹⁰ measuring and reporting both our positive and negative impact transparently and amplifying it throughout our value chain through the Code of Interdependence,¹¹ Chiesi is going far beyond carbon reduction.

We consider our sustainability journey as an ongoing process, we are always improving and setting tougher goals.¹² That's why we will not only reduce our environmental footprint by managing our operations but by rethinking and innovating our products – for patients and planet.

We are proud to have taken decisive and ambitious action to ensure patients can continue to access the therapeutic options that best suit their needs, whilst innovating to find the most environmentally conscious solution available.¹³ Patients should not have to shoulder the burden of environmental responsibility when considering treatment options that affect their health. In the face of a global climate crisis, we must all share the burden of action.

Proof points in the section:

9. In December 2018, Chiesi changed its structure and by-laws, adopting the new legal status of Benefit Corporation, introduced in Italy and in the United States.

10. Being a B Corp means meeting the highest standards of verified social and environmental performance, transparency and accountability. B Corporation, “B Corp Directory: Chiesi Group” www.bcorporation.net

11. Chiesi requires every part of its value chain to fulfil certain environmental and social standards. With our suppliers, we co-created the first SDG-enabled Code of Conduct to define shared guidelines – also called “Code of Interdependence”. We involved about 70 of our strategic supply partners to design this code of conduct to create a sustainable ecosystem. Chiesi Group, “Code of Interdependence” www.chiesi.com

BREAKING DOWN CHIESI'S COMMITMENT AND PROGRESS

- ENERGY
- SUPPLY CHAIN AND LOGISTICS
- OFFSETTING AND OTHER INITIATIVES
- BUILDINGS AND INDUSTRIAL OPERATIONS
- HUMAN TRANSPORTATION
- PRODUCTS AND PATIENT USE

Proof points in previous section:

12. In March 2021, Chiesi joined the initiative from the UNFCCC "Race To Zero".

13. In 2019, Chiesi was the first pharmaceutical company to publicly announce a solution to address the carbon footprint of pressurised metered dose inhalers (pMDIs) while continuing to invest in DPI technology to provide the range of therapeutic treatment options that patients suffering from asthma and chronic obstructive respiratory disease (COPD) need.

Chiesi Group, "Chiesi outlines €350 million investment and announces first carbon minimal pressurized Metered Dose Inhaler (pMDI) for Asthma and COPD"

www.chiesi.com

ENERGY

Energy purchasing (upstream): Electricity is purchased according to sustainable models accredited by the reference bodies and exclusively from renewable energy sources. The possibility of purchasing biofuels will be implemented as soon as their use on an industrial scale is ready.

Currently, 100% of the electricity consumed by Italian sites is renewable (approximately 3% produced on-site by photovoltaic systems) and of high quality, as it comes from low impact sources (in particular wind) and from specific new plants (grid connection less than 5 years). In addition, a Corporate Green Energy Purchasing Guideline will be shared with all local affiliates.

The models under evaluation for future purchases of electricity are characterized by a greater additionality in terms of support to the ecological transition and to Renewable Energy development (Power Purchase Agreement or Direct CAPEX with Carbon Credit creation), guaranteeing flexibility and responsiveness.

Energy usage (downstream): Attention to energy consumption and the drive for continuous improvement of energy performances will be guaranteed by Energy Management System, certified according to the highest international standard, ISO 50001 (already achieved in Chiesi's Parma sites) which require timely and precise monitoring in all phases of the plant's life and periodically reviewing improvement plans.

We are looking into innovative ways to pass from fossil fuels, as natural gas, to electricity from renewable sources for our thermal consumptions (heating and process requirements).

SUPPLY CHAIN AND LOGISTICS

Chiesi's Code of Interdependence is a co-created Code of Conduct for Chiesi suppliers developed in 2019 with our strategic partners. It aims to restructure the relationship between Chiesi and its suppliers in a shared value perspective. The Code is based on the principles of the B Corp movement, but also those of the Pharmaceutical Supply Chain Initiative (PSCI), the International Labour Organization (ILO), and the 2030 Agenda for Sustainable Development. With this Code, we define shared guidelines and require every part of Chiesi's Value Chain to adhere to a common set of principles to achieve a more sustainable and inclusive business model.

From 2020, a specific contractual clause dedicated to the Code of Interdependence acceptance and inspiration has been included at Group level in all our new third-party agreements.

We are now working to create the foundations for the "2021 onwards" engagement plan with our strategic suppliers and for the most impacting spend categories. The previous engagement with suppliers and partners around the Code is already stimulating a virtuous cycle in favor of common benefit subjects. Several partners of ours have been inspired to follow our lead to start the process of B Corp certification.

We designed the Logistics Impact Meter, a tool that helps us map the effects on the environment, people and communities of all actors in logistics and distribution operations and refers to best practices and innovative solutions available. Our objective is to map our logistic network; identify the parameters that determine the impact of each actor (warehouses, hub, transit points); and work on improvements through a pilot project in Italy.

OFFSETTING

There are other initiatives not included in the SBTi targets that also contribute to further decreasing CO2 emissions. Only few of those will be accepted by international protocols as tools to capture emissions that are no further reducible.

Chiesi is working on a guideline that will be shared among all affiliates so that they only buy the offsets that fulfil the criteria set by the international standards.

Nonetheless, we carry on activities aimed at reducing emissions and improving air quality in our region, such as **the Green Kilometer Parma Consortium** (*Consorzio Forestale KilometroVerdeParma Impresa Sociale*.) Initially the initiative focused on creating an 11 km green barrier along the motorway but has now evolved into a much bigger project of urban reforestation of the Parma province.

Through a partnership among local companies, local organizations, the municipality and landowners, the Consortium aims to capture emissions, reduce air and noise pollution and raise environmental awareness among citizens.

Chiesi is one of the co-founders of the Consortium and actively participates in the implementation of reforestation initiatives. In the immediate future, the Consortium has the objective to plant 20,000 trees in the area and Chiesi intends to continue its active participation through developing a forest of 2,000 trees.

BUILDINGS AND INDUSTRIAL OPERATIONS

Better Building Program is a project focused on improving the sustainability performance of Chiesi sites. The starting point of this program is a Sustainability Assessment, which evaluates the sustainability impact of our existing buildings in terms of people welfare, mobility policies, waste management, energy and water consumption. This assessment is a benchmark with other companies both locally and internationally and it aims to measure Chiesi buildings using a common metric in order to evaluate if the minimum requirements for a LEED certification are met.

LEED Certification: in 2020, the new headquarter has been awarded the highest-level LEED Platinum for new building design and construction protocol . The Research Center has been awarded the LEED Gold for Existing building and operation maintenance (EB:OM) protocol.

The Research center in Parma has been awarded LEED EB:OM certification.

Propellant capture (industrial operations): an abatement system has been installed in Parma and Blois manufacturing sites in 2020 and it is operating since the beginning of 2021 in both sites. This system is able to condensate the propellant losses in the spray test phase (both in Parma and Blois) and in the filling phase (in Blois only). The propellant recovered is then sent to a high temperature incinerator that safely and effectively destroys it.

HUMAN TRANSPORTATION

Chiesi developed a "Human Transportation Policy" along three key streams: Business Travel, Commuting and Car Fleet.

Business Travel: Despite 2020 being an exceptional year (due to the pandemic), Chiesi will also limit business travel in the future to what is strictly necessary. Traveling will be replaced by digital meetings using all the available technological options. When traveling will still be necessary, Chiesi will support 'greener' partners and travel options.

Commuting: The aim is to facilitate "soft mobility", fostering cycling or the use of public transport for employee commutes. Alternative mobility is also promoted through bonuses, rewards and games in order to encourage participation.

Car Fleet: We have put in place a global project for the electrification of the car fleet that relies on new technologies and involves selected partners. The plan foresees a systematic replacement of our cars with hybrid or electric models, with Italy being the starting point of this electrification plan.

PRODUCTS AND PATIENT USE

In 2019, Chiesi was the first pharmaceutical company to publicly announce a solution to address the carbon footprint of pressurized metered dose inhalers (pMDIs) while continuing to invest in dry powder inhaler (DPI) technology to provide the range of therapeutic options that patients need. The first carbon minimal pMDI containing a low global warming potential (GWP) propellant will be introduced by 2025 ensuring a 90% carbon footprint reduction. Chiesi is actively investing €350M to fast-track development and bring this innovative solution to market.

In 2021 Chiesi plans to adopt 100% use of Forest Stewardship Council (FSC) paper for all the secondary packaging boxes.

With the aim of developing products that are sustainable by design, the Life Cycle Perspective (LCP) was launched in 2019 and extends to all products in R&D in 2020. LCP will continue to be implemented in the direction of creating a sustainable, future-fit R&D process where sustainability is integrated from the very start through (green) design.

In 2021, we are also launching an eco-friendly products challenge in order to plan and invest into other product enhancements. For instance, we are co-founding a UK-based, women-led consortium of SMEs (Disposal and Reply) which is researching ways to minimise or eliminate the use of plastic by redesigning some components of our inhalers. The project has won funding from the 'Designing sustainable plastic solutions' competition run by Innovate UK, the UK's innovation agency.

DARE TO SHARE

We are committed to becoming carbon neutral by 2030 on direct emissions and by 2035 on emissions in our value chain. We have done our homework and know how we will hit our targets and when we will make this happen.

As producers, we take this responsibility seriously, and as people we believe everyone must do their part. We hope that other industry players will join in prioritising actions over words.

We believe announcements and commitments are easy to make but it's only our actions that matter.

It's why we already share our progress and will continue to do so until we meet our goals.¹⁴

Do you dare to share?

Proofpoints for this section:

14. Chiesi has an Impact Committee dedicated to the monitoring and management of purposes of common benefit.

In 2018, Chiesi launched the program "We ACT - We actively Care for Tomorrow" showing the expression of Chiesi's commitments towards sustainability. Chiesi Group, "We Act Sustainability Manifesto" www.chiesi.com

Chiesi publishes its sustainability report annually. Chiesi Group, "Sustainability Report" www.chiesi.com

Chiesi also contributes to the Sustainable Development Goals (SDGs) set up by the United Nations in 2015 and measures its impact through the SDG Action Manager. United Nations Global Compact, "SDG Action Manager" www.unglobalcompact.org

CHECK ON OUR PROGRESS

Proofpoints for this section:

- B Corp certification and B Impact Assessment <https://bcorporation.net/directory/chiesi-group>
- 2019 Sustainability Report <https://www.chiesi.com/en/sustainability/sustainability-report/> - PDF
- We Act Sustainability Manifesto <https://www.chiesi.com/en/sustainability/we-act-sustainability-manifesto/>
- Sustainability in our supply chain, the Code of interdependence
https://www.chiesi.com/documenti/30_code-of-interdependence.pdf - PDF
- €350M investment in the first carbon minimal pressurised metered dose inhaler (pMDI)
<https://www.chiesi.com/en/chiesi-outlines-350-million-investment-and-announces-first-carbon-minimal-pressurised-metered-dose-inhaler-pmdi-for-asthma-and-copd/> - PDF